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STRUCTURE AND MAIN COMPONENTS OF THE SYSTEM OF FINANCIAL AND ECONOMIC SECURITY OF INDUSTRIAL ENTERPRISES

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The importance of the concept of "financial and economic security" for industrial enterprises is analyzed. A number of unresolved problems of many Ukrainian industrial enterprises that have adapted to new conditions and are implementing innovative financial and security solutions are highlighted. The author characterizes Ukrainian and world scientists who have made a significant contribution to the development of theoretical and practical aspects of financial and economic security of enterprises. A number of elements are identified and characterized, each of which plays an important role in maintaining the financial stability and competitiveness of an industrial enterprise. The main problems in the field of financial and economic security of enterprises are substantiated. The main factors that determined the state of the industrial sector are identified, in particular: the impact of hostilities, economic instability and the need to adapt to wartime conditions. It is characterized that the period of 2022-2024 was a test for industrial enterprises of Ukraine, but at the same time stimulated them to introduce new approaches to ensuring financial and economic security and adaptation to difficult conditions. The author makes assumptions about the industrial sector of Ukraine in 2025, which will continue to adapt to new realities. The European countries that demonstrate a high level of digitalization and integration of financial technologies (FinTech) in ensuring economic security are analyzed. The main trends in European countries are characterized. The main problems of financial and economic security of enterprises are identified and characterized. Suggestions for improving the system of financial and economic security of industrial enterprises in Ukraine are provided. Conclusions on ensuring the stable development of industrial enterprises and increasing their competitiveness are provided.

СТРУКТУРА ТА ОСНОВНІ СКЛАДОВІ ЕЛЕМЕНТИ СИСТЕМИ ФІНАНСОВО-ЕКОНОМІЧНОЇ БЕЗПЕКИ ПРОМИСЛОВИХ ПІДПРИЄМСТВ

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безпека, фінансово-економічна безпека, стратегія, підприємство, промисловий сектор, ресурси, антикризове управління, прибуток, стійкий розвиток, захист фінансових систем, фінансовий моніторинг, інвестиційна безпека.

Проаналізовано важливість поняття «фінансово-економічна безпека» для промислових підприємств. Виокремлено низку невирішених проблем багатьох українських промислових підприємств, які адаптувалися до нових умов і впроваджують інноваційні фінансові та безпекові рішення. Охарактеризовано українських на світових науковців, які зробили значний внесок у розвиток теоретичних та практичних аспектів фінансово-економічної безпеки підприємств. Виокремлено та охарактеризовано низку елементів, кожен з яких виконує важливу роль у збереженні фінансової стійкості та конкурентоспроможності промислового підприємства. Обґрунтовано основні проблеми у сфері фінансово-економічної безпеки підприємств. Визначено основні фактори, які визначали стан промислового сектору, зокрема: вплив воєнних дій, економічну нестабільність та необхідність адаптації до умов воєнного часу. Охарактеризовано, що, період 2022–2024 років став випробуванням для промислових підприємств України, проте водночас стимулював їх до впровадження нових підходів у забезпеченні фінансово-економічної безпеки та адаптації до складних умов.

Надано припущення щодо промислового сектору України у 2025 році, який продовжить адаптацію до нових реалій. Проаналізовано Європейські країни, які демонструють високий рівень цифровізації та інтеграції фінансових технологій (FinTech) у забезпеченні економічної безпеки. Охарактеризовано основні тенденції Європейських країн. Визначено та охарактеризовано основні проблеми фінансово-економічної безпеки підприємств. Надано пропозиції щодо вдосконалення системи фінансово-економічної безпеки промислових підприємств в Україні. Надано висновки щодо забезпечення стабільного розвитку промислових підприємств та підвищення їх конкурентоспроможності.

Statement of the problem

The financial and economic security of industrial enterprises is an important factor in their sustainable development and competitiveness. In the context of modern challenges, such as military operations, global economic crises, sanctions pressure and technological changes, the issue of financial security is becoming a key task for industrial enterprises [5-6].

While many Ukrainian industrial enterprises have adapted to the new environment and are implementing innovative financial and security solutions, a number of unresolved issues remain:

1. The impact of external economic threats:

− military actions and destruction of industrial infrastructure, which lead to a reduction in production and an increase in costs;

− currency market instability and inflationary risks that complicate financial planning of enterprises;

− limited access to international financial markets and a decrease in Ukraine's investment attractiveness.

2. Insufficient level of financial control and crisis management:

− lack of an integrated approach to financial risk management at most enterprises;

− insufficient use of modern methods of financial monitoring and analytics;

− lack of flexible mechanisms for responding to financial threats and crises.

3. Growth of cyber threats:

− lack of effective cybersecurity measures at enterprises, which leads to the risk of loss of financial information;

− increase in attacks on financial systems of enterprises, which may lead to their destabilization;

− low level of digital literacy of employees in the field of financial security.

4. Limited financing and investment security:

− lack of available credit resources for the development of industrial enterprises;

− uncertainty about future macroeconomic conditions, which hinders long-term financial planning;

− lack of sufficient state support for the industrial sector in the area of financial security.

5. Regulatory and legal issues:

− low efficiency of legislative mechanisms in the field of financial control and economic security;

− lack of incentives for the introduction of modern financial and analytical systems;

− high level of bureaucracy and administrative burden on industrial enterprises.

Based on the above, it should be noted that the current challenges faced by Ukrainian industrial enterprises require a revision of approaches to ensuring financial and economic security. The need to strengthen crisis management, digital transformation of the financial sector, efficient use of resources, and integration into the international financial system are key areas for further research and development of practical solutions.

Analysis of recent research and publications

A significant contribution to the development of theoretical and practical aspects of financial and economic security was made by such Ukrainian scholars as: Heets V. M. [1], who studied macroeconomic stability and financial risks; Hryniova V. M., who dealt with the issues of economic sustainability of enterprises; Dashko I. M. [2; 3; 5], who studies the issues of financial and economic security of industrial enterprises and her scientific works are focused on the development of theoretical and practical aspects of ensuring the financial and economic security of industrial enterprises in order to increase their competitiveness and sustainability in the face of dynamic changes in the external environment, development of strategies to ensure competitive; Cherep A. V. [5; 6; 13] – is a leading Ukrainian scientist in the field of financial and economic security of industrial enterprises, her scientific interests cover a wide range of issues related to economics, entrepreneurship and financial management, in particular, in the monograph "Financial and Economic Security of Industrial Enterprises" she analyzed the current challenges and threats facing industrial enterprises and proposed strategies to ensure their financial stability; Chechetov M. V. [7] – analyzed the management of economic security of enterprises; Shvydanenko H. O. – studied corporate aspects of financial security.

At the international level, a significant contribution was made by: Porter M. (USA), who developed a model of competitive strategies to improve economic security; Kaplan R. & Norton D. (USA) [8] – created the concept of a balanced scorecard (BSC), which is used to analyze economic security; Beck T. (Germany) [10] – studied financial security and banking risks; Stiglitz J. (USA) [9] – analyzed financial crises and risk management mechanisms, but there are unresolved issues from this study that need to be disclosed and suggestions for improvement.

Formulation of the objectives of the article

The purpose of the study is to develop the theoretical and practical foundations for ensuring the financial and economic security of industrial enterprises, to analyze its main components, to identify modern threats and to formulate strategies for minimizing risks.

Summary of the main research material

In the context of globalization, unstable economic situation and increased competition, the financial and economic security of industrial enterprises is of particular importance. Modern enterprises are forced to adapt to new challenges, such as financial crises, sanctions policy, cyber attacks, inflationary processes, changes in legislative regulation and currency market instability.

In Ukraine, the situation is complicated by factors such as high dependence on foreign markets, instability of the banking sector, limited access to cheap credit, and low digital security of enterprises. The absence of an effective financial monitoring and risk management system can lead to company bankruptcies, loss of investment, and weakening of competitive positions in the international market.

Financial and economic security is the key to sustainable operation of enterprises, efficient use of resources and their adaptation to changes in the external environment. Development of effective financial security strategies is a key task of modern management and economic policy of the state [13].

The system of financial and economic security of an enterprise consists of a number of elements, each of which plays an important role in maintaining financial stability and competitiveness (Table 1):

According to the World Bank and the State Statistics Service of Ukraine, the main problems in the area of financial and economic security are:

− instability of financial flows due to the economic crisis;

− insufficient funding for information security measures;

− lack of a systematic approach to investment risk management;

− high level of corruption in the field of enterprise resource management [12].

In 2022-2024, Ukrainian industrial enterprises faced a number of challenges that significantly affected their financial and economic security. The main factors that determined the state of the industrial sector include the impact of hostilities, economic instability, and the need to adapt to wartime conditions:

1. The impact of hostilities and economic adaptation: Russia's full-scale invasion of Ukraine in 2022 resulted in significant damage to industrial infrastructure, especially in the east and south of the country. Many businesses were forced to suspend operations or relocate production facilities to safer regions. This led to a decline in production and revenues. In 2022, only 56% of industrial enterprises made a profit, while in 2021 this figure was 75.5% [1].

In response to these challenges, businesses began implementing strategies to adapt to wartime conditions. This included reorientation to manufacturing products for defense needs, cost optimization, and the search for new markets. The state, for its part, introduced support programs aimed at restoring and developing the industrial sector in the wartime environment [4].

2. Financial and economic security and risk management: In the context of the crisis, the issue of financial and economic security has become particularly relevant. Companies focused on developing and implementing risk management systems aimed at minimizing financial losses and ensuring business sustainability. Key measures included diversification of suppliers, introduction of modern cybersecurity technologies, and strengthening of internal control [2].

3. The role of cybersecurity: The growing dependence on digital technologies has increased the importance of cybersecurity. The increase in the number of cyberattacks on industrial enterprises required the introduction of modern means of protecting information systems and training personnel in the basics of cyber hygiene. This has become an integral part of ensuring the financial and economic security of enterprises [3].

It should be noted that the period of 2022-2024 was a test for Ukrainian industrial enterprises, but at the same time stimulated them to introduce new approaches to ensuring financial and economic security and adaptation to difficult conditions [7-8].

It is expected that in 2025, Ukraine's industrial sector will continue to adapt to new realities. Priority areas will be the restoration of destroyed enterprises, the introduction of innovative technologies and integration into European markets, while ensuring financial and economic security will remain a key factor in the sustainable development of industrial enterprises in the post-crisis period.

Analyzing European countries, we can say that they demonstrate a high level of digitalization and integration of financial technologies (FinTech) in ensuring economic security, where the main trends are:

− use of artificial intelligence for financial monitoring;

− introduction of cybersecurity standards to protect financial systems;

− active involvement of ESG (environmental, social and corporate governance) tools in the strategies of enterprises.

The main problems of financial and economic security of enterprises include:

1. High level of economic risks:

− instability of the macroeconomic environment and crisis phenomena in the financial sector;

− the impact of global economic shocks on the financial stability of enterprises;

− high volatility of exchange rates, which affects the cost of raw materials and products.

2. Low level of financial control and risk management:

− lack of effective methods of financial risk management;

− insufficient transparency of financial reporting;

− lack of automated systems for monitoring financial flows.

Table 1 – Main components of the financial and economic security system

No. p/n	Element	Main functions	Possible threats
1	Financial security	Control of financial flows, crisis prevention	Financial fraud, insolvency
2	Information security	Data protection against unauthorized access	Cyberattacks, information leakage
3	Investment security	Risk analysis, investment management	Inefficient investments, fraud
4	Operational security	Cost optimization, efficiency improvement	Low productivity, misuse of resources
5	Legal security	Compliance with legislation, legal support	Litigation risks, regulatory changes
6	Personnel security	Personnel protection, minimization of internal threats	Data leakage, employee fraud

[developed by the author]

3. Information security issues:
− growing threats in the field of cybersecurity;
− financial data leaks due to insufficient security of information systems;
− insufficient funding for cybersecurity measures.
4. Insufficient level of investment security:
− high risks associated with investing in unstable economic conditions;
− limited access to financing and credit resources;
− lack of mechanisms for state support of investments in the industrial sector.
5. Personnel problems:
− outflow of professional staff abroad due to better working conditions;
− lack of an effective system of training specialists in the field of financial security;
− insufficient level of financial literacy of business managers.
6. Imperfect legal regulation:
− lack of effective legislative control in the field of corporate security;
− corruption risks that complicate doing business;
− high tax and administrative burden on enterprises.

Therefore, based on the above problems, the following is recommended to improve the system of financial and economic security of industrial enterprises in Ukraine:

1. Increase the efficiency of financial risk management.
2. Implementation of international risk management standards (ISO 31000, COSO ERM).
3. Development of digital technologies for analyzing and controlling financial flows.
4. Strengthening legal regulation in the field of corporate security.
5. Education and training of personnel to reduce internal threats:
− introduction of modern financial monitoring tools;
− use of big data analytics for risk assessment;
− application of financial risk insurance mechanisms.
6. Strengthening cybersecurity:
− introduction of artificial intelligence systems to detect cyber threats;
− use of blockchain technologies for secure financial transactions;
− training of personnel in the basics of cybersecurity and financial protection.
7. Optimization of investment policy:
− creation of mechanisms for state support of investments in strategic sectors;
− use of the latest methods of investment risk assessment;
− development of partnerships between business and scientific institutions for innovative development.
8. Development of human resources:
− implementation of training programs for specialists in the field of financial security;
− stimulating enterprises to improve staff qualifications;
− support for initiatives to attract Ukrainian specialists working abroad.
9. Improvement of legal regulation:
− harmonization of national legislation with international standards of financial risk management;
− development of new anti-corruption mechanisms in the financial sector;
− improvement of tax policy to stimulate the development of industrial enterprises.
10. Automation of financial processes:
− use of ERP systems for integrated enterprise management;
− development of FinTech solutions for financial analysis;
− introduction of cloud technologies for managing financial flows.

Thus, the current challenges faced by Ukrainian industrial enterprises require a revision of approaches to ensuring financial and economic security. The need to strengthen crisis management, digital transformation of the financial sector, efficient use of resources, and integration into the international financial system are key areas for further research and development of practical solutions.

Conclusions

Financial and economic security is a key element of the sustainability of industrial enterprises. The integration of modern digital technologies, effective financial control and the development of international cooperation will help ensure the stable development of industrial enterprises and increase their competitiveness.

To achieve these goals, companies need to implement financial flow control systems, strengthen information security, and develop risk minimization strategies. The integration of modern analytical tools, the introduction of financial monitoring, and the improvement of corporate governance will help to counteract internal and external threats more effectively.

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