

Modes and Measures of Business Support During Wartime: The Case of the Carpathian Region of Ukraine

Regional and Local Studies
Special Issue on Ukraine
© Authors 2023



ISSN 1509-4995
E-ISSN 2719-8049
doi: 10.7366/15094995s2302

Olha Mulska

M. Dolishniy Institute of Regional Research of the National Academy of Sciences of Ukraine, Department of Social and Humanitarian Development of Regions; Kozelnytska St. 4, Lviv 79026, Ukraine; Email: oliochka.mulska@gmail.com; ORCID: 0000-0002-1666-3971

Ihor Baranyak

M. Dolishniy Institute of Regional Research at the National Academy of Sciences of Ukraine, Department of Social and Humanitarian Development of Regions; Kozelnytska St. 4, Lviv 79026, Ukraine; Email: ihorbaranyak@gmail.com; ORCID: 0000-0002-1467-0262

Iryna Demkiv

West Ukrainian National University, Department of Management, Public Administration and Personnel; Lvivska St. 11, Ternopil 46009, Ukraine; Email: demkiv_irina@ukr.net; ORCID: 0000-0001-6538-7988

Abstract

This article reveals the geographical distribution, structures, and problematic aspects of business migration to the oblasts of the Carpathian region of Ukraine and abroad. In the context of the Russian–Ukrainian war, the article assesses the risks and threats that internal and international business migration pose to the Ukrainian economic system, economies of the Carpathian region, the internal consumer market, and business entities. Measures to mitigate the threats of business migration to the Carpathian region are offered. The implementation of certain measures will eliminate the identified threats to relocated businesses and minimise the risks to the social and economic development of the Carpathian region and Ukraine as a whole.

Keywords

relocation, war, business, units, Ukraine, region

Introduction

The new challenges and threats created by the Russian–Ukrainian war have destabilised the socioeconomic system of Ukraine, decreased the effectiveness of its economic processes, limited the competitiveness of internal production and economic complexes, and strengthened the adverse conditions of transformations in the field of socioeconomic relations. Creating socioeconomic stabilisation for the oblasts of the Carpathian region of Ukraine is a fundamental prerequisite not only to guarantee the appropriate quality of life of the population but also to minimise the conflict in society, reduce social tensions, and increase citizens' level of satisfaction.

The economic, social, political, and military turbulence that Ukraine is currently experiencing due to the war with the Russian Federation has slowed the country's development and led to the socioeconomic regression of certain regions, creating an existential challenge for the country. The key economic factors in restoring socioeconomic development and economic stability are the preservation and effective realisation of the potential of the entrepreneurial sector, as well as the capitalisation of the factors of production. Ukraine's economic progress requires the effective migration of businesses and their production equipment and other capacities to safer regions. The relocation of elements of the economic system serves as a tool for preserving business activity and creativity and accumulating and commercialising new technologies. According to a study by the Advanter Group (11–13 March 2022), due to the war, 54% of enterprises completely ceased operations in Ukraine, 25% almost stopped their activities, 21% relocated (2% completely, 12% partially, 7% in the process), and 31% of enterprises did not have time to relocate (Econ.T 2022).

The absence or further decline in business activity in the country will lead to the stagnation of national and regional economies. Since the entrepreneurial sector is a catalyst for the intensification of industrialisation processes, economic innovation, and technological progress, a priority for the economic policy must be developing an instrument to mitigate the threats and risks to national and regional economic security and preserving and developing business potential and industrial capital.

Business migration to the Carpathian region of Ukraine has an ambiguous impact on the social and economic development of the territory, leading the researchers to formulate the following hypotheses:

H1: Business migration allows for preserving the entrepreneurial potential of the territory, region, and country, thus ensuring economic recovery through the restoration of budget sustainability.

H2: Business migration leads to a significant loss of resources (financial, intellectual, innovative, and technological) in regional business donor economies.

The purpose of the article is to argue for the need to improve the tools of state support for local businesses and relocated elements of the economic system to preserve and develop the potential of the country's entrepreneurial sector.

1. Literature review

1.1. Social and economic environment of business migration regulation.

The increasingly negative demographic, social, and economic consequences of international migration in wartime present a challenge to the development of Ukraine's economic system. However, migration also performs the so-called market-adaptation function when, given a surplus in the labour market, low income and wages, and other conditions, it allows a migrant person to provide themselves and their family with the necessary earnings (Rahman 2013; Mulka et al. 2020; Boiko et al. 2021). In this context, immigration can be seen as a natural result of economic relations or corruption. Several studies have shown that migration during periods of economic development has numerous positive effects, such as balancing the structural characteristics of the employment sector; increasing the knowledge, professional qualifications, and specialised skills of the employee; and generally increasing intellectual and human resource capital, thereby improving financial and resource opportunities for further development (Gómez and Giráldez 2017; Hear et al. 2017; Katsarski 2019). Therefore, the managed migration process is favourable to the wartime economy concerning the country and its territories; the system of cross-border, interregional and international relations; and finally, Ukraine's European integration.

The impact of business migration to the Carpathian region is ambiguous among the determinants of socioeconomic stabilisation. On the one hand, these processes save businesses and jobs. On the other hand, the critical risks of the processes include a significant loss of resources (financial, intellectual, human (Lücke and Saha, 2019), innovative, and technological (An et al., 2014; Mulka et al., 2020)) in the regional economy from which the business migrates. The tools of state support for local businesses and relocated elements of the economic system must be intensified and improved in the face of the existential challenges today (An, Kang and Lee 2014; Cifranič 2016; Vasylytsiv et al. 2022) to preserve and develop the potential of the entrepreneurial sector, restore economic growth and security to the country and its territories, and capitalise on factors of production and innovative progress.

Today, international business migration is becoming a new trend in the migration processes of Ukraine, and it has two forms. The first, 'classic' form refers to an entity removing its registration in Ukraine and registering as an economic agent as a resident of another state or as a new enterprise abroad and transferring some of its capital there (Brouwer et al. 2004; Cohen and Morrison 2005). The second, 'hidden' form of business migration refers to when a migrant person starts their own business in another country, either immediately or over time, after working as a hired worker (Collings et al. 2007; Hemmasi et al. 2010; Balbontin and Hensher 2019).

Poland currently has the highest number of labour migrants from Ukraine and almost the highest rate of economic growth among the EU countries – according to expert estimates, the country

will become one of the 20 largest economies in the world by 2030. Poland's clear and transparent legislation, judicial system, and moderate level of tax burden significantly incentivise business migration from Ukraine to Poland (Levytska et al. 2022; Mulska et al. 2022). However, other countries, such as the Czech Republic, Germany, Hungary, Romania, and Great Britain et. are also adopting similar policies, which threaten to draw more businesses out of Ukraine.

For Ukraine, these trends are critically threatening. Individuals capable of entrepreneurship are skilled at overcoming difficulties, creating new jobs, and generating innovative ideas and solutions. Thus, along with business migration, there is also the movement of capital and other assets, among which intangible elements such as intellectual property are given special priority. The result of migrating innovation activity reduces the innovative and technological competitiveness of the national economy.

Business migration abroad also means that specific entrepreneurial skills, experience in organising and doing business, business technologies, and connections and relationships are leaving the country. Ukrainian businesses abroad become centres for attracting Ukrainian business partners, market infrastructure actors, employees, and families. Educational emigration is also stimulated, as businesses often want the Ukrainian employee to be prepared and immediately adapted to the realities of the country where the business is registered and functioning.

2.2. Organisational and economic policy of Ukraine to support businesses during the war.

Since the beginning of the war, central and regional governments have implemented several measures to stabilise the activities of the entrepreneurial sector in Ukraine, provide organisational and financial support for relocated businesses, and reduce current and potential risks and threats. These measures include:

- (1) Regulating the free transportation of the property of business enterprises, institutions, and organisations (Resolution CMU 2022b);
- (2) Providing a plan of urgent measures to move, if necessary, the production capacities of business entities from the territories where hostilities are taking place or where there is a threat of hostilities (Resolution CMU 2022a);
- (3) Developing the Ministry of Economy's programme for the relocation of enterprises, which provides for the provision of a package of state support for the selection of a location and transportation to the new location;
- (4) Assisting in the resettlement of employees and the search for new employees, as well as the restoration of logistics, the purchase of raw materials, and the search for markets (MEU 2022).

At the initiative of the government, other informational and organisational measures have been taken to support and provide for the functioning of relocated businesses in Ukraine. In particular, information platforms for business relocation assistance have been developed at the central level. The main tasks of these platforms are to ensure a quick process of finding a location for the resumption of business; establish direct contacts between territorial communities and businesses ready for relocation; provide a free platform for supporting business relocation, which is intended for both businesses that have applied for relocation and for enterprises that intend to help others with relocation; and provide Telegram channels to monitor the needs of relocated businesses and businesses in the process of relocation, as well as **chatbots** for communication between regional authorities and relocated enterprises.

In addition, the Ukrainian Cabinet of Ministers has developed a new tax model for wartime business. The main elements of the tax model are:

- (1) Lending to enterprises under the programme '5-7-9%' in the amount of up to UAH 60 million at 0% interest during martial law;
- (2) A simplified taxation system: for large businesses, it is possible to pay only a single tax, provided that the annual turnover of the enterprise/company does not exceed UAH 10 billion. For individual entrepreneurs of groups I and II, a single tax is voluntary (if there is no income during wartime, individual entrepreneurs may also not pay single social contribution (SSC)). Furthermore, individual entrepreneurs of groups II and III do not need to pay SSC for mobilised workers – it will be paid at the expense of the state budget;

- (3) Reduction of VAT on fuel from 20% to 7% (in particular, on its import), as well as the abolition of excise taxes on petroleum products;
- (4) Increase in rent for mining (IFin 2022).

3. Methodology

The article uses a set of general scientific methods and techniques, such as theoretical and logical generalisation, to identify the latest determinants of the state regulation of business development and the need to preserve entrepreneurial capital. It takes a systematic approach to study the development of state and regional business support in wartime, the conceptual foundations of business migration management processes, the development of strategic directions for implementing state and regional business migration policies, and the economic mechanisms for regulating business migration.

Structural-logical and semantic analyses are used to investigate the developmental environment for relocated businesses, and grouping is used to identify the risks and threats that business migration post to the national economy, the economic system of the Carpathian region, the internal consumer market, and business entities. In addition, the article adopts methods of analysis and synthesis to generalize the tools that can be used to manage business relocation processes.

Statistical analysis enables the researchers to analyse the current state, trends, and structural changes in international and internal business migration, and cluster analysis is used to assess the characteristics of regional economies as a determinant of business attractiveness for relocation. Finally, strategic management justifies institutional support for the regulation of internal and international business migration.

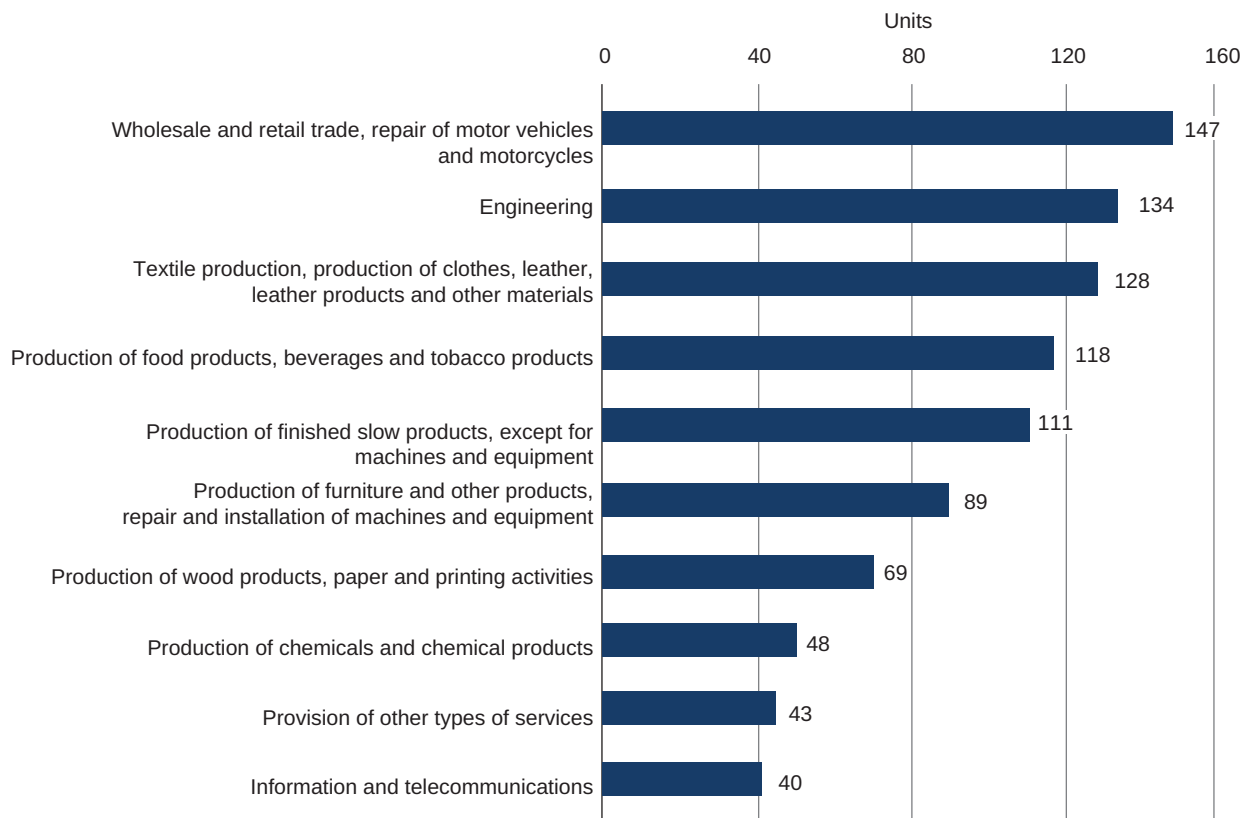
The study's sources are the laws of Ukraine, decrees of the President of Ukraine, resolutions of the Cabinet of Ministers of Ukraine, normative legal acts of the Ministry of Economy of Ukraine, statistical materials of the State Statistics Service of Ukraine, analytical materials of internal and international economic organisations, and publications of internal and international experts. The outlined trends in business migration are highlighted based on expert and statistical data from the time period between 24 February and 20 April 2022.

4. Results

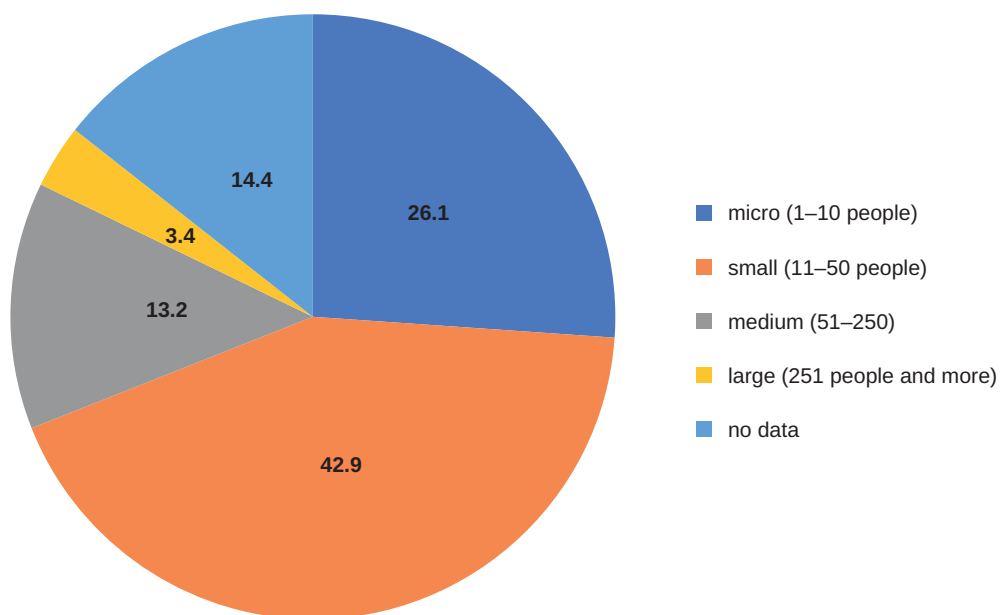
The problem of providing relocation to safe regions of Ukraine or other countries has become acute for business entities that find themselves in hot zones where active hostilities are expected, to preserve business activities and provide conditions conducive to development. As of 16 April 2022, the Ukrainian Ministry of Economy received 1,630 applications for relocation from enterprises (Fig. 1a, b). About 400 enterprises were relocated, over 200 of which resumed work in a new place (MEU 2022). Strategic enterprises and companies that produce essential goods, as well as enterprises that were able to independently dismantle and transport their capacities, received priority for financial and organisational support from the state.

The Carpathian region of Ukraine has become the main economic hub for relocated businesses (Fig. 2) because it has a higher level of wartime economic security compared to other regions, high export potential, opportunities for the restoration and growth of foreign trade with the EU countries, and an employment-surplus regional labour market which can provide jobs and reduce the cost of production. Thus, in the Lvivska oblast (20 April 2022), 400 applications for business relocation were processed, of which 93 units of various sectors of the economy (mechanical engineering, food, woodworking, light, and chemical industries) successfully carried out relocation, preserving more than 600 jobs (LODA 2022).

In the Lvivska oblast, a programme was developed to support relocated businesses by providing irrevocable financial assistance in the amount of UAH 100,000 when registering an enterprise within the region and more than an additional UAH 100,000 subject to the creation of 20 jobs. The programme provides compensation for connection to the power grid (UAH 750,000 per enterprise), as well as two vouchers for marketing services (UAH 50,000) and product certification (UAH



a) The 10 biggest industries that applied for business relocation in Ukraine by the number of relocated enterprises



b) Structural distribution of applications for business relocation by enterprise size and number of jobs, shown by percentage

Figure 1. Business relocation applications: Industry scale (units) and structural distribution (%), 2 April 2022

Source: Systematised based on the data from MEU (2022).

80,000) (Business 2022b). Thus, the Lvivska oblast has every opportunity to become the largest industrial hub in the country.

Furthermore, the Lvivska oblast has become the main point of relocation not only for production enterprises but also for high-tech companies. Before the war, Lviv was the third-largest IT capital of Ukraine after Kyiv and Kharkiv, with about 30,000 people working in IT in Lviv. The number of

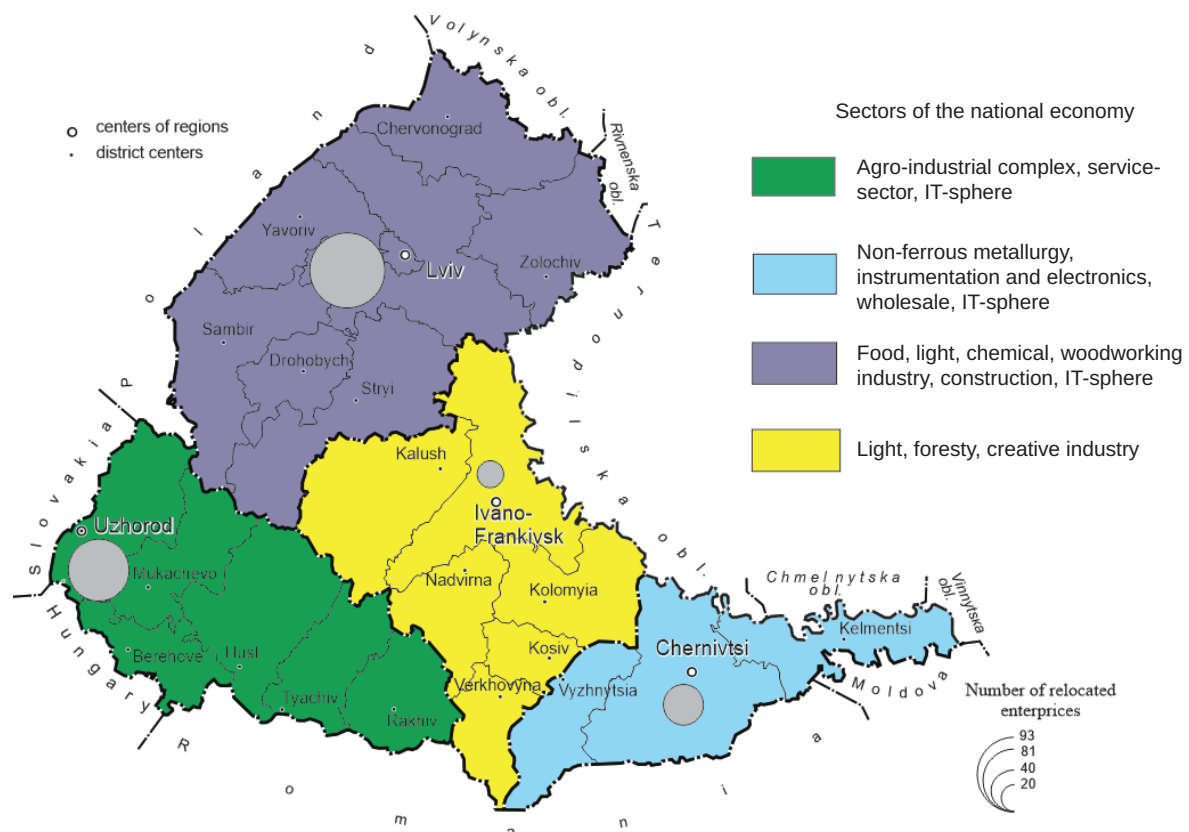


Figure 2. Scale and sectoral affiliation of businesses that relocated to the oblasts of the Carpathian region of Ukraine (units), 6 April 2022

Note: The figure represents the number of enterprises (units) in the Lvivska and Zakarpatska oblasts as of 20 April and 15 April 2022, respectively.

IT specialists in Lviv reached 70,000–100,000 during the war (6 April 2022) (UNIAN 2022). The number of IT companies in the Lviv cluster has increased by 40 units since the beginning of the war in the country.

Eighty-one units were relocated to the Zakarpatska oblast (Uzhhorod, Mukachevo and Beregovo) (15 April 2022); of them, 54 enterprises are already functioning, and 27 are in the process of placement (13 April 2022) (Business 2022b). These are companies from the IT, medical, agro-industrial, light, and pharmaceutical industries. The oblast does not consider applications for the relocation of businesses whose activities are harmful to the environment or create risks for the tourism and recreational industry (Business 2022a).

About 100 enterprises (6 April 2022) applied for relocation to the Ivano-Frankivska oblast. Almost 20 of these units moved their production facilities from territories where active hostilities continue (Zhasminova 2022). Light and forest industry enterprises (in particular, furniture and modular houses), as well as companies from the creative industry, have relocated to the region.

In the Chernivetska oblast, the relocated business are industry-specific. These are enterprises that specialise in manufacturing non-ferrous metals, electric motors, chemical reagents, and maintenance of special equipment, as well as wholesale and IT enterprises. Forty enterprises have been relocated (6 April 2022), and 20 have launched production facilities (Social 2022).

Before the outbreak of hostilities in Ukraine, there was a trend toward both clear and hidden business migration abroad. The main reasons for the increase in business migration were Ukraine's socioeconomic conditions, which were mostly unfavourable in comparison with the EU countries, its high tax burden, and the low level of investment attractiveness in the territories and sectors of the economy. It is noteworthy that at the beginning of 2022, there were 21,800 companies with Ukrainian capital in Poland, which was 2.5 times more than German enterprises and 5 times more than Dutch enterprises. The war and, consequently, problems with logistics and the shortage of raw

materials, led to the intensification and spread of various forms of business migration from Ukraine to Poland. Since the beginning of the war, 5% of businesses (enterprises of the creative, IT, and light industries) have migrated abroad (Liga Business 2022).

International business migration (evacuation) has the greatest impact on the entrepreneurial sector of the national economy. The entrepreneurial sector's degree of influence depends on both the volume of business migration abroad and the quality characteristics of the relocated businesses. The departure of highly qualified specialists, subjects of strategic sectors of the economy, enterprises with unique resources, technological potential, and so on will negatively impact the national and regional economies, making it impossible to create economic stability and realise the potential of the entrepreneurial sector.

International business migration will likely increase due to the indefinite end of the war, the weakening of the country's economic security, the damage to logistics chains, and the lack of economic opportunities for the entrepreneurial sector. Damaging aspects of doing business in Ukraine contribute to the market for business migration, including the relocation of businesses to the EU countries. The development of audit and advisory networks will contribute to business migration out of Ukraine and increase the country's risk of losing entrepreneurial capital.

Business in wartime Ukraine operates under conditions of complete uncertainty, complex security risks, and socioeconomic unpredictability and turbulence. In such a situation, it is critically important to ensure that businesses are properly prepared to respond to emergencies and that authorities implement adaptive measures to reduce the level of elasticity in numerous factors, including the military threat on the north-eastern, eastern, and southern borders of the state and the systemic crisis and stagnation of the economy.

5. Discussion

During the Russian–Ukrainian war and martial law in Ukraine, internal and international business migration generates distinct threats to the Ukrainian economic system and regional economies, including the oblasts of the Carpathian region of Ukraine, the internal consumer market, and business entities.

The most significant threats to the Ukrainian economic system are the reduction of business activity, the declining GDP of the country, and the limiting or non-existent tax revenues to local budgets. In one month of the war, the total direct losses of small and medium-sized businesses in Ukraine reached 80 billion USD. In the first quarter of 2022, Ukraine's GDP fell by 16% (Guba 2022), and the forecast estimate of Ukraine's GDP contraction in 2022 is 21% (Forbes 2022).

The other threats to the national economy are:

- (1) Inefficient infrastructure with high resource and energy consumption required for production, excessive development of raw materials industries, low level of innovation, detachment of the financial sector from the real economy, and inefficient functioning of sectors that provide social development;
- (2) Lack of innovative and technological development in industrial enterprises, deterioration of the scientific and technical potential of industry, and reduction of the share of high-tech industries due to large-scale migration of capital and labour;
- (3) Deepening disparities between consumer spending and economic investment, and structural imbalances in the development of the internal consumer market;
- (4) Significant loss of financial, intellectual, and human resource support for the development of Ukraine, reduction of export potential, and continuous transformation of the geography of industrial enterprises' export processes.

An enormous threat that business migration poses to regional economies, including the oblasts of the Carpathian region, is increasing the financial burden on local budgets related to financing the support and development programmes for relocated businesses in the region. This may lead to a significant deficit of resource support for the economic development of the regions; asynchronous territorial development due to the uneven allocation of relocated businesses; the replacement of high-tech production with low-tech; and increasing the cost of production due to the lack of regional programmes for cooperation between industry and scientific and technological institutions.

In addition, regional economics may experience low efficiency in technological parks and business incubators. Furthermore, against the background of state support for relocated and local enterprises prioritising jobs for internally displaced people, there is a risk of deepening the structural and sectoral disparities of regional labour markets due to the growing unemployment rate among the local population. Another significant risk for regional economies in wartime is the worsening of budget imbalances among regions (creating tensions in the budget and tax sphere) due to the high probability of relocated businesses having low participation in value chains, as well as the risk of reverse business relocation.

Concerning the internal consumer market, business relocation in Ukraine may pose the following risks:

- (1) Prolonged growth of the overall level of prices for consumer goods, including food, raw materials, and suppliers' goods, and a decrease in purchasing power, which will lead to structural deformations in the internal consumer market;
- (2) Reducing the diversification of product supply structures, thereby failing to meet the growing demand and requirements of consumers for the quality and range of products.

Several risks pertain directly to business entities, namely:

- (1) Loss of competitive advantages due to the lack of an adaptive marketing strategy, limited information about the local market, and temporary innovation and market lag compared to local competitors;
- (2) Increased risk of bankruptcy, lack of high capital turnover, and problems with recruitment.

6. Summary and concluding remarks

The uncontrolled spread of business migration within Ukraine and from Ukraine to EU countries, as well as the non-optimal organisational and economic mechanisms for supporting relocated and local businesses in wartime conditions, negatively impacts the stability of the social and economic system of Ukraine. Business migration to the Carpathian region has increased due to factors such as the indefinite end of the war, the weakening of economic security in Ukraine as a whole and in those regions where active hostilities are taking place, damage to logistics chains, and the lack of economic opportunities for the entrepreneurial sector. Sectoral differences have been identified among relocated businesses in the oblasts of the Carpathian region: the Zakarpatska oblast hosts companies from the agro-industrial complex, service sector, and IT sphere; the Chernivetska oblast contains companies working on non-ferrous metallurgy, electronics, wholesale trade, and IT; the Lvivska oblast is popular among food, light, chemical, woodworking, construction, and IT companies; and many companies from the light, forest, and creative industries have migrated to the Ivano-Frankivska oblast.

To neutralise the threats of business migration to the oblasts of the Carpathian region of Ukraine, it is necessary to form and implement appropriate organisational, financial, and economic measures to preserve and develop entrepreneurial capital during the Russian–Ukrainian war. Such measures would support the social and economic stability of the country and its regions and equalise spatial-structural and social disparities. Measures of mitigating threats to relocated businesses and minimising the risks of destabilising the social and economic system of the regions can be categorised into three modes. The first mode, *hibernation mode*, includes implementing resource mobilisation and a partnership model of doing business, providing financial and organisational support to export-oriented businesses, and granting permission to foreign entities and individuals to invest in military bonds, the digitalisation of business processes, and so on.

The measures of the second mode, *business migration mode*, include simplifying the procedure for obtaining budget support for a relocated business, providing various forms of assistance to relocated enterprises, reducing the cost or delaying payment for renting warehouses for relocated businesses, and creating industrial clusters in the region. The final mode, *business evacuation mode*, contains measures such as applying modern business technologies, innovations, and intellectual property; developing cooperation practices for small and large relocated businesses abroad; and involving the Ukrainian diaspora in organisational and financial assistance to relocated businesses.

Recommendations

Regional policies regarding the development of relocated businesses and the mitigation of relevant threats must prioritise supporting industries and individual enterprises in the following areas: high-tech business, which is capable of providing innovative development of the economy as a whole as well as progressive energy-efficient technological equipment; industries whose products will directly contribute to the development of the internal market and import substitution; integrating the regions of the country; solving the problems of depressed territories; and supporting cross-regional cooperation.

Measures to neutralise the threats to business activity in Ukraine and to business migration to the oblasts of the Carpathian region should be identified according to three business response modes, which correlate to the changing level of threats and critical risks in war conditions. These three modes are hibernation, relocation, and evacuation (Table 1).

Table 1. Toolkit for supporting business activity in wartime

Modes	The main measures
Hibernation	Implement resource mobilization and the partnership model of doing business
	Provide financial and organizational assistance to export-oriented businesses
	Conduct work to obtain financial assistance from international institutions
	Maximally digitalize business processes and use electronic services
	Strengthen bilateral cooperation with EU countries in terms of a temporary simplification of customs and licensing procedures
Relocation	Simplify the procedure for obtaining budget support for relocated businesses
	Expand forms of regional order for the goods and services of relocated enterprises without complex long-term contracts
	Provide various forms of assistance to relocated enterprises
	Reduce the cost or delay payment for relocated businesses renting warehouses
	Create industrial clusters in the region
	Provide tax holidays for enterprises of radio engineering, the electronic industry, and mechanical engineering
Evacuation	Improve business conditions in Ukraine in general
	Apply modern progressive business technologies, innovations, and intellectual property
	Create specialized grant programmes and projects to activate the system of communications with relocated businesses abroad
	Develop cooperation practices for small and large relocated businesses abroad
	Develop platforms for finding international projects for relocated Ukrainian enterprises

Source: own elaboration.

To preserve entrepreneurial capital and the pace of business activity in wartime Ukraine, the key measures of central and regional governments are those that can be effective in hibernation mode, that is, the temporary provision of a significant part or all of business operations. These measures include:

- (1) Implementing resource mobilisation and the partnership model of doing business, according to which units become partners of the state in the process of providing for the needs of the population and simultaneously increasing the mobility of business processes and the adaptability of organisational and entrepreneurial structures. The most successful practice is based on the model of public–private partnership, which involves businesses in targeted projects to stabilise the economy and restore social infrastructure;
- (2) Providing financial and organisational assistance to export-oriented businesses. The main task of these businesses in wartime is to increase export volumes to increase foreign exchange earnings to the regions of Ukraine. Preserving the geography of exports by simplifying

export-import procedures should be a priority since the result of investments in this direction provides potential financial resources. Key measures to this end are:

- a) Restoring transport and logistics infrastructure (roads, warehouses, points of registration of goods);
- b) Creating reserve routes, particularly reorienting part of the goods flow from sea to land.
- (3) Conducting work to obtain financial assistance from international institutions and allowing foreign legal entities and individuals to invest in military bonds;
- (4) Maximally digitalise business processes and use electronic services;
- (5) Strengthen bilateral cooperation with EU countries in terms of a temporary simplification of customs and licensing procedures.

An important task for state authorities is to develop adaptive triggers that can affect the process of business development in the oblasts of the Carpathian region (relocation mode). For the relocated business, it is necessary to implement organisational, institutional, financial, and informational measures to support the business's adaptation and development. Such measures include:

- (1) Simplifying the procedure for obtaining budget support for relocated businesses, especially introducing a single window for budget assistance to be obtained by relocated enterprises, which will be financed through government-targeted military bonds or a special fund of international assistance for the restoration of the country;
- (2) Expanding forms of state (as well as regional and local) order for the goods and services of relocated enterprises without complex long-term contracts;
- (3) Providing various forms of assistance to relocated enterprises, such as irrevocable financial assistance to production enterprises from local budgets, provided that new jobs are created; voucher support for micro and small businesses; and financing the cost of purchasing equipment for the light, food, and machine-building industries;
- (4) Reducing the cost or delaying payment for relocated businesses renting warehouses;
- (5) Creating industrial clusters in the region, which will increase economic efficiency and labour productivity and profitability, as well as facilitate the access of production units to highly skilled labour, services of financial and credit and trade organisations, and infrastructure and scientific and educational resources;
- (6) Provide tax holidays to enterprises of radio engineering and the electronic industry, as well as mechanical engineering (railway, aviation). Such an initiative will strengthen the industrial potential of the region, effectively capitalise on production factors, and create high competitiveness. In a few years, the active relocation of industrial enterprises to the western regions of Ukraine will transform the geography of the country's industrial potential.

The business evacuation mode (relocation from the territory of Ukraine to another country) is the most dangerous for the economy of the country and the region, as it increases the migration potential of the region and the country, leaching it of intellectual, human, and entrepreneurial resources. By contrast, business re-immigration to Ukraine, the replacement of business migration abroad with business migration to safer regions of Ukraine, and the accumulation of migration capital encourage the development of a hibernation regime.

The key government initiatives in the sphere of business relocation abroad should be:

- (1) Improving business conditions in Ukraine in general and in its regions. First, some components of the business environment of Ukraine require improvement; these components include international trade, insolvency problems, the taxation system, the execution of contracts, and connection to digital international networks. It is noteworthy that EU countries have been found to have the best conditions in the world for foreign trade activities (World Bank 2020). The business environment of Ukraine and the Carpathian region requires the implementation of certain measures to improve its ability to neutralise threats against raiding, corruption, political lobbying, pressure from controlling structures, and the monopolisation of regional economies;
- (2) Applying modern progressive business technologies, innovations, and intellectual property;
- (3) Forming specialised grant programmes and projects to activate the system of communications with relocated businesses abroad and create reverse flows of relocated businesses;
- (4) Developing cooperation practices for small and large relocated businesses abroad as well as enterprises that remain in Ukraine, which will reduce the risks of production and sales operations for business units in the region and provide new directions of development;

- (5) Develop platforms for finding international projects for relocated Ukrainian enterprises, which will contribute to creating a partnership environment between Ukrainian and foreign companies and providing working projects for relocated businesses in the IT sector, creative industry, engineering, and consulting;
- (6) Involve the Ukrainian diaspora in organisational and financial assistance to relocated businesses.

The proposed toolkit for supporting business activity in wartime and levelling the threats of units' migration to the oblasts of the Carpathian region of Ukraine in the projection of three modes will eliminate the outlined intimidations to relocated business and minimise risks in the projection of socio-economic development of Ukraine in general and the Carpathian region in particular. Therefore, further research will be the development of a regional programme to support relocated business for the development of the entrepreneurial sector and ensure the economic stability of the territory.

References

- An, Y., Kang, Y., and Lee, S., 2014, 'A study on the impact of soft location factors in the relocation of service and manufacturing firms', *International Journal of Urban Sciences*, 18(3), 327–339. <https://doi.org/10.1080/12265934.2014.893834>
- Balbontin, C., and 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>
- Boiko, V., Mulska, O., Baranyak, I., and Levytska, O., 2021, 'Ukrainian migration aspirations towards Germany: Analysis and development scenarios', *Comparative Economic Research*, 24(1), 65–84. <http://dx.doi.org/10.18778/1508-2008.24.04>
- Brouwer, A. E., Mariotti I., and van Ommeren, J. N., 2004, 'The firm relocation decision: An empirical investigation', *The Annals of Regional Science*, 38(2), 335–347. DOI: 10.1007/s00168-004-0198-5
- Business, 2022a, *Large capital relocation*. Accessed 16 April 2022, at: <https://biz.nv.ua/ukr/economics/it-kompaniji-perezjizdyat-u-lviv-ivano-frankivsk-vinnicyu-hto-pereviz-biznes-novini-ukrajini-50234910.html> (accessed: 17.04.2023).
- Business, 2022b, *In Zakarpattia a national IT cluster is being created*. Available at: <https://biz.nv.ua/ukr/tech/na-zakarpatti-stvoryuyut-sviy-it-klaster-novini-ukrajini-50230119.html> (accessed: 20.04.2023).
- Cifranič, M., 2016, 'Localization factors in decision making of location of selected enterprises', in: E. Horská, Z. Kapsdorferová, M. Hallová (eds.), *International Scientific Days 2016: The Agri-Food Value Chain: Challenges for Natural Resources Management and Society* (pp. 305–314). Nitra: Slovak University of Agriculture in Nitra. <https://doi.org/10.15414/isd2016.s4.09>
- Cohen, J. P., and Morrison, C. J., 2005, 'Agglomeration economies and industry location decisions: The impacts of spatial and industrial spillovers', *Regional Science and Urban Economics*, 35(3), 215–237.
- Collings, D. G., Scullion, H., and Morley, M. J., 2007, 'Changing patterns of global staffing in the multinational enterprise: Challenges to the conventional expatriate assignment and emerging alternatives', *Journal of World Business*, 42, 198–213. DOI: 10.1016/j.jwb.2007.02.005
- Economic Truth (Econ.T), 2022, 'How the state can support business in war'. *Ekonomicheskaya Pravda*, March 22nd. Available at: <https://www.epravda.com.ua/rus/columns/2022/03/20/684363/> (accessed: 30.03.2022).
- Forbes, 2022, 'Small and medium-sized businesses lost \$80 billion in the month: How entrepreneurs work in conditions of war', *Forbes*, September 25th. Available at: <https://forbes.ua/news/maliy-ta-seredniy-biznes-za-misyats-vtrativ-cherez-vyynu-80-mlrd-yaki-problemi-ta-ochikuvannya-pidpriemstv-25032022-5015> (accessed: 16.04.2022).
- Gómez, M. G., and Giráldez, M. S., 2017, 'The causality between economic growth and immigration in EU/EFTA member states', Documentos de trabajo do Departamento de Economía Aplicada (1701). Available at: <http://webx06.webs4.uvigo.es/wp-content/uploads/2019/05/wp1701.pdf> (accessed: 18.04.2022).
- Guba, R., 2022, 'The annual decline of Ukraine's economy can reach 40 percent'. Available at: <https://www.dw.com/uk/richne-padinnia-ekonomiky-ukrainy-mozhe-siahnuty-40-vidsotkiv-minekonomiky/a-61340071> (accessed: 25.04.2022)
- Hear, N. V., Bakewell, O., and Long, K., 2017, 'Push-pull plus: Reconsidering the drivers of migration', *Journal of Ethnic and Migration Studies*, 44(1), 1–18. <https://doi.org/10.1080/1369183X.2017.1384135>

- Hemmasi, M., Downes, M., and Verner, I., 2010, 'An empirically-derived multidimensional measure of expatriate success: Reconciling the discord', *The International Journal of Human Resource Management*, 21(7), 982–998. <https://doi.org/10.1080/09585191003783447>
- IFin, 2022, 'New tax benefits for enterprises under martial law'. Available at: <https://www.ifin.ua/news/showsinglenews?id=16504&savedPageNumber=1&backUrl=/> (accessed: 02.05.2022)
- Information Agency (UNIAN), 2022, 'Experience in business relocation during the war'. Available at: <https://www.unian.ua/society/velikiy-perezjzd-dosvid-relokaciji-biznesu-pid-chas-viyini-novini-ukrajini-11774737.html> (accessed: 24.04.2022).
- Katsarski, N., 2019, 'Factors determining migration of the population', *International Journal of Knowledge Management*, 30(6), 1729–1733. DOI: <https://doi.org/10.35120/kij30061729K>
- Levytska, O., Mulska, O., Shushkova, Yu., Ivaniuk, U., Vasylytsiv, T., Krupin, V., and Ivanova, L., 2022, 'Modelling the impact of emigration upon social and economic development of the Carpathian region of Ukraine', *Bulletin of Geography. Socio-economic Series*, 57, 141–154. DOI: 10.12775/bgss-2022-0028.
- Liga Business, 2022, 'How the war affected Ukrainian business'. Available at: <https://biz.liga.net/ua/ekonomika/all/article/gosudarstvo-svoeobraznyy-koll-tsentr-kak-biznes-ubegaet-ot-voynny-na-zapad-ukrainy> (accessed: 21.04.2022)
- LODA, 2022, 'Since the beginning of the war, almost a hundred enterprises have been relocated to Lviv region'. Available at: <https://loda.gov.ua/news?id=67192> (accessed: 21.04.2022).
- Lücke, M., and Saha, D., 2019, 'Labour migration from Ukraine: Changing destinations, growing macro-economic impact', Policy Studies Series [PS/02/2019]. Berlin – Kyiv: German Advisory Group.
- Ministry of Economy of Ukraine (MEU), 2022, *Enterprise relocation program*. Available at: <https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=3e766cf9-f3ca-4121-8679-e4853640a99a&title=ProgramaRelokatsiiPidprimstv> (accessed: 16.04.2022).
- Mulska, O., Levytska, O., Panchenko, V., Kohut, M., and Vasylytsiv, T., 2020, 'Causality of external population migration intensity and regional socio-economic development of Ukraine', *Problems and Perspectives in Management*, 18(3), 426–437. DOI: 10.21511/ppm.18(3).2020.35
- Mulska, O., Vasylytsiv, T., Levytska, O., Sabetska, T., and Stefanyshyn, L., 2022, 'Development of regional labor markets in Ukraine as a tool to regulate internal migration and reduce social vulnerability', *Central European Management Journal*, 30(4), 120–149. DOI: <https://doi.org/10.7206/cemj.2658-0845.92>
- Resolution CMU, 2022a, On approval of the plan of urgent measures for the movement, if necessary, of the production capacities of business entities from the territories where hostilities are taking place and / or there is a threat of hostilities to safe territory. Available at: <https://zakon.rada.gov.ua/laws/show/246-2022-%D1%80#Text> (accessed: 16.04.2022).
- Resolution CMU, 2022b, On the peculiarities of the joint-stock company 'Ukrposhta' in conditions of martial law. Available at: <https://zakon.rada.gov.ua/laws/show/305-2022-%D0%BF#Text> (accessed: 17.04.2022).
- Rahman, M. M., 2013, 'Estimation of internal migration by the national growth rate method: An alternative approach', *The Bangladesh Development Studies*, 36(3), 79–87. DOI: <https://doi.org/10.2307/44730021>
- Social, 2022, *40 enterprises from war zones moved to Bukovyna*. Available at: <https://suspilne.media/223197-na-bukovinu-pereihali-40-pidpriemstv-iz-zon-bojovih-dij-so-vidomo/> (accessed: 25.04.2022)
- Vasylytsiv, T., Mulska, O., Osinska, O., and Makhonyuk, O., 2022, 'Social and economic development of Ukraine: Modelling the migration factor impact'. *Economics and Business Review*, 8(3), 27–58. DOI: <https://doi.org/10.18559/ebr.2022.3.3>
- World Bank, 2020, *Business enabling environment*. Available at: <https://www.worldbank.org/en/programs/business-enabling-environment/alternative-existing-indicators#1> (accessed: 26.04.2022).
- Zhasminova, E., 2022, 'Business relocation'. Available at: <https://galka.if.ua/shvejni-czehi-virobnicztvo-modulnih-budinkiv-ta-vulichnih-mebliv-vzhe-sto-biznesiv-mayut-namir-pereihati-na-prikarpattya/> (accessed: 18.04.2022).

Acknowledgments

The study was conducted within the framework of applied research "Mechanisms of the proactive policy for reducing social vulnerability of the population (based on the Carpathian region of Ukraine)" (No SR 0121U112014, M. Dolishniy Institute of Regional Research of National Academy of Sciences of Ukraine, 2021–2023).