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# STATE OF ECONOMIC SECURITY AND DIRECTIONS OF RESTORATION SOCIO-ECONOMIC DEVELOPMENT AND FOOD SECURITY IN THE CONDITIONS OF WAR

### **ABSTRACT**

The purpose of the article is to determine the state of economic security, ways to ensure its level, and ways to restore socio-economic development under the cumulative impact of threats. In order to realize this goal, an expert assessment of the components of economic security provided and the need to take into account the component of military-economic security indicated. It indicated that the task of neutralizing threats to military and economic security opens up new windows of opportunity, in particular opportunities in ensuring socio-economic development. Prerequisites for the use of opportunity windows are defined. The dynamic nature of threats of war that require institutional measures for permanent monitoring of dynamic threats, their operational analytical assessment and the introduction of tactics to neutralize threats and reduce their long-term negative impact, are indicated. An analysis of the state economic security provided, directions for improving this state by components of economic security indicated. The main factors on which the well-being of the country's population depends are determined, the effects of crises on the indicators of the levels of income and expenditure of the population analyzed, and the drivers of the deterioration of well-being are established. It noted that the deterioration of the socio-economic situation of households led to the narrowing of the domestic market, which had a negative impact on the functioning of SMEs. It indicated that this created a negative inverse multiplier effect on the well-being of the population. The negative effects of the crisis, which led to a reduction in production volumes in the agricultural sector, were identified. It indicated that this significantly limited the ability of the branch to fulfil food security tasks. Proposed ways to reduce the negative impact of war on agricultural production to ensure food security. The directions and recommendations for economic and food security and restoring socio-economic development are specified.

**Keywords:** economic security, socio-economic development, food security, directions of economic recovery, influences of war

**JEL Classification:** E20, E31, J49, M21, O11, O23

### INTRODUCTION

Martial law conditions have a serious impact on the socio-economic development, economic and food security of the country. Military conflicts lead to the destruction of infrastructure, a decrease in production and economic activity, loss of life and property, as well as population displacement and exacerbation of social problems. The dynamic nature of war threats not only requires institutional measures for their permanent monitoring, operational analytical assessment and the introduction of appropriate institutional measures but also opens windows of opportunity, in particular, in neutralizing some negative effects on the level of economic security and ensuring socio-economic development.

Restoring the economy and food security requires significant financial resources and investments. One of the key factors of recovery is the optimal management of budget resources. The military conflict distorts the country's economic system, leading to a decrease in income, an increase in the budget deficit, and an increase in the public debt.



For effective recovery, it is necessary to attract external financial resources, such as loans, grants, and investments in order to support economic reforms, recovery of production and infrastructure.

Investment is another important determinant of post-war recovery. Foreign investments can provide the necessary technological base, new jobs, increase production efficiency and development of new sectors of the economy. The right investment policy, which is aimed at sustainable development and ensuring recovery, can become a necessary tool for reforming the economy after the war.

Under martial law, the financial system is often opaque, unstable and inefficient. The reforms should be aimed at creating a stable and transparent financial system that ensures the confidence of investors and entrepreneurs.

Food security is also an important aspect of post-war recovery. Economic crises, the COVID-19 pandemic, and military operations have led to significant difficulties in the production of agricultural products and their supply to consumers, destruction of agricultural infrastructure, loss of crops and increased dependence on food imports. To ensure food security, it is important to restore the agricultural sector, provide support to agricultural enterprises, and ensure access to credit and innovative technologies.

### LITERATURE REVIEW

The study of issues of economic security, and its component - food security and socio-economic development can be traced in the works of many Ukrainian researchers. General theoretical aspects of the specified problem were investigated by scientific teams led by Ilchuka (2018), Bobukh (2018) and Vozniak (2021). They raise issues of a theoretical nature, the solution of which requires national and international joint efforts. In their opinion, in conditions of instability, it is necessary to introduce an innovation-investment system approach, structural changes in the economy, and the use of new approaches by institutional structures. Shemayeva et al. (2023) investigated the methodological aspects of ensuring economic stability in the conditions of war and indicated that the factors that form negative effects during martial law "partly arose in the pre-war period (low adaptive capabilities of the Ukrainian economy to the conditions of martial law, institutional defects and traps that inhibited its reformation and conditioned the existence of disparities in the pre-war period, etc.)." Antoshkin and others (2022) pointed to the structuring of economic security and defined its "structural blocks: international politics, world economy, globalization processes; economic, state and public institutions; resources and productivity; ideology, strategies and models of the country's development." Redziuk (2023) indicated the correlation between business activity and "the quality of state regulation, provision of a wide range of relevant financial and investment instruments" due to which problems and factors inhibiting the development of business activity in Ukraine were identified, which directly affects the state of economic security and social - economic development. Maiorova (2013) indicated the importance of economic security in improving the investment climate of Ukraine and related financial and credit leverage. The same aspect was also emphasized by Brezhnyeva-Yermolenko et al. (2018), deepening the disclosure of the problem of investment in the national economy by commercial banks. Summarizing the need not only to ensure the legal basis for regulating the specified processes, Borshchevskyy et al. (2022) focus research on the identification of various elements of the financial and investment potential, namely: "... the financial and budgetary capacity of the region, the potential investment capacity of its market, the ability to attract resources through co-financing and lending." Socio-economic problems of regional development in Ukraine, according to Martynovych (2023), require the classification of the entire research database into three separate periods, namely: pre-war, post-war and post-war, with which we agree.

The full-scale war created new threats not only to economic security, and socio-economic development but also to the provision of food to the population. The specified conditions and threats were studied by Rebryk et al. (2023) and based on the results of their analysis indicated the "necessity of modelling and forecasting the dynamics of the economy of Ukraine in the medium term in order to develop government decisions to ensure the economic security of the state." This thesis is supplemented and expanded in the presented article. Romanovska and others (2022) indicated that the management of socio-economic processes is complicated by "the long-term economic crisis caused by the destruction caused by the Russian regime and the slowdown of business activity earlier - as a result of the COVID-19 pandemic." The negative consequences of the crisis are indicated: "unbalance of the national financial system (uncontrolled growth of the budget deficit, which as a result of military actions crossed a critical line), opacity and corruption schemes in certain sectors of the economy, which led to significant financial frauds, illogicality and inconsistency of government reforms," etc. This required a detailed study in the presented article. Mazaraki et al. (2022) analyzed the threats of war to economic security and indicated that there is a significant dynamic of the "trade balance deficit. The specified dynamics are determined by the reduction of imports at lower rates than exports." Buriak et al. (2022) pointed to "significant disparities in the achievement of social and economic development of Ukraine." These disparities have not only a regional but also an industry dimension,



as indicated in the presented article. Chernyshova et al. (2022) studied the prospects of investments and obtaining loans by Ukrainian manufacturers. Ohrenych and others. (2023) analyzed the impact of a decrease in the level of economic security on the competitiveness of domestic enterprises in war conditions. It is stated that "enterprises will have to take radical actions to reduce profits." Onyshchenko and others. (2023) indicated that the war led to a "socio-economic crisis, which is characterized by a weakening of the macroeconomic balance, an increase in social tension, and a drop in the standard of living of the population." The most dangerous threats are: "the fall in the standard of living and the impover-ishment of the population due to a sharp drop in the purchasing power of Ukrainians; the increase in unemployment due to the drop-in business activity; the outflow of the population from permanent places of residence and the loss of permanent work due to the migration crisis".

The issue of food security of the country's population during the crisis occupies a special place, which was discussed in the article by Bioko et al. (2022) and indicated that food security is a component of economic security and forms the prerequisites for socio-economic development. Bioko and others (2022) also indicated the needs of the agrarian industry for the proper provision of food security, in particular, foreign assistance "in demining and recreation of fertile lands of deoccupied territories; providing preferential loans to farmers for the restoration of equipment and production facilities damaged or destroyed as a result of hostilities; provision of preferential loans by foreign investors for the restoration of the infrastructure of storage, transportation and processing of products." Kovalova (2020), note that it is necessary to introduce appropriate changes in the operational management of food safety issues, both normative and methodical. The same opinion is held by Pashchenko (2022), adding an analysis of factors that can negatively affect the economy of the country, regions, food producers and the population. Thus, scientists and specialists pay the main attention to separate issues, and not to a comprehensive study of the financial and investment determinants of the restoration of socio-economic development and food security in the conditions of martial law, which served to select the goal and object of research.

### **AIMS AND OBJECTIVES**

The purpose of the article is to determine the state of economic security, directions for ensuring its level and directions for restoring social and economic development under the combined influence of threats. The tasks of the article are to define: the components of economic security and their state, first of all, the state of food security; the impact of war threats on economic security by its components; areas of neutralization of threats to economic and food security; development of recommendations for the restoration of socio-economic development.

### **METHODS**

In the course of the research, general scientific and special methods of cognition were used: hermeneutic regarding the analysis of the effects of war on the state of economic security; analysis and synthesis to determine the state of food security and investment climate in the country; induction and deduction regarding the development of proposals and clarifications for the purpose of socio-economic development and food security. The method of critical analysis made it possible to indicate directions for neutralizing threats to economic and food security and to develop recommendations for the restoration of socio-economic development.

### **RESULTS**

The analysis was carried out taking into account the refined classification of the research periods. The authors suggest the following research periods:

- 2010-2014 pre-occupation period;
- 2015-2019 the period of partial occupation of the territory of Ukraine;
- 2020-2021 the period of Covid-19;
- 2022 and until now the period of full-scale hostilities on the territory of Ukraine. In the absence of data on some indicators, the calculation was made for 2022.

The introduction of the third period made it possible to assess the cumulative impact of various threats (COVID-19, military actions) on the well-being of the population, capital investments, the dynamics of the gross domestic product, etc.

The state of economic security in the conditions of war is determined by the ability of the economy to withstand internal and external challenges, to ensure the appropriate level of competitiveness on the global market and the stable and



balanced functioning of all industries. This state at the beginning of a full-scale war was supported by the resources formed in previous times and international aid. During the transition of the aggressor to a war of attrition, the impact of military actions on the state of economic security was supplemented by the bombing of critical infrastructure, in particular infrastructure for export purposes, tactics of destroying the socio-economic component of national security and promoting the formation of economic disparities. The aggressor analyzes the actions of the government and military administrations and applies operational manoeuvring with the tools of hybrid warfare, purposeful development and use of new types of threats to economic security. The dynamic nature of the threats of war, and changes in their influence by direction, determine the dynamic nature of changes in previously much more stable economic categories, such as economic security and socio-economic development. This requires institutional measures to monitor dynamic threats, their operational analytical assessment and the introduction of tactics to neutralize threats and reduce their long-term negative impact (Shevchuk, Omelchuk, 2023).

The National Institute for Strategic Studies compiled a list of threats by components of economic security under martial law and assessed their relative weight (Table 1).

**Table 1. Threats by components of economic security and their relative weight.** (Source: based on data from the National Institute for Strategic Studies, 2023)

Nº	Components of economic security	The relative weight of components of economic security, %
1	Social security	22
2	Financial security	16
3	Macroeconomic security	14
4	Food security	14
5	Foreign economic security	12
6	Investment and innovation security	12
7	Production safety	10

Challenges of war lead to the need to take into account one more aspect of economic security, which was left out of the attention of the experts of the National Institute of Strategic Studies - military-economic security. This component of economic security can be defined as a set of institutional measures that ensure urgent and strategic military-economic needs within the established time limits and at the appropriate level. Indicators of military and economic security can be defined as the ability of the economy to produce the necessary weapons and supplies; supply the troops with the appropriate amount and nomenclature of food supply, seasonal clothing, ammunition, and other necessary resources; the level of formation of operational reserves and the level of providing military production with labour resources. The availability and volume of strategic and tactical reserves are also an indicative indicator. The need to produce and supply the army with everything necessary in wartime can stimulate the economy, solve the problem of unemployment, and ensure the sustainability of socio-economic development even in conditions of significant threats. At the same time, it should be taken into account that the economic principles of labour to meet military needs are not identical to the economic principles of peacetime labour, in particular, given that the result of labour is a public product "military service" (Shemayeva et al., 2023). This will affect the assessment of budgetary resources for the fulfilment of the specified tasks.

This indicates the expediency of implementing a systemic approach in the use of resources for the complex neutralization of threats in various components of economic security. This also indicates that war not only creates threats but also opens new windows of opportunity, in particular opportunities in ensuring socio-economic development. The problem with the use of windows of opportunity is that due to the dynamics of changes in the conditions of the state of war, they are unstable, therefore, for the effective use of all opportunities, anticipatory analysis, forecasting and operational provision of measures and the formation of prerequisites for their successful implementation, preparation of resources, etc. must be implemented. For this purpose, the relevant institutional structures should be assigned the duties of implementing the specified tasks, given powers and defined responsibilities. Implementation of the specified direction requires the implementation of relevant political decisions.

Today, experts consider the level of the state budget deficit and, accordingly, the growth of external debt, the rate of which is increasing, as the cost of external borrowings increases, to be one of the most significant risks for the state of economic security. This is a multiplier of the specified threat to the state of economic security due to the need to repay and service loans. The situation is complicated by the fact that, according to the forecasts of the National Bank, revenues from exports will decrease. For example, for one of the main commodity items of export - agricultural products, as a result of the decrease in world prices. Thus, in the 3rd quarter of 2024, according to the forecasts of the National Bank, prices



for wheat (Wheat K C Hard National) will decrease to the level of the 3rd quarter of 2021, and for corn (Corn Yellow #2 Del. US Gulf) even to the level of 4 quarter of 2020 (Mazaraki et al., 2022). This requires increasing the efforts of institutional structures to find new ways of obtaining financial resources, optimizing budget expenditures, and forming a rational structure of the country's debt. A promising way to optimize costs is to abandon the predominant support of export-oriented industries and direct budgetary resources to the development of small businesses, FOP, and the encouragement of innovative areas of activity. This is expedient, in particular, given the fact that supporting the export of main products with low-added value contributes to the rooting of the commodity-based nature of the economy. One of the indicated ways can also be a purposeful policy on obtaining reparations from the aggressor and attracting his confiscated financial resources.

A component of economic security, as indicated in Table 1, is investment and innovation security. Therefore, it is necessary to create a state program to attract investments, first of all, in such a reliable direction of investment as the restoration of infrastructure, in particular, in the construction sector. Restoration of destroyed infrastructure objects: roads, bridges, and energy enterprises are relevant already today, but in the post-war period, due to the huge volume of work and profits, the construction sector promises to be significant. Investments in the restoration of infrastructure can contribute to the restoration of sustainability of economic security and socio-economic development in the conditions of war. That is why the expedient direction of restoring socio-economic development is to increase the efforts of institutional structures to promote investments, especially in promising sectors of the economy. A necessary direction of investment is also the promotion of the development of the domestic market, which can become a multiplier in improving the socio-economic component of the country's economic security.

At the same time, the risk of a drop in the standard of living of the population, which is observed according to the main indicative indicators, is significant. The reduction of labour and financial resources and the level of material and technical support of critical areas of the economy and the military are also significant. There are significant uncertainties in the challenges of military actions: the time and resources needed to restore economic activity in the liberated territories; the level of danger in logistical ways; disproportions in production and business activities due to distance from the war zone, etc. Significant uncertainty is also characterized by a decrease in the level of employment in the industry due to the occupation of centres of concentration of industrial production, relocation of enterprises, narrowing of sales markets, etc. In particular, the difficulties of employing qualified specialists in connection with the above lead to deformation in the field of labour resources, an increase in the level of unemployment and the impoverishment of the population, which is a new, previously unexplored impact of the war. After the start of the full-scale war, unemployment significantly exceeded the critical level of ~9%, which poses a significant challenge to socio-economic security. The long-term impact of this threat is due to the war, in particular, because the military actions led to the slowdown and even the shutdown of a significant number of Ukrainian companies, and ~21% of entrepreneurs were forced to change the type of economic activity. The decline in the standard of living of the population is also provoked by counter-directed measures of tax policy - for declaring a reduction in the tax burden, in particular, on labour, reducing tax rates to 10%, etc., new taxes are introduced and previous tax cancellations are introduced (fuel excise tax, real estate sales tax, etc.). Socio-economic development requires a predictable tax policy, which also takes into account the social consequences of the decisions of institutional structures.

In accordance with the specified goal, we conducted a thorough study of the factors that affected the deterioration of the country's financial and investment climate and the socio-economic situation of the population by comparing the indicators of the Inflation Index, the devaluation of the hryvnia against the US dollar (Figure 1), dynamics of capital investments, property damage received by state, municipal institutions, enterprises and organizations, and the country's population.

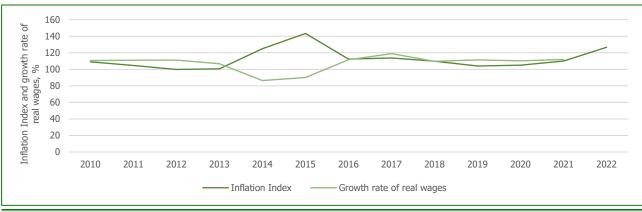


Figure 1. Comparison of Inflation Index and Growth Rate of Real Wages, %. (Source: based on data from the https://index.minfin.com.ua/)



Figure 1 shows a deterioration in the financial and economic situation. Comparing the indicators of the Hryvnia Inflation and Devaluation Index, we note that they increased almost equally and amounted to 7.222 and 7.241 starting from 2007 to March 2023. One of the important factors was the devaluation of the hryvnia against the USD by 4.606 times, especially starting from 2014 and to this day. That is, all monetary physical accumulations, deposits and bank accounts in the national currency led to huge irreparable losses.

The well-being of the country's population depends on several main factors: the average monthly income per person, and prices for basic products, goods and services (Table 2). The higher the level of income, the greater the wealth and the better provision of everyday human needs. On the contrary, the higher the level of prices with an unchanged trend of income, its decrease or its slight increase, a person cannot fully provide himself with everything he needs. So, only in 2021-2022, the cost of fuel increased by 70%, which became the driver of price growth for almost all types of goods, including the increase in food prices - by 29.3% (BBC News Ukraine, 2023).

Table 2. Impacts of crises on indicators of income and expenditure levels of the population, UAH. Notes: \* - all indicators of the Indexes are calculated until 2010; 1 - according to the data of the State Statistics Service of Ukraine (SSCU); 2 - according to the data of the Pension Fund of Ukraine (PFU); 3 - <a href="https://biz.nv.ua/ukr/economics/zarplata-2023-na-skilki-zrosla-serednya-zarplata-v-ukrajini-50336985.html">https://biz.nv.ua/ukr/economics/zarplata-2023-na-skilki-zrosla-serednya-zarplata-v-ukrajini-50336985.html</a>; 4 - the 2023 indicator for April was calculated using the data <a href="https://index.minfin.com.ua/ua/labour/salary/min/">https://index.minfin.com.ua/ua/labour/salary/min/</a>). (Source: based on data from the State Statistics Service of Ukraine and authors calculated)

Indicators*	Pre-occu- pation pe- riod	The period of par- tial occupation of the territory of Ukraine	The period of Covid- 19	The period of full- scale hos- tilities on the terri- tory of Ukraine	Index chang		hange	je	
A	1	2	3	4	5=2/1	6=3/2	7=4/3	8=4/1	
Average monthly salary1, UAH	2928.6	7168.7	12802.7	15679.53	2.4	1.8	1.2	5.4	
Average monthly salary2, UAH	2647.0	6286.7	11667.0	13399.6	2.4	1.9	1.1	5.1	
Minimum salary4, UAH	1099.2	2814.8	5750.0	6700.0	2.6	2.0	1.2	6.1	
Average monthly total expenditure per household, UAH	3598.5	7158.1	10383.5	0.0	2.0	1.5	0.0	0.0	
Average monthly total resources per one household, UAH	4102.6	8331.7	13461.4	0.0	2.0	1.6	0.0	0.0	
Consumer price indices for goods and services to December 2010	108.9	235.0	301.9	406.9	2.2	1.3	1.3	3.7	
	including:								
Housing, water, electricity, gas and other fuels	117.1	468.8	643.2	713.6	4.0	1.4	1.1	6.1	
Transport	131.0	274.6	337.6	499.4	2.1	1.2	1.5	3.8	
Food and non-alcoholic beverages	104.6	206.8	267.1	391.2	2.0	1.3	1.5	3.7	

With the beginning of the military aggression of the Russian Federation against Ukraine, more than 8 million people left for the EU, of which, according to a UN survey, 72% were aged 18-59 and almost half had higher education (BBC News Ukraine, 2023). Among them, the loss of labour potential amounted to more than 70%. The part of the population remaining in Ukraine is approximately 28.5 million people, of which 41.1% can be classified as economically active, including employed - 32.6% and 9.5% are unemployed (Ukrinform, 2023a). With the beginning of the military aggression of the Russian Federation against Ukraine, households significantly reduced their own incomes - by 65%, as reported by the United Nations. The share of households whose only source of income is wages decreased by 14% to 53%. The economic situation of most households in the country is deteriorating, which is confirmed by the UN survey. The share of households that cannot buy everything they need is 44%, with an insufficient level of food supply - 33%, partially reduced consumption, use credit resources and switch to low-quality (sub)products - 43% of respondents (Ukrinform, 2023b).

It should be noted that the main factor in the growth of inflation in Ukraine was a significant mismatch between the value of the UAH and the USD. The USD exchange rate increased more than seven times. However, without taking into account this factor, when studying the socio-economic development of Ukraine, we have significant distortions, as evidenced by the data in Table 3.



Table 3. Impacts of crises on indicators of income and expenditure levels of the population, USD. Notes: \*- all indicators of the Indexes are calculated until 2010.

		On ave						
Indicators*	Pre-occupa- tion period	The period of partial occu- pation of the territory of Ukraine	The period of Covid-19	The period of full-scale hos- tilities on the territory of Ukraine	Index change			
Α	1	2	3	4	5=2/1	6=3/2	7=4/3	8=4/1
The USD exchange rate for 100 USD, for the NBU rate	961.5	2659.1	2848.9	3656.9	2.7657	1.0714	1.2836	3.8034
Average monthly salary (SSCU)	322.8	270.4	449.0	428.8	0.8378	1.6603	0.9549	1.3283
Average monthly salary (PFU)	291.7	237.1	409.1	366.4	0.8129	1.7252	0.8957	1.2562
Minimum salary	122.3	105.9	201.6	183.2	0.8662	1.9031	0.9089	1.4983
Average monthly to- tal expenditure per household	374.3	269.2	364.5	n/d	0.7192	1.3540	х	х
Average monthly to- tal resources per household	426.7	313.3	472.5	n/d	0.7343	1.5081	х	х

Converting the indicators to the USD, we see that the level of the average salary increased by only 30% against 5.4 times (in UAH), that is, the distortion of the indicator is 76%. The situation is similar to other indicators of this group. Therefore, in the future, we will convert all indicators into a liquid international monetary unit - the USD.

The deterioration of the economic situation in the country is evidenced by the situation of small and medium-sized enterprises (SMEs) (Figures 2 and 3).

The deterioration of the socio-economic condition of households led to the narrowing of the domestic market, which had a negative impact on the functioning of SMEs and led to a narrowed reproduction of their fixed capital, a decrease in the economic efficiency of operation, a reduction in personnel or the liquidation of business. This created a negative inverse multiplier effect on the socio-economic status of the population.

According to Figure 2, the percentage of entrepreneurs who were not affected by the hostilities is insignificant (6%), while 88% have different levels of losses, ranging from 10 to 100 and above thousands of dollars. A decrease in the financial strength of enterprises negatively affected the employment of ordinary people due to a decrease in the ability to pay wages to their employees. The decrease in employee incomes and the high level of migration abroad of specialists and ordinary consumers of products led to a decrease in the purchasing power of the population to 43% in 2023 compared to the previous period and a shortage of specialists by almost a third. The lack of own working capital and the lack of the possibility of replenishing the working capital of SMEs with credit resources also have a negative impact. In the conditions of hostilities, the state should provide tax preferences and activate the activities of SMEs. However, the instability of the tax field complicates and prevents the stability of their development, as reported by a third of the surveyed entrepreneurs.



Figure 2. The specific weight of SMEs that suffered losses as a result of military operations. (Source: constructed using Ivanov, 2023)



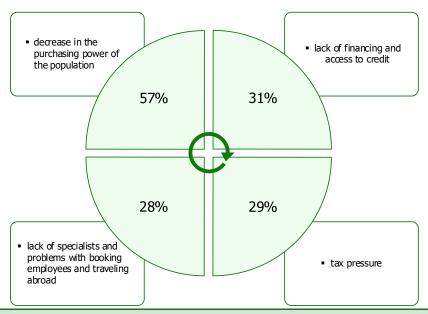


Figure 3. The main obstacles to the development of SMEs in the conditions of war. (Source: constructed using Ivanov, 2023)

In conditions of uncertainty, enterprises rely only on their own financial resources. The tension in the economic environment is quite high, which has affected the financial strength of SMEs, as evidenced by the data in Figure 4. For example, the share of entrepreneurs who do not have a financial basis at all increased by 7% to 32% in 2022-2023, which affected the decrease of the share of SMEs that are able to function in the future for more than a year, by 2% and amounted to 12%. In other enterprises, the situation is not better, as 53% of entrepreneurs can function without interruption for 1 to 6 months. This is also confirmed by the data in Table 5, where the gross fixed capital formation indicator decreased by almost 37%, changes in inventories – by 65%, and acquisitions less disposals of valuables – by 40% over the 4 studied periods. A quarter of entrepreneurs who took part in a survey conducted by the European Business Association noted the absence of qualitatively available data or their lack of business support programs at both the national and international levels. More than a third of interviewed entrepreneurs reported receiving tax benefits, and 2/3 had a positive experience. A little more than a quarter of managers of SMEs noted a positive experience of attracting loans through the Affordable Loans 5–7–9% program, of which almost half had a negative experience (Ivanov, 2023).



Figure 4. The specific weight of the financial stability of SMEs in war conditions. (Source: constructed using Ivanov, 2023)

The agricultural sector, the food industry, information and communication technologies and others need investment, despite the hostilities. Capital investments help to restore, expand, improve an existing or create a new business. Since socioeconomic development depends on various spheres of the country's economic life, investments require more thorough research at the regional level and in terms of types of economic activity (Tables 4, and 5).

Table 4. Capital investments by types of economic activity by regions for 2010-2022, USD million. (Source: based on data from the State Statistics Service of Ukraine and authors calculated)



	Pre-occu-	The period of par-	The period	The period of full-	Index change				
Regions of Ukraine	pation pe- riod	tial occupation of the territory of Ukraine	of Covid- 19	scale hostilities on the territory of Ukraine	5=2/1	6=3/2	7=4/3	8=4/1	
A	1	2	3	4					
Ukraine	24221.2	17174.8	20747.3	11202.4	0.7091	1.2080	0.5399	0.4625	
Vinnytsya	545.7	457.1	535.7	386.2	0.8376	1.1721	0.7209	0.7077	
Volyn	297.8	308.0	365.8	260.7	1.0342	1.1877	0.7129	0.8756	
Dnipropetrovsk	2127.7	1724.2	2406.0	1106.9	0.8103	1.3955	0.4601	0.5202	
Donetsk	2383.5	714.9	1036.8	152.2	0.2999	1.4503	0.1468	0.0638	
Zhytomyr	277.4	259.9	364.3	167.2	0.9369	1.4018	0.4589	0.6027	
Zakarpattya	276.2	232.4	250.4	186.4	0.8413	1.0774	0.7447	0.6750	
Zaporizhzhya	743.0	491.3	641.2	254.7	0.6613	1.3051	0.3971	0.3427	
Ivano-Frankivsk	529.1	345.7	326.8	187.4	0.6534	0.9453	0.5733	0.3541	
Kyiv	1866.3	1378.5	1352.3	852.3	0.7386	0.9810	0.6303	0.4567	
Kirovohrad	354.4	246.0	270.7	194.1	0.6941	1.1004	0.7169	0.5475	
Luhansk	778.8	121.0	136.1	7.4	0.1554	1.1249	0.0544	0.0095	
Lviv	1071.0	873.6	967.5	715.4	0.8157	1.1074	0.7394	0.6679	
Mykolayiv	461.7	372.7	379.8	137.0	0.8071	1.0192	0.3606	0.2966	
Odesa	1142.7	706.1	800.1	370.4	0.6179	1.1331	0.4630	0.3242	
Poltava	888.8	610.0	933.7	479.6	0.6863	1.5308	0.5136	0.5395	
Rivne	268.7	216.2	476.0	329.3	0.8046	2.2018	0.6919	1.2257	
Sumy	282.9	239.6	311.6	150.3	0.8469	1.3005	0.4825	0.5314	
Ternopyl	283.0	251.6	315.2	232.5	0.8891	1.2526	0.7377	0.8216	
Kharkiv	1106.3	703.8	788.0	262.1	0.6362	1.1195	0.3327	0.2370	
Kherson	236.0	272.9	382.9	19.2	1.1561	1.4031	0.0500	0.0811	
Khmelnytskiy	368.2	362.8	423.5	266.7	0.9855	1.1673	0.6297	0.7244	
Cherkasy	343.5	313.1	375.2	252.3	0.9114	1.1985	0.6725	0.7346	
Chernivtsi	201.4	122.4	133.5	91.8	0.6075	1.0915	0.6877	0.4560	
Chernihiv	259.8	255.2	320.3	227.1	0.9824	1.2551	0.7091	0.8743	
Kyiv city	7127.3	5596.1	6453.8	3913.2	0.7852	1.1533	0.6063	0.5490	

The given data indicate a gradual decrease in the growth index of capital investments both in Ukraine as a whole and in some of its regions. Also, it should be noted that the following regions: Kharkiv and Mykolaiv decreased investment attraction more than twice, and Kherson, Luhansk and Donetsk by 15.6 times, 14.3 times and 5.3 times, respectively.

Table 5 shows that during the period of the study, such types of economic activities as public administration and defence were the least affected; compulsory social security and Human health and social work activities, where there was even an increase in capital investment by 8.5% and 2.4 times, while the drop in Agriculture, forestry and fishing did not exceed 20%.



**Table 5. Capital investments by types of economic activity for 2010-2022, USD million.** (Source: based on data from the State Statistics Service of Ukraine and authors calculated)

		The period		The period of full-	Index change			
Types of economic activity	Pre-occu- pation pe- riod	of partial occupation of the ter- ritory of Ukraine	The period of Covid- 19	of full- scale hos- tilities on the terri- tory of Ukraine	5=2/1	6=3/2	7=4/3	8=4/1
A	1	2	3	4				
Total	24221.2	17174.8	20747.3	11202.4	0.7091	1.2080	0.5399	0.4625
Agriculture, forestry and fishing	1743.1	2031.6	2117.2	1406.6	1.1656	1.0421	0.6644	0.8070
Industry	8518.6	6038.1	7432.1	3448.6	0.7088	1.2309	0.4640	0.4048
Construction	3731.1	1943.7	1673.3	892.2	0.5209	0.8609	0.5332	0.2391
Wholesale and retail trade; repair of motor vehicles and motorcycles	2289.3	1355.9	1763.3	1004.1	0.5923	1.3005	0.5694	0.4386
Transportation and storage	2313.2	1320.9	1383.5	1354.5	0.5710	1.0474	0.9790	0.5856
Accommodation and food service activities	162.9	79.1	81.5	59.7	0.4854	1.0303	0.7330	0.3666
Information and communication	968.6	812.1	811.6	461.3	0.8384	0.9994	0.5684	0.4763
Financial and insurance activities	666.6	331.5	387.5	243.6	0.4973	1.1688	0.6285	0.3654
Real estate activities	1281.5	825.6	888.2	390.5	0.6443	1.0758	0.4396	0.3047
Professional, scientific and technical activities	645.8	310.8	508.1	164.4	0.4812	1.6349	0.3236	0.2546
Administrative and support service activities	404.7	397.7	382.4	180.1	0.9826	0.9616	0.4711	0.4451
Public administration and defence; compulsory social security	920.5	1264.1	2392.0	999.0	1.3732	1.8922	0.4176	1.0852
Education	150.3	124.4	133.5	54.9	0.8278	1.0733	0.4114	0.3655
Human health and social work activities	202.0	234.5	642.6	476.2	1.1609	2.7404	0.7410	2.3573
Arts, entertainment and recreation	167.8	86.3	126.3	58.9	0.5143	1.4636	0.4661	0.3509
Other services activities	55.2	18.6	24.2	7.7	0.3366	1.3019	0.3201	0.1403

In connection with the significant growth of the dollar exchange rate, capital investments decreased in the 4th period in relation to the 1st in the following sectors of the economy:

- no more than 30% of the basic Construction; Real estate activities; Professional, scientific and technical activities; Other service activities; no more than 31-40% of the base Industry; Accommodation and food service activities; Financial and insurance activities; Education; Arts, entertainment and recreation;
- no more than 41-50% of the base Wholesale and retail trade; repair of motor vehicles and motorcycles; Information and communication; Administrative and support service activities;
- no more than 51-60% of the basic Transportation and storage.

This, in turn, is evidence of the dismissal of some or all employees from various enterprises, institutions and organizations, in connection with their reorganization, partial or complete closure and, accordingly, the deterioration of the socio-economic conditions of their life.

The result of the above-mentioned destructive changes for 2010-2022 was a drop in GDP in almost all sectors of the economy (Table 6), with the exception of Electricity, gas, steam and air conditioning supply (42% growth), which is associated with an increase in tariffs; Information and communication (38% growth) in connection with the adopted large-scale digitalization measures (for example, the Country in a smartphone, the Diya platform, etc.) and the growth of Public administration expenses; compulsory social security by 4.4 times; Subsidies on products (for example, for food producers) by 2.3 times and by final consumer expenses of non-profit organizations (by 2 times) and by the general expenses of the public sector of management (almost twice). This led to a significant deterioration of the state of economic security.



**Table 6. Dynamics of gross domestic product in actual prices, USD million.** (Source: based on data from the State Statistics Service of Ukraine and authors calculated)

		The pe-		The pe-	Index change				
Indicator	riod of Pre-occu- partial oc- T Indicator pation pe- cupation r		The pe- riod of Covid-19	riod of full-scale hostilities on the territory of Ukraine	5=2/1	6=3/2	7=4/3	8=4/1	
Α	1	2	3	4					
Gross domestic product	151180.0	112265.7	169562.6	141951.6	0.7426	1.5104	0.8372	0.9390	
Composition of gross domestic product									
	•	1. Proc	luction side				•		
Agriculture, forestry and fishing	12654.9	11599.1	17278.4	11671.6	0.9166	1.4896	0.6755	0.9223	
Mining and quarrying	8778.2	6316.8	9524.7	8082.0	0.7196	1.5078	0.8485	0.9207	
Manufacturing	18349.7	12984.6	17300.4	10755.3	0.7076	1.3324	0.6217	0.5861	
Electricity, gas, steam and air conditioning supply	4467.5	3391.2	5322.4	6330.3	0.7591	1.5695	1.1894	1.4170	
Water supply; sewerage, waste management and remediation activities	797.4	394.2	620.8	432.6	0.4944	1.5749	0.6967	0.5424	
Construction	4238.3	2567.3	4729.3	1716.8	0.6057	1.8421	0.3630	0.4051	
Wholesale and retail trade; repair of motor vehicles and motorcycles	21967.2	15066.4	23325.8	17547.7	0.6859	1.5482	0.7523	0.7988	
Transportation and storage	11010.8	7352.9	9784.2	5593.5	0.6678	1.3307	0.5717	0.5080	
Accommodation and food service activities	1111.8	807.7	1400.9	946.3	0.7265	1.7343	0.6755	0.8511	
Information and communication	4740.9	4489.5	8154.2	6524.4	0.9470	1.8163	0.8001	1.3762	
Financial and insurance activities	7059.1	3254.7	5152.2	4054.5	0.4611	1.5830	0.7869	0.5744	
Real estate activities	8881.9	6703.8	10238.0	6923.2	0.7548	1.5272	0.6762	0.7795	
Professional, scientific and technical activities	4276.9	3519.0	5170.2	2629.6	0.8228	1.4692	0.5086	0.6148	
Administrative and support service activities	1726.5	1492.9	2241.2	1066.1	0.8647	1.5013	0.4757	0.6175	
Public administration; compulsory social security	6771.0	6506.7	11280.7	30005.1	0.9610	1.7337	2.6599	4.4314	
Education	7521.7	4794.3	7382.4	5894.3	0.6374	1.5398	0.7984	0.7836	
Human health and social work activities	5030.5	2708.8	4358.4	3470.3	0.5385	1.6090	0.7962	0.6899	
Arts, entertainment and recreation	1046.2	662.1	985.9	619.9	0.6329	1.4890	0.6287	0.5925	
Other service activities	1302.3	921.2	1446.6	990.0	0.7074	1.5703	0.6843	0.7602	
Taxes on products	19734.2	17003.2	24319.6	17352.8	0.8616	1.4303	0.7135	0.8793	
Subsidies on products	-287.1	-270.9	-453.9	-654.6	0.9438	1.6753	1.4422	2.2802	
		2. In	come side						
2.1. Compensation of employees	73377.6	45503.5	71444.2	71163.3	0.6201	1.5701	0.9961	0.9698	
2.2. Net taxes on production and imports	19415.0	17042.9	23429.3	15920.2	0.8778	1.3747	0.6795	0.8200	
2.3 Gross operating surplus, mixed-income	58387.3	49719.4	74689.2	54868.1	0.8515	1.5022	0.7346	0.9397	
		3. Expe	nditure side	)					
3.1. Final consumption expenditure	131524.6	100249.5	151559.9	147889.2	0.7622	1.5118	0.9758	1.1244	
of households	102482.5	77279.8	118743.7	91401.6	0.7541	1.5365	0.7697	0.8919	
of non-profit institutions serving house- holds	1087.2	978.3	1569.3	2212.3	0.8998	1.6041	1.4098	2.0349	
of general government	27954.9	21991.3	31246.9	54275.3	0.7867	1.4209	1.7370	1.9415	
individual consumption expenditure	18389.1	12365.1	16912.1	14788.6	0.6724	1.3677	0.8744	0.8042	
collective consumption expenditure	9565.8	9626.3	14334.8	39486.8	1.0063	1.4891	2.7546	4.1279	
3.2. Gross capital formation	30018.2	20112.8	20386.8	17901.2	0.6700	1.0136	0.8781	0.5963	
gross fixed capital formation	26007.8	18370.0	22511.0	16481.6	0.7063	1.2254	0.7322	0.6337	
changes in inventories	3961.3	1715.7	-2176.7	1390.1	0.4331	-1.2687	-0.6386	0.3509	
acquisitions less disposals of valuables	49.1	27.0	52.5	29.5	0.5504	1.9429	0.5622	0.6012	
3.3 Exports of goods and services	71069.4	51999.9	67594.5	50331.2	0.7317	1.2999	0.7446	0.7082	
3.4 Imports of goods and services	-81432.2	-60096.4	-69978.6	-74170.1	0.7380	1.1644	1.0599	0.9108	



Characterizing negative trends, let's pay attention to the constant negative trade balance, the peak of which falls in the last period of the study (USD -23.8 million). These negative trends were deepened by the government's destructive policy aimed at deindustrialization, raising tariffs for utility services for businesses and the population, taxes and fees, capital export, etc.

With the beginning of full-scale hostilities on the territory of Ukraine, many different objects of socio-economic purpose (schools, houses, health care facilities and general-purpose roads) were destroyed and damaged (Table 7).

Table 7. Damage to social and economic objects in Ukraine. (Source: built using Ukraine Recovery Plan data, 2022)

Regions of Ukraine	Schools, units	Roads, km	Health facilities, units	Housing, mln sq. m
Ukraine	1893	19917.441	748	59.031
Vinnytsya	13	0	5	0.037
Volyn	1	0	0	0
Dnipropetrovsk	22	75	7	0.366
Donetsk	449	2695.2	176	17.324
Zhytomyr	77	49.3	24	0.526
Zakarpattya	83	3872.3	32	0.960
Zaporizhzhya	0	0	0	0.027
Ivano-Frankivsk	0	0	0	0
Kyiv	167	1402.3	122	7.451
Kirovohrad	5	0	0	0
Luhansk	160	2959.4	20	12.021
Lviv	0	0	0	0.026
Mykolayiv	158	1809.4	82	4.048
Odesa	11	0.2	1	0.256
Poltava	1	63	0	0.020
Rivne	2	0	0	0.006
Sumy	46	1584.6	19	1.029
Ternopyl	0	0	0	0.074
Kharkiv	476	3890.8	145	9.578
Kherson	82	3.941	51	0.504
Khmelnytskiy	1	0	0	0
Cherkasy	14	0	1	0.011
Chernivtsi	0	0	0	0
Chernihiv	125	1512	63	4.767

The territories closest to the Ukrainian-Russian border suffered the greatest damage. Thus, schools were most damaged out of the total number of damaged schools in the following regions of Ukraine: Donetsk region - 23.7%, Kharkiv region - 25.2%, Kyiv region - 8.8%, Luhansk region - 8.5% and Mykolaiv region - 8.4%. The highest level of road damage in Ukraine is observed in Kharkiv Oblast - 19.5%, Zaporizhia Oblast - 19.4%, Luhansk Oblast - 14.9%, Donetsk Oblast - 13.5%, and Mykolaiv Oblast - 9.1% of total road surface damage. A large number of buildings of health care facilities were damaged in Donetsk - 23.5%, Kharkiv - 19.4%, Kyiv - 16.3%, Mykolaiv - 11% and Chernihiv - 8.4% of the total number of such buildings damaged. Residents of Donetsk Oblast - 29.4%, Luhansk Oblast - 20.4%, Kharkiv Oblast - 16.2%, Kyiv Oblast - 12.6%, and Chernihiv Oblast - 8.1% suffered the greatest losses from damage to the total housing stock of Ukraine.



These data are confirmed by the Kyiv School of Economics (KSE), which estimates that the total amount of damage is 137.8 billion dollars, of which almost 40% falls on the housing stock, 26% on the infrastructure and 9.5% on losses of enterprises of various forms of ownership and types of activity (BBC News Ukraine, 2023).

The government and the president of Ukraine are trying to cover the financial and budgetary collapse with new loans, issuing or extending other government bonds, receiving donor aid, etc. (Figure 5). For 2022-2023, almost 36.9 billion fortunes were received. The largest contribution to the support of the Ukrainian economy was made by the USA and the EU, which account for 2/3 of all financial injections. The share of international financial organizations (IMF, European Investment Bank, World Bank) is 15.5% (BBC News Ukraine, 2023). The National Bank of Ukraine also contributed to improving the economic situation in the country by buying OVDP bonds for USD 10.9 billion in 2022 (BBC News Ukraine, 2023).

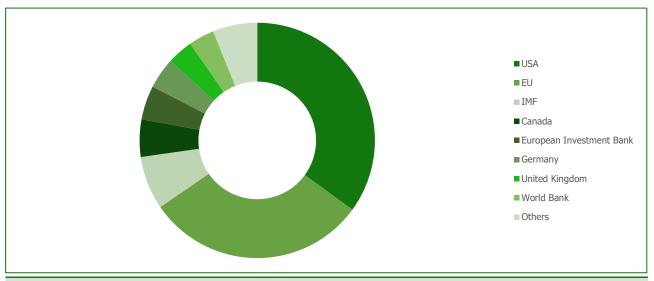


Figure 5. Investments in the recovery of the economy of Ukraine. (Source: built using BBC News Ukraine, 2023)

As can be seen from Table 6 crises due to the combined negative effects of the pandemic and the war resulted in a decrease in production volumes in the agricultural sector. The war also led to a significant reduction in investments in agriculture (see Table 5). This significantly limited the ability of the industry to fulfil food security tasks. In particular, these opportunities have significantly decreased as a result of the destruction of the infrastructure of agricultural farms in the South of Ukraine; the destruction of the irrigation system due to their use by the aggressor for fortification; the demining of agricultural land; significant deterioration of soil fertility; destruction of cattle, robbery of agricultural enterprises. Other resource potential of farms has also significantly deteriorated. For example, a significant part of the workers was evacuated or mobilized; agricultural enterprises have a significant shortage of working capital; as a result of the occupation, hostilities, and dynamic migration of the population, the client base of agrarian enterprises has been distorted. A problem in providing the population with food is also the fact that due to the cumulative effect of threats, the cost price of agricultural products is increasing. In particular, due to the lack of qualified personnel, the management of agricultural enterprises is forced to raise the level of wages for employees, which affects food prices. In conditions of a decrease in the socio-economic level of the population, this leads to a significant deformation of demand and a decrease in sales of certain types of products, which is a multiplier for the deterioration of the level of food security.

All of the above creates a significant level of risks to the country's food security. These risks are aggravated by a significant deficit in the country's budget, which, accordingly, leads to a drastic reduction in the state's ability to support agricultural producers and restore the functioning of destructive farms. This, in the conditions of war, limits the direction of restoration of an adequate level of food security. Table 8 provides suggestions for ways to ensure food security.



Table	Table 8. Directions for reducing the negative impact of war on agricultural production to ensure food security.								
Nō	Directions	The results							
1	Financing of modernization of processing enterprises	Acquisition of greater added value, extension of the term and improvement of storage conditions of agricultural products, preservation of their quality							
2	Facilitating the cooperation of small and medium-sized agricultural en- terprises according to the project approach	Development of the infrastructure of small and medium-sized agricultural enterprises in the processing and storage of products, introduced by small energy							
3	Creation of regional centres for training personnel for the agrarian industry in scarce specialities with gender parity	Solving the problems of employment and personnel shortage							
4	Formation of distribution networks for FOP in the agricultural industry	Improvement of the system of supply of agricultural products to consumers, acquisition of stability of sales of products of FOP of the agricultural industry							
5	Involvement of international organizations and donor states in demining land, restoration of irrigation systems and soil fertility in liberated regions	Increase in the production of agricultural products, restoration of agricultural production in the liberated regions							
6	Launch of food support programs for low-income population groups, regulation and stabilization of prices for the main types of food by the state	Support of the poor and the acquisition of sustainability in the flow of finances to agrarian farms in conditions of a lack of working capital							
7	Implementation of material and non-material incentives for small enterprises and FOPs that keep at least two heads of cattle	Increasing the level of supply of dairy products to the population and making them cheaper, restoring the cattle population							
8	Introduction for small and medium-sized agricultural enterprises of re- imbursement for loans for the implementation of small capacity instal- lations for the processing of oil crops and the production of cereals	Increasing the level of supply of oil and cereals to the population.  Providing the opportunity to use processing waste directly in agricultural farms							

As part of the restoration of socio-economic development and food security in Ukraine, the Recovery Plan of Ukraine was developed and launched, the main achievements of which should be: GDP growth (about 7% every year), an increase in financing of the real sector of the economy (by more than UAH 750 billion), an increase in economic complexity indices and human capital (inclusion in the TOP-25 countries of the world) (Figure 6).

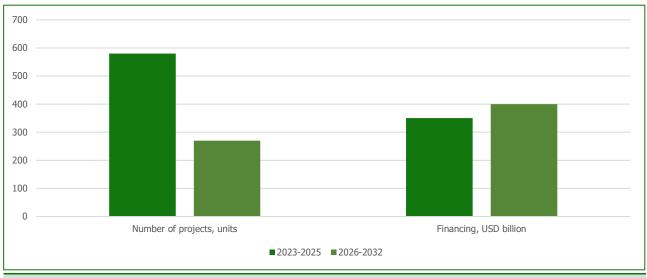


Figure 6. Determinants of recovery of financial and investment activity in Ukraine. (Source: built using Ukraine Recovery Plan data, 2022)

If we specify the directions of financing under individual National programs to increase the levels of economic and food security, restore socio-economic development, then according to our research, the following items need to be highlighted (Figure 7). The issues of restoration of logistics and infrastructure, communal services and regional infrastructure, access to various sources of financing, defence capability and security, etc., require the greatest injection.



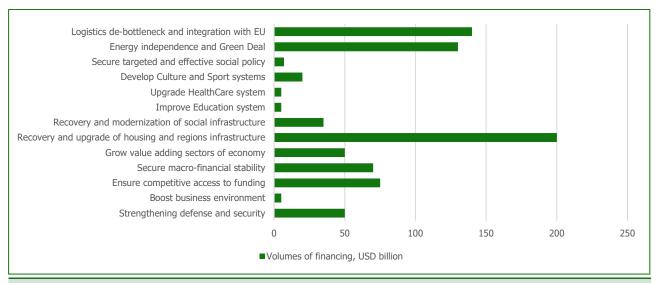


Figure 7. Volumes of funding of the National Programs of the Recovery Plan of Ukraine. (Source: built using Ukraine Recovery Plan data, 2022)

An important driver of increasing the country's investment attractiveness was the signing of an agreement (Memorandum of Understanding, November 10, 2022) with the company BlackRock Financial Market Advisory, regarding support and consultation on the creation and development of the Development Fund of Ukraine. The main goal of this project is to attract private capital to the recovery and further development of the economy of Ukraine. It is also planned to attract other world-famous financial consulting companies to BlackRock: McKinsey, JP Morgan, etc. (Pylypiv, 2023). The well-known names of the companies in the world will provide an opportunity to attract more private (foreign) capital after the end of the war. The key investment areas of the Development Fund of Ukraine will be such sectors of the economy as energy, agriculture, infrastructure facilities, information technologies, and production. According to experts' estimates, the post-war recovery of Ukraine's economy will require USD 350-750 billion of direct state investments (Kuznyetsova et al., 2023).

The following recommendations are offered for the implementation of the necessary institutional measures:

- Reducing the level of corruption, increasing the transparency of management decisions and criminal liability for the unauthorized and inappropriate use of state financial resources (Omelchuk et al., 2022; Chernyshova et al., 2022; Oliinyk et al., 2022).
- 2. Development, approval and implementation of financial aid programs and projects aimed at restoring economic growth on an innovative basis (Sytnyk et al., 2022; Buriak et al., 2022; Kuznyetsova et al., 2021; Mironova et al., 2022).
- 3. Provision of investment-attractive and financially expedient under favourable conditions of attracting private capital, including on the international capital market (Ukraine Recovery Plan, 2022; Pylypiv, 2023; Kuznyetsova et al., 2023).
- 4. Implementation of institutional measures for permanent monitoring of dynamic threats, their operational analytical assessment and introduction of tactics to neutralize threats and reduce their long-term negative impact.
- 5. For the effective use of all windows of opportunity that are dynamically created in the conditions of war, anticipatory analysis, forecasting and operational provision of measures and formation of prerequisites for their successful implementation, preparation of resources, etc., must be implemented. For this purpose, the relevant institutional structures should be assigned the duties of implementing the specified tasks, given powers and defined responsibilities. Implementation of the specified direction requires appropriate political decisions.
- 6. Increasing the efforts of institutional structures to find new ways of obtaining financial resources, optimizing budget expenditures, and forming a rational structure of the country's debt. One of the specified ways can be the policy of obtaining reparations from the aggressor and attracting his confiscated financial resources.
- 7. Reduction of unemployment to a level below the critical level. For this, it is necessary to implement a state program, which, in particular, will provide for the formation of a projected tax policy that also takes into account the social consequences of the decisions of institutional structures.



- 8. In order to ensure food security, it is necessary to implement the above-mentioned support measures for the agricultural industry.
- 9. Creation of a state program to attract investments, first of all, in such a reliable direction of investment as the restoration of infrastructure. A necessary direction of investment is also the promotion of the development of the domestic market, which can become a multiplier in improving the socio-economic component of the country's economic security.
- 10. Implementation of a systematic approach in the use of resources for complex neutralization of threats in various components of economic security. In particular, the primary need during the war to provide urgent and strategic military-economic needs for conducting military operations can stimulate the economy, solve the problem of unemployment, and ensure the sustainability of socio-economic development even in conditions of significant threats.
- 11. Social support for low-income population groups, regulation and stabilization of prices for the main types of food by the state. The specified support should be provided primarily through the use of the public works mechanism (with the exception of persons with health conditions or significant age, respectively). (Pashchenko, 2022; Kovalova, 2020; Petrychenko et al., 2022).
- 12. Creation of a state program for energy system restructuring. State funding of up to 50% of programs and projects for the installation of 5 kW PV systems and batteries for households. Introduction of support for green types of fuels (Shtunder et al., 2022; Havrysh et al., 2016; Borshchevskyy et al., 2022).
- 13. Development and approval of a program to stimulate the return of specialists who migrated abroad during the war (Zayed et al., 2022; Lytvyn et al., 2022; Mulska et al., 2022).
- 14. Approximation of national legislation to EU requirements, and implementation of Sustainable Development Goals in regulatory documents (Sumets et al., 2022a; Sumets et al., 2022b; Ahmed et al., 2022).

### **DISCUSSION**

In a number of studies, in particular, Antoshkin et al. (2022), Onyshchenko et al. (2023) specified the structure of economic security. Antoshkin and others (2022) defined the following structural blocks of economic security: "international politics, world economy, globalization processes; economic, state and public institutions; resources and productivity; ideology, strategies and models of the country's development; monitoring, methods of assessment and diagnosis and forecasting". First, in our opinion, as structural blocks of economic security, its components should be considered from the point of view of security: social, financial, food, investment and innovation security; secondly, the military actions indicated the need to take into account one more important component, namely military and economic security, which was left out of the attention of the mentioned researchers. Also, under conditions of war, the reliability of the rear becomes especially important, one of the directions of its formation is socio-economic security, and this, in our opinion, needs to be taken into account more than, for example, the globalization processes indicated by Antoshkin et al. (2022) as components of economic security. Rebryk and others. (2023) indicated "the need for modelling and forecasting the dynamics of Ukraine's economy in the medium term". In our opinion, given the dynamic changes in threats, this should be done in real-time and in the short term. Mazaraki et al. (2022) indicated that during the war, "priorities should be the creation of new modern industries with the maximum use of modern technologies, the development of the domestic military industry, the restoration of lending to the economy, the support of the agricultural industry and exporters, and in the future, the restriction of imports and the development of domestic production." All of the above requires resources, first of all, financial resources, which, as indicated in the presented article, with a budget deficit and a reduction in investments, requires a balanced budget policy. Ohrenych and others. (2023) indicated the impact of a decrease in the level of economic security on the competitiveness of domestic enterprises and stated that "in order to reduce profits, enterprises will have to take radical actions." But Ohrenych et al. (2023) did not indicate that these "radical actions" will serve as a driver of further deterioration of economic security, which is considered in the presented article and to neutralize which priority areas of state support are determined. The issue of "uncontrolled growth of the budget deficit, which as a result of military operations crossed the critical line" is mentioned in the article by Romanovska et al. (2022) needs to specify directions for neutralizing this threat. Therefore, in the presented article, it is indicated that such a promising direction is the optimization of costs, first of all, the refusal to support export-oriented industries and the direction of budget resources for the development of small businesses, FOP, and the encouragement of innovative areas of activity. This is expedient, in particular, given the fact that supporting the export of products with a low level of processing contributes to the formation of the raw material character of the economy.



A number of scientists: Borshchevskyy and others (2022), Brezhnyeva-Yermolenko and others (2018), Kuznyetsova et al. (2023) indicate the need to attract investments to improve the state of economic security and to restore socio-economic development. The presented article emphasizes that the primary direction of investment is primarily the promotion of the development of the domestic market, as this can become a multiplier in improving the socio-economic component of the state of the country's economic security. Buriak et al. (2022) indicated "significant disparities in the achievement of socio-economic development." Not only the regional but also the sectoral dimension of disparities is indicated in the presented article and proven by the provided statistical data.

The presence of debatable questions on the above-mentioned issues indicates the relevance and expediency of the presented research.

## **CONCLUSIONS**

Since the threats to economic and food security, and socio-economic development of Ukraine are of different natures: COVID-19, and military actions of different intensity in different periods of time, the analysis in the presented article was carried out taking into account the refined classification of the studied periods. The genesis of negative effects on the state of economic security and the sources of its restoration are determined. The dynamic nature of threats of war, changes in their impact by directions, which requires institutional measures for permanent monitoring of dynamic threats, their operational analytical assessment and introduction of tactics to neutralize threats and reduce their long-term negative impact, are indicated. An analysis of the negative effects of the war on the components of economic security is provided, and the results of an expert assessment of their relative weight are given. The necessity of taking into account one more aspect of economic security, which was left out of the attention of experts, is indicated in the conditions of war - military-economic security. Indicators of military and economic security are indicated. The expediency of implementing a systemic approach in the use of resources for complex neutralization of threats according to various components of economic security is indicated. It is pointed out that the war not only creates threats but also opens new windows of opportunities, in particular opportunities in solving some aspects of socio-economic development. The problem with the use of the specified windows of opportunity is that due to the dynamic changes in the conditions of the state of war, they are unstable, therefore, for the effective use of all opportunities, anticipatory analysis, forecasting and operational provision of measures and the formation of prerequisites for their successful implementation, preparation of resources, etc. must be implemented. For this purpose, the relevant institutional structures should be assigned the duties to implement the specified tasks, given the authority and defined responsibility.

The main factors on which the well-being of the country's population depends are indicated, the effects of crises on the indicators of the population's income and expenditure levels are analyzed, and the drivers of the deterioration of well-being are established. The negative effects of the crisis, which led to a reduction in production volumes in the agricultural sector, were identified. It is indicated that this significantly limited the ability of the branch to fulfil food security tasks. Proposed ways to reduce the negative impact of war on agricultural production to ensure food security. The directions of financing under separate national programs for increasing the level of economic and food security, and restoring socioeconomic development have been specified, and the main tasks of neutralizing threats to economic and food security and restoring socio-economic development have been defined.

# **ADDITIONAL INFORMATION**

### **AUTHOR CONTRIBUTIONS**

All authors have contributed equally.

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The Authors declare that there is no conflict of interest.



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# СТАН ЕКОНОМІЧНОЇ БЕЗПЕКИ ТА НАПРЯМИ ВІДНОВЛЕННЯ СОЦІАЛЬНО-ЕКОНОМІЧНОГО РОЗВИТКУ Й ПРОДОВОЛЬЧОЇ БЕЗПЕКИ В УМОВАХ ВІЙНИ

Метою дослідження є визначення стану економічної безпеки, напрямів забезпечення її рівня та напрямів відновлення соціально-економічного розвитку за сукупного впливу загроз. Для реалізації цієї мети наведено експертну оцінку складових економічної безпеки та вказано на необхідність за умов війни враховувати також складову воєнноекономічної безпеки. Указано, що завдання нейтралізації загроз воєнно-економічній безпеці відкриває нові вікна можливостей, зокрема можливості забезпечення соціально-економічного розвитку. Визначені передумови використання зазначених вікон можливостей. Указано на динамічний характер загроз війни, зміни їхнього впливу за напрямами, що вимагає інституційних заходів щодо перманентного моніторингу динамічних загроз, їх оперативної аналітичної оцінки та запровадження тактики нейтралізації загроз і зменшення їхнього довгострокового негативного впливу. Надано аналіз стану економічної безпеки, указані напрями покращення цього стану за складовими економічної безпеки. Визначені основні фактори, від яких залежить добробут населення країни, проаналізовано впливи криз на показники рівнів доходів і витрат населення, установлені драйвери погіршення добробуту. Зазначено, що погіршення соціально-економічного становища домогосподарств обумовило звуження внутрішнього ринку, що негативно вплинуло на функціонування МСП та призвело до звуження відтворення їхнього основного капіталу, зниження економічної ефективності функціонування, скорочення їх кількості чи ліквідації бізнесу. Указано, що це утворило негативний зворотний мультиплікативний вплив на соціально-економічне становище населення. Зазначене обумовлює необхідність спрямування національних економічних програм на розширення внутрішнього ринку. Визначено негативні впливи криз, які призвели до скорочення обсягів виробництва в аграрній галузі. Указано, що це значно обмежило можливості виконання галуззю завдань продовольчої безпеки. Запропоновані напрями зменшення негативного впливу війни на агровиробництво для забезпечення продовольчої безпеки. Конкретизовано напрями фінансування за окремими загальнодержавними програмами підвищення рівня економічної та продовольчої безпеки, відновлення соціально-економічного розвитку; надані рекомендації щодо нейтралізації загроз економічній і продовольчій безпеці та відновлення соціально-економічного розвитку.

**Ключові слова:** економічна безпека, соціально-економічний розвиток, продовольча безпека, напрями відновлення економіки, впливи війни

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