

Consequences of the War for the Labour Market of the Carpathian Region of Ukraine: Priorities of Stabilisation Policy¹

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Abstract

The article addresses the structural–temporal changes in the characteristics of the labour market in the oblasts of the Carpathian region of Ukraine (Lvivska, Zakarpatska, Ivano-Frankivska and Chernivetska) due to the large-scale Russian military invasion of Ukraine. Regional, sectoral and market condition–related changes in the labour market and employment in the region during the war are identified. The article defines the threats to the functioning of the regional labour market, which are related to growing unemployment, increasing pressure on social infrastructure and the domestic labour market, reduction in human resources and the growing trend of relocation of business and skilled workers from the western oblasts of Ukraine to other countries. The policy for social-labour stabilisation of the oblasts in the Carpathian region of Ukraine in conditions of war and post-war recovery is substantiated.

Keywords

Carpathian region, war, socioeconomic destabilisation, labour market, employment, forced migration

1. Introduction and literature review

The Russian large-scale military aggression in Ukraine, which started on 24 February 2022, has already caused deep social–political turmoil. All sectors of the Ukrainian and regional economies are facing significant change, especially the labour market and employment. The war has resulted in a massive population outflow from Ukraine (over 10% of the population only in the first month of the war, which according to the UN, is recognised as the deepest migration crisis since World War II and will lead to large demographic losses) and increasing forced internal migration for over 20% of the country's population. The current situation poses the risk of a humanitarian catastrophe, growing social tensions and destabilisation of the socioeconomic situation in the hosting areas.

The disproportions and imbalances in the labour market of the oblasts of the Carpathian region, which have emerged and continue to develop in conditions of intense hostilities in the east and south of the country, are characterised by the following trends:

- forced internal migration of Ukrainian refugees from the areas of hostilities and adjoining oblasts (a significant proportion of these refugees are looking for employment, thereby increasing the labour supply in western Ukraine);

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- reduction in human resources of economic entities because of mobilisation of their staff for the army;
- external migration of the population, including outflows from the western oblasts, in conditions of a more favourable visa regime and broad support of Ukrainian refugees worldwide;
- business relocation (at an increasing pace) from central and eastern Ukraine to the west (resulting in changes in the characteristics of job offers and labour demand).

Therefore, a few core tasks gain increasing relevance. First, there is a need to monitor and generalise these and other trends in the context of their impact on labour markets (particularly the impact of regional, sectoral, professional and migration-related trends). Second, there is a need to adequately identify the challenges, risks and threats that affect the functioning of labour markets, employment and unemployment, and disposable income so that they can be eliminated or prevented in time (including from the viewpoint of stabilising the general social and economic situation in the country and its regions). It is even more crucial given the lack of budgetary resources, which have been designated for the support of military forces and war. Third, it is important to focus on the substantiation and institutionalisation of the mechanisms and tools of regional policy of the state for the maintenance of the labour market structure and system, its intellectual and human resources framework, and adaptation to the new conditions and realities of the functioning and development of regional economic systems.

There are significant strategic implications of regional policy for the Carpathian region, since the western oblasts of Ukraine are bound to become the centres of industrial development and the location for key strategic companies and industries of the real sector of the national economy. This perspective is due to, first, the long distance to the territories of the aggressor; second, the proximity of transport and logistics systems to the countries of the European Union; and third, the difficulties in transportation of domestic output abroad by sea and the growing importance of the road transportation vector.

However, stabilising the situation and harnessing the available potential and capacities of intra-regional labour markets of the Carpathian region of Ukraine require the implementation of systemic and unconventional public policy measures. Therefore, the research aims to identify the trends and threats to the functioning of the labour market in the oblasts of the Carpathian region of Ukraine in wartime conditions and substantiate recommendations on its regional stabilisation policy.

Nowadays, the issues and consequences (especially from the socioeconomic perspective) of the Russian war against Ukraine are hardly examined. Existing studies mainly focus on the causes and preconditions of the long-term Russian aggression and invasion of independent Ukraine (Applebaum 2022; Gil 2021), including those of an economic nature (Mykhnenko 2020). However, the results of scientific discourses on the short-term economic consequences of the war, namely, regarding the financial–budgetary sector (Mielus 2022), as well as price and inflation shocks (Dräger, Gründler & Potrafke 2022), are starting to emerge. Meanwhile, the socio-humanitarian turmoil of military invasion has become the priority since it first affected the whole of Ukraine and then, logically, spread across the entire European continent. These studies are related to the problems of life and health (Leon *et al.*, 2022), as well as migration and security, which started to be addressed after the military conflict began in 2014 (Jaroszewicz 2018; Cziomer 2016). In practice, some part of the consequences of the protracted Ukrainian–Russian armed confrontation and the predicted challenges and threats of an active war phase for contemporary Europe were justified. Therefore, the calls for the preservation of identity and development of a common European Union policy (Gehring 2019; Sasse & Lackner 2018) have allowed countries to come together to both implement joint sanctions and provide military–economic support to Ukraine. The directions, forms, volumes and efficiency of both pre-war assistance (Antonyuk, Fedun & Papish 2020; Kondrakiewicz 2021) and wartime support (Astrov 2022) have thus become the subject of many research studies. However, the results of current evaluations of the functioning of regional labour markets in Ukraine during the war, identification of risks and threats, including those to the socioeconomic system of the country, and substantiation of decision-making in the regional stabilisation policy are lacking.

2. Data and method

The analytical strategy of the study relies on an analysis of the main threats and challenges of the war for the labour market of the Carpathian region of Ukraine during the first month of the Russian military invasion (February–March 2022).

To analyse data, context analysis of surveys, reports, overviews and other sources as well as methods of economic analysis were used. To assess the level of regional tensions, the authors analyse the total and economic pressure of forced migration on the population of the oblasts in the Carpathian region. The total pressure is calculated as the number of internally displaced persons (IDPs) per 1,000 available population of the territory of the displaced persons' allocation, while economic pressure is expressed through the number of IDPs per 1,000 employed population of the territory.

The article is mainly based on statistical data from the International Organization for Migration (IOM), which provides the results of the General Population Survey on IDPs in Ukraine, United Nations Refugee Agency (UNHCR), which provides operational data on the Ukrainian refugee situation, State Statistics Service of Ukraine (SSSU) for data on the number of total and employed population in the region, CESifo publications on the European countries' response to external threats caused by the continuing Russian–Ukrainian conflict, Gradus Research Company (results of diagnosing the state of Ukrainian business during the full-scale war) and local authorities (data on employment of internal migrants).

Another source of information involves legal documents concerning the policy of social and labour stabilisation in the oblasts of the Carpathian region of Ukraine in conditions of war and post-war economic reconstruction.

3. Research results

The spatial disintegration of the economy and heavy migration within Ukraine and to other countries create a new environment for regional labour markets. Current migration processes are especially visible in the western oblasts of the country, where their volume, dynamics and structure have become a significant phenomenon in the development of regional economies. These processes have led to new socioeconomic risks and threats related to imbalances in domestic labour markets and the deteriorating quality and conditions of labour.

3.1. Nature of transformation in the labour market of the region in conditions of war

The current situation has generated three types of transformations in the labour market and employment in the oblasts of the Carpathian region of Ukraine:

1. Market condition transformations caused by, first, the massive migration of population from the areas of hostilities and those in danger of hostilities, which directly influences the labour supply, jobs and thus labour demand because of business liquidation, reduction or relocation, and second, decreasing disposable income due to general economic instability;
2. Regional imbalances as a result of structural–spatial changes in the labour market in the backdrop of intense internal (6.5 million people in the first month of war (UNHCR 2022)) and external (3.8 million people in the same period (IOM 2022)) migration in Ukraine;
3. Sectoral imbalances due to deep transformations in labour market conditions and the loss of established productive, logistical, trade and other links.

These changes generate tensions in employment because of the growing share of the economically inactive population (children, elderly and disabled for health reasons) in the regions of the IDPs' location. The calculated level of economic pressure in the oblasts of the Carpathian region (Table 1) indicates high tensions in Zakarpatska oblast (786 displaced per 1,000 employed) and moderate pressure on the employed in Lvivska oblast (389 displaced per 1,000 employed).

Table 1. The total and economic pressure of forced migration on the population of oblasts of the Carpathian region of Ukraine

Territory	Present population as of 1 February 2022, <i>thousands people</i>	Employed population aged 15–70, <i>thousands people</i>	Internally displaced persons within the territory, <i>thousands people</i>	Pressure, per 1,000 people	
				total	economic
	(1)	(2)	(3)	(3)/(1)	(3)/(2)
Ukraine	41,130	15,610	6,500	158	416
Carpathian region	5,960	2,423	912	153	376
<i>Oblasts:</i>	2,476	1,029	400	162	389
Lvivska					
Zakarpatska	1,244	484	380	306	786
Ivano-Frankivska	1,351	543	70	52	129
Chernivetska	890	368	62	70	168

Source: own calculation based on the data of the State Statistics Service of Ukraine (SSSU 2022).

These oblasts, being border regions, constitute the core of the forced dislocation of internal migrants, and migrants often consider them as transit areas on their way abroad. Western oblasts have traditionally been the areas of increased migration activity and have always been characterised by high dynamism in employment (Mulska *et al.* 2020). Growing unemployment (a significant share of displaced people either lose their jobs or cannot continue their labour activity), increasing involuntary part-time employment, an increase in the average period of searching for jobs by the unemployed, an increasing competition for job vacancies, and decreasing employment levels are some of the early markers of tensions in regional labour markets.

There is also a growing total pressure on social infrastructure (educational, healthcare, cultural, housing facilities) and correspondingly on the social service system in the western regions of Ukraine. Socioeconomic tensions are stipulated by the structure of IDPs, who include children, the elderly, unemployed people of working age and those pursuing education. According to the IOM, 27.6% of internally displaced households have children under 5 years old, 60.8% have arrived with children aged 5–18 years, 10.2% of households have pregnant or breastfeeding women, 56.3% of households have elderly people of non-working age, 32.1% have people with chronic conditions and 19.5% of households have disabled people (Gradus 2022).

The parameters of forced migration volumes and the respective level of pressure on hosting regions are very dynamic. Some of the displaced people go abroad, primarily through the western borders of Ukraine, and some of them move to other oblasts or return to the territories of previous residence (origin), while others find jobs and become economically active resources (Lupak *et al.* 2022).

The war has brought significant changes in business functioning and job supply in regional labour markets. First, 85% of economic entities have moved to a partial operation mode or have terminated operations, and 1% of these have completely ceased operations and do not plan their recovery. Most business entities (86%) have lost loading capacities or work at reduced capacities than before the war. The visible and emerging trends indicate a further decline in business activity in the country. This will lead to a reduction in jobs and a growing labour deficit in both areas of hostilities and regions that are relatively less involved in the war. Moreover, a reduction in the purchasing power of the population and economic entities will entail the loss of customer orders, which is likely to become the main problem in the organisation of production and business (the issue is already relevant for 50% of domestic economic entities). Moreover, the lack of staff with the required skills is another substantial obstacle – currently, 17% of representatives of domestic businesses lack employees, and 15% consider the need to retain key employees to be the most crucial problem (Gradus 2022).

3.2. The threats to the labour market and regional economy caused by the war

There are several threats to the functioning of the labour market in the oblasts of the Carpathian region of Ukraine in the existing conditions of war and martial law:

- Most oblasts face growing unemployment, deteriorating financial condition of the population, decrease in purchasing power and narrowing of the domestic market. This is fostered by the reduced vacancy rate all over the country. In the first weeks of the war, new job offers in the labour market reduced by about 45%, new CVs by 51% and submitted CVs by 39%, especially in large cities (such as Lviv). As a result, the number of candidates per vacant position has increased to 9 in Lviv, 12 in Ivano-Frankivsk and 14 in Uzhorod (Robota.ua, 2022).
- There is intense pressure on social infrastructure because of the need for social protection of IDPs. It is fostered by their low employment level, including those people contacting the local employment centres to find jobs. The average percentage of displaced persons' employment in Lvivska and Zakarpatska oblasts is only 10–11% (LRES 2022).
- The increased pressure on the domestic labour market and growing competition for jobs in hosting regions because of the large number of IDPs particularly distorts the labour market in the regions that were earlier characterised as having a limited number of jobs (among the western regions, these are the oblasts of Zakarpatska, Chernivetska and Ivano-Frankivska, as well as the remote mountain areas of Lvivska oblast).
- There is a reduction in the human resources of economic entities and the emergence of a deficit of some specialists, mainly in trade, logistics and pharmaceuticals (epravda 2022).
- The trend of relocation of business and qualified staff from the western oblasts of Ukraine to foreign countries continues, predominantly in case of removal of the respective restrictions after the war (or at least its active phase). Currently, a range of EU countries have significantly simplified the employment and business reregistration conditions. In particular, Poland has launched initiatives on benefits for legalisation of residence (up to 18 months with access to the healthcare system and free education for children) and employment (only subject to notification with registration in the Labour Bureau and after receiving professional training and consultations) (Crowe-news 2022).

3.3. Opportunities for labour markets in the Carpathian region of Ukraine

The general labour market policy and the initiatives of regional authorities should be directed at balancing the labour market and eliminating the risks and threats. Meanwhile, it is worth using a range of positive trends and opportunities in the current situation of war. These include:

- active migration of IT specialists to the western regions of the country, a growing number of IT clusters and the transformation of Lviv, Uzhorod and Ivano-Frankivsk into powerful IT hubs. While about 30,000 IT specialists worked in Lviv before the war, there are now 70,000–100,000 people, which is over one-third of the Ukrainian IT industry and 1.5–2 times more than those working before the war in such major IT centres of Ukraine as Kyiv and Kharkiv. The number of IT companies in Lviv has also increased to over 500 (Forbes.ua 2022).

Moreover, despite hostilities, the overall business activity in the IT industry is not falling, fostering the comprehensive use of human resource capacity with its substantial growth. According to experts, 98% of companies have retained business activity in conditions of war, about 42% have the same load level, and about 6% have a higher volume of customer orders. The provision of Starlink stations and access to the satellite Internet in the western regions of Ukraine boost the growth of production capacities and promote efficient use of the industry's economic potential.

- relocation of highly skilled specialists and scarce staff to the western regions of Ukraine. Such specialists are actively looking for jobs. Thus, in Lvivska oblast, about 25% of job seekers are displaced persons, and most of them are sought-after specialists in the region (technologists, middle and senior managers, procurement officers and analysts with work experience at large enterprises) (Forbes.ua 2022b). However, the allocation of specialists according to their professions and respective positions in the system of business management or non-commercial entities remains a challenge. It exacerbates disparities in regional labour markets when specialists with higher skills have jobs that require lower qualification levels.

- intensification of activity by authorities and labour market infrastructure entities to secure employment for internal migrants. Over 1,500 job offers for IDPs were created in Lviv alone (community service engineers, parking attendants, bakers and public service and consumer service personnel). The Centre for Support of Internally Displaced Ukrainians and a chatbot with job offers were launched for proper coordination of these issues (Tvoemisto 2022). About the same number of citizens displaced during the war have already found jobs according to the following employment structure: 20% – operators and assemblers of equipment and machines, 17% – trade and household service personnel, 12% – qualified workers with tools, 11% – senior government officials and managers, 10% – specialists, 9% – professionals, 6.5% – workers of the simplest professions, 6% – people without a profession, 4% – technical staff, 1% – qualified agricultural and forestry workers (LRSA 2022).

The task of searching for ways to balance the labour market, improve the social security system for the unemployed and foster employment is becoming increasingly relevant, especially in the industries that contribute to restoring destroyed buildings, critical infrastructure and humanitarian facilities, as well as those providing services to displaced people to reinforce national security. Yet, the challenges go beyond the boundaries of Ukraine's internal interests since they also affect the external development vectors.

3.4. Measures for stabilising the situation in the regional labour market in conditions of war

Under the military law, state authorities have implemented several measures to stabilise the situation in the labour market of Ukraine and eliminate a range of risks and threats. In particular, the following documents were adopted:

- the Law of Ukraine 'On the Organisation of Labour Relations in Conditions of Martial Law' No. 2136-IX as of 15 March 2022;

Resolutions of the Cabinet of Ministers of Ukraine:

- 'Some issues of labour remuneration for the employees of state authorities, local governments, enterprises, institutions, and organisations funded or subsidised from the budget in conditions of the martial law' No. 221 as of 7 March 2022;
- 'Some issues of registration and reregistration of unemployed, recording of job seekers, accrual and payment of unemployment allowance during the martial law' No. 334 as of 19 March 2022;
- 'On approval of the procedure of compensating the employers' expenditures on labour remuneration for employing the internally displaced people due to hostilities during the martial law in Ukraine' No. 331 as of 20 March 2022, which fosters the provision of jobs for the maximum number of citizens in the regions without intense hostilities and the creation of new sectoral and geographical employment vectors in Ukraine.

The most essential changes secured during the martial law by the regulations mentioned above are related to: (1) the introduction of annual paid *leave for all employees for 24 calendar days*; (2) *the increase of employers' autonomy in decision-making* regarding the conclusion of employment contracts (including the period of employment contracts during the martial law or during the replacement of a temporarily absent employee to quickly offset the staff shortage), the change of substantial labour conditions, recording the working and rest periods and the organisation of human resource management; (3) *guaranteeing the right of the officials of state authorities and managers of institutions and organisations funded or subsidised from the budget to independently determine the remuneration of the non-productive time of employees* within the payroll specified in the estimates but no less than two-thirds of the tariff rate set for the tariff category (salary); (4) securing an opportunity to *submit an application for unemployed status*, unemployment allowance and termination of unemployment registration *in a mobile app of the Portal 'Diya'*; (5) *guaranteeing the employers the compensation of labour remuneration costs* up to the amount of UAH 6,500 annually per employee for whom they pay the contribution to the obligatory state social insurance during martial law and 30 calendar days after it is cancelled or terminated.

Ukrainian regions are also launching important initiatives and measures to simplify the labour relationship during martial law. For instance, Lvivska oblast has organised a *Telegram channel* of the Lviv Regional Employment Service and *messenger* and *profiles* in social networks to provide

consultations on the work of the oblast employment service, employment, registration of clients and obtainment of unemployed status, as well as information on available job offers and vacant positions in the region.

4. Discussion

The stabilisation of the labour market in the oblasts of the Carpathian region of Ukraine in conditions of war and during post-war recovery can take place in one of the following most likely scenarios: 1) pessimistic: the development level lags behind the standards of the EU countries, accompanied by a tremendous 'drain' of human resources, shadowing of employment and deteriorating quality of jobs; 2) realistic: the convergence with labour markets of the main countries that are recipients of the Ukrainian workforce based on a proactive employment policy; 3) optimistic: rapid growth of the competitiveness of the national labour market due to an 'economic leap' during the country's post-war recovery period.

The third scenario has quite clear perspectives, given the strategic orientation of Ukraine to attract advanced technologies from Europe in order to rebuild the destroyed infrastructure and modernise industry, secure neo-industrialisation, and develop new engineering, electronics and defence sectors (Borshchevsky 2022). Under the optimistic scenario, the 'economic miracle' can be achieved through the rapid pace of socioeconomic and technological progress, introduction of technology-intensive innovations in the real sector of the economy, integration of activities in the state–science–industry system by creating new high-paying jobs, and transformation of migration risks into positive migration effects (Mulska 2021). A flexible, competitive labour market and efficient employment policy should be the ground for such a 'leap' in the context of the post-war reality of social development.

However, the authorities should use the following key tactical benchmarks to stabilise the domestic labour market:

- Secure the growth of labour mobility to improve the adaptability of IDPs and other categories of the population to the changes in the labour market. Labour mobility determines the qualitative characteristics of the workforce, its prospective capacity to change the functions in the production of tangible and intangible benefits, its readiness for professional and qualification growth, mastering of new professions and adaptation to dynamic conditions, including business migration and functioning of companies relocated from dangerous areas. The development of labour mobility is fostered by budgetary and grant assistance for the activities of specialised NGOs, consulting and recruiting agencies, educational institutions and HR companies engaged in training, retraining and professional adaptation of personnel.
- Provide training (including attracting volunteers to achieve these goals) to IDPs in the western oblasts of the country in the most competitive professions to increase their competitiveness and enhance their assimilation in their territory of residence, thereby reducing pressure on social infrastructure and the social service system. This benchmark can also be achieved by allocating funds for training and retraining of internal migrants and creating (through the consolidated efforts of local governments and economic entities) job offer pools for displaced persons to promote their employment and adaptation.
- Launch mechanisms for reverse labour migration and business relocation abroad by stimulating the business and investment activity of re-emigrants.
- Provide (assist in purchase or rental) housing for IDPs in rural areas and small towns to assimilate them and secure efficient use of their capacity. Through this step, the pressure on the system of resettlement of displaced people can be reduced, the stock of human capital in less economically developed areas can be improved and the demand and supply of human resources in the region can be diversified.
- Use the capacity of businesses re-localised in the western oblasts of the country as an additional supply of jobs for IDPs and other unemployed residents.
- Open new industrial parks to provide space for new businesses (mainly the real sector's economic entities) and increase the scale of activity of already relocated manufacturing, thereby securing the creation of new jobs, ensuring an increase in labour demand and capacity of

intra-regional labour markets and levelling the structural imbalances in these markets, both in terms of labour demand and supply volumes and structural (including professional) aspects.

- Intensify the activity of entrepreneurship support centres and consulting structures (with budget and grant support) to help IDPs launch their private businesses and promote the creation of small businesses in the western oblasts of the country.
- Undertake measures to support higher educational institutions and vocational educational institutions that secure the training of specialists sought after in the post-war period and create conditions for the development of staff training and retraining systems. Priority needs to be given to specialists such as professional soldiers, psychologists, doctors and other medical, rehabilitation, construction, architecture, energy and defence industry staff.

The implementation of these initiatives requires the adoption and realisation of a complex program to stabilise and develop the regional labour market in conditions of martial law and post-war recovery and measures related to the support of economic entities, IDPs and people who have lost their jobs. Various assistance ‘packages’ could be provided – basic (provision of housing, jobs, and educational, medical, social and other services) and specific (meeting the special needs of IDPs and providing targeted social assistance). These practices should be adapted to the needs of each region and the social profiles of displaced people.

5. Conclusion

The functioning of the labour market in the oblasts of the Carpathian region of Ukraine in war-time conditions is accompanied by the intensification of a set of risks and threats, including growing unemployment, the deteriorating financial condition of the population, falling purchasing power and narrowing of the domestic market; growing pressure on social infrastructure due to the need for social assistance for IDPs; increased pressure on the domestic labour market and growing competition for jobs in hosting regions because of the large number of IDPs, which significantly distorts the labour market conditions; reducing human resource capacity of economic entities; and emergence of the shortage of some specialists.

To stabilise the internal labour market during the war, regional authorities should implement a number of measures aimed at increasing labour mobility, providing training leading to the acquisition of the most competitive professions by IDPs, launching mechanisms for reverse labour migration, providing IDPs with housing in rural areas and small towns, using the potential of relocated businesses, opening new industrial parks for allocation to new businesses and increasing the scale of already relocated industries, intensifying business support activity, providing consultation support for IDPs’ initiatives to start their own businesses, and supporting higher education and vocational educational institutions which provide training for specialists in demand in the post-war period.

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