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Kryvovyazyuk Igor, Candidate of Economic Sciences, Professor

Lutsk National Technical University

<https://orcid.org/0000-0002-8801-4700>igor.kryvovjazyuk@lntu.edu.ua

Кривов'язюк Ігор, к.е.н., професор

Луцький національний технічний університет

<https://orcid.org/0000-0002-8801-4700>igor.kryvovjazyuk@lntu.edu.ua

Kryvoviazziuk Bohdan

Lutsk National Technical University

<https://orcid.org/0009-0004-8007-177X>bogdan_kriv@ukr.net

Кривов'язюк Богдан

Луцький національний технічний університет

<https://orcid.org/0009-0004-8007-177X>bogdan_kriv@ukr.net

MONITORING BUSINESS STRUCTURES ACTIVITY TO PREDICT THEIR DEVELOPMENT UNDER CONDITION OF MARTIAL LAW

This article examines topical issues of the need for constant monitoring the changes in the business structures activity. The main purpose of the study is to monitor the business activity of industrial business structures of Ukraine to predict their development under condition of martial law. A critical analysis of scientific publications about the problem of improving the management of business structures activity revealed the lack of scientists' attention to researched problems. The relevance of its solution is caused by the scale of the impact of military conflicts on the business structures activity, which requires its monitoring to further establish the state and ensure compliance of the business with the norms that are considered necessary to maintain a certain level of development stability or to survive, to determine areas where the business can improve its activities and become more profitable. The methodological basis is the system of methods used to obtain the final results of the study: theoretical generalization – to deepen the essence of the concept of «monitoring business activity»; analysis, synthesis and logical generalization – to obtain conclusions during monitoring business confidence and business climate in industry; prognostic – to predict the development of industrial business structures of Ukraine under condition of martial law. The object of research is the business structures activity. The article presents the results of monitoring business confidence and business climate in the industry of Ukraine under condition of martial law. Analysis, synthesis and logical generalization of monitoring results became the basis for further forecasting the development of business structures. The results of the study can be useful for business structures that seek to maintain a certain level of development stability and identify areas of activity improvement.

Keywords: *monitoring business activity, forecasting the development, business confidence, business climate, business structures, martial law, Ukraine.*

МОНІТОРИНГ ДІЛОВОЇ АКТИВНОСТІ БІЗНЕС-СТРУКТУР ДЛЯ ПРОГНОЗУВАННЯ ЇХ РОЗВИТКУ В УМОВАХ ВІЙСЬКОВОГО СТАНУ

У цій статті розкрито актуальні питання необхідності постійного спостереження за змінами ділової активності бізнес-структур. Основною метою дослідження є здійснення моніторингу ділової активності промислових бізнес-структур України для прогнозування їх розвитку в умовах військового стану. Критичний аналіз змісту наукових публікацій з вирішення проблеми удосконалення управління діловою активністю бізнес-структур виявив недостатність уваги вчених до досліджуваної проблематики. Актуальність її розв'язання зумовлена масштабністю впливу військових конфліктів на ділову активність бізнес-структур, що вимагає її моніторингу для подальшого встановлення стану та забезпечення відповідності бізнесу нормам, які вважаються необхідними для підтримання певного рівня стабільності розвитку або ж для виживання, визначення сфер, де бізнес може поліпшити свою діяльність і стати більш прибутковим. Методологічну основу становить система застосованих для отримання кінцевих результатів

дослідження методів: теоретичного узагальнення – для поглиблення сутності поняття «моніторинг ділової активності»; аналізу, синтезу і логічного узагальнення – для отримання висновків під час моніторингу ділової впевненості та ділового клімату в промисловості; прогностичний – для прогнозування розвитку промислових бізнес-структур України в умовах військового стану. Об'єктом дослідження в роботі виступає ділова активність бізнес-структур. У статті представлено результати моніторингу ділової впевненості та ділового клімату в промисловості України в умовах військового стану. Аналіз, синтез і логічне узагальнення результатів моніторингу стали основою подальшого прогнозування розвитку діяльності бізнес-структур. Результати дослідження можуть бути корисними для бізнес-структур, які прагнуть підтримання певного рівня стабільності розвитку та визначення сфер покращення діяльності.

Ключові слова: моніторинг ділової активності, прогнозування розвитку, ділова впевненість, діловий клімат, бізнес-структура, військовий стан, Україна.

Introduction. The study of the features of monitoring the business structures activity to predict their development under condition of martial law is now an extremely urgent problem for Ukrainian business, since military conflicts on a large scale affect the business activity of enterprises. In such conditions, there are significant difficulties for business, in particular, such as interrupting supply chains, changing market requirements, increasing security risks, reducing demand for products, etc. Monitoring the business activity of business structures is crucial to understand their effectiveness and predict their future development. In a business environment that is stable and predictable, this type of monitoring can help to identify areas where a business can improve its activity and become more profitable. Whereas under condition of martial law, monitoring business activity can be used to ensure business compliance with the norms that are considered necessary to maintain a certain level of development stability or to survive. The use of the results of monitoring the business activity of business structures plays an important role in solving problems of entrepreneurship development and/or improving the efficiency of their activities management.

This research was carried out within the research topic «Managerial innovations in the methodology of solving problems of entrepreneurship development and ensuring business excellence» (0121U108254).

Literature Review. The research of business activity and the issues of its monitoring are devoted to the developments of such national and foreign scientists as Adonin, S.V., Vartanova, O.V., Yershova, N., Kniaz, S.V., Skrynkovskyi, R.M., Konovaliuk, I.V., Rusyn-Hrynyk, R.R., as well as Bobkova E.Y., Kuchumov A.V., Britchenko I., Kovalska L., Shostak L., Sak T., Myshko O., Lubinski T., Salvioni D.M., Bosetti L., Fornasari T. and others. The authors examined the essence of the concepts of «business activity» and «monitoring», the characteristics of monitoring business activity are disclosed, features of accounting and analytical support for the diagnosis of business activity and management of enterprises business activity. As it is emphasized in the works of the scientists, the success of business management depends on the range of efforts made by business structures and plays an essential role in increasing productivity and profit in the future in the direction of promotion in the markets of products, capital, labor (Adonin et al., 2021). Monitoring business activity is a component of analytical management support that aims to comprehensively monitor and diagnose changes in the level of such activity (Vartanova, 2017), whose results form the basis for forecasting the studied object development (Yershova, 2018) and indicate the applied aspect of its implementation. The choice of the monitoring object and sources of information, methods of monitoring activities is important to monitor business activity. (Kniaz et al., 2022). It should be noted that in recent years, the importance of monitoring the business activity of business structures that play a significant role in the development of entrepreneurship has been growing, while the monitoring itself is designed to promote better awareness of business leaders about strengths and weaknesses, as well as increase the chances and improve opportunities for solving problems that are typical for monitoring systems of most business structures today (Skrynkovskyi, 2022). The main elements of monitoring are the mechanisms of strategic planning, controlling

and the results of evaluating the effectiveness of the mechanism (diagnostics) (*Kryvoviazuk, 2017; Kryvoviazuk et al., 2021*). At the same time, the results of monitoring and forecasting serve as a basis for improving the strategic and operational results of business structures (*Kryvoviazuk, 2022*). Comparisons should be made with the results of research by international rating agencies to obtain better monitoring results (*Kryvoviazuk & Volynchuk, 2014*). Analysis and evaluation of monitoring results is important for increasing the business activity of business structures of different levels (*Bobkova et al., 2022; Kryvoviazuk et al., 2023*). At the same time, it is important to discuss practical issues of analyzing and visualizing data in real-time (*Lubinski, 2008*), as well as using their results in the development of business models (*Salvioni et al., 2022*).

However, despite the significant contribution of the above-mentioned scientists, the issue of constant monitoring the changes in the business structures activity to predict their development was not examined properly for the conditions of martial law.

The purpose of the article is monitoring the business activity of industrial business structures of Ukraine to predict their development under condition of martial law.

Methodology. The theoretical and methodological basis of the study are the key provisions of the theory of business cycles. To achieve the goal set in the work, the following scientific methods were used: theoretical generalization – to deepen the essence of the concept of «monitoring business activity»; analysis, synthesis and logical generalization – to obtain conclusions during monitoring business confidence and business climate in industry; prognostic – to predict the development of industrial business structures of Ukraine under condition of martial law.

Results. The results of the critical analysis of the content of scientific publications of modern scientists suggest that monitoring the business activity of business structures is an important component of business management, which includes the implementation of constant monitoring of changes in the business activity of business structures in order to improve the managers' awareness of such changes, whose results form the basis for forecasting their development, serve as a basis for improving strategic and operational results of business activities.

Business activity monitoring allows business owners and managers to assess their current performance and predict future events by tracking the day-to-day operations of a business, including sales, production, and costs. This information is used to determine the current state of the business and areas where improvements can be made. Also, such information can be used to predict future events, such as changes in consumer demand, market trends, or the introduction of new technologies. Businesses that effectively control their activity are more likely to identify and solve the problems before they become threatening. Enterprises can prepare for potential changes in the market or industry by predicting future events. That is, monitoring business activity can help businesses to identify opportunities for growth. Businesses can identify areas where they perform well and benefit from these areas of activity by analyzing sales and production data. They can also identify new growth opportunities, such as expanding new markets or creating new products.

Monitoring business activity of industrial structures of Ukraine under condition of martial law is proposed to be carried out according to statistical observations. Statistical information on the expectations of entrepreneurial structures regarding the prospects for the development of their business activity is compiled according to a survey of their managers. The monitoring methodology is summarized in the Methodological provisions of the state statistical observation «State of enterprises business activity», according to the order of the State Statistics Service of Ukraine of 31.10.2022. No. 262, which takes into account the recommendations for conducting business activity surveys of The Joint Harmonised Programme of Business and Consumer Surveys (EU) (*European Union, 2022*), and OECD Business Survey Guidelines (*OECD, 2003*).

Summarized results of observations of the dynamics of business confidence indicators (Table 1) and the business climate in industry (Table 2) demonstrate pronounced negative trends in the values of estimated indicators during the period of martial law in Ukraine, revealing unfavorable prospects for business activity of business structures at least until the end of 2023.

Table 1 – Indicator of the business confidence in the industry during martial law in Ukraine

Indicator components	2022, by months												2023	
	01	02	03	04	05	06	07	08	09	10	11	12	01	02
<i>Indicator of business confidence in the industry</i>	-9.4	-5.4	-25.7	-22.4	-16.7	-15.0	-14.9	-15.0	-13.2	-14.4	-16.9	-19.0	-14.8	-12.4
Estimation of the current volume of orders for production (demand), balance	-31	-31	-57	-56	-54	-53	-53	-54	-52	-51	-52	-51	-52	-51
Expected changes in output in the next three months, balance	-4	7	-41	-34	-18	-12	-10	-9	-5	-7	-14	-23	-6	-1
Estimation of the current stock of finished products, balance	-7	-8	-21	-23	-22	-20	-18	-18	-17	-15	-15	-17	-14	-15

Source: Clarified by the authors based on (State Statistics Service of Ukraine, 2023)

The change in the values of the indicator of business confidence in the industry during the martial law in Ukraine reveals extreme business uncertainty in March-April 2022, a gradual improvement in the situation by September 2022 and the next deterioration in business confidence by the end of 2022, early 2023 demonstrates its slight improvement for the business structures of industry. To a large extent, such a negative situation revealed during the monitoring business confidence in the industry is due to a sharp reduction in orders for the production of products, as well as to a much smaller extent by reduction in stocks of finished products. It is quite clear that all this was the result of military operations by the aggressor country on the territory of Ukraine.

The results of monitoring the business climate in the industry during the martial law in Ukraine revealed much more moderate negative changes (Table 2) compared to the dynamics of the indicator of business confidence in the industry. At the same time, the trends of changes in the values of business confidence indicators and business climate almost coincide.

Table 2 – Indicator of the business climate in the industry during martial law in Ukraine

Indicator components	2022, by months												2023	
	01	02	03	04	05	06	07	08	09	10	11	12	01	02
<i>Industry business climate indicator</i>	1,0	1,0	-2,0	-2,0	-1,7	-1,2	-1,2	-1,3	-1,0	-0,9	-1,0	-1,3	-1,0	-0,7
Estimation of changes in production volume for the previous three months, balance	0	1	-33	-38	-34	-25	-22	-23	-18	-18	-15	-18	-18	-10
Expected changes in output in the next three months, balance	-4	7	-41	-34	-18	-12	-10	-9	-5	-7	-14	-23	-6	-1
Estimation of the current volume of orders for production (demand), balance	-31	-31	-57	-56	-54	-53	-53	-54	-52	-51	-52	-51	-52	-51
Estimation of the current volume of foreign orders for production (export demand), balance	-22	-24	-29	-28	-30	-29	-32	-33	-33	-33	-35	-34	-35	-35
Estimation of the current stock of finished products, balance	-7	-8	-21	-23	-22	-20	-18	-18	-17	-15	-15	-17	-14	-15

Source: Clarified by the authors based on (State Statistics Service of Ukraine, 2023)

Negative changes that characterize the dynamics of the business climate indicator in the industry are mainly due to a decrease in the volume of domestic and foreign orders for the production of products. The expected changes in output in the next three months of the year are the most favorable for February 2023.

The business has weakened its negative expectations regarding the dynamics of production volumes in 2023 taking into consideration the fact that the fading activity of hostilities in the east and south of Ukraine, and terrorist attacks occurring throughout its territory (Fig. 1).

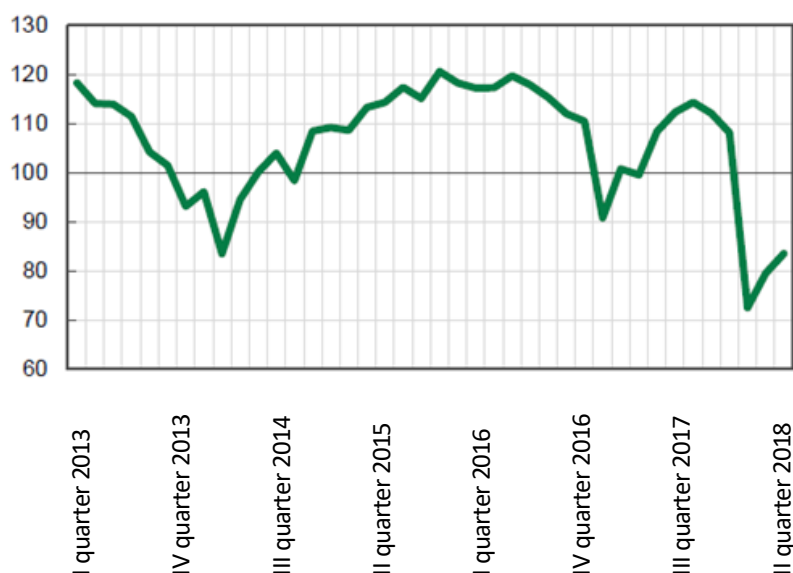


Figure 1. Index of business expectations of Ukrainian enterprises for the next 12 months
 Source: Formed by the authors based on (National bank Ukraine, 2023)

Summarizing the results of the research, we will demonstrate how the expectations of business representatives have changed regarding changes in their financial and economic situation, the total volume of sales of their own products, investment expenditures and changes in the number of employees in the future for the next 12 months (Table 3).

Table 3 – Index of business expectations in the industry during martial law in Ukraine

Business expectations in the next 12 months	2022			
	I quarter	II quarter	III quarter	IV quarter
Regarding changes in the financial and economic situation	7,2	-17,1	-15,1	-11,5
Regarding changes in total sales volumes of own production	17,0	-19,0	-7,2	-7,3
Regarding changes in investment costs for construction works	0,9	-37,2	-29,3	-26,9
Regarding changes in investment costs for machinery, equipment, and inventory	14,3	-34,7	-25,3	-16,6
Regarding changes in the number of employees	1,5	-29,0	-25,5	-20,1
IBE, %	108,2	72,6	79,5	83,5

Source: Formed by the authors based on (National bank Ukraine, 2023)

It should be stated that despite some positive changes in the expectations of business representatives for the next 12 months (that is, 2023) at the end of the studied period, estimates for certain components of the index remain extremely negative. It means that business structures will continue to face serious obstacles to their development. And this situation will be a common feature at least until the end of 2023.

Conclusions. This paper reveals the theoretical foundations and results of monitoring the business activity of industrial business structures of Ukraine in order to predict their development under condition of martial law.

It is determined that the monitoring business activity of business structures should be examined as a component of business management, which includes the implementation of constant monitoring the changes in business activity in order to improve the awareness of business leaders of such changes, the results of which form the basis for forecasting their development, serve as a basis for improving strategic and operational results of business activities.

The study revealed that monitoring business activity requires more than simple data collection, namely, an analysis of this data and a summary of conclusions that can inform further decision-making. According to the results of monitoring the business activity of industrial business structures of Ukraine, it was found that during the period of martial law in 2022, business confidence significantly decreased, and the business climate worsened in the industry. Business weakened its negative expectations about future changes in the business environment in Ukraine in 2023. The greatest concern among business representatives is the further reduction of investment expenditures and the number of employees as for forecasting changes in the development of business structures and their business expectations. Under condition of remaining martial law in Ukraine, the continuation of negative trends should be expected in the business structures activity.

Thus, monitoring the business activity of business representatives is crucial to their success. It allows us to identify and solve the problems, predict future events, and identify opportunities for growth. At the same time, effective monitoring requires investment in the appropriate systems and tools which enable it to be implemented, as well as relevant experience in data interpretation. Enterprises can stay ahead and maintain stable development, timely identifying areas for improving business activities by controlling business activity.

Author contributions:

Conceptualization: Kryvovyazyuk Igor

Data storage: Kryvovyazyuk Igor

Formal analysis: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Acquisition of financing: Kryvovyazyuk Igor

Investigation: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Methodology: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Administration: Kryvovyazyuk Igor

Resources: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Supervision: Kryvovyazyuk Igor

Confirmation: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Visualization: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

Written by: Kryvovyazyuk Igor, Kryvoviaziuk Bohdan

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