"Government response on russian war in Ukraine: Relocating business"

AUTHORS	Vladyslav Lavreniuk (D) R Yevheniia Polishchuk (D) R Anna Kornyliuk (D) Vladyslav Horbov (D) Alla Ivashchenko (D) R	
ARTICLE INFO	Vladyslav Lavreniuk, Yevheniia Polishchu and Alla Ivashchenko (2023). Government Relocating business. <i>Problems and Persp</i> 576. doi:10.21511/ppm.21(4).2023.42	response on russian war in Ukraine:
DOI	http://dx.doi.org/10.21511/ppm.21(4).2023.42	
RELEASED ON	Monday, 11 December 2023	
RECEIVED ON	Saturday, 07 October 2023	
ACCEPTED ON	Thursday, 30 November 2023	
LICENSE	This work is licensed under a Creative Commons Attribution 4.0 International License	
JOURNAL	"Problems and Perspectives in Management"	
ISSN PRINT	1727-7051	
ISSN ONLINE	1810-5467	
PUBLISHER	LLC "Consulting Publishing Company "Business Perspectives"	
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"	
NUMBER OF REFERENCES	NUMBER OF FIGURES	UMBER OF TABLES
60	NUMBER OF FIGURES	5
OU .	,	J

© The author(s) 2023. This publication is an open access article.





BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives" Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

Received on: 7th of October, 2023 Accepted on: 30th of November, 2023 Published on: 11th of December, 2023

© Vladyslav Lavreniuk, Yevheniia Polishchuk, Anna Kornyliuk, Vladyslav Horbov, Alla Ivashchenko, 2023

Vladyslav Lavreniuk, Ph.D. in Economics, Associate Professor, Banking and Insurance Department, Faculty of Finance, Kyiv National Economic University named after Vadym Hetman, Ukraine.

Yevheniia Polishchuk, Doctor of Science in Economics, Professor, Department of Corporate Finance and Controlling, Faculty of Finance, Kyiv National Economic University named after Vadym Hetman, Ukraine. (Corresponding author)

Anna Kornyliuk, Ph.D. in Economics, Associate Professor, Department of Corporate Finance and Controlling, Faculty of Finance, Kyiv National Economic University named after Vadym Hetman, Ukraine.

Vladyslav Horbov, Ph.D. in Sociology, Associate Professor, Personnel Management, Sociology and Psychology Department, Kyiv National Economic University named after Vadym Hetman, Ukraine.

Alla Ivashchenko, Doctor of Science in Economics, Professor, Department of Corporate Finance and Controlling, Faculty of Finance, Kyiv National Economic University named after Vadym Hetman, Ukraine.



This is an Open Access article, distributed under the terms of the Creative Commons Attribution 4.0 International license, which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Conflict of interest statement: Author(s) reported no conflict of interest Vladyslav Lavreniuk (Ukraine), Yevheniia Polishchuk (Ukraine), Anna Kornyliuk (Ukraine), Vladyslav Horbov (Ukraine), Alla Ivashchenko (Ukraine)

GOVERNMENT RESPONSE ON RUSSIAN WAR IN UKRAINE: RELOCATING BUSINESS

Abstract

The russian war in Ukraine replaced not only millions of people but also businesses in the safer regions of Ukraine. The study aims to identify regional stakeholders' emergency responses in reaction to the russian war in Ukraine associated with business relocations and their impact on the host region. Employing qualitative research methods, including focus group discussions and in-depth semi-structured interviews with 25 informants (representatives of departments of economic development of regional authorities and administrators of regional development agencies), the study was conducted between March and May 2023. The findings reveal a diverse range of relocation strategies, with a significant inclination toward safer western and central regions of Ukraine, which accounted for more than 70% of displaced businesses. The notable share of relocated companies are wholesale and retail trade companies and the processing industry companies - 40% and 32%, respectively. It is assumed that not capital-intensive companies were relocated first. The support from regional stakeholders played a crucial role in mitigating business challenges related to relocation (communication difficulties, market loss, supply chain disruptions, and employee relocation issues, providing comprehensive assistance, and facilitating integration into the new socio-economic environment). The study acknowledges potential biases in responses and emphasizes the importance of correctly interpreting results. The study results are helpful for policy-making regarding regional development and the post-war rebuilding of Ukraine.

Keywords russian war in Ukraine, displaced business, relocation,

regional support of business

JEL Classification F23, L25, O18, R23

INTRODUCTION

In 2022, Ukraine faced unprecedented challenges due to the Russian military invasion. Businesses in the country had to contend with shelling and missile attacks, leading to severe losses and uncertainty. Many Ukrainian businesses decided to move to safer regions within Ukraine to protect their assets and people.

The economic impact of the conflict was substantial. State Statistics data for 2023 revealed a 20% decline in business profits nationwide. The regions closest to the front lines suffered the most, with Luhansk Oblast experiencing a devastating 96% drop in profits. Other hard-hit areas included Kherson Oblast (94%), Zaporizhzhia Oblast (83%), Donetsk Oblast (80%), Dnipropetrovsk Oblast (74%), Kharkiv Oblast (55%), and Mykolaiv Oblast (50%).

Ukrainian enterprises adopted relocation strategies to secure their future in response to this turmoil. Understanding these strategies, their effects on host regions, and the role of regional stakeholders is vital for shaping policies in these dynamic circumstances.

Demonstrating solidarity in such a difficult circumstance, different representatives of the regional stakeholders helped organize the relocation process. Assessing the effectiveness of these responses is critical for developing an emergency guide of actions during force major (war conflicts, disasters, etc.) and post-war rebuilding actions.

All support initiatives can be divided into government initiatives (national-level programs and common regional authorities and regional development agencies), initiatives of local communities (NGOs, volunteers, and individuals), and foreign donors. Identifying challenges during relocation business both from the host regional ecosystem and displaced business are needed to develop specific solutions for their further development. One of such obstacle is poor communication between businesses and government, which reduces the effectiveness of the support programs. Identifying barriers faced by relocated businesses is crucial for the effectiveness of future support programs. Additionally, examining host regions' issues will inform comprehensive regional development policies in restoration infrastructure and energy systems.

1. LITERATURE REVIEW

Business relocation is a strategic decision firms undertake for different reasons, influenced by various economic, geographical, policy, force majeure, and disaster-related factors. Bao et al. (2022) explore the impact of business relocation on the broader community, suggesting that it affects businesses and households. The importance of considering geographical factors in business relocation was highlighted by Zhou et al. (2016). Mammadov et al. (2023) suggested credit guarantee schemes supporting business growth after relocation. Non-direct support of relocated businesses by the government is described by Riadinska et al. (2022), where the attention is drawn to changing legislation for credit activities of the banks to aid displaced enterprises.

Couch et al. (2011) investigate the cyclical nature of business relocations and their impact on employees. Koster and Venhorst (2014) focused on relocating highly educated self-employed individuals and underscored the role of human capital in business relocation decisions. Shen et al. (2017) emphasize the role of regulatory factors in shaping business relocation patterns in response to environmental concerns. Lee (2022) examined the transactional challenges businesses face when relocating and how they can affect their performance. Wang et al. (2019) investigated the dislocation between China's economy and carbon emissions due to industrial relocation. Chen et al. (2020) explored the

relationship between relocation and corporate performance.

Zhang et al. (2022) examined the importance of considering compliance costs in relocation decisions. Tramaco (2019) provides industry-specific insights into business relocation. Fan and Liu (2021) highlight the global nature of business relocation. Balbontin and Hensher (2019) examined the drivers of business location and relocation decisions, emphasizing firm-specific and location-specific factors. Dewit et al. (2019) investigated the impact of employment protection on firm relocation decisions.

Birg and Voßwinkel (2021) reveal the effects of emission taxes on firm relocation. Valentino et al. (2019) provide an institutional perspective on business relocation. Kapitsinis (2019) examines the impact of economic crises on firm relocation, using the Greek SME movement to Bulgaria as a case study. Wasileski et al. (2011) compared business closure and relocation following natural disasters (earthquakes and hurricanes). Hellwig (2023) focused on the relocation patterns of young digital firms in Germany.

Györffi and Oren (2006) underline the role of policy and market forces in shaping relocation decisions. Drozd (2019) addresses the technical aspects of relocation, particularly moving infrastructure. Brown (2019) provides practical insights for firms contemplating relocation decisions. The empirical investigation conducted by Brouwer et al. (2004) considers factors such as firm size, industry, and

regional characteristics in understanding relocation patterns.

Gourinchas et al. (2017) analyzed the Greek crisis, which had implications for the relocation of firms, and discussed economic crises and their broader impacts. Onikiienko et al. (2021) provided information on how cash flows change during periods of economic shock. Siodla (2021) provides insights into how disasters can influence business location decisions. Vigdor (2008) offers insights into the consequences of natural disasters on business relocations. Sastry and Gregory (2014) highlight the geographical aspects of post-disaster business relocations. Knoben and Oerlemans (2005) provide a literature review on the effects of firm relocation on its performance. Iuchi and Mutter (2020) analyze community relocation approaches after significant disasters in Asia.

The main idea of Bower and Weerasinghe (2021) was to analyze planned relocation cases in the context of hazards, disasters, and climate change. UNDP (2013) underscores the vulnerability of businesses to various hazards. Verme and Schuettler (2021) offer insights into the broader consequences of displacement, which can affect local economies. Sasse (2020) examines the displacement caused by war, focusing on the case of Ukraine.

Military conflicts significantly affect the life of the country as a whole due to the displacement of people (Alekseyenko et al., 2021), businesses, and universities (Zakharova & Prodanova, 2023; Porkuian et al., 2023; Spivakovsky et al., 2023). The russian full-scale war invasion in Ukraine has had profound economic consequences (Plastun et al., 2023; Razinkova et al., 2023), leading to business relocations in the context of the ongoing conflict. Baik (2022) discusses the legal and practical aspects of business relocation in a war-torn environment in Ukraine. Zakharchenko (2022) focuses on how businesses adapt to the challenges posed by the war invasion. Smochko and Luzhanska (2022) analyze the role of business relocation in ensuring economic resilience in a hostile environment. EBRD (2023) report provides insights into the challenges and needs of SMEs in Ukraine after the russian invasion. PricewaterhouseCoopers Advisory LLC (2022) comprehensively analyzes

how the war invasion has influenced business relocation and economic activities.

Melnyk and Leshchuk (2022) and Korobka (2023) explore the features, problems, and incentives for relocating businesses and their production in the context of the war. Havryliuk (2023) investigates the effect of the russian military invasion on Ukraine's endogenous potential and examines the peculiarities of small business relocation in wartime conditions. Tepliuk et al. (2023) reveal the features of responsible consumption management as well as sustainable issues for enterprises in globalization conditions. Government initiatives' role in mitigating the war's impact on businesses and potentially influencing relocation decisions were extensively analyzed (Alekseieva et al., 2023; Hordiienko & Prykhodko, 2022). Kornyliuk et al. (2022) studied the government support for businesses in crises. Mulska et al. (2023) explored how various support mechanisms affect business relocation patterns.

The literature review on business relocation demonstrates its multifaceted nature, with factors ranging from economic conditions and environmental regulations (e.g., disaster-related factors) to human capital and political considerations. The ongoing russian war invasion in Ukraine has prompted businesses to relocate as they grapple with the challenges and uncertainties posed by the military conflict. Understanding the main features and motivations behind these relocations is crucial for policymakers, researchers, and businesses seeking to navigate the complex landscape of business relocation in a conflict zone.

The objective of this study is to explore how the emergency actions taken by regional stakeholders in response to the russian war in Ukraine have played a crucial role in business relocations and how it impacted the host regions.

2. METHODS

Considering the unique nature of the target group and the challenges in obtaining valid information, qualitative research methods were selected to collect sociological data, specifically focus group discussions and in-depth semi-structured interviews. A questionnaire (interview guide) outlining essential questions for discussion was chosen as the research instrument. The structure of the guide consisted of several information sections: experience of collaborating with representatives of relocated businesses, support programs, and economic impact, donors and sponsors, and general characteristics of displaced businesses.

Representatives of relocated businesses constitute a novel social group within Ukrainian society, which has found itself amidst social turbulence and is significantly influenced by various social processes and phenomena in the relocation area. Experts from local and regional authorities provided the primary support, including legal, financial, and social assistance for these displaced businesses. Over time, these efforts have accumulated the necessary experience to elucidate the peculiarities of adaptation for relocated businesses within the new socio-economic environment.

The empirical foundation of this study consists of the results obtained from a series of in-depth interviews conducted with managers, representatives of local governments, regional military administrations, and regional development agencies (10 interviews), as well as focus group discussions (2 focus groups). These interviews and discussions were facilitated using cloud-based communication services. The responses provided by the informants were recorded using video and audio recording equipment. Empirical data were collected between March and May 2023, involving 25 informants.

It is essential to consider that when generalizing individual expert opinions, the correct interpretation of the results is crucial. It is also acknowledged that during the survey, there might be instances of "social desirability" and "asymmetry of attribution," where respondents provide socially accepted answers within a specific community or social group. Such "heightened criticism" could be encountered when experts discussed their own perspectives on the functioning of relocated businesses within the region of operation. These research indicators are projective and predictive, providing descriptive trend information.

3. RESULTS AND DISCUSSION

3.1. Overview of relocation trends during full-scale invasion

Russian full-scale invasion in February 2022 forced Ukrainian entrepreneurs to adopt a rushed decision to save their employees and production facilities and relocate to safer, mainly western and central regions.

The highest business relocation rates were observed in the first 5 months of the full-scale war when 661 companies were relocated with the Government's relocation program. Later, the growth rate decreased. As of March 2023, according to the Ministry of Economy (2023), 800 companies had been relocated with the government's assistance.

Figure 1 shows the number of relocated companies under the Government Relocation Program. However, the statistics about the total number of relocated companies, including those who moved

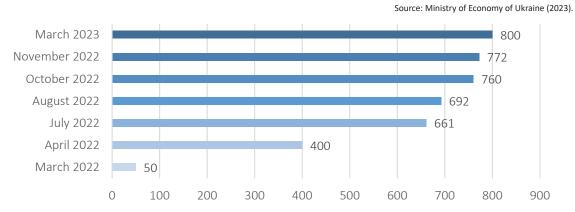


Figure 1. Number of enterprises relocated under the Government Relocation Program (cumulative number of entities)

to other regions using their own resources or with the help of regional authorities, are missing. This data gap complicates the comprehensive exploratory analysis of the business relocation process in Ukraine during the full-scale war.

After more than a year, the relocation process has slowed down significantly. In some regions, the number of relocated companies has decreased – companies return to their home regions. However, they also create branches in new regions where they have relocated, which means business expansion.

Based on collected region-level data and interview results, four main relocation strategies can be identified:

- Relocation within the region. For example, 5
 companies from the occupied territories of
 Zaporizhzhia Oblast were relocated to the city
 of Zaporizhzhia. This strategy is the least safe
 due to the security risks but is expected due to
 historically low levels of population mobility.
- 2. Relocation to neighboring or relatively safer central regions without intensive warfare. For example, 41 companies, mostly from Kharkiv, Donetsk, and Luhansk Oblasts, relocated to the Poltava and Cherkasy Oblasts.
- 3. Relocation to the western regions. This is the safest strategy chosen by most relocated businesses. At the same time, the largest share of businesses relocated to the regions bordering the EU Lviv and Zakarpattia almost 40% of the total number of relocated companies. However, significantly fewer companies relocated to western regions close to the Belarusian border (Rivne and Volyn Oblasts) due to security risks.
- 4. Relocation abroad. This is the most radical strategy and, in fact, means starting a business almost from scratch, even if it is possible to relocate employees and equipment.

Some companies also have chosen the option of business re-registration in comparatively safe regions instead of physical relocation. The main reasons are the impossibility of production facilities relocation, especially in capital-intensive industries (machinery and ship repair companies), and due to the rapid occupation of the territory (for example, Kherson Oblast). Such a strategy indicates an intention to operate in the Ukrainian legal framework (including tax payments) if a company's location is occupied.

3.2. Analyzing interviews on business relocation during full-scale invasion

Appendices A-E summarize the informants' responses to the current issues of relocated business. The synthesis of informants' answers facilitated the visualization and summarization of the survey results. This process involved aggregating and interpreting the responses, enabling a comprehensive understanding of the collective perspectives provided by the informants.

Considering the survey results, it is reasonable to divide the block of questions 'Relocation issues' into two key questions: 1) What were the relocation difficulties for the business? 2) What were the difficulties of relocation for regional authorities? The results showed a significant variation in difficulties for both relocated businesses and regional authorities.

According to the results, the challenges associated with business relocation are quite diverse, and it is appropriate to divide them according to the following classification criteria: 1) by nature; 2) by subject; 3) by stages of relocation (Figure 2).

Respondents mentioned communication difficulties, loss of markets, problems in supply chains, sales, and the quality of premises provided. There were also difficulties in relocating employees and interacting with government agencies. Notably, the respondents emphasized the importance of relocators understanding the geographical and economic aspects of the host region, which they had difficulty with. The results generally indicate specific regional, subjective, and operational relocation difficulties.

The analysis expands the taxonomy of relocation difficulties in wartime. In particular, general and specific relocation difficulties for businesses were identified (Figure 3).

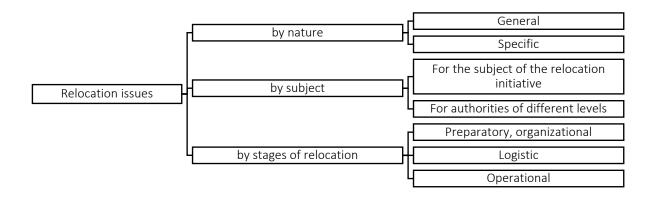


Figure 2. General classification of problems in the business relocation process

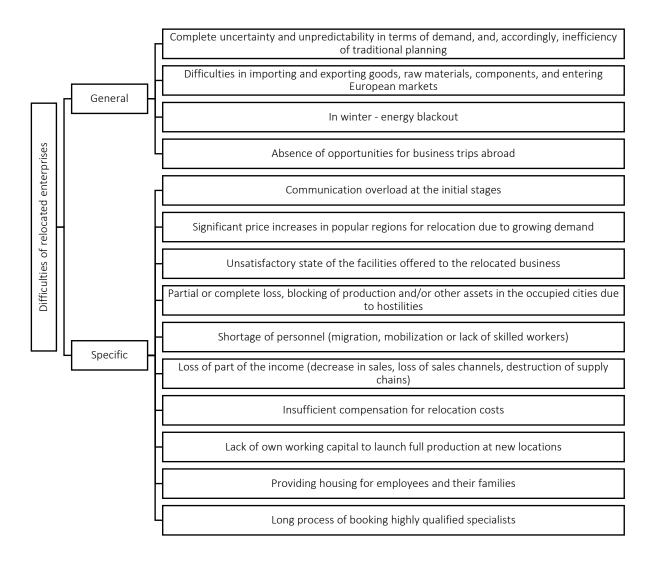


Figure 3. Difficulties of relocation for business

On the other hand, regional authorities also faced significant difficulties, the classification of which is presented in Figure 4.

Most informants emphasized the importance of active support for relocated businesses by regional authorities as an essential element of the region's

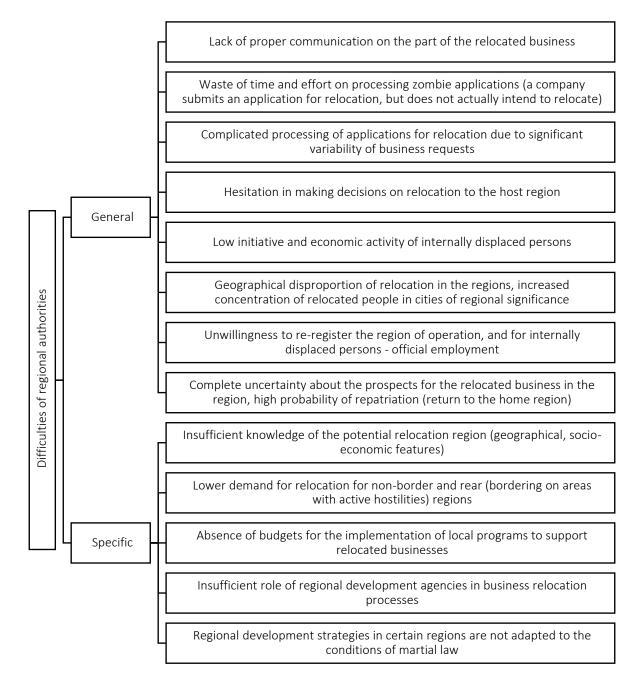


Figure 4. Difficulties of relocation for authorities

economic development strategy under martial law. Regional authorities emphasized their own pivotal role in creating a favorable business ecosystem for relocated businesses in their region. In most cases, this involved providing financial support, facilitating partnerships with local businesses and institutions, and providing the necessary infrastructure. Given the results of the interviews, it is advisable to combine the following questions in the block of questions "Support for relocated businesses by regional authorities": 1) How did regional author-

ities and potential relocators communicate and coordinate their actions? 2) How was the business relocation to the chosen region prepared and organized? 3) How was the relocation and logistics of the relocated business carried out? 4) How was the relocated business restored, launched, and supported in the host region?

Regional authorities' support of displaced enterprises is a key factor in the successful relocation process. It has been established that regional authorities actively promote the relocation of new businesses to their regions by providing additional incentives and infrastructure support. This contributes to the development of the business community in the region, creates a favorable atmosphere for investment, and helps to increase the economic potential of the region. The study has shown that support for relocated businesses by regional authorities includes: 1) Communication and coordination of actions between regional authorities and potential relocators; 2) Preparation and organization of business relocation to the selected region; 3) Relocation and logistics of relocated business; 4) Restoration, launch, and support of relocated business activities.

In terms of communication and coordination between regional authorities and potential relocators, various tools are used, such as specialized government web resources, Telegram channels, and Google services, to exchange information with potential relocators. In addition, regional authorities tried to consider each business's individual needs. They provided support at various stages of relocation, which contributed to the successful integration of these businesses in the host regions.

The respondents' answers about preparing and organizing business relocation demonstrated a preference for large cities and oblast centers in relocation processes. Regional authorities assisted in finding and improving living conditions and established communication on these issues with employment centers. Respondents reported organizing systematic meetings with relocated businesses,

as well as providing ongoing consulting support and assistance in all aspects of relocation.

At the same time, respondents pointed out the importance of considering the needs of relocated businesses for logistics support and assistance from logistics companies and government agencies. Most respondents named Ukrzaliznytsia, Ukrposhta, and Nova Poshta as key players in logistics support. However, sometimes, individual contacts with logistics companies are used to ensure successful relocation.

According to the respondents, relocated businesses' restoration, launch, and support should include elements such as cooperation with administrative service centers and institutions to obtain the necessary information, support, and permits. Regional authorities emphasize the importance of ensuring that basic requests of relocated businesses are addressed quickly and efficiently. It is also essential to facilitate their successful start by cooperating with local businesses and assisting in finding raw materials and qualified personnel. An equally important aspect emphasized by respondents is the organization of follow-up meetings and interaction between relocated businesses and government agencies, facilitating communication and solving problematic issues.

Initial communication took place only with enterprises that needed state support for relocation (the so-called "official relocation") (Figure 5). Enterprises that did not need and want relocation support and did not take any initiatives to com-

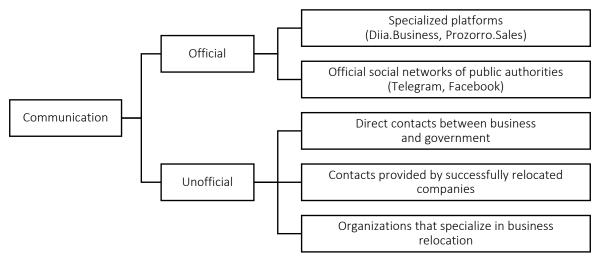


Figure 5. Communication between potential relocators and regional authorities

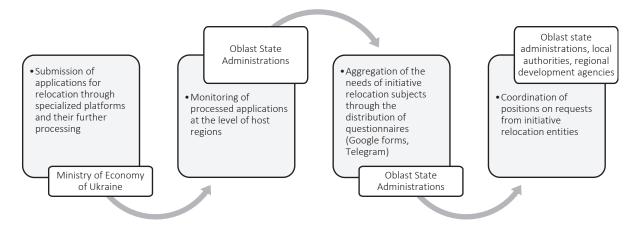


Figure 6. Stages of communication and coordination between localized businesses and regional authorities

municate with regional authorities did not take any initiatives to relocate on their own (the socalled "unofficial relocation").

Potential relocators communicated with regional authorities (Figure 5) through 1) specialized platforms created as part of the nationwide business relocation program "Diia.Business" and "Prozorro.Sales" (official communication); 2) direct contacts between businesses and local governments (informal communication). Communicating and coordinating potential relocators with regional authorities was divided into specific stages (Figure 6).

Submission of applications for relocation through specialized platforms was coordinated by the Ministry of Economy of Ukraine. Processed applications were displayed online to the authorities of potential host regions, coordinated by the Military State Administrations. Military State Administrations distribute a questionnaire (usually Google form or Telegram) to those wishing to relocate to their region to identify the necessary wishes; coordinators were regional military administrations. Preparation of information for initiative relocation subjects, according to their requests (2-3 days), was coordinated by oblast state administrations, regional development agencies, and local self-government bodies. Feedback to those wishing to relocate regarding their requests and coordination of further actions were taken by oblast state administrations, regional development agencies, and local self-government bodies.

Thus, the process of preparing and organizing the business relocation included:

- Coordination of positions on the geographical location in the region and the necessary real estate and its preparation;
- Coordination and organization of employees' and their families' transportation, search for housing, etc;
- 3. Assistance in obtaining financial assistance (grants, funding programs);
- 4. Further consulting and information support and organization of a mechanism for cooperation with the relocated business of state agencies (employment centers, educational institutions, medical institutions, tax authorities, law enforcement agencies, etc.).

Most enterprises desired to relocate to large cities and regional centers (or at a distance of 10-15 km from them). Many businesses emphasized the administrative status of the locality (large city, regional center), refusing to consider suitable real estate but more remote settlements with such status. Regional authorities facilitated the restoration of destroyed/damaged real estate that could be used for the needs of relocated businesses. At the same time, regional authorities assisted in transporting employees and their families. Communication was conducted with dormitories, possible places of temporary accommodation (schools, kindergartens, educational institutions), and volunteers

willing to accept the displaced persons. To ensure proper living conditions, housing for internally displaced persons and employees (and their families) was renovated.

It has been established that regional authorities and regional development agencies were engaged in the selection and assistance in the processing of financial assistance: 1) domestic grants; 2) international grant funding; 3) government programs to assist internally displaced persons; 4) concessional lending. Additionally, efforts are being made to raise charitable contributions, donations, and other fees to help relocated businesses and internally displaced persons. The regional authorities provided ongoing informational support to relocated enterprises, including consulting activities to establish cooperation between local government agencies and relocated businesses to facilitate their integration into the region's socio-economic relations (reducing bureaucracy, optimizing and accelerating registration procedures, and helping to establish sales channels).

Regional authorities facilitated the relocation of production facilities, employees, and their families. Such activities were carried out as part of the national relocation program by Ukrzaliznytsia and Ukrposhta. A certain number of companies relocated independently and at their own expense. When Ukrposhta and/or Ukrzaliznytsia were overloaded, regional authorities used their

connections with local logistics companies to organize the relocation of businesses and employees. The full structure of logistics support for business relocation in Ukraine can be seen in Figure 7.

To facilitate relocation and logistics, relocated enterprises were offered (before making the final decision on relocation) to move their resources to specially created protected logistics hubs in advance to minimize risks, before making the final decision.

The process of restoring and launching the relocated business involved:

- 1. Restoration of infrastructure (electricity, water supply, heating and ventilation systems, communications, etc.; repair and adjustment of systems and networks; obtaining the necessary documents and permits);
- 2. Restoration of equipment and technologies (inspection, repair, adjustment, and testing of machines, tools, automation systems, and other technical means transported in the process of relocation);
- Reorganization of business processes (revision of logistics and supply, sales technologies; recruitment of personnel, if necessary, retraining of the existing workforce);

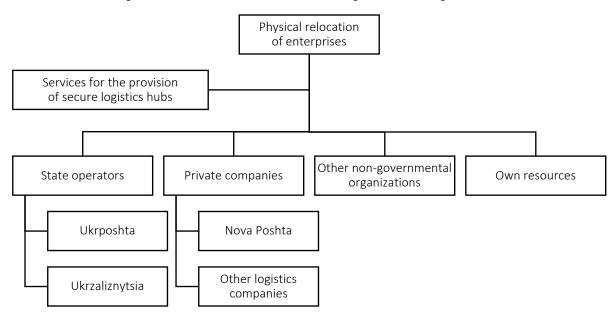


Figure 7. Logistics support for enterprise relocation

- 4. Restoration of the client base and partnerships (establishing work with previous clients and partners; conducting marketing campaigns and advertising activities to attract new clients and expand the market with the support of the RDA and regional authorities);
- Testing and launching the business (testing on one business cycle, in case of success – launching full capacity);
- 6. Further support of the relocated business (assistance in solving problems; assistance in financing current needs, operational activities, etc.; consultations individual, group (meetings, forums).

The launch of the business after the recovery is a positive result of the coordinated work of businesses, regional authorities, and regional development agencies. This stage helped to conduct pilot sales, evaluate the first results, and identify problems. Regional development agencies supported relocated businesses by analyzing business plans and the results of their implementation. An essential aspect of the work of regional development agencies was assistance in obtaining grants (search for proposals, formulation of requests, budgeting, and support). In the case of a successful pilot launch, a share of enterprises (with partial relocation of employees/equipment) initiated 100% relocation to the host region.

Regional authorities facilitated communication among relocated businesses through sector-based cooperation, assigning curators to resolve issues promptly. They organized meetings and information sessions and invited relevant authorities to address problems. Separate hotlines were established for quick communication, and meetings with international representatives were held in border regions. In Zakarpattia Oblast, a digital information portal, Dopomoga Zakarpattia, was launched for various support services. Additionally, "Entrepreneurship Support Centers" were established within oblast state administration departments responsible for economic and regional development. The majority of respondents reduced the set of issues related to the impact of relocated enterprises on the ecosystems of host regions to two main aspects: socio-economic and technological impact:

- 1. Socio-economic impact:
- increasing economic activity in the region;
- increasing the population of the region due to internally displaced persons increases the consumption of goods and services by businesses in the region;
- strengthening of competition with local businesses;
- increasing tax revenues to the regional budget;
- creating new jobs;
- conversing business culture.
- 2. Technological impact:
- expanding the region's technological infrastructure;
- improving the skills of employees through the exchange of experience;
- developing R&D activities.

The findings reveal a diverse range of relocation strategies, with a significant inclination toward safer western and central regions of Ukraine. The businesses faced multifaceted challenges, including communication difficulties, market loss, supply chain disruptions, and employee relocation issues. However, the support from regional authorities played a crucial role in mitigating these challenges, providing comprehensive assistance, and facilitating integration into the new socio-economic environment. The study acknowledges potential biases in responses and emphasizes the importance of correctly interpreting results.

The challenges faced by relocated businesses and regional authorities are diverse and may change at each stage of relocation. This study aligns with Brouwer et al. (2014), Ornoy and Tarba (2013), and Haines (1970), highlighting the complexity and evolving challenges faced by relocated businesses and regional authorities during relocations.

While previous research focused mainly on the challenges of individual business relocations, this study expands this perspective by examining the difficulties encountered by regional authorities in host regions. This complements the findings of Tepliuk et al. (2023) and underscores the need to consider the responsibilities and challenges of regional authorities in facilitating successful business relocations.

This study also underscores the significance of robust communication networks, especially for IT companies and financial institutions, aligning with the observations of Prokopenko et al. (2020) and Dykan et al. (2021). These findings emphasize the critical role of technology and communication infrastructure in successful business relocations.

Furthermore, this study supports the conclusions of Melnyk and Leshchuk (2022), who argue that relocated enterprises can help host regions preserve and efficiently utilize their resources and labor potential. This study expands on this view

by providing a more comprehensive understanding of the impact of relocated businesses on host regions.

While most scholars do not pay enough attention to logistics in the relocation process, one found that it is one of the most critical stages in conducting research. This study offers valuable insights into governance responses to support relocated businesses, complementing and expanding upon the findings of previous studies. Considering the challenges faced by businesses and regional authorities contributes to a more holistic understanding of this complex phenomenon.

Additionally, it is noted that the prospects for future government decisions include the development of programs to support localized businesses, utilizing both local resources and foreign tranches, and aligning with the broader trend of governments actively engaging in supporting relocated businesses to enhance regional development and economic growth.

CONCLUSION

This study aims to investigate how the emergency actions taken by regional stakeholders in response to the russian war in Ukraine have played a crucial role in business relocations and how it impacted the host regions.

The results demonstrated that despite the government showcasing a proactive approach by rapidly launching the relocation program, the regionally based authorities provided more effective assistance measures, which can be attributed to two factors. Firstly, increasing budget inflows makes local communities highly motivated to attract relocated businesses. Secondly, lower levels of information asymmetry mean that local authorities better understand the region's peculiarities and opportunities, allowing them to suggest tailored solutions that the government may not have sufficient knowledge of.

This suggests that regional authorities and regional development agencies emerged as pivotal players in this emergency response, providing indispensable support in terms of resources, infrastructure, and integration assistance to the displaced businesses. Their active involvement was crucial in creating a conducive environment for businesses to restart their operations.

The analysis shows that regional support for displaced businesses has mostly led to tangible positive outcomes in all the host regions, contributing to economic growth, job creation, and technological advancement. This aligns with the broader objectives of stabilizing the economy and fostering development in the face of adversity.

The resilience demonstrated by Ukrainian businesses, their ability to adapt, and the trend of expanding into new regions even after relocation underscore the effectiveness of both the government's and the local authorities' emergency response.

The experiences and lessons drawn from this emergency response are invaluable for future preparedness. They highlight the necessity for continuous monitoring, comprehensive analysis, and the development of adaptable strategies to better address the challenges of business relocation in conflict situations.

In conclusion, the Ukrainian government's emergency response to assist displaced businesses has been instrumental in mitigating the war's economic impact, fostering resilience, and contributing to the stability and development of host regions. The experience provides critical insights for future emergency responses, emphasizing the importance of a coordinated, adaptable, and supportive approach.

AUTHOR CONTRIBUTIONS

Conceptualization: Yevheniia Polishchuk, Anna Kornyliuk. Data curation: Vladyslav Lavreniuk, Alla Ivashchenko.

Formal analysis: Vladyslav Lavreniuk, Anna Kornyliuk, Vladyslav Horbov.

Funding acquisition: Yevheniia Polishchuk, Alla Ivashchenko.

Investigation: Vladyslav Lavreniuk.

Methodology: Yevheniia Polishchuk, Vladyslav Horbov. Resources: Vladyslav Lavreniuk, Alla Ivashchenko.

Validation: Vladyslav Horbov.

Visualization: Vladyslav Lavreniuk, Anna Kornyliuk.

Writing - original draft: Vladyslav Lavreniuk, Yevheniia Polishchuk, Anna Kornyliuk, Vladyslav

Horbov, Alla Ivashchenko.

Writing – review & editing: Yevheniia Polishchuk, Anna Kornyliuk.

ACKNOWLEDGMENT

The study was conducted within the framework of the State Budget of the Kyiv National Economic University named after Vadym Hetman on the topic "Displaced business in revitalization of regional ecosystems in Ukraine" (state registration number 0123U100357).

REFERENCES

- Alekseieva, K., Maletych, M., Ptashchenko, O., Baranova, O., & Buryk, Z. (2023). State Business Support Programs in Wartime Conditions. *Economic Affairs*, 68(01s), 231-242. https://doi.org/10.46852/0424-2513.1s.2023.26
- Alekseyenko, L., Tulai, O., Petrushenko, Y., Kuznietsov, A., & Derkash, J. (2021). Affordable housing for internally displaced persons: The priorities for investment and development in Ukraine. *Investment Management and Financial Innovations*, 18(1), 101-113. https://doi.org/10.21511/imfi.18(1).2021.09
- 3. Baik, O. I. (2022). Relocation of business entities under martial law

- in Ukraine: Legal and practical aspects. *Yurydychnyi Naukovyi Elektronnyi Zhurnal Legal Scientific Electronic Journal*, *9*, 216-219. (In Ukrainian). https://doi.org/10.32782/2524-0374/2022-9/52
- Balbontin, C., & Hensher, D. A. (2019). Firm-specific and location-specific drivers of business location and relocation decisions. Transport Reviews, 39(5), 569-588. https://doi.org/10.1080/01441647. 2018.1559254
- Bao, H., Wu, X., Peng, Y., & Han, L. (2022). Key factors influencing household asset allocation of relocated households: A case study of Hangzhou. *Habi*tat International, 124, 102562.

- https://doi.org/10.1016/j.habitatint.2022.102562
- Birg, L., & Voßwinkel, J. S. (2021). Emission taxes, firm relocation, and product differentiation. European Journal of Law and Economics, 51(2), 297-345. https://doi. org/10.1007/s10657-021-09685-7
- 7. Bower, E., & Weerasinghe, S. (2021). Leaving place, restoring home. Enhancing the evidence base on planned relocation cases in the context of hazards, disasters, and climate change. Platform on Disaster Displacement and Andrew & Renata Kaldor Centre for International Refugee Law. Retrieved from https://environmentalmigration.iom.int/sites/g/files/tmzbdl1411/files/documents/pdd-

- leaving_place_restoring_home-2021-screen_compressed.pdf_
- Brouwer, A., Mariotti, I., & Ommeren, J. (2004). The firm relocation decision: An empirical investigation. *The Annals of Regional Science*, 38, 335-347. https://doi.org/10.1007/s00168-004-0198-5
- 9. Brown, A. (2019, January 22). Relocating a business: 6 factors to consider. Career Minds. Retrieved from https://blog.careerminds. com/relocating-a-business_
- Chen, S., Yan, X., & Yang, B. (2020). Move to success? Headquarters relocation, political favoritism, and corporate performance. *Journal of Corporate Finance*, 64, 101698. https://doi.org/10.1016/j. jcorpfin.2020.101698
- 11. Couch, K. A., Jolly, N. A., & Placzek, D. W. (2011). Earnings losses of displaced workers and the business cycle: An analysis with administrative data. *Economics Letters*, 111(1), 16-19. https://doi.org/10.1016/j.econlet.2010.12.011
- 12. Dewit, G., Görg, H., & Temouri, Y. (2019). Employment protection and firm relocation: Theory and evidence. *Economica*, 86(344), 663-688. https://doi.org/10.1111/ecca.12280
- 13. Drozd, W. (2019). Structure relocation. *Civil and Environmental Engineering Reports*, 29(4), 176-184. https://doi.org/10.2478/ceer-2019-0053
- Dykan, V., Pakharenko, O., Saienko, V., Skomorovskyi, A., & Neskuba, T. (2021). Evaluating the efficiency of the synergistic effect in the business network. *Journal* of Eastern European and Central Asian Research, 8(1), 51-61. https://doi.org/10.15549/jeecar. v8i1.646
- European Bank for Reconstruction and Development (EBRD).
 (2023). Key problems and needs of SMEs analyzed almost a year after the Russian invasion. Retrieved from https://www.merezha.ua/reports/2023/Challenges-and-Needs-of-SMEs-in-War-Time-en.pdf
- 16. Fan, X.-m., & Liu, H.-g. (2021). Global supply chain shifting:

- A macro sense of production relocation based on multi-regional input-output table. *Economic Modelling*, *94*, 672-680. https://doi.org/10.1016/j.econmod.2020.02.009
- Gourinchas, P.-O., Philippon, T., & Vayanos, D. (2017). The analytics of the Greek crisis. NBER Macroeconomics Annual, 31, 1-81. https://doi.org/10.1086/690239
- Györffi, M., & Oren, G. (2006). Relocation of EU industry. An overview of literature (Background Note IP/A/ITRE/NT/2006-14). European Parliament's committee on Industry, Research and Energy (ITRE). Retrieved from https:// www.europarl.europa.eu/document/activities/cont/201109/2011 0906ATT26029/20110906ATT26 029EN.pdf_
- Haines, V. G. (1970). Business relocation: A guide to moving a business. Business Books Limited.
- Havryliuk, I. (2023). Effect of the Russian military invasion on the endogenous potential of Ukraine. Ekonomika ta Suspilstvo – Economics and Society, 48. https://doi. org/10.32782/2524-0072/2023-48-53
- 21. Hellwig, V. (2023). Digital gravity? Firm birth and relocation patterns of young digital firms in Germany. *Journal of Regional Science*, 63(2), 340-378. https://doi.org/10.1111/jors.12624
- Hordiienko, Y., & Prykhodko, O. (2022). State support of entrepreneurial activity during the war in Ukraine. SSP Modern Economics State and Public Administration, 1(1), 1-10. https://doi.org/10.53933/mespa.vli1.75
- Iuchi, K., & Mutter, J. (2020). Governing community relocation after major disasters: An analysis of three different approaches and its outcomes in Asia. Progress in Disaster Science, 6, 100071. https://doi.org/10.1016/j.pdisas.2020.100071
- Kapitsinis, N. (2019). The impact of economic crisis on firm relocation: Greek SME movement to Bulgaria and its effects on business performance. *GeoJournal*, 84(2), 321-343. https://doi.org/10.1007/

s10708-018-9863-6

- 25. Knoben, J., & Oerlemans, L. A. G. (2005). *The effects of firm relocation on firm performance A literature review*. European Regional Science Association. Retrieved from https://www.academia.edu/26827124/The_effects_of_firm_relocation_on_firm_performance_A_literature_review.
- Kornyliuk, A., Ivashchenko, A., Polishchuk, Y., Tereshchenko, O., & Onikiienko, S. (2022). Government early policy responses on Covid-19 challenges in Central and Eastern Europe: SME support. Acta Innovations, 42(4), 50-58. https://doi.org/10.32933/actainnovations.42.4
- 27. Korobka, S. V. (2023). Osoblyvosti relokatsii maloho pidpryiemnytstva v umovakh viiny [Features of the relocation of a small business in the conditions of war]. Problemy Suchasnykh Transformatsii. Seriia: Ekonomika ta Upravlinnia Problems of Modern Transformations. Series: Economics and Management, 7. (In Ukrainian). https://doi.org/10.54929/2786-5738-2023-7-04-14
- 28. Koster, S., & Venhorst, V. A. (2014). Moving shop: Residential and business relocation by the highly educated self-employed. *Spatial Economic Analysis*, *9*(4), 436-464. https://doi.org/10.1080/17421772.2014.961537
- 29. Lee, I. H. (I.). (2022). Startups, relocation, and firm performance: A transaction cost economics perspective. *Small Business Economics*, 58(1), 205-224. https://doi.org/10.1007/s11187-020-00406-z
- Mammadov, E. M., Belov, A., & Svistun, L. (2023). Role of partial credit guarantee scheme in enabling growth of SME. In V. Onyshchenko, G. Mammadova, S. Sivitska, & A. Gasimov (Eds.), Proceedings of the 4th International Conference on Building Innovations (pp. 731-740). Springer International Publishing. https:// doi.org/10.1007/978-3-031-17385-1 61
- 31. McLaughlin, G. E., & Robock, S. (1949). Why industry moves South: A study of factors influencing the

- recent location of manufacturing plants in the South (1st ed.). Committee of the South, National Planning Association.
- Melnyk, M. I., & Leshchuk, I. V. (2022). Osoblyvosti, problemy ta stymuly relokatsii natsional-noho vyrobnytstva v umovakh viiny [Peculiarities, problems and incentives of relocation of national production in conditions of war]. Rehionalna Ekonomika Regional Economy, 104(2), 94-100. (In Ukrainian). https://doi.org/10.36818/1562-0905-2022-2-10
- 33. Ministry of Economy of Ukraine. (2023, March 21). Norvezka rada u spravakh bizhentsiv nadast finansovu pidtrymku relokovanym ukrainskym pidpryiemstvam, Yuliia Svyrydenko [The Norwegian Refugee Council will provide financial support to relocated Ukrainian enterprises, Yulia Sviridenko]. (In Ukrainian). Retrieved from https://www.me.gov.ua/News/Detail?lang=uk-UA&id=15cea637-53f8-4a31-8c9c-6f492fb394e6&title=NorvezkaRada​
- 34. Mulska, O., Baranyak, I., & Demkiy, I. (2023). Modes and measures of business support during wartime: The case of the Carpathian region of Ukraine. Studia Regionalne i Lokalne, Special Issue on Ukraine, 25-36. https://doi.org/10.7366/15094995s2302
- 35. Onikiienko, S., Polishchuk, Y., Ivashchenko, A., Kornyliuk, A., & Demchyshak, N. (2021). Prior credit assessment of long-term SME projects with non-standard cash flows. *Banks and Bank Systems*, *16*(2), 148-158. https://doi.org/10.21511/bbs.16(2).2021.14
- 36. Ornoy, H., & Tarba, S. Y. (2013). The relocation processes and international business travelers in the era of globalization and their impact on employee experiences. World Review of Entrepreneurship, Management and Sustainable Development, 9(2), 179-194. https://doi.org/10.1504/WREMSD.2013.052358
- 37. Plastun, A., Laichuk, S., Rudenko, L., Guzenko, T., & Mashyna,

- Y. (2023). Assessing the impact of the russian invasion on the competitiveness in the Ukrainian insurance market. *Insurance Markets and Companies*, 14(1), 72-84. https://doi.org/10.21511/ins.14(1).2023.07
- Porkuian, O., Tselishchev, O., Halhash, R., Ivchenko, Y., & Khandii, O. (2023). Twice displaced, but unconquered: The experience of reviving a Ukrainian university during the war. Problems and Perspectives in Management, 21(2-si), 98-105. https://doi.org/10.21511/ppm.21(2-si).2023.12
- 39. PricewaterhouseCoopers Advisory LLC. (2022). Rapid assessment of the war's impact on micro, small and medium enterprises in Ukraine. Kyiv: United Nations Development Programme in Ukraine. Retrieved from https://www.undp.org/sites/g/files/zskgke326/files/2022-10/EN_Rapid_Assessment_of_War_on_MSMEs_in_Ukraine.pdf
- 40. Prokopenko, O., Kazanska, O.,
 Deineha, I., Butenko, N., Omelyanenko, V., & Bovkun, O.
 (2020). Communication business processes of industrial enterprises in the conditions of globalisation. *International Journal of Management*, 11(5), 884-895.
 Retrieved from https://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_5/IJM_11_05_081.pdf
- Razinkova, M., Nebaba, N., Korneyev, M., Yakovenko, T., & Bohorodytska, A. (2023). Assessment of Ukraine's external debt burden under geopolitical instability. *Public and Municipal Finance*, *12*(2), 67-81. https://doi.org/10.21511/pmf.12(2).2023.06
- Riadinska, V. O., Samsin, I. L., Kovalko, N. M., Andrushchenko, H. S., & Soldatenko, O. V. (2022). Credit activity legal regulation of commercial banks. *Review of Economics and Finance*, 20(1), 385-392. https://doi.org/10.55365/1923. x2022.20.45
- Sasse, G. (2020). War and displacement: The case of Ukraine. *Europe-Asia Studies*, 72(3), 347-353. https://doi.org/10.1080/09668 136.2020.1728087

- 44. Sastry, N., & Gregory, J. (2014). The location of displaced New Orleans residents in the year after Hurricane Katrina. *Demography*, *51*(3), 753-775. https://doi.org/10.1007/s13524-014-0284-y
- Shen, J., Wei, Y. D., & Yang, Z. (2017). The impact of environmental regulations on the location of pollution-intensive industries in China. *Journal of Cleaner Production*, 148, 785-794. https://doi.org/10.1016/j.jclepro.2017.02.050
- Siodla, J. (2021). Firms, fires, and firebreaks: The impact of the 1906 San Francisco disaster on business agglomeration. *Regional Science* and Urban Economics, 88, 103659. https://doi.org/10.1016/j.regsciurbeco.2021.103659
- 47. Smochko, N., & Luzhanska, T. (2022). Relocation of Ukrainian business as a tool of economic security in a military state. *Social Development and Security*, 12(4), 112-118. https://doi.org/10.33445/sds.2022.12.4.10
- Spivakovsky, O., Omelchuk, S., Malchykova, D., Tsapiv, A., & Lemeshchuk, O. (2023). Academic solidarity and digitization: Management of a displaced university. Problems and Perspectives in Management, 21(2-si), 40-51. https:// doi.org/10.21511/ppm.21(2si).2023.06
- Tepliuk, M., Sahaidak, M., Petrishyna, T., Fokina-Mezentseva, K., Fomenko, B., & Vasyliev, I. (2023). Managing responsible consumption and sustainable production enterprises in glocalization conditions. *Acta Innovations*, 48(6), 75-91. https://doi.org/10.32933/ActaInnovations.48.6
- Tramaco. (2019). Tramaco expands production capacity via site relocation. *Additives for Polymers*, 6, 7-8. https://doi.org/10.1016/s0306-3747(19)30132-0
- 51. UNDP. (2013). Small businesses:
 Impact of disasters and building
 resilience. Analysing the vulnerability of micro, small, and medium
 enterprises to natural hazards and
 their capacity to act as drivers of
 community recovery. Geneva, Switzerland. Retrieved from https://

- www.preventionweb.net/english/ hyogo/gar/2013/en/bgdocs/ UNDP,%202013.pdf
- Valentino, A., Schmitt, J., Koch, B., & Nell, P. C. (2019). Leaving home: An institutional perspective on intermediary HQ relocations. *Journal of World Business*, 54(4), 273-284. https://doi.org/10.1016/j. jwb.2018.08.004
- 53. Verme, P., & Schuettler, K. (2021). The impact of forced displacement on host communities: A review of the empirical literature in economics. *Journal of Development Economics*, 150, 102606. https://doi.org/10.1016/j.jdeveco.2020.102606
- 54. Vigdor, J. (2008). The economic aftermath of Hurricane Katrina. *Journal of Economic Perspectives*, 22(4), 135-154. https://doi.org/10.1257/jep.22.4.135

- 55. Wang, Z., Chen, S., Cui, C., Liu, Q., & Deng, L. (2019). Industry relocation or emission relocation? Visualizing and decomposing the dislocation between China's economy and carbon emissions. *Journal of Cleaner Production*, 208, 1109-1119. https://doi.org/10.1016/j.jclepro.2018.10.166
- Wasileski, G., Rodríguez, H., & Diaz, W. (2011). Business closure and relocation: A comparative analysis of the Loma Prieta earthquake and Hurricane Andrew. *Disasters*, 35(1), 102-129. https://doi.org/10.1111/j.1467-7717.2010.01195.x
- Zakharchenko, V. I. (2022). Restoration of Ukraine from the consequences of the war by means of neo-economy: Sectoral and spatial approaches. *Ukrainian Geographical Journal*, 2022(4), 23-36. https://doi.org/10.15407/ugz2022.04.023

- 58. Zakharova, O., & Prodanova, L. (2023). A university displaced twice: Irreversible and erroneous losses of human capital. *Problems and Perspectives in Management, 21*(2-si), 123-132. https://doi.org/10.21511/ppm.21(2-si).2023.15
- Zhang, Y., Song, Y., & Zou, H. (2022). Non-linear effects of heterogeneous environmental regulations on industrial relocation: Do compliance costs work? *Journal of Environmental Management*, 323, 116188. https://doi.org/10.1016/j.jenyman.2022.116188
- 60. Zhou, S., Liu, Y., & Kwan, M.-P. (2016). Spatial mismatch in post-reform urban China: A case study of a relocated stateowned enterprise in Guangzhou. *Habitat International*, 58, 1-11. https://doi.org/10.1016/j.habitatint.2016.08.003

APPENDIX A

Table A1. Key informants

S No.	Name	Symbol
	INTERVIEWEES	•
	I. Regional authorities	'
1.	Kyiv Oblast State Administration	P1
2.	Lviv Oblast State Administration	P2
3.	Khmelnytskyi Oblast State Administration	P3
4.	Cherkasy Oblast State Administration	P4
5.	Chernivtsi Oblast State Administration	P5
	II. Agencies	
6.	Volyn Region Development Agency	P6
7.	NGO UFRA	P7
8.	Zakarpattia Regional Development Agency	P8
9.	Kyiv Region Development Agency	P9
10.	Kirovohrad Regional Development Agency	P10
11.	Lviv Regional Development Agency	P11
12.	Poltava Regional Development Agency OFFICE OF EUROPEAN INTEGRATION	P12
13.	Khmelnytskyi Regional Development Agency	P13
14.	Cherkasy Regional Development Agency	P14
	OFFICIAL WRITTEN RESPONSES FROM OBLAST STATE ADMINISTR	ATIONS
1.	Vinnytsia Oblast State Administration	х
2.	Zakarpattia Oblast State Administration	Х
3.	Zaporizhzhia Oblast State Administration	х
4.	Luhansk Oblast State Administration	х
5.	Lviv Oblast State Administration	Х
6.	Poltava Oblast State Administration	Х
7.	Rivne Oblast State Administration	Х
8.	Ternopil Oblast State Administration	Х
9.	Cherkasy Oblast State Administration	X
10.	Kherson Oblast State Administration	

APPENDIX B

Table B1. Data on the problems of relocated business

	RELOCATION ISSUES	
Questions	Representative quotations	
Problems of relocation for business	 «loss of sales markets and communication. Some other enterprises – this applies to all businesses, not only the relocated ones – approached us about going abroad. They had to sign contracts abroad for the raw materials they needed, and they could not leave» (P3) «because we understand that they lost many of these supply chains for their products due to the war» (P12) «the issue of going abroadin the places where they were, they had established supply chains and contractors with whom they had been cooperating for many yearseverything was cut off, and they needed to reestablish it allgiven that they arrived in the border region, they started looking for opportunities to go abroad to present themselves, to participate in some exhibitionsin fact, going abroad on a business trip became impossiblethey go, but for a different purposeas volunteersas a volunteer, they need to bring something else to showbut they do not go for this purpose» (P5) «we no longer 'nightmare' them with our calls because at a certain period of time, it became too much» (P2) «The problem, in addition to communication, was in prices. Rental prices increased very sharply prices were rising simply for illiquid real estate there were warehouses not even of category B+ prices per meter were 10 dollars and more we included the Bureau of Economic Security in this communication» (P2) «the problem with the quality of the premisesrequests were not successful because our premises did not have the lighting capacity required for large multi-story enterprisesthere were premises with crane beams, but they had a tonnage of 5, 10, 15 tons, and when there was a question of 20, 30, 50 tons, there were only a few such premises» (P2) «it turned out that there are no specialists in the labor market who can service such equipmentAnd that is why we are now working with our vocational education at the employment center» (
Problems of relocation for regional authorities	wBut it is clear that the question is when this situation occurred, all enterprises flocked to the border» (P3) wunfortunately, in 2022, we did not have funds under the program» (P1) wsome people said that if you move to us, please re-register for registration and taxes. Our position is we do not insist on re-registration; we understand it is difficult. You have moved, we help you, you work, get settled, no questions asked. If you want to re-register» (P3) wnot all the enterprises that came in at the beginning, well, at the beginning of the hostilities, moved to the territory of Kirovohrad region; some of them stayed, some of them moved on» (P10) wIt is necessary to raise such an institution as the RDA to a decent level because it is a tool administrations cannot implement grant projects; they can only recommend, show, indicate the list of these grant projects, and agencies are the very tools that implement grant projects» (P8) wToday, we all have developed regional development strategies that were actually approved by the session in peacetime, developed in peacetime The administrations have begun to prepare the second phase of the action plan for the implementation of these strategies for 2024–2027. But to date, no changes have been made to those strategies approved in 2019 to update those strategies and bring their goals and strategic objectives to the realities of today» (P8) (P8) wwe had to explain where we were. Not everyone even realized that we are located next to the EU, that we have checkpoints, that we have a border crossing with Romania. Especially for enterprises engaged in exports, this is an excellent territory for them not everyone understands the geographical structure of Ukraine» (P5) wthere are many government programs, such as reimbursement to employers for employment, grants for starting a business for individuals. The Employment Center offers a lot, including vouchers for retraining. But we do not see any activity from IDPs	

APPENDIX C

Table C1. Data on the support of localized businesses by regional authorities

SUPPORT FOR RELOCATED BUSINESSES BY REGIONAL AUTHORITIES	
Questions	Representative quotations
Communication and Coordination	«this is a general communication system; the Ministry of Economy, together with Prozorro Sales, accomplished it» (P13) «and so on, yes, to facilitate relocation, and it is available on the Diia website» (P6) «we have created a chat in the Telegram channel with territorial communities. Additionally, we have a register formed from the free land plots and vacant premises to offer for relocation» (P1) «a Google spreadsheet was developed, where entrepreneurs wanting to relocate entered their data, contact numbers, names, type of activity, and all contacts that could be used for connection. In the initial stage, this Google spreadsheet was publicly available, and we distributed it among all our communities» (P5) «in addition to the government program, we know that there are cases when businesses, for example, had cooperation with other regions; they simply moved to those with whom they cooperated, outside the government program» (P3) «we understand that there are enterprises that moved without necessarily informing the authorities» (P5) «the Ministry of Economy was the main player here, and they collected applications from businesses that wanted to change their location» (P2) «when a business took the initiative to relocate, we saw the processed application online» (P2) «depending on their conditions and requirements – such as area, ceiling height, and so on – we made offers. That is how we communicated» (P3) «at that time, there was a specific questionnaire that we used to work on each of them» (P2)
Preparation and Organization	«When they came to us, we met them on the spot and helped them as needed» (P3) «most of the relocated businesses still wanted to operate in the city or the regional center» (P5) «When the question is asked. We want the regional center. And not much farther awayplus 10, 15, 20 k practically, the largest number of relocated people are from former cities of oblast significance» (P3) «there were both private and communal premises. We assisted in accommodating employees because the were enterprises that moved with an established core of employees. Some moved to dormitories, and some to the private sector» (P5) «directly with the employment center, which was also involved in this process, and with the dormitories the could be offered at that time to accommodate the staff» (P4) «we personally organized meetings with the relocated businesses so that, first of all, they could get to know each other, and secondly, they knew where the authorities were and whom to contact in case of any probler issues» (P1) «any business that has relocated or is planning to relocate to the region A hotline was created We prov maximum support for everything related to premises, employment, recruitment, and dormitories» (P4) «each entity that decided to relocate was assigned an employee who had to contact them with a certain frequency and understand the state of affairs We coordinated with the main state labor department to preconsulting support» (P2)
Navigating Relocation Logistics	«The first block is cargo transportation, when the enterprise itself is relocated. The second block is the transportation of people who were also moving, sometimes with their families» (P2) «can transfer all its assets and liabilities to a specific hub. This designated hub was protected by the TRO forces» (P2) «We operated within the framework of the government program; it involved compensation through Ukrzaliznytsia and Ukrposhta» (P4) «the Ministry of Infrastructure, which, through Ukrposhta or Ukrzaliznytsia, provided the resources and means to carry out the relocation» (P2) «Nova Poshta is also providing some assistance with the relocation of businesses» (P1) «when they could not do it, or time was running out, we utilized our individual contacts with logistics companies or those involved in passenger or other transportation at that time» (P2) «there are some transportation activities facilitated by associations that have managed such relocations» (P2)

Table C1 (cont.). Data on the support of localized businesses by regional authorities

	SUPPORT FOR RELOCATED BUSINESSES BY REGIONAL AUTHORITIES	
Questions	Representative quotations	
Resilience and Recovery	 «cooperation has been establishedwith administrative service centers. Businesses that apply directly receive contact information on how to register, how to obtain all these certificates from the ASCclose cooperation with the employment center and state laborthe employment center assists with employment, and state labor assists withpermits» (P1) «we requested the tax office to promptly and clearly address some fundamental requests, ensuring that no one faced prejudice or biased treatment» (P2) «we requested the tax office to promptly and clearly address some fundamental requests, ensuring that no one faced prejudice or biased treatment» (P2) «where entrepreneurs, where local businesses offered their territory for free for the relocated business in the beginning» (P5) «we searched for raw materials for them, as suppliers were hesitant to sell to them, not knowing the business» (P13) «we have established cooperation with the employment center; we provide them with a list of relocated businesses every monthand to fill vacancieswe need to enter our employee records, whether registered or not, in coordination with the pension fund» (P1) «a major meeting of relocated businesses with state institutionsin a closed formatwe invited the head and first deputy of each institution, i.e. cadastre, labor, tax, gas, energy, heat, and so on. Each provided information about the services and contact persons in a stand-up mode, and the relocated businesses could communicate with them accordingly. If this communication was somehow different or unsatisfactorywe intervened in this matter and resolved their issues» (P2) «we have been disseminating information about certain enterprises, for example, furniture production for hospitals, through our channels, to local governments, to budgetary institutions, so that they could see that there are such enterprises, establish contacts, and place orders	

APPENDIX D

Table D1. Data on the impact of relocated businesses on the host region

IMPACT OF RELOCATED BUSINESSES ON THE HOST REGION		
Questions	Representative quotations	
Socio-economic	«the strongest wins in the competition, so we need to increase, we need to improve some other indicators. For example, to provide services there» (P5) «the relocated business paid 4 million to the budgets of all levels. This was for the 22nd. And for the first quarter of this year, 23 million» (P5) «some sectors have been bolstered by the presence of internally displaced persons. Because, I do not know, coffee shops are overcrowded. Food establishments are crowded. The garment industry has picked upas if it is back to prewar levels. There are probably more people» (P13) «when we talk to the relocated businesses, they have such a socially responsible mission in their community because they hire internally displaced personsthey pay taxes, they contribute to the local budget, they are engaged in socio-economic life by employing them» (P12) «in terms of economic indicators, this has not significantly impacted the economy. It did not affect the gross regional product significantly, nor did it affect the volume of exports/imports. Well, perhaps we will observe its impact over a longer time perspective» (P2)	
Technological	«There are various business specializations. Even, I heard therea business that relocated, a sewing or shoe business, mentioned that they had different technologies compared to what we have herethe equipment is much more expensive than that of local businesses» (P13) «When the relocated business began to communicate with local employees and workers, they noticed that the qualifications were much lower. Perhaps, this could serve as an impetus to improve ours. In this sense, if there are businesses with a different level of qualificationsExchange of experience might help our businesses and employees in this way» (P3)	

APPENDIX E

Table E1. Data on the prospects of the relocated business

	PROSPECTS FOR WORKING WITH RELOCATED BUSINESSES		
Questions	Representative quotations		
Prospects of relocated businesses: insights from experts	«there are entrepreneursthey worked there all their lives; their parents stayed there, and they have relatives therewe said that you can maintain your ties with your small homeland, establish a branch here, work, and have a backup airfieldthey produce products there, and they have created a distribution hub here» (P5) «we have to understand very well that after the end of hostilities, enterprises will return to their original locations and become the drivers of the restoration of their territories» (P8) «it seems like the state has spent money, they came here, and they all went backthe philosophy of relocation to preserve this potentialit does not matter where the enterprise is; the main thing is that it is preserved and works. Well, for us, when they leave, it is a minus. But there are those who sayif they fire me there, I will not return because I feel better here, I started earning more here, and I have more people working here» (P5) «we already have several cases of people returning; we have companies from the Kyiv region, but they have already returned. We unblocked the region, and they returned to their place» (P4) «enterprises moved from the Kyiv region, yes, to other regions, but not a large number; most of them returned to the Kyiv region after the de-occupation» (P1) «they were in Kyiv, yes, then they moved to Lviv region, from the Lviv region, they moved back to Kyiv region; they had such a double relocation» (P1) «we encourage relocated businesses to officially re-register or create a branch here and be legally registered as entrepreneurs» (P5)		
Future solutions to support relocated businesses: a strategic outlook	«Perhaps more programs or simplified procedures, for instance, as businesses enter the industrial park there» (P1) «they are even consulting with each other to form an association of relocated businesses» (P2) «For relocated businesses, we plan to provide separate funds for preferential lending—small amounts, but nevertheless, there will be some small supporta program to facilitate the entry of enterprisesinto export activities. These are different, soft measures» (P3) «the Cabinet of Ministers has registered an industrial park, Khotyn Investtheir strategy is to attract future participants to the industrial parkto provide appropriate benefits if they enter the industrial parkto enjoy certain tax benefits» (P5) «a program, a comprehensive program for the development of small and medium-sized enterprisesto receive compensation for part of the cost of this equipment, up to 30%, but not exceeding 50 thousand This refers to production and technological equipment. We are developing this program there is a criterion of 'payment and amount of taxes paid,' 'number of people employed'if it is a legal entity, at least 30 people should workpay taxes of 300 thousand per year, for the previous yearif an individual, then without restrictions on the number of employeespay taxes of at least 50 thousand for the previous year» (P5)		