

Current Dynamics and Obstacles Facing Small and Medium-Sized Businesses in Ukraine Amidst the War

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ABSTRACT

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Introduction: This study's relevance is driven by the need to develop scientifically sound economic instruments to create a favourable business environment that will help restore and increase the resilience of small and medium-sized businesses in Ukraine during the war and post-war reconstruction.

Objectives: This research article aims to analyse the economic instruments for supporting small and medium-sized businesses in Ukraine during the war and post-war periods by analysing the current barriers to their functioning, assessing the status and main factors affecting the productivity of SMEs, and formulating ways to improve efficiency, optimise processes and recover from the war.

Methods: The study used methods of information synthesis, statistical method, forecasting method, correlation analysis, and method of generalisation and systematisation, which allowed for a comprehensive analysis of current problems and barriers to the functioning of small and medium-sized businesses, identification of key trends, and substantiation of the prospects for the development of this sector in the context of the war and post-war recovery of Ukraine.

Results: The correlation analysis revealed a correlation between the sales volumes of medium-sized enterprises, the innovation index ($r = 0.587$), and the business confidence index ($r = 0.667$). However, the lack of statistical significance ($p > 0.05$) indicates the need for innovative development and increased investment in technology. At the same time, the correlation between small business sales and the business confidence index ($r = 0.806$ at $p = 0.05$) shows the importance of ensuring a stable external environment for SMEs. In turn, micro-enterprises also demonstrate a high correlation with business confidence ($r = 0.912$ at $p = 0.016$), emphasising the dependence of their functioning on economic stability.

Conclusions: The results of the study indicate the need to reduce regulatory pressure, eliminate corruption and bureaucracy, expand financing programmes and create a mechanism for preserving human resources to ensure the prompt recovery of the SME sector both during the war and post-war periods, as well as to ensure sustainable economic growth by creating favourable conditions for economic activity and stimulating the development of critical sectors of the economy.

Keywords: economic instruments, financial resources, food security, human resources, regulatory pressure, business climate.

INTRODUCTION

Small and medium-sized enterprises are among the most critical components of economic stability, providing a significant share of employment, contributing to the development of the regional economy, and building sustainable infrastructure at the local level. At the same time, as the crisis and economic instability in Ukraine continue to unfold due to the hostilities, SMEs are forced to look for new ways to improve the overall business climate. Despite SMEs' somewhat optimistic assessment of the Ukrainian business climate, as shown in Figure 1, the war has required the

sector to adapt traditional economic support instruments and create new mechanisms to respond to specific threats and challenges effectively.

However, the prospects for SME development are no less critical, and they should be mainly focused on their recovery in the post-war period. In this context, studying economic instruments to support SMEs requires the development of a compelling state policy to restore Ukraine's economic potential, mainly by removing barriers to business development and facilitating access to finance and markets.

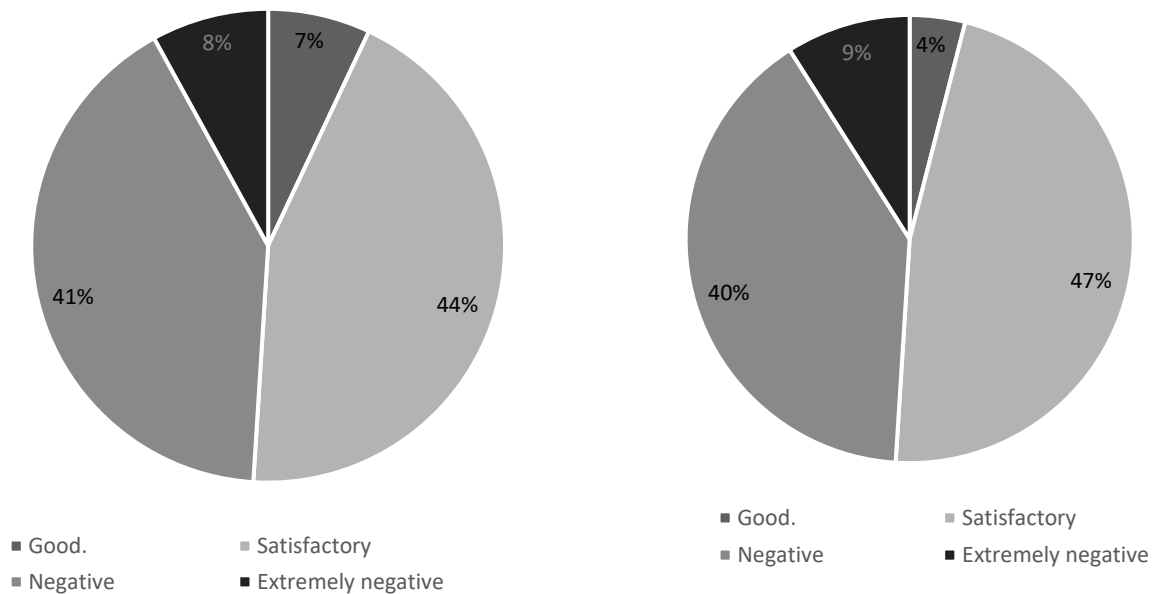


Figure 1: Assessment of the ukrainian business climate

Source: Ukrinform [1]

Note: a – business with foreign investments; b – Ukrainian business.

This research article aims to identify critical economic instruments to support small and medium-sized businesses in Ukraine during the war and post-war periods by analysing the most priority problems faced by this sector during the war. The article also assesses the status and environment of SMEs, including barriers to continuing operations, staffing, sales volumes, and the need for financing.

LITERATURE REVIEW

Small and medium-sized businesses (SMEs) are vital to any country's market economy. They ensure stability, fill the budget, create jobs, saturate the market with goods and services, and create a competitive environment [2, 3, 4]. Among the most pressing global challenges for SMEs are regulatory constraints, access to finance, market competition, and infrastructure deficits [5, 6]; the impact of economic competition, lack of resources, low innovation potential [7], as well as the inconvenience of going global at the beginning and fewer opportunities in SMEs' international strategies compared to large firms [8]. However, given the specifics of SMEs in Ukraine and the impact of Russia's long-term armed aggression on this process, current research indicates that in the context of war, SMEs face a large number of new challenges, namely: unpredictability and volatility of the business environment [9]; reduced demand for goods, services or work, suspension of work of contractors, suppliers and customers [10, 11]; loss of qualified personnel due to mobilisation and migration of refugees abroad [12, 13]; high regulatory pressure, which leads to an unfavourable regulatory climate in general [14]; loss or damage to supply chains and, as a result, lack of financial resources for operational activities [15]; the need to introduce new technologies and intensify innovation to simplify routine SME operations in the context of digitalisation [16], which requires high-quality training of skilled personnel to work with digital tools,

and, therefore, requires continuous improvement of the quality of educational services in extreme conditions and emergencies [17].

Given these problems of small and medium-sized businesses in Ukraine, Syniura-Rostun [18] identified that key government measures should be aimed at reducing regulatory pressure and preventing corruption in the regulatory sphere, which leads to significant economic losses and reduced results of expenditures to the state budget. In addition, to address the issue of mobilising qualified personnel, Yatsenko [19] notes the need to implement an optimal model for booking employees digitally to retain key personnel in the required areas. According to Alekseieva et al. [10], the most influential economic tool to support small and medium-sized businesses is state programmes to support entrepreneurship under martial law, which establish a mechanism for providing state aid and support under the legal regime of martial law, including financial, informational and organisational support (e.g., business relocation programmes, affordable loans "Affordable Loans 5-7-9%" and grants for own business). This view is supported by Yudina et al. [16], who identified the need to attract alternative sources of funding (search for grants, investments, credit lines) to overcome the effects of the crisis and optimise costs, including budget revisions, cost-cutting, and increased resource efficiency, to ensure continued operation in a war of instability.

METHODS

The following methods were used in the research:

- The information synthesis method was used to identify and integrate various scientific approaches and views covered in the current scientific literature on current problems and promising areas for developing small and medium-sized businesses in Ukraine in the context of war and post-war recovery.
- The statistical method was applied to analyse secondary data to identify critical trends in the SME sector, particularly the favourable business environment, employment dynamics and future growth of the sector.
- The forecasting method was performed to forecast the volume of sales of small and medium-sized businesses for the next period (2024) using the FORECAST.ETS function of the Excel statistical software based on the initial statistical data from official sources.
- The systematisation method was employed to formulate criteria for analysing the main factors affecting the productivity of small and medium-sized businesses, including the Business Confidence Index (BCI), the Business Activity Index (UBI), the Global Innovation Index (GII), and critical variables (sales volumes in 2020–2023 and forecast values for 2024).
- The correlation analysis, carried out using Pearson's Correlations tool in the JASP statistical program between the identified variables on the volume of sales by enterprise size and the criteria of business development in Ukraine, was applied to study the relationship between the main factors influencing the productivity of small and medium-sized businesses.
- The generalisation method was used to justify the need to apply economic instruments that can contribute to increasing business confidence and productivity of small and medium-sized businesses in the context of the war in Ukraine based on the pre-existing problems and barriers to the functioning of this sector.

RESULTS

Small and medium-sized enterprises (SMEs), as a key segment of the market economy, contribute to the economic stability of the country, as well as fill budgets, create jobs, saturate the market with goods and services, and create a competitive environment. Given that SMEs are pretty flexible in the face of changing social processes, quickly adapting to changes in the market, this sector contributes to the formation of the middle class, the development of civil society, the reduction of social inequality and tension, the acceleration of democratisation of market relations and social sustainability. However, a large number of Ukrainian SMEs have suffered significant losses due to the outbreak of Russia's full-scale invasion of Ukraine, which has led to their shutdown and increased unemployment in the country. An assessment of the business environment for small and medium-sized businesses in Ukraine during the war, as shown in Figure 2, shows an increase in the number of cases of blocking tax invoices, problems with logistics, including the loss of key transport routes, delays in deliveries and, as a result, increased costs for alternative transportation routes, and the refusal of government agencies to reserve key employees from mobilisation.

Thus, according to the NISS survey [20], the top priorities for the authorities are to eliminate corruption (66.7%) and improve access to credit (42.4%). Also, a significant proportion of entrepreneurs pointed to the need for judicial (36.4%) and tax (32.5%) reforms, the introduction of e-booking (32.6%), a stronger moratorium on business inspections by the State Tax Service and the Bureau of Economic Security (29.3%), and the acceleration of the movement of goods through customs (26.4%).

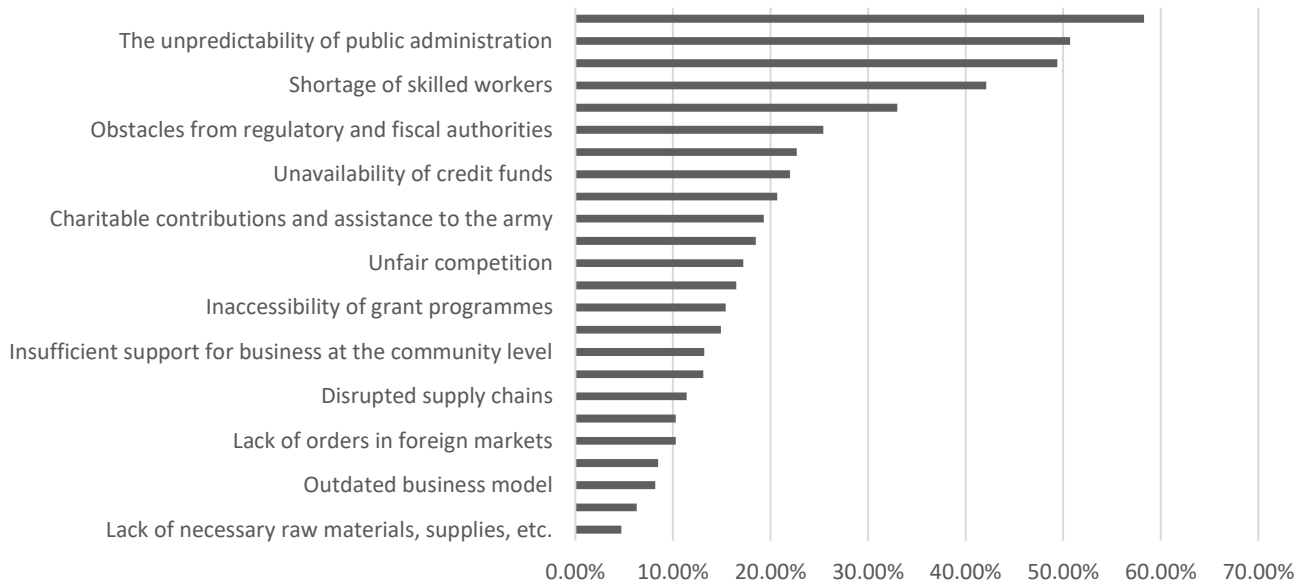


Figure 2: Assessment of the Business Environment for Small and Medium-Sized Businesses in Ukraine during the War

Source: UNDP [21]

Along with other problems that complicate the operations and resumption of business activities in wartime, the lack of a sufficient number of skilled workers (42.1%) remains a significant risk. Before the full-scale invasion, SMEs accounted for the largest share of Ukrainian workers in the labour market, with small businesses accounting for 48% (4.3 million people) of all workers employed in Ukraine [22]. However, according to Hromada [23], as of May 2024, a large number of employees were forced to take leave (7.5%), although this figure has significantly decreased compared to the first year of the full-scale invasion (as of June 2022, it was 20%). In addition, despite a significant decline compared to 2022 (27%), the share of staff currently working on salary reductions is 12.9%, a trend that has not changed over the past two quarters.

In contrast, the dynamics of the share of staff currently laid off (Figure 3) over the past three quarters have been on a steady upward trend, and as of May 2024, it stood at 29.6%, the highest figure on record during the full-scale invasion. However, an increase in the share of redundancies in winter is a natural phenomenon for the labour market, so the high value is not critical. In general, the share of laid-off people has been 20-30% over the past two years.

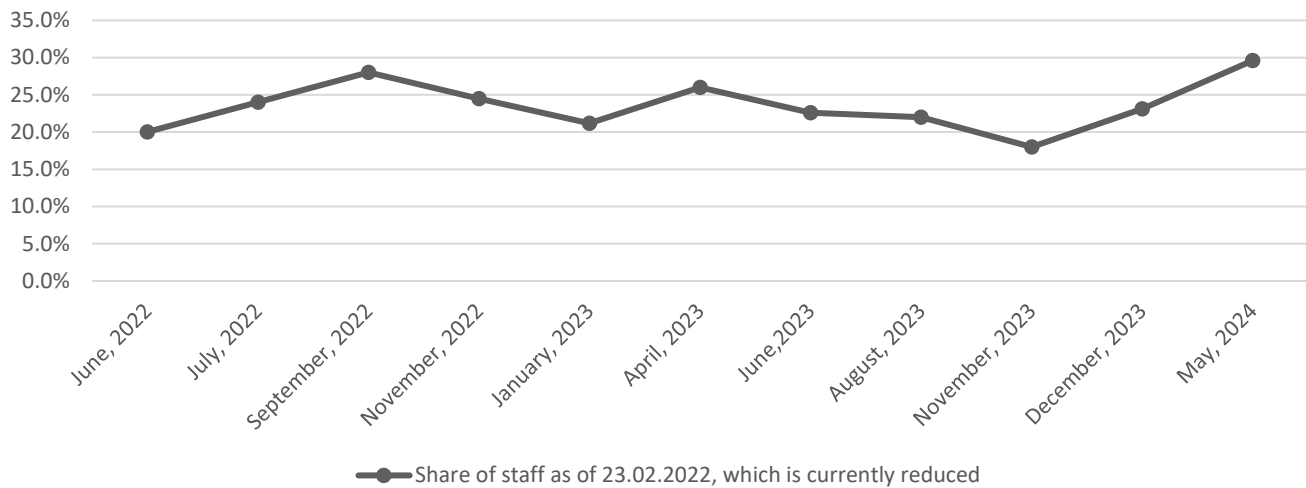


Figure 3: Changes in the Share of Reduced Staff in 2022–2024

Source: Hromada [23]

These challenges directly or indirectly affect enterprises of all types of economic activity. However, given the specifics and the prominent role of the agricultural sector's production and logistics potential in the Ukrainian economy, the focus on food security in the state regulation of the Ukrainian economy is one of the highest priorities in the wartime period. According to the Ministry of Agrarian Policy of Ukraine and the Kyiv School of Economics, the total losses the Ukrainian agricultural sector incurred in 2022 reached USD 6.6 billion, 23% of all losses. This is 23% of the total value of assets in Ukrainian agriculture. Agricultural losses by category during the full-scale invasion are shown in Figure 4.

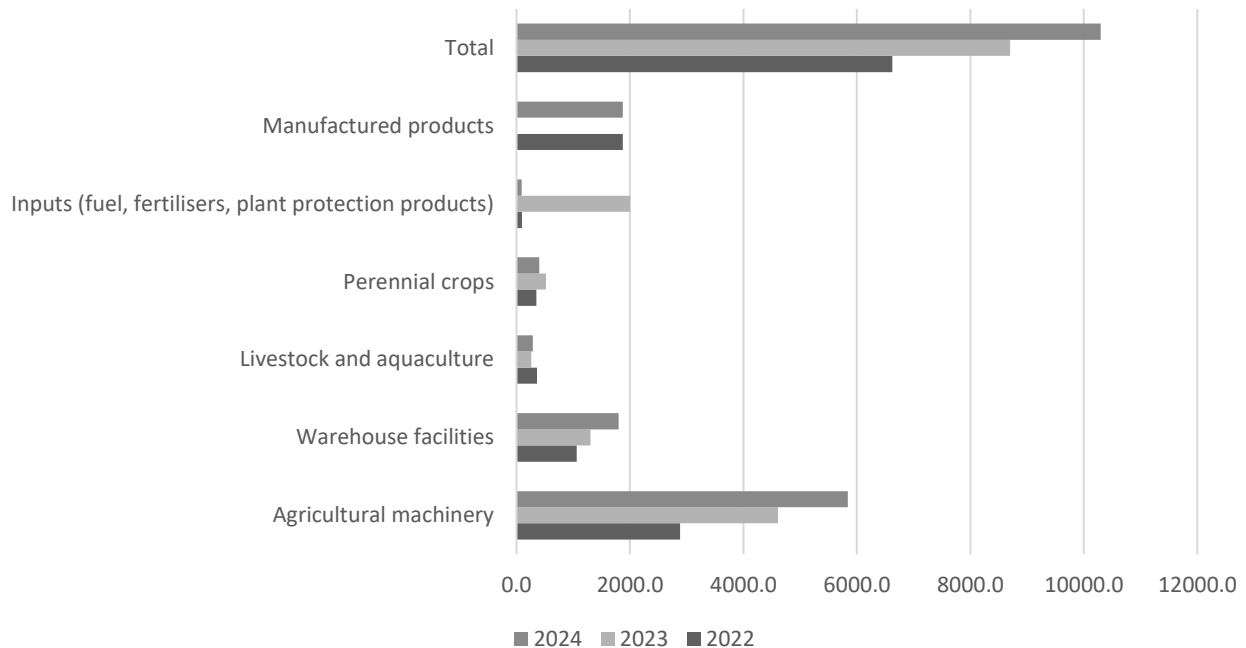


Figure 4: Breakdown of Losses in Ukraine's Agricultural Sector during the Wartime Period by Category, USD million

Source: KSE Agrocenter [24], Neiter et al. [25], Neiter et al. [26], Gazuda et al. [27]

Thus, on the one hand, the authorities are focused on filling the domestic market with food and, on the other hand, on maintaining Ukraine's role in the top 5 suppliers to the global food market. At the same time, small and medium-

sized businesses in the agricultural sector have faced the consequences of Russia's full-scale military aggression (Figure 5). While agriholdings, through the diversification of their business, carry out domestic subsidies and subsidies for agricultural production, as well as generate income through their exports, farmers, agricultural enterprises, and other forms of small and medium-sized enterprises in the agricultural sector are hostages of grain traders, primarily in terms of pricing.

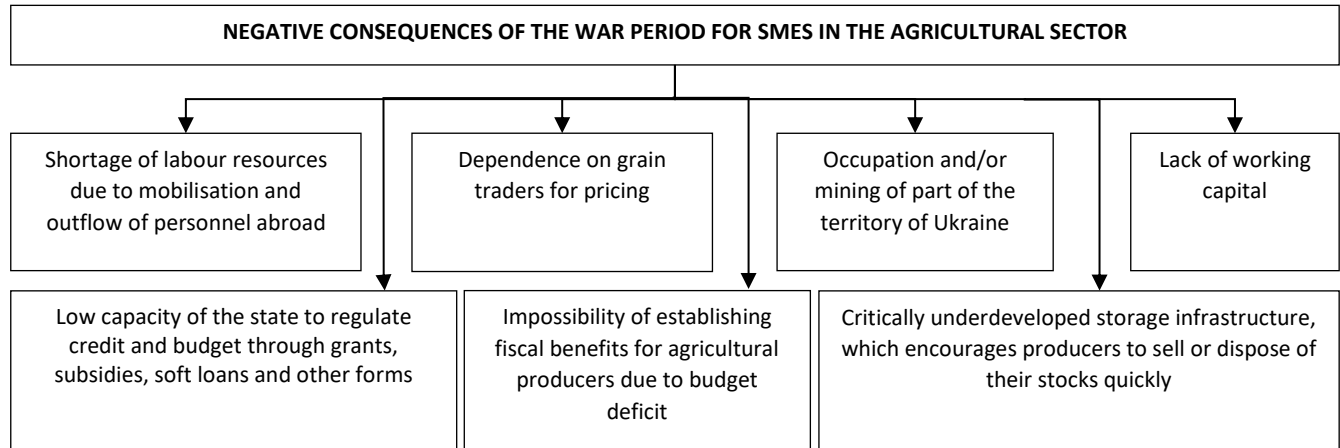


Figure 5: Negative Consequences of the Wartime Period for Small and Medium-Sized Businesses in the Agricultural Sector

Source: compiled by the author

Given the above challenges, it should also be noted that according to UNDP [21], SME managers' expectations regarding their business's growth prospects are pretty variable. One-third of enterprises expect a decrease in turnover, and 20% expect the same level of turnover. At the same time, 20% forecast growth compared to the weighted average, and 26% expect a significant increase in turnover. The expected weighted average growth rate of small and medium-sized businesses between 2022 and 2024 is shown in Figure 6.

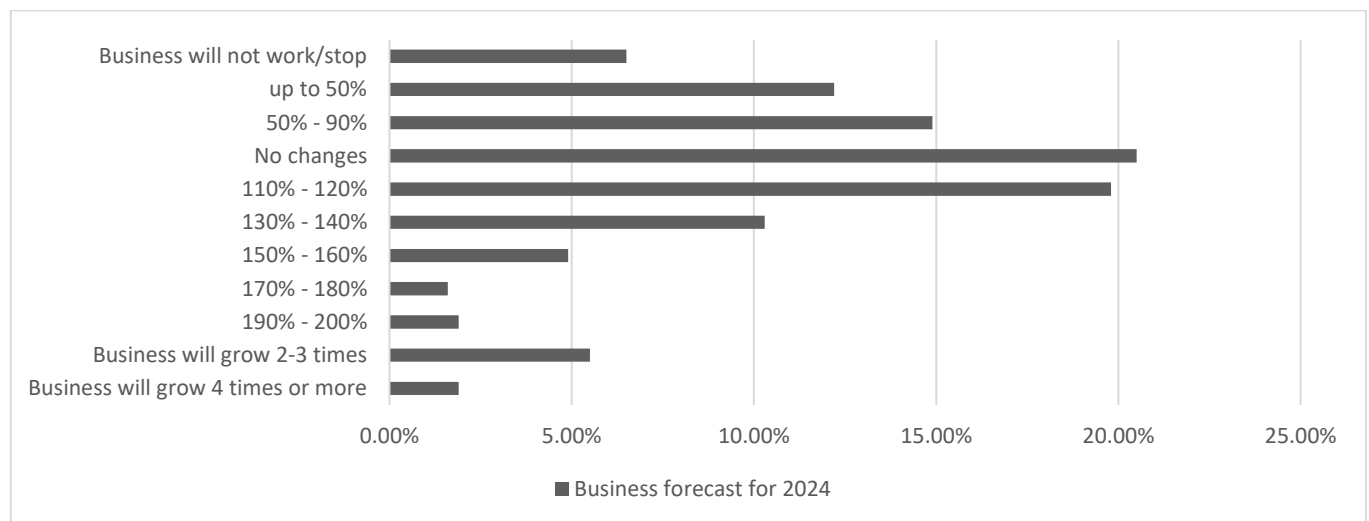


Figure 6: Expected Weighted Average Growth Rate of SMEs between 2022 and 2024

Source: UNDP [21]

In this context, it is worth noting that, given the volume of sales of products (goods and services), they demonstrate sufficient resilience and a tendency to recover in the crisis conditions, which are mainly related to the war and, as a result, political and economic instability. Therefore, forecasting the volume of sales of small and medium-sized enterprises for the next period will help to identify further growth trends, emphasising the importance of this sector for the national economy. The results of the author's forecasting of the sales volume of SMEs' products, goods, and services are shown in Figure 7.

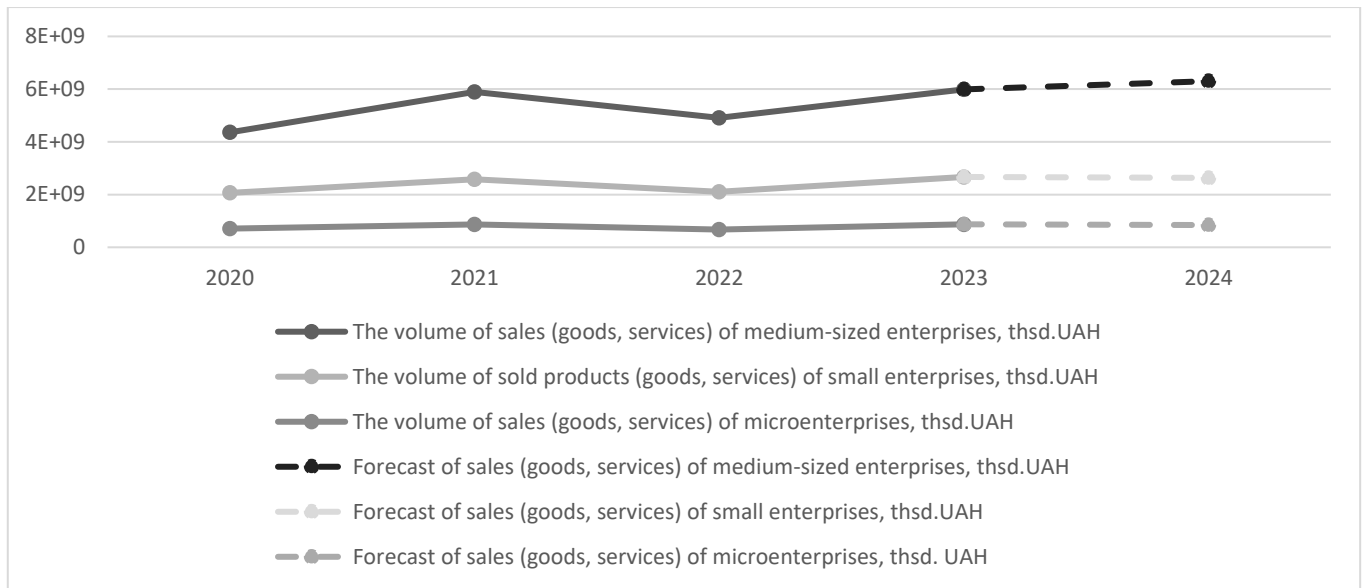


Figure 7: Forecasting the Volume of Products (Goods and Services) Sold by Small and Medium Enterprises

Source: compiled by the author based on Ukrstat [28]

Thus, during the analysed period, according to the State Statistics Service of Ukraine, the dynamics of sales of products (goods, services) of small and medium-sized enterprises indicates both negative trends in the development of this sector of the economy, in particular, a decrease in the volume of SMEs' sales (medium = -16.8%; small = -18.4%; micro = -21.97%) due to the outbreak of a full-scale invasion; and positive trends - a significant increase in sales in 2023 (medium = 22.08%; small = 26.97%; micro = 29.65%), characterised by economic recovery due to a decline in business activity, forced relocation and the shutdown of many enterprises amid the war.

Based on the statistical data obtained, forecasting SMEs' sales volumes for the next period was carried out using FORECAST.ETS function of the Excel statistical program. According to the forecasting results, it was found that sales volumes will remain relatively stable with a slight fluctuation (medium = 5.2%; small = -1.29%; micro = -3.25%), which indicates a predominantly positive outlook for small and medium-sized enterprises. The stable economic environment, investments in innovation and adaptation to new market conditions amidst the intensification of hostilities are expected to contribute to further development and growth in sales.

The following criteria were selected for the correlation analysis of the main factors affecting the productivity of small and medium-sized businesses, in addition to the volume of products (goods and services) sold as critical variables:

- The dynamics of the business activity index (UBI) indicate the overall level of business activity and its ability to increase turnover and create jobs. The normative value of this indicator ranges from 50 to 100, i.e. a value below 50 indicates negative expectations of business from further developments. This indicator also shows the general expectations of entrepreneurs regarding current economic conditions and trends in the business environment. In the course of further analysis, the correlation between changes in the business activity index and the volume of sales of enterprises (in particular, small and medium-sized enterprises) will allow us to determine the nature of the relationship between the overall level of business activity and business productivity.
- The Global Innovation Index (GII) measures a country's innovation level (in our case, the data is taken for Ukraine) and classifies world economies according to their innovation potential and achievements. The maximum value of the overall ranking may vary depending on the annual number of countries analysed; for example, in 2023, the index was calculated for 132 world economies, and in 2024 - for 133 world economies. Thus, the higher the country's innovation activity, the lower the value of this indicator will be; for example, Switzerland (score = 67.6) took first place in the 2023 ranking, while Ukraine (score = 32.8) took 55th place [29].
- Ukraine's business confidence index is measured by assessing the current and future business activity of 1,236 enterprises covering all industries, including small and medium-sized enterprises from different

regions, as well as changes in the country's business environment, inflation and exchange rate expectations [30]. A value above 100 indicates increased confidence in short-term performance, while a value below 100 indicates pessimism about the manufacturing sector's future development of production, orders and inventories. For example, business confidence in Ukraine decreased to 99.5 points in the second quarter of 2024 from 104.5 points in 2023, which indicates negative expectations of entrepreneurs regarding the economic situation, investment climate and overall development of the business environment in the country amid the ongoing war. It should be noted that according to OECD [31], the Business Confidence Index (BCI) of OECD member countries at the beginning of 2024 is 99.38, which is not significantly different from the indicator for the same period of the previous year (99.59).

Table 1 presents the results of forecasting the sales volume of small and medium-sized enterprises and the criteria for correlation analysis of the main factors affecting their productivity.

Table 1: Baseline Data for the Correlation Analysis of the Main Factors Affecting the Productivity of Small and Medium-Sized Businesses in Ukraine

Period	Global Innovation Index (GII)	Ukraine Business Confidence Index (BCI)	Ukrainian Business Index (UBI)	The volume of sales (goods, services)		
				Medium enterprises, thsd. UAH	Small enterprises, thsd. UAH	Of these, microenterprises, thsd. UAH
2020	45	90,8	39,9	4359362088,3	2064120734,4	704885585,2
2021	49	112,3	52,5	5900055014,1	2576371440,7	862346302,5
2022	57	72,6	33,9	4906839019,4	2101911968,7	672875826,7
2023	55	104,5	38,2	5990514360,3	2668866290,6	872356457,3
2024	60	99,5	43,7	6302122012*	2634303864*	843973314*

Source: compiled by the author based on Hromada [23], Ukraine Business Confidence [30], WIPO [32], and Ukrstat [28]

Note: * – forecast values calculated by the author

Based on the systematised initial data, a correlation analysis was carried out between the variables of sales volume by enterprise size and the criteria of business development in Ukraine. The correlation analysis was done using Pearson's Correlations tool in the JASP statistical program. The results of the correlation analysis of the main factors affecting the productivity of small and medium-sized businesses are given in Table 2. The full version of the correlation analysis is presented in Appendix 1.

Table 2. Results of the Correlation Analysis of the Main Factors Affecting the Productivity of Small and Medium-Sized Businesses in Ukraine

Variable		Global Innovation Index (GII)	Ukraine Business Confidence Index (BCI)	Ukrainian Business Index (UBI)
Medium-sized enterprises	Pearson's r	0.587	0.667	0.472
	p-value	0.149	0.109	0.211
	Lower 95% CI	-0.454	-0.343	-0.572
	Upper 95% CI	1.000	1.000	1.000
Small enterprises	Pearson's r	0.404	0.806*	0.519
	p-value	0.250	0.050	0.185
	Lower 95% CI	-0.626	-0.046	-0.529
	Upper 95% CI	1.000	1.000	1.000
Microenterprises	Pearson's r	0.201	0.912*	0.628

	p-value	0.373	0.016	0.129
	Lower 95% CI	-0.744	0.358	-0.402
	Upper 95% CI	1.000	1.000	1.000

Source: compiled by the author

Note: * – significant correlation at $p < 0.05$

Based on the results of the correlation analysis, conclusions are drawn about the current state of small and medium-sized businesses in Ukraine and the impact of critical factors on their productivity. According to the analysis, the volume of sales of products (goods, services) of medium-sized enterprises demonstrates a moderate positive correlation with the innovation index ($r = 0.587$) and the business confidence index ($r = 0.667$) without indicating the statistical significance of this relationship ($p > 0.05$). In this regard, government stimulation of innovative development in the structure of production and the social sphere and investments in the creation, application and dissemination of new knowledge and technologies contribute to the development and increase the efficiency of SMEs in Ukraine. In addition, the business confidence of enterprises in the stability of the political environment, the national economy, and the market for goods or services in which the enterprise operates also intensifies SMEs' business activities. It provides prospects for further growth in this sector.

The volume of sales of small enterprises demonstrates a strong and statistically significant positive correlation with the index of business confidence ($r = 0.806$ at $p = 0.05$) and, therefore, the confidence of small businesses in the stability of the external environment of their operation directly affects their productivity. In turn, micro-enterprises included in the number of small enterprises also show a reasonably strong correlation with the business confidence index ($r = 0.912$ at $p = 0.016$), which is statistically significant. This correlation is due to the high dependence of microenterprises on the economic stability of their operating environment, the presence or absence of which may affect the further activities of such businesses in the market.

DISCUSSION

Today, the urgent task of the state is to support representatives of small and medium-sized businesses in Ukraine, which is in crisis due to the intensification of hostilities, the limitation of the legal regime of martial law and the accompanying negative consequences of the war. Due to its significant impact on market stability, job security, and filling the state budget, SMEs contributes to the countries economic growth etc. [2, 3, 4]. The conditions for its further growth are significantly deteriorated by the conflict with Ukraine, which necessitates the adaptation of conventional assistance mechanisms.

Currently, one of the key problems for Ukrainian SMEs is regulatory pressure, which is often exacerbated by corruption risks, which has a negative impact on economic stability and thus causes a deficit in the state budget [18, 32]. According to the results of our study, reducing regulatory pressure is necessary to improve the efficiency of SMEs. The State Customs Service's overhaul, which includes tackling corruption, streamlining procedures, and introducing digital tools, is a top priority for ensuring openness and reducing obstacles in the business world [14, 34, 35]. In this context, we have proposed reforming the Bureau of Economic Security, which, based on EU standards, will aim to improve the quality of management and analysis of economic data to fight financial crimes and corruption. Research also highlights the need to expand financing instruments for SMEs, which are also highlighted in the works of Alekseieva et al. [10] and Yudina et al. [16].

In the conditions of war, Ukrainian SMEs face a shortage of qualified workers who are either mobilized or forced to emigrate. Implementation of an optimal employee reservation system, in particular through digital tools, is one of the important mechanisms for staff retention [12, 20, 36]. An effective reservation system, as noted in our work, will contribute to the provision of enterprises with critical specialists necessary to maintain their competitiveness and efficient work.

Despite the fact that some areas of support for SMEs are currently difficult to implement, their development after the end of the war and the termination of the martial law regime will be one of the key sectors for restoring the economic stability of the country. For example, export credits, tax incentives for export-oriented enterprises, and risk insurance programs have a high potential to attract SMEs to international trade [5, 7, 8]. Also, as noted in the conclusions, the

creation of information and consulting platforms to increase awareness of international markets will contribute to the expansion of opportunities for enterprises in this sector.

CONCLUSION

Thus, the identified problems of SMEs' functioning, as well as the need to increase the level of business confidence to ensure the further productivity of such enterprises, determine the relevance of using economic instruments to support small and medium-sized businesses in Ukraine during the war period: preventing unlawful actions by law enforcement agencies, including corruption in the regulatory sphere, leads to economic instability and reduces potential state budget revenues while putting pressure on small and medium-sized businesses.

In this context, the State Customs Service of Ukraine should be reformed to reduce corruption and increase procedure efficiency by eliminating bureaucracy and introducing digital tools to ensure transparency. Thus, the reform of the customs service requires the involvement of international experts and consultants specialising in improving the transparency and efficiency of customs services to provide recommendations and adjustments to the government's actions in the reform process.

The next step is to increase the efficiency of the Bureau of Economic Security. In the process of reforming this bureau, it is necessary to take into account the norms and standards of the European Union to ensure institutional independence, professional development of employees and the use of digital tools for data collection and analysis, effective methods of investigating economic crimes and combating financial crimes, corruption. In addition, it is essential to ensure quality control over compliance with certain norms and standards by creating and approving qualitative and quantitative criteria for assessing compliance and measuring their effectiveness.

It is also necessary to remove barriers to SMEs' operation in the context of war, which involves a qualitative transformation of approaches to using the risk assessment criteria monitoring system (RACMS). This direction involves transitioning from a prescriptive to an analytical approach, facilitating more flexible and effective control of tax risks. One of the critical tasks is to introduce a clear deadline for blocking tax invoices, which will reduce administrative pressure on companies and eliminate the risk of long delays in their operations. In addition, it is necessary to raise the threshold for mandatory VAT registration, which will reduce the burden on businesses and support SMEs in times of economic instability. However, at the same time, it is necessary to maintain the simplified taxation system but also to minimise opportunities for abuse by defining clear criteria for distinguishing between employment and freelance at the legislative level, as well as replacing the broad fiscalisation of individual entrepreneurs of the 2nd and 3rd groups of the single tax with the fiscalisation of exclusively risky categories of taxpayers who have a significant probability of reaching the established limits.

In addition, it is necessary to ensure a full-fledged automated exchange of tax and customs information with the relevant services of other countries. Such an approach will minimise opportunities for tax evasion and increase businesses' transparency. In this context, it is essential to develop and implement an effective mechanism for the automated exchange of documents on the customs value of goods, which will avoid manipulating the value of imported products and facilitate effective control by customs authorities.

Expanding business financing instruments, particularly for military equipment and hardware companies. To implement this area, it is necessary to complement existing lending programmes from the banking sector (the Affordable Loans 5-7-9% programme, the EU4Business credit line), donor projects and grants (eRobot grants, grants for own business, compensation for the demining of agricultural land), as well as to develop new, larger-scale initiatives that will boost the business recovery process in the face of the crisis.

Developing an optimal model for booking employees will reduce pressure on the labour market and enable businesses to retain qualified personnel. This model can be implemented digitally (e.g., eBronirovanie), allowing for prompt reservation of a person liable for military service who contributes directly to the country's defence capability through work.

However, some areas of SME support are currently difficult to implement and may become more effective in the post-war period.

First and foremost, the use of financial instruments, such as export credits, tax incentives for export-oriented enterprises, financial incentive programmes for entering new markets, and support for export and foreign trade risk

insurance to increase SME participation in international trade; and, in addition, the creation of information and advisory platforms for entrepreneurs to increase their awareness of international markets and export requirements.

Secondly, increasing the transparency and efficiency of budgetary programmes for business support, including auditing deferred resources, verifying the criteria for allocating funds, and introducing digital platforms for accounting and reporting on budgetary programmes. This ensures the reduction of corruption and the efficient use of public resources to develop small and medium-sized businesses.

It should be noted that appropriate programmes of subsidies and grants for reconstruction, preferential lending, exemption from certain taxes, and the creation of special economic zones with favourable business taxation conditions must be developed to support and stimulate SMEs in de-occupied or completely destroyed territories.

In addition, it is essential to develop appropriate economic instruments to ensure labour market flexibility, such as providing training grants, encouraging remote work development, and creating legal conditions to encourage part-time employment and short-term contracts, which will help businesses adapt to the new economic environment. Investments in infrastructure projects at the national and local levels that will be employed in the restored regions will also become critical economic instruments.

Particular attention should be paid to addressing the urgent issues of small and medium-sized business development in the agricultural sector under the legal regime of martial law, which involves the implementation of several key areas:

- autonomisation of energy supply to farmers and agricultural enterprises through the creation of energy production cooperatives;
- signing of an additional protocol to the Association Agreement on the accession of Ukrainian agricultural producers to the European food security system with the possibility of receiving subsidies from the European Union;
- creating favourable conditions for attracting foreign investment in constructing new safe elevators and storage facilities.

Thus, by efficiently using these economic instruments to support business, the state can achieve a rapid recovery of the SME sector both during the war and post-war periods and ensure sustainable economic growth by creating favourable conditions for economic activity and stimulating the development of key economic sectors.

REFERENCES

- [1] Ukrinform, Opinions about the business climate in Ukraine are divided - EBA. Poll. Ukrinform, 2023. <http://surl.li/jghmsy>. Accessed on October 28, 2024.
- [2] Abduzhalieva, E.; Dolonova, T.; Meymankulova, N.; Savina, S. Prospects for the development of small and medium-sized businesses in a green economy in Kyrgyzstan. *E3S Web of Conferences*. EDP Sciences, 2024, 533(04009), 1-9. <https://doi.org/10.1051/e3sconf/202453304009>
- [3] Nazir, M. A.; Khan, R. S.; Khan, M. R. Identifying prosperity characteristics in small and medium-sized enterprises of Pakistan: Firm, strategy and characteristics of entrepreneurs. *Journal of Asia Business Studies*, 2024, 18(1), 21-43. <https://doi.org/10.1108/JABS-09-2022-0309>
- [4] Vagif, J. H. An Analysis of SMEs Market in History of Azerbaijan. In *SHS Web of Conferences*, EDP Sciences, 2021, 129(09006), 1-14. <https://doi.org/10.1051/shsconf/202112909006>
- [5] Mwamba, K. Barriers to market entry and strategies for success: a study on small and medium enterprises (SMEs) in Ghana and Tanzania. *Jurnal Manajemen dan Bisnis*, 2024, 3(1). <https://journal.uinsgd.ac.id/index.php/branding/article/view/38745>. Accessed on October 28, 2024.
- [6] Gazuda, S.; Almashiy, Y.; Gazuda, L.; Kovalska, L.; Suvorova, S. The mechanism of the branding development of agrarian regions in the conditions of the european integration. *Management Theory and Studies for Rural Business and Infrastructure Development*, 2024a, 46(1), 112–121. <https://doi.org/10.15544/mts.2024.12>
- [7] Naradda Gamage, S. K.; Ekanayake, E. M. S.; Abeyrathne, G. A. K. N. J.; Prasanna, R. P. I. R.; Jayasundara, J. M. S. B.; Rajapakshe, P. S. K. A review of global challenges and survival strategies of small and medium enterprises (SMEs). *Economies*, 2020, 8(4), 79. <https://doi.org/10.3390/economies8040079>
- [8] Ren, S.; Eisingerich, A. B.; Tsai, H. T. How do marketing, research and development capabilities, and degree of internationalisation synergistically affect the innovation performance of small and medium-sized

- enterprises (SMEs)? A panel data study of Chinese SMEs. *International Business Review*, 2015, 24(4), 642-651. <https://doi.org/10.1016/j.ibusrev.2014.11.006>
- [9] Kvasnii, L.; Moravska, O.; Malyk, L.; Shulzhyk, Y.; Orlova, O.; Scherban, O. Scenarios of the Development of Enterprises of the Tourist Industry of Ukraine in the Conditions of the War and Post-War Period. *Financial and Credit Activity: Problems of Theory and Practice*, 2023, 2(49), 313-325. <https://doi.org/10.55643/fcaptop.2.49.2023.3999>
- [10] Alekseieva, K.; Maletych, M.; Ptashchenko, O.; Baranova, O.; Buryk, Z. State business support programmes in wartime conditions. *Economic Affairs (New Delhi)*, 2023, 68(1), 231-242. <https://doi.org/10.46852/0424-2513.1s.2023.26>
- [11] Kovalska, L.; Rogach, S.; Petrukha, N.; Mamontova, N.; Yurchenko, O.; Derevianko, S.; Kolumbet, O. Correlation analysis of profitability in the management system of agricultural enterprises on the basis of sustainable development. *Scientific Papers. Series: Management, Economic Engineering in Agriculture and Rural Development*, 2021, 21(4).
- [12] Gibadullin, O.; Latynin, M.; Kosenko, A.; Fesak, S. Analysis of Crisis Management Measures in the War Period as a Prerequisite for the Sustainable Development of Ukraine's Industry. *Pressing Problems of Public Administration*, 2024, 1(64), 125-150. <https://doi.org/10.26565/1684-8489-2024-1-08>
- [13] Stashchuk, O.; Shmatkovska, T.; Dziamulych, M.; Kovalska, L.; Talakh, T.; Havryliuk, O. Integrated assessment, analysis and management of financial security and stability of joint-stock companies operating in the agricultural sector: a case study of Ukraine. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, 2021, 21(2), 589-603.
- [14] Khymych, I. H. Financial and economic evaluation of innovative activity in Ukraine in the conditions of war. *Modern Science: challenges of today: Collective monograph*. pp.150-181. Bratislava, 2023. https://elartu.tntu.edu.ua/bitstream/lib/42700/1/%D0%9C%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D1%96%D1%8F_Modern%20science_FINAL.pdf#page=150. Accessed on October 28, 2024.
- [15] Kryshthal, H. The Role of Logistics in the Development of Agriculture of Ukraine in the War Conditions. *Science and Innovation*, 2024, 19(2), 73-82. <https://doi.org/10.15407/scine19.02.073>
- [16] Yudina, O. I.; Zinchenko, H. K.; Zhydyk, A. I.; Semenikhin, V. O. Modern functioning and development of small and medium-sized enterprises: innovative changes. *Scientific notes of Lviv University of Business and Law*, 2023, 39, 588-592. <https://nzlubb.org.ua/index.php/journal/article/view/1234>. Accessed on October 28, 2024.
- [17] Semenets-Orlova, I.; Kushnir, V.; Rodchenko, L.; Chernenko, I.; Druz, O.; Rudenko, M. Organisational Development and Educational Changes Management in Public Sector (Case Of Public Administration During War Time). *International Journal of Professional Business Review*, 2023, 8(4), e01699. <https://doi.org/10.26668/businessreview/2023.v8i4.1699>
- [18] Syniura-Rostun, N. Institutional Environment of Functioning of the Enterprise: National and Regional Dimensions (Based on Data of Rating Assessments). *Young scientist*, 2020, 5(81), 187-193. <https://doi.org/10.32839/2304-5809/2020-5-81-39>
- [19] Yatsenko, L. D. Modern Problems of the Development of Small and Medium-Sized Businesses in Ukraine as the Main Source of Jobs. *Centre for Economic and Social Research NISS*, 2024, 1-11. https://niss.gov.ua/sites/default/files/2024-05/malyi-i-seredniy-business_o.pdf. Accessed on October 28, 2024.
- [20] NISS, Problems of the development of small and medium-sized businesses in Ukraine as the main source of jobs. *National Institute for Strategic Studies*, 2024. <https://niss.gov.ua/doslidzhennya/sotsialna-polityka/problemy-rozvytku-maloho-ta-serednoho-biznesu-v-ukrayini-yak>. Accessed on October 28, 2024.
- [21] UNDP, Assessment of the impact of the war on micro, small and medium-sized enterprises in Ukraine. *United Nations Development Programme*, 2024. <https://www.undp.org/sites/g/files/zskgke326/files/2024-04/undp-ua-smb-2024.pdf>. Accessed on October 28, 2024.
- [22] Ukrstat, The number of employees in business entities by type of economic activity with the distribution by the number of employees in 2021. *State Statistics Service of Ukraine*, 2021. https://ukrstat.gov.ua/operativ/operativ2022/fin/pdsg/arh_kzp_ved_zp_u.htm. Accessed on October 28, 2024.

- [23] Hromada, Business Status and Business Needs: Survey results in April-May 2024. Ministry of Digital Transformation, 2024. <https://hromada.gov.ua/research/doslidzennya-stanu-ta-potreb-biznesu-v-ukrayini>. Accessed on October 28, 2024.
- [24] KSE Agrocenter, Agricultural War Damages, Losses, and Needs Review. Centre for Food and Land Use Research (KSE Agrocenter), 2023, 3, 1-23. <https://kse.ua/wp-content/uploads/2023/05/RDNA2.pdf>. Accessed on October 28, 2024.
- [25] Neiter, R.; Bohonos, M.; Nivievskiy, O.; Makarenko, O.; Lytvynov, V. 2022, Review of war damage in Ukraine's agriculture. Centre for Food and Land Use Research (KSE Agrocenter), 2, 1-4. <https://minagro.gov.ua/storage/app/sites/1/uploaded-files/damagesreportissue2ua-1.pdf>. Accessed on October 28, 2024.
- [26] Neiter, R.; Zoria, S.; Muliar, O. Damages, losses and needs of agriculture due to full-scale invasion. Centre for Food and Land Use Research (KSE Agrocenter). 33 p. 2024. https://kse.ua/wp-content/uploads/2024/02/RDNA3_ukr.pdf. Accessed on October 28, 2024.
- [27] Gazuda, S.; Hotra, V.; Gazuda, M.; Kovalska, L.; Kifor, H.; Omarov, S. Assessment of the potential of agricultural regions as a prerequisite for the formation and development of their branding. Management Theory and Studies for Rural Business and Infrastructure Development, 2024b, 46(2), 122–130. <https://doi.org/10.15544/mts.2024.13>
- [28] Ukrstat, The volume of sales (goods, services) of enterprises by types of economic activity with the division into large, medium, small and micro-enterprises (2010-2023). State Statistics Service of Ukraine, 2023. https://www.ukrstat.gov.ua/operativ/menu/menu_u/size_20.htm. Accessed on October 28, 2024.
- [29] WIPO, GII 2023 at a glance: The Global Innovation Index 2023 captures the innovation ecosystem performance of 132 economies and tracks the most recent global innovation trends. WIPO, 2023, 17-23. <https://www.wipo.int/documents/d/global-innovation-index/docs-en-2023-wipo-pub-2000-2023-section1-en-gii-2023-at-a-glance-global-innovation-index-2023.pdf>. Accessed on October 28, 2024.
- [30] Ukraine Business Confidence, Trading Economics, 2024. <https://tradingeconomics.com/ukraine/business-confidence>. Accessed on October 28, 2024.
- [31] OECD, Business Confidence Index (BCI). Organisation for Economic Co-operation and Development, 2024. <https://www.oecd.org/en/data/indicators/business-confidence-index-bci.html>. Accessed on October 28, 2024.
- [32] WIPO, Ukraine ranking in the Global Innovation Index 2024. WIPO, 2024. <https://www.wipo.int/gii-ranking/en/ukraine>. Accessed on October 28, 2024.
- [33] Kryvovyazyuk, I.; Britchenko, I.; Kovalska, L.; Oleksandrenko, I.; Pavliuk, L.; Zavadzka, O. Economic and mathematical modeling of integration influence of information and communication technologies on the development of e-commerce of industrial enterprises. Journal of Theoretical and Applied Information Technology, 2023, 101(10), 3801–3815. <http://www.jatit.org/volumes/Vol101No10/12Vol101No10.pdf>
- [34] Popelo, O.; Tulchynska, S.; Garafonova, O.; Kovalska, O.; Khanin, S. Methodical Approach to Assessing Innovative Development Efficiency of Regional Economic Systems in the Conditions of the Creative Economy Development. Wseas Transactions on Environment and Development, 2021, 17, 685–696.
- [35] Merezhko, N.; Tkachuk, V.; Komakha, V.; Rechun, O.; Kovalska, L. Optimization of Diesel Fuel Composition with Bio-Component and Functional Additives. Lecture Notes in Mechanical Engineering, 2021, 349–360. https://doi.org/10.1007/978-3-030-77823-1_35
- [36] Ierko, I.; Kovalska, L.; Pohrebskyi, T.; Golub, G.; Demianchuk, O.; Gazuda, S. A methodological approach to analysing and assessing the competitive potential of tourism industry entities. Financial and Credit Activity Problems of Theory and Practice, 2024, 3(56), 257–269. <https://doi.org/10.55643/fcaptp.3.56.2024.4379>

Appendix 1

Correlation							
Pearson's Correlations							
Variable		GII	BCI	UBI	Medium	Small	Micro
GII	Pearson's r	-					
	p-value	-					
	Lower 95% CI	-					

* $p < .05$, ** $p < .01$, *** $p < .001$, one-tailed