

Підприємництво, торгівля та біржова діяльність

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Methodical approaches to the assessment of socio-economic systems

Pavlov Kostiantyn Volodymyrovych

Doctor of Economics, Professor, Professor of the Department of Economics and Trade, Lesya Ukrainka Volyn National University, 13 Voly Avenue, Lutsk, Voly Avenue, 43025, Volyn region, Ukraine, <https://orcid.org/0000-0003-2583-9593>

Begun Svitlana Ivanivna

PhD in Economics, Associate Professor, Associate Professor of the Department of Economics and Trade, Lesya Ukrainka Volyn National University, 13 Voly Avenue, Lutsk, Voly Avenue, 43025, Volyn region, Ukraine, <https://orcid.org/0000-0003-1689-4048>

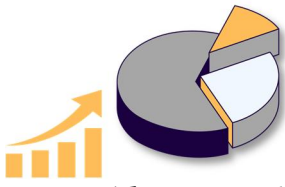
Murzina Alina Vadymivna

Student of the Department of Economics and Trade, Lesya Ukrainka Volyn National University, 13 Voly Avenue, Lutsk, Voly Avenue, 43025, Volyn region, Ukraine, <https://orcid.org/0009-0002-9040-2662>

Kramar Oles Yuriiiovych

Postgraduate student of the Department of Economics and Trade, Lesya Ukrainka Volyn National University, 13 Voly Avenue, Lutsk, 43025, Volyn region, Ukraine, <https://orcid.org/0009-0000-9217-8604>

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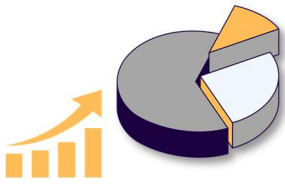


Abstract. *This is a substantiated study of socioeconomic systems, emphasizing assessing their effectiveness in the context of Ukrainian enterprises' economic security. The critical aspects that affect the functioning of enterprises' economic security mechanisms are analyzed. The study has identified several major problems that impede the effective functioning of the economic security system, findings that are crucial for Ukrainian enterprises' economic security. At present, the economic security of the country and its support systems are important not only in shaping the international image of the country, but also in maintaining effective cooperation with other states. This creates favorable conditions for Ukrainian enterprises engaged in foreign economic activity and affects the country's domestic economic situation and its sovereignty in general. The public sector, which significantly affects the indicators of national economic security, plays a crucial role in this interconnected system.*

The article's purpose *is to comprehensively study a wide range of methodological approaches that can be implemented to assess the characteristics of social and economic systems.*

Materials and Methods. *The system of economic security of the State includes many subsystems, among which the subsystems of economic security of individual enterprises play a critical role. Their security level depends on the nature of their activities, potential, specifics of products or services, the State of markets, target audience, circulation systems, pricing, etc. In this context, an important task is to analyze the State of socioeconomic systems as one of the factors in increasing the overall economic security of the State.*

Prospects. *Assessing socioeconomic systems is a multilayered process that requires various methodological approaches. The choice of a particular research methodology largely depends on the purpose of the study, the type and quality of available data, and the specific characteristics of the system under evaluation. The study has shown that assessing socioeconomic systems is a complex task requiring a comprehensive approach. This approach, which combines qualitative and quantitative methods of analysis, is necessary to gain a deeper understanding of socioeconomic*



systems' functioning and their impact on enterprises' economic security. This method makes it possible to identify problem areas, change weaknesses, and respond to threats in a timely manner.

Keywords: *economic security, system analysis, socioeconomic system, socioeconomic security, methodology.*

Методичні підходи до оцінки соціально-економічних систем

Павлов Костянтин Володимирович

доктор економічних наук, професор, професор кафедри економіки і торгівлі
Волинський національний університет імені Лесі Українки, 43025, Волинська
область, місто Луцьк, просп. Волі, 13, <https://orcid.org/0000-0003-2583-9593>

Бегун Світлана Іванівна

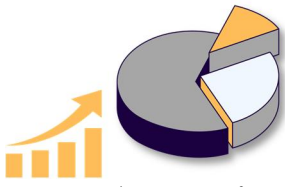
кандидат економічних наук, доцент, доцент кафедри економіки і торгівлі
Волинський національний університет імені Лесі Українки, 43025, Волинська
область, місто Луцьк, просп. Волі, 13, <https://orcid.org/0000-0003-1689-4048>

Мурзіна Аліна Вадимівна

Студентка кафедри економіки і торгівлі, Волинський національний університет
імені Лесі Українки, 43025, Волинська область, місто Луцьк, просп. Волі, 13,
<https://orcid.org/0009-0002-9040-2662>

Крамар Олесь Юрійович

Аспірант кафедри економіки і торгівлі, Волинський національний університет
імені Лесі Українки, 43025, Волинська область, місто Луцьк, просп. Волі,
13, <https://orcid.org/0009-0000-9217-8604>

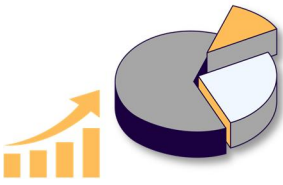


Анотація. Здійснено обґрунтоване дослідження поняття соціально-економічних систем, з особливим акцентом на оцінці їх ефективності в контексті економічної безпеки підприємств України. Аналізуються критичні аспекти, що впливають на функціонування механізмів економічної безпеки підприємств. У результаті дослідження виявлено декілька основних проблем, які заважають ефективному функціонуванню системи економічної безпеки. Наразі економічна безпека країни та її системи забезпечення мають важливе значення не тільки у формуванні міжнародного іміджу країни, але й у підтримці ефективної співпраці з іншими державами. Це створює сприятливі умови для українських підприємств, які реалізують зовнішньоекономічну діяльність, і впливають на внутрішній економічний стан країни та її суверенітет загалом. Оцінка та зниження ризиків для державної економічної безпеки здійснюється через всебічний аналіз функціонування всіх секторів економіки, особливо державного сектора, що значно впливає на показники національної економічної безпеки.

Мета статті полягає у всебічному дослідженні широкого спектру методичних підходів, що можуть бути реалізовані в процесі оцінки особливостей соціальних та економічних систем.

Матеріали та методи. Система економічної безпеки держави включає безліч підсистем, серед яких ключову роль відіграють підсистеми економічної безпеки окремих підприємств. Рівень їх безпеки залежить від характеру діяльності, потенціалу, специфіки продукції або послуг, стану ринків, цільової аудиторії, систем товарообігу, ціноутворення тощо. У цьому контексті важливим завданням є аналіз стану соціально-економічних систем як одного з чинників підвищення загальної економічної безпеки держави.

Перспективи. Оцінка соціально-економічних систем демонструє собою багатоплановий процес, що вимагає застосування різних методичних підходів. Вибір конкретної методик дослідження значною мірою залежить від мети дослідження, типу та якості наявних даних, а також специфічних



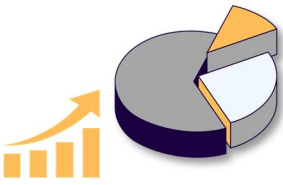
характеристик системи, що оцінюється. Дослідження показало, що оцінка соціально-економічних систем вимагає комплексного підходу, який об'єднує якісні та кількісні методи аналізу. Основні підходи до оцінки, такі як системний аналіз, моделювання, порівняльний аналіз та індикаторний підхід, дозволили отримати глибше уявлення про функціонування соціально-економічних систем та їх впливу на економічну безпеку підприємств. Використання цього методу дозволяє визначити проблемні зони, змінити слабкі місця та вчасно реагувати на загрози.

Ключові слова: економічна безпека, системний аналіз, соціально-економічна система, соціально-економічна безпека, методика.

Problem statement. Currently, the economic security of the country and its support systems play an essential role in shaping the country's international image and promoting practical cooperation with other states. This creates favorable conditions for Ukrainian companies engaged in foreign economic activity and affects the country's domestic economic situation and its sovereignty in general. Risks to the state's economic security are assessed and minimized through a comprehensive analysis of the functioning of all sectors of the economy, with the public sector being of particular importance, as it has a significant impact on the national economic security indicators.

The state's economic security system includes many subsystems, among which subsystems of economic security of individual enterprises play a critical role. Their security level depends on the nature of their activities, potential, specifics of products or services, market conditions, target audience, circulation systems, pricing, etc. In this context, an important task is to analyze the state of socioeconomic socioeconomic systems as one of the factors in improving the overall economic security of the state.

The main goal of any enterprise, regardless of its form of ownership, industry, or type of activity, is to generate income sufficient to cover expenses and further development. However, in the current environment, there is a tendency to reduce the number of profitable enterprises and increase the share of unprofitable ones. The



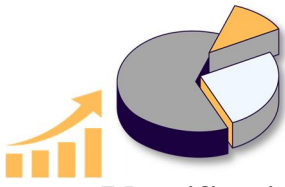
transition of Ukraine's economy to market relations is taking place against the backdrop of a production decline and a lack of information, which negatively affects the financial condition of enterprises. This forces them to focus on solving current problems to survive, preventing them from creating a financial basis for long-term prospects.

For effective business management, owners and managers need economic information that allows them to determine the current level of economic security of the enterprise, assess its development prospects, and identify problem areas. This helps to avoid further deterioration of the situation. Tools for systematic analysis of the financial and economic state are appropriate for such tasks. Therefore, the study of methods and tools for monitoring the state of socioeconomic systems from the point of view of economic security is quite relevant.

Analysis of recent research and publications. The issues of business security and its components have been the subject of scientific research by many scholars. Defining the essence of financial results and assessing the sufficiency of the economic result, which is expressed as the difference between the income and expenses of an enterprise, are also considered in the works of such researchers as F. Butynets, L. Khudolii, N. Tkachenko, and others.

The system of indicators used to assess the state of socioeconomic systems at different hierarchical levels is widely discussed in the scientific works of many researchers. A notable contribution to this area is made by L. Bogatchyk [1], whose ideas provide a fundamental understanding of the subject. In addition, I. Kononova [2] has made significant progress in this area, while O. Masliy [4] has contributed valuable perspectives. Other researchers, such as O. Ovcharenko, V. Dubnytskyi [5], T. Klebanova, and O. Rudachenko [10], have further enriched the discourse around evaluating socioeconomic systems.

In addition, A. Yakymchuk, O. Kardash, O. Postelzhuk, and O. Yakymchuk [15] also provided significant findings and analyses that improve our understanding of this complex topic.



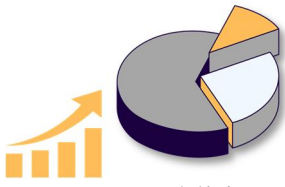
Identification of previously unresolved aspects of the overall problem.

However, the importance of an enterprise's financial and economic state as a decisive factor in its overall economic security is often considered only in passing in most of the existing literature. Such a superficial approach emphasizes the urgent need for a more comprehensive consideration of these critical issues. Thus, rigorously substantiating the compliance of the current state of the economic system with the established performance indicators is not only relevant but also urgent. Additionally, a thorough assessment of the impact of these indicators on socioeconomic systems at various levels is required. Therefore, it becomes necessary to substantiate the methodological framework for assessing the financial and economic state of an enterprise, particularly by examining models, key indicators, and stages of comprehensive evaluation of socioeconomic systems. This situation calls for identifying and developing appropriate analytical tools and methodologies that can contribute to a deeper understanding of these dynamics and facilitate more effective decision-making in this area.

The article's purpose is to comprehensively study a wide range of methodological approaches that can be implemented in assessing the characteristics of social and economic systems.

The main material of the study. Modern enterprises, concerns, unions, holdings, associations, and corporations are complex and dynamic socioeconomic systems. Although they share common characteristics, each organization has its own unique features, some of which are difficult to account for and control.

Socioeconomic systems demonstrate diverse potentials in various dimensions, including technical, technological, organizational, and economic factors. These capacities play a crucial role in shaping the system's capabilities and performance as a whole, influencing how it responds to internal and external uncertainties. On the other hand, internal uncertainties arise within the organization itself. These include ongoing reconstruction and reform processes at the enterprise level, which may include the introduction of new organizational structures and remuneration models [8].

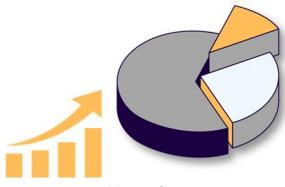


In addition, changes in the quantitative and qualitative composition of the workforce can introduce uncertainty, as can challenges caused by deteriorating team morale. Other internal factors may include technical errors by specialists, unreliability of machinery and equipment, and various inefficiencies. External uncertainty factors combine a wide range of elements, such as changing economic conditions that affect the demand and supply of products. This category also includes pioneering innovations created by scientific institutions that may disrupt existing market dynamics and recent legislative changes in tax and customs policies that may significantly affect business operations and profitability [13].

The socioeconomic system is organized hierarchically, where each level of government operates with a certain degree of autonomy while acting as a supervisory entity for the level above it. This hierarchy usually consists of different levels, such as units, teams, departments (or workshops), and ultimately the enterprise. The specific structure and number of subsystems in this hierarchy are influenced by the internal complexity of the organization, as well as its main goals and objectives. By applying a hierarchical approach to management, organizations can optimize their operations by facilitating better communication and overcoming information barriers [13].

The true potential of any given system is fundamentally shaped by its ability to improve efficiency. This improvement is achieved through thoughtful and strategic management interventions that focus on optimizing the interaction and relationships between the various components in the system. In addition, it involves carefully considering different types of systems and individual processes in operation [9].

From a methodological point of view, enterprises are recognized as open systems. This classification emphasizes that their operating condition is significantly influenced by external factors and the unique characteristics of their internal environment. To maintain a state of equilibrium, the system must include feedback mechanisms. The absence or breakdown of this feedback loop can lead to harmful consequences, such as overproduction of goods or shortages of services available to consumers.



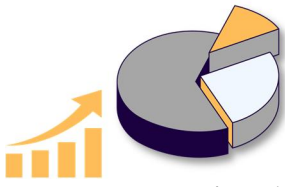
Socioeconomic systems can gain experience over time, improve their processes, and self-regulate to a certain extent. However, for these systems to function effectively, they require structured management intervention to ensure optimal performance. Several defining characteristics are inherent in socioeconomic systems, including aspects such as peripherality, which refers to their ability to operate on the edge of traditional economic boundaries; flexibility, which indicates their ability to adapt to changing circumstances; and elasticity, which indicates their ability to adjust output in response to changing levels of demand [6].

In addition to these characteristics, socioeconomic systems are characterized by their stability and ability to respond quickly to environmental changes. When applying the systems approach, an organization is viewed as a holistic entity with a complex interaction of structural and functional components. However, when sufficient organization or critical economic measures are implemented, the efficiency and overall productivity of the enterprise can be significantly reduced, leading to lost opportunities and potential stagnation in growth [2, 3].

The security of an enterprise is fundamentally intertwined with the principles of sustainable development, characterized by a constant and sustainable nature. This stability is realized through strategically using various resources and business opportunities, ensuring that each resource is used most efficiently [7].

This approach guarantees the stable operation of the enterprise while promoting dynamic progress in the scientific, technical, and social spheres. In addition, it plays a crucial role in mitigating the risks posed by both internal and external threats. A commonly accepted definition of enterprise security is when an organization effectively uses its resources, such as capital, human resources, information, technology, machinery, equipment, and rights, along with available market opportunities. This security state is essential for preventing harmful influences from inside and outside the organization, thus protecting its long-term viability and promoting sustainable development in a particular market context [8, 11].

The main functional goals of business security include:

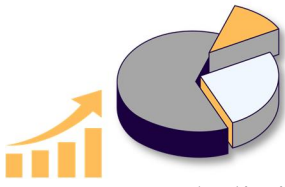


- Ensuring high financial efficiency and sustainability, liquidity, and financial independence of the company;
- Ensuring technological independence and increasing the competitiveness of the organization's technical potential;
- Improving management efficiency and creating an optimal organizational structure;
- Improving the qualifications of personnel and promoting the development of their intellectual and production capabilities;
- Minimizing the negative impact of production activities on the environment;
- Reliable legal protection of all aspects of the organization's activities;
- Protection of information resources, confidentiality of information, and provision of reliable information services to all departments;
- Creation and implementation of a comprehensive system to ensure the physical safety of employees, protection of financial assets, protection of property, and preservation of commercial interests of business owners [8, 9].

There are diverse business security guarantees: information, economic, legal, and other. Thus, the categories of business security include:

- Economic security: ensures the profitability of companies, protects against over-taxation, and monitors compliance with economic indicators.
- Information security: protection of information, including trade secrets, intellectual property, and restricted information.
- Physical security: important for protecting enterprise facilities from theft, fire, environmental leaks, and other risks associated with goods and materials stored at the enterprise [8, 9].

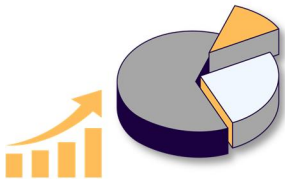
After thoroughly examining the fundamental concept of security in a broader context, we will now turn our attention to an in-depth study of the various elements that contribute to the economic security of enterprises. In today's rapidly evolving economic landscape, one of the critical indicators reflecting the overall performance of an enterprise is its financial performance. It is well known that this particular indicator



serves as a holistic summary of the company's activities, allowing stakeholders to synthesize the results of various operational aspects and assess the effectiveness of these organizations [12].

Thus, the accuracy of calculations and determination of the final performance indicators of business entities is essential. This need for accuracy is not just an internal issue; it also extends to several external stakeholders. Both internal users, such as owners, managers, and supervisors, and external users, which include relevant government agencies and a range of other stakeholders, are interested in reliable and transparent information regarding the financial performance of an enterprise. Their reliance on such data underscores the importance of transparency and accountability in financial performance reporting, as it directly affects decision-making and strategic planning for both the enterprise and the economic environment. Thus, a deep understanding of these financial parameters is essential to strengthening economic security and promoting sustainable growth of enterprises. The interaction of revenues and expenses, which together make up the financial performance of an enterprise, are key components that require careful accounting and analysis. These figures are significant not only at the microeconomic level of individual enterprises but also at the macroeconomic level. This significance arises from the need for continuous growth and development within the enterprise, largely dependent on effectively addressing the challenges associated with implementing development initiatives funded by profits - profits fundamentally linked to the financial performance we review. The leading indicator of economic efficiency is the financial performance of an enterprise. In order to thoroughly assess the financial condition of an enterprise, a comprehensive analysis of several important economic indicators is carried out [4, 14].

Evaluating socioeconomic systems is an important aspect of studying their functioning, efficiency, and development. Methodological approaches to evaluation can be diverse, and their choice depends on the purpose of the study, the specifics of the system, and the availability of data. Let us consider several main methodological approaches, their features, and advantages [2, 3].



A systemic approach to the assessment of socioeconomic systems involves studying the system as a whole, taking into account all its components. The main stages of this approach are shown in Table 1.

Table 1

Main stages of the systematic approach

Stage	Inventory
Setting goals	Formulation of the goal to be achieved by the system
Identification	Identify the elements that make up the system
Analyzing relationships	Researching how elements affect each other
Performance evaluation	Measuring results and comparing them to goals

Source: author's development.

Modeling is a powerful tool for evaluating socioeconomic systems. Depending on the purpose of modeling, different types of models can be used (Table 2):

Table 2

Types of models for assessing socio-economic systems

Model type	Inventory
Statistical models	Used to analyze historical data
Economic models	Evaluate economic processes and their impact on the system
Dynamic models	Model the interaction between system elements

Source: author's development.

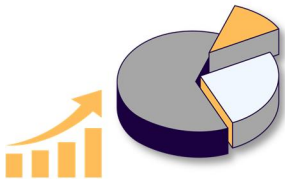
Benchmarking allows us to assess the effectiveness of socio-economic systems by comparing them to similar systems or standards. The main stages of the benchmarking analysis are shown in Table 3.

Table 3

Stages of comparative analysis of socio-economic systems

Stage	Inventory
Selecting objects	Identify the systems to be compared
Evaluation criteria	Determining the indicators by which the evaluation will be conducted
Data collection	Collecting information about the objects of comparison
Visnovky	Formulating recommendations based on analysis

Source: author's development.



Benchmarking allows us to assess the effectiveness of socio-economic systems by comparing them to similar systems or standards. The main stages of the benchmarking analysis are shown in Table 4.

Table 4

Key indicators for assessing socio-economic systems

Indicator	Essence
GDP per capita	Measures the economic well-being of the population
Unemployment rate	Reflects employment in society
Human development index	Assesses the quality of life, education and health of the population

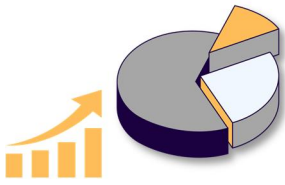
Source: author's development.

These indicators can reflect various aspects of the system's functioning, such as economic development, social justice, environmental sustainability, etc.

Thus, it is important to take these indicators into account in order to assess their impact, avoid possible risks, and enhance security.

Conclusions and Prospects for Further Research. Assessing socio-economic systems is a multifaceted process requiring various methodological approaches. The specific research objectives, the type and quality of available data, and the unique characteristics of the evaluated system heavily influence the choice of a particular research methodology. Different approaches can provide different insights, so aligning the chosen method with the intended research results is crucial. In addition, integrating multiple methodologies can increase the depth and breadth of the analysis, leading to more nuanced insights.

The study found that assessing socio-economic systems requires a comprehensive approach that combines quantitative and qualitative analysis methods. The main approaches to assessment, such as system analysis, modeling, comparative analysis, and indicator approach, allow for a deeper understanding of the functioning of socio-economic systems and their impact on the economic security of enterprises.

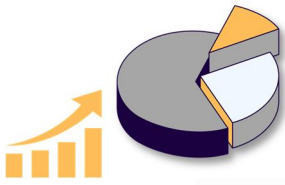


Using these techniques allows for the identification of problem areas, the determination of weaknesses in the system, and the prompt and timely response to threats.

Prospects for further research are to improve the existing methodological approaches to increase the accuracy and efficiency of the assessment of socio-economic systems. As researchers, academics, and practitioners in socio-economic studies, your contributions to this improvement are crucial and can significantly advance the field.

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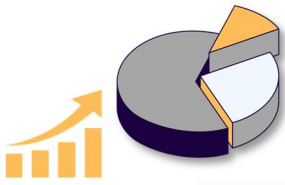
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