
Labour Migration During the War: State Regulation, Integration into the Economic System and Migration Policy¹

Oleg M. Yaroshenko

(Yaroslav Mudryi National Law University, Ukraine)

oleg-yaroshenko@edu-knu.com

Roman V. Shapoval

(Yaroslav Mudryi National Law University, Ukraine)

rvshapoval1@gmail.com

Nataliia O. Melnychuk

(Taras Shevchenko National University of Kyiv, Ukraine)

melnata@ukr.net

Dmytro V. Luchenko

(Yaroslav Mudryi National Law University, Ukraine)

d.v.luchenko@nlu.edu.ua

Nataliia M. Shvets

(Yaroslav Mudryi National Law University, Ukraine)

natalyshvets@gmail.com

In the socio-political upheaval caused by Russia's full-scale armed aggression against Ukraine, all sectors of the Ukrainian and regional economy, including the labour market and employment, are undergoing significant changes. The movement of people within Ukraine and abroad is the largest in Europe since the Second World War. These processes require scientific understanding, and an assessment of their scale and consequences is becoming extremely important. The purpose of the present study is to analyse the functioning of the labour market in Ukraine under martial law and the consequences of migration processes for the Ukrainian economy. Drawing on research methods that include dialectical, logical, systematic, legal statistical and sociological comparative analysis and synthesis, we examine the migration policy of Ukraine and the EU looking at migration management and regulation. In the conclusions we formulate recommendations that may help to address problems of labour migration and stabilize the domestic labour market and the country's economy.

Keywords: Migration, population displacement, war in Ukraine, migration policy, population employment, labour migration.

Introduction

Migration processes are important objects of research because of their impact on national economies, quality of life and education, welfare and the development and stability of nation states. In the context of expanding international economic ties, international migration is becoming increasingly important for the development of society (Liubchenko et al. 2019). As this concerns, on the one hand, the internationalization of the economy, and, on the other hand, the uneven development of countries, labour migration has acquired unprecedented socio-economic and political significance in the modern world.

In today's Ukraine, military actions are the main driver of migration, including labour migration. The events following the outbreak of full-scale war on 24 February 2022 triggered a new large-scale migration (Yaroshenko et al. 2021). The military aggression by the Russian Federation, which began with the bombing of a large number of settlements across Ukraine, caused the massive destruction of civilian infrastructure, primarily housing, and led to a large-scale displacement of people to safer western areas in the country and beyond (Gerlach and Ukrainets 2022). This was the largest migration crisis in Europe since World War II.

In the future, the issue of returning these people to Ukraine could become a serious problem, further complicated by the simplified regime of residence for Ukrainian citizens in the European Union (EU), the United States, Canada and other countries. According to the United Nations High

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Commissioner for Refugees (UNHCR), more than 8 million people are temporarily displaced in Ukraine; by the end of 2022, this may increase to 8.3 million, and the number of internally displaced persons to 8.7 million. This would be a disaster for the country (CNN 2022).

Once the war ends, it will be integral to Ukraine's reconstruction to encourage people to migrate back to the country (re-migrate), establish intergovernmental agreements, and draft plans for the reintegration of Ukrainians and the restoration of the functioning of the Ukrainian community and the rebuilding of institutions (Refugees Operational Portal 2022, Yaroshenko et al. 2022). Awareness among a significant part of the population, including entrepreneurs, of the risks associated with the proximity of the borders of an aggressive neighbour would be likely to lead to massive population movements to the western and central regions. This would inevitably cause in these territories several problems related to the lack of jobs, housing, social infrastructure, and so on (Khrystova and Uvarova 2022). Developing a sustainable economy, which, in addition to investments, will require labour for construction and for other economic activities, and maximum protection from the risks and threats associated with the actions of an aggressive neighbour will be of paramount importance.

The problems of labour migration are being studied by Ukrainian scholars, such as Borshchevskiy (2022), Chichirina (2022), Mulska (2021), Suptelo (2020) and Libanova (2018). The importance of this topic is highlighted by the increase in its scale caused by the war. The specifics of the labour market in wartime require new approaches to the state regulation of employment and unemployment and to the provision of labour for migrants, refugees and internally displaced persons (IDPs). The purpose of this ongoing work is to examine the consequences of the current migration processes for the Ukrainian economy, study the migration policy of Ukraine and the EU with a focus on the management and regulation of migration, and formulate recommendations to address the problems raised by labour migration and the issues pertaining the stabilization of the domestic labour market and the country's economy.

Materials and Methods

Our research draws on modern economic and legal theory, as well as on domestic and foreign scholars' work on labour migration. The dialectical method, one of the main methods for the study of labour migration, has contributed to the analysis of the development of interrelated and interdependent determinants of labour migration in Ukraine. The logical method has been used to investigate the current state and problematic aspects of labour migration in Ukraine, including the functioning of the labour market under martial law. The application of the systematic method has allowed us to identify ways to overcome the migration crisis caused by the outbreak of the large-scale war. Statistical and sociological methods have been used to substantiate the theoretical conclusions regarding the legal regulation of labour migration and the consequences of the migration processes for the country's economy. Using the comparative legal method, we analyse the complexities of regulating the labour migration and devising a migration policy and develop proposals for improvement in this area. We address the migration processes, identify the peculiarities of state regulation, study the migration policies of Ukraine and the European Union and investigate the issues of migration management and regulation.

Structural and logical analysis has helped to formulate methodological approaches to the study of migration processes and their relationship with the socio-economic development of the country. The method of systematic approach has been used to substantiate the strategic priorities of the state regulation of migration processes and formulate recommendations for solving problems in the field of labour migration and stabilize the domestic labour market and the country's economy. Logic and semantics have helped to define the concepts of 'migrant' and 'refugee'. Structural and functional analysis helped to identify the economic risks that arise in wartime as a result of extensive migration. Methods of formal and dialectical logic have helped to substantiate the theoretical basis of the state regulation of labour migration. A comprehensive analysis has addressed the concept of 'labour migration of the population', and helped to develop recommendations for improving the migration policy. Economic and statistical methods have been used to investigate migration factors and processes in Ukraine, assess economic losses from external migration and forecast the prospects in the field of economy and labour relations. Through the historical approach we have studied the processes of migration of the Ukrainian population over time, while the method of 'generalization' has been used to examine the international experience of migration policy.

Results

The Problem of Labour Migration in Ukraine: Impact on the Country's Economy

Let us now look at the legal categories of 'migrant' and 'refugee'. Migrants are among the most numerous people involved in displacement processes. Article 11 of the international Convention concerning Migrant Workers and the Promotion of Equal Opportunities and Equal Treatment of Migrant Workers defines migrant workers as follows: 'Migrant worker means a person who migrates or has migrated from one country to another to obtain employment, other than at his own expense, and is any person who has lawfully entered a country as a migrant worker' (International Labour Organization 1975).

It is worth emphasizing that, while the current Ukrainian legislation does not contain a definition of 'migrant', the law 'On Refugees and Persons in Need of Complementary or Temporary Protection' defines a 'refugee' as a person who is not a citizen of Ukraine and who, as a result of well-founded fears of being persecuted on the grounds of race, religion, nationality, citizenship (nationality), belonging to a particular social group or political opinion, is outside the country of his/her citizenship, cannot enjoy the protection of that country, or does not wish to enjoy such protection due to the listed fears, or, not having citizenship (nationality) and being outside the country of his/her previous permanent residence, cannot or does not wish to return to it due to the above fears (Verkhovna Rada of Ukraine 2012).

The difference between 'migrants' and 'refugees' needs further attention. First, a migrant can move both within and outside the country. Second, a migrant's may have changed his or her permanent residence in order to obtain education (training), medical care, change of employment, etc. Third, a migrant may be either a citizen of Ukraine or a foreigner, a stateless person who is legally on the territory of Ukraine. On the other hand, refugees can only be foreigners and stateless persons who are legally on the territory of Ukraine; second, refugees change their permanent place of residence due to a well-founded fear of being persecuted on the grounds of race, religion,

nationality, citizenship (nationality), membership of a particular social group or political belief; third, a refugee must be outside the country of his or her nationality and cannot enjoy its protection or be outside the country of his or her previous permanent residence. The category of ‘refugee’ should also include such subtypes as ‘persons in need of temporary protection’ and ‘persons in need of complementary protection’ (Bogatyrets and Gaina 2019).

Today, demography and migration are inseparable from a country’s economic development. In the case of Ukraine, the functioning of the labour market under martial law is accompanied by several threats:

- Rising unemployment, deterioration of the financial situation of the population and a decrease in people’s purchasing power, and a narrowing of the domestic market;
- Increased pressure on the social infrastructure, due to the need for social support for internally displaced persons;
- Increased pressure on the domestic labour market and increased competition for jobs in the host regions, due to the growing number of internally displaced persons, which especially distorts the labour market in regions that were previously characterized as having a limited number of jobs (in the western Ukrainian regions, these are Zakarpattia, Chernivtsi, Ivano-Frankivsk and remote and mountainous areas of Lviv region);
- Weakening of the human resources potential in the business sector and the emergence of a shortage of certain specialists; in particular, in the areas of trade, logistics and pharmaceuticals;
- A tendency to relocate businesses and highly qualified specialists abroad, in particular, during the war and after the relevant restrictions are lifted at the end of the war.

Undoubtedly, there are negative features of labour migration that can threaten the efficient functioning of the economy and the stability of the domestic climate; above all, the dependence of the state’s economy on foreign exchange earnings. Then, there are the negative demographic indicators, as the population decreases due to people moving abroad and having children in other countries. Social orphanhood is a widespread phenomenon, as children grow up without the direct care of their parents (Karpachova 2021). Another problem is that the elderly are left without proper care and need more than just financial assistance. Unfortunately, the issue of abandoned parents due to people’s moving abroad is currently not taken into account by the state. The consequences of migration processes in Ukraine include:

- The leaching of intellectual human capital and labour force;
- People leaving to work on labour-intensive goods instead of knowledge- or capital-intensive ones leads to a lower status of Ukrainian workers for foreigners and, in general, to a kind of degradation of the population;
- A decrease in the GDP. For example, in Poland, over the past few years, the contribution of Ukrainian labour has contributed to up to 13% of the country’s economic growth (Dzyuman and Lomakina 2022).

When comparing Ukraine’s migration policy with other countries’, we see that Ukraine is losing significantly in the struggle for labour resources, mainly because the country does not

conduct annual or at least periodic assessments of its need for labour. (Libanova and Pozniak 2020). Canada, for example, has a long-standing system for the assessment of its labour needs, including those of migrants. There, those interested in additional labour (businesses, social services, municipalities, etc.) submit their applications to the state territorial districts, and the provinces forward the applications to the Ministry of Immigration, Refugees and Citizenship, which drafts a three-year Immigrant Attraction Plan. For 2022, this plan addresses about 430,000 people. In Ukraine, the plan for 2022 (the so-called immigration quota approved by the government) provides for only 8,400 people, which is about 50 times less, in spite of the fact that the population of Canada and Ukraine is almost the same (Crossing the state border under the legal regime of martial law 2022).

This raises the issue of finding ways to balance the labour market, improve the social protection system for the unemployed and promote employment, especially in those industries that are working to restore lost residential complexes, critical infrastructure, humanitarian facilities, and the military-industrial complex to strengthen national security. However, these challenges go beyond Ukraine's domestic interests, as they also affect external development vectors. The stabilization of Ukraine's labour market during the war, as well as during its post-war recovery, is likely to take place under three possible scenarios:

1. Pessimistic: the level of development lagging behind the standards of the European Union (EU) countries with a huge 'leaching' of human resources, shadowing of employment and deterioration of the quality of jobs;
2. Realistic: rapprochement with the labour markets of the main recipient countries of the Ukrainian labour force based on proactive employment policy;
3. Optimistic: the rapid growth of competitiveness of the national labour market due to the 'economic charade' in the period of post-war recovery of the state.

The third scenario has fairly clear prospects, as Ukraine is strategically oriented towards attracting the latest technologies from Europe, which will be used to restore the destroyed infrastructure and to modernize industry and develop new branches of mechanical engineering, electronics, industrialization and the military-industrial complex (Borshchevskyi 2022). An 'economic miracle' with optimistic prospects can be achieved through the rapid pace of socio-economic and technological progress, the introduction of high-tech innovations into the real sector of the economy, the integration of activities in the state-science-industry system through the creation of new well-paid jobs and the transformation of the migration risks into positive migration effects (Mulcka 2021). The basis for such a 'leap' should be a flexible, competitive labour market and an effective employment policy in the post-war reality of social development.

It should be pointed out that the problem of migration existed in Ukraine even before the full-scale invasion by the Russian Federation, due to unregulated and imperfect legislation and the lack of a policy to attract migrants and citizens who have migrated. However, with the outbreak of the war, the scale of the problem has grown to a level never seen before in Ukraine and across the modern world. The situation is complicated by several occurrences related to Ukrainian refugees in other countries. Ukraine needs to create its re-migration vector, with the participation of host countries, international organizations and the migrants themselves. Re-migration will be a complex, lengthy and multi-stage process; yet, without its implementation, Ukraine risks losing a significant

share of its citizens and, at the same time, the existence of an independent state with its own national identity.

The Strategy of Ukraine's Migration Policy

The current military operations in Ukraine are destructive for the economy and the labour market. The real damage is difficult to assess. The Russia Will Pay project has estimated that the total losses of the Ukrainian economy as a result of the war range from \$543 to \$600 billion. This estimate includes both the direct losses and indirect losses, such as the falling GDP, the stoppage of investments, the outflow of labour, additional defence and social support costs, and so on (CES 2022).

Russia's war against Ukraine has led to a drop in Ukrainian grain exports. The reorganization of supplies from other countries will not compensate the loss of supplies from Ukraine, for Ukraine produces a significant share of the world's food market, which is estimated at \$120 billion. In normal times, the country produces about 27% of sunflower seeds, 5% of barley, 3% of wheat and rapeseed and 2% of corn, but the war has caused a record fall in the harvests; for instance, grain exports are currently limited to 500,000 tons per month, compared to 5 million tons before the war. According to the Ministry of Agrarian Policy, this is a loss of \$1.5 billion. Importers from North Africa and the Middle East are particularly dependent on Ukrainian and Russian supplies and are trying to find alternatives. The International Grains Council estimates that global grain trade, excluding rice, could fall by 12 million tons this season, the largest decline in at least a decade. Record-high global food prices could rise by another 22%, as Russia's war against Ukraine halts trade and destroys future harvests (*Economic Truth 2022a*).

A migration policy is an element of demographic policy and a means to achieving the desired population size, while the labour force is a part of socio-economic policy, a tool for achieving its goals. Clearly, when stating or predicting a population shortage due to an unfavourable demographic situation, the government's role will be to attract immigrants, reduce the outflow of foreign nationals and encourage the return of the population. It is also necessary to address people's distribution on the territory in order to expand production, develop natural resources and increase labour resources in certain industries or regions.

The mechanisms for implementing a specific migration policy include programmes which aim to facilitate the planned, systematic implementation of the process of migration and provide the necessary assistance to its participants. The International Organization for Migration distinguishes between humanitarian and development programmes. Humanitarian programmes include refugee assistance programmes and programmes for the voluntary return of migrants (including illegal migrants) who have been unable to adapt to life in another country. Regarding irregular migrants, many countries use regularization programmes. Integration programmes for migrants are coming to the forefront, providing loans for housing and employment assistance, especially assistance to obtain the qualifications necessary to work abroad. Labour-supplying countries have programmes that support migrants' remittances to their home countries, their return, and the investment of knowledge gained abroad and savings made for the country's development (Smutchak et al. 2020).

Civil society actors are also involved in the management of migration, including the media, which inform people about migration, reflects public attitudes towards it, and shapes public opinion;

the church, which performs both ethnocultural and social roles; non-governmental organizations, and associations of people. In addition to human rights organizations, associations of migrants are of great importance, as they represent the interests of these people before the state and society and provide feedback to the authorities on the results of their activities in the field of migration (IOM 2018). The role played by a wide range of state measures not directly aimed at migration management should also be noted. Economic and social policies, security provisions and education and housing policies have their own goals, but they change the environment to which people decide to migrate. It follows that the indirect impact of migration behaviour on the population should be taken into account when planning and implementing relevant measures (Pudryk et al. 2020).

The goal of migration policy is not to collect as many refugees as possible, but to select the most active and employable among them. Germany facilitates the employment of Ukrainian nurses. They are helped to pass the language exam and settle in. French and Polish organizations invite skilled immigrants to learn the language for free and introduce them to the local culture. Ukrainian refugees say they have better living conditions abroad than at home. This means that Ukraine will have to fight for the return of its citizens ('re-migration'), and that patriotism alone will not help (Libanova 2018).

The unprecedented wave of migration in recent decades has also sparked unprecedented solidarity among EU citizens and governments. For the first time, EU countries have quickly activated the Temporary Protection Directive, which provides access to protection and services for refugees from Ukraine. The European Union (EU) has granted Ukrainian IDPs the right to live and work in all 27 EU countries for 3 years. They are also entitled to social benefits, medical care and access to school education. Published on 8 March 2022, the Commission's proposal on 'Cohesion Action for Refugees in Europe' (CARE) aims to increase the flexibility of the cohesion policy by establishing rules that allow EU member states to provide emergency support to people who fled Ukraine after Russia's invasion. Through amendments to the Regulation that establish a common provision for the use of European Structural and Investment Funds 2014-2020 and the Regulation on the European Fund for the Most Disadvantaged, CARE proposes four changes to the Cohesion Policy rules in order to speed up and simplify the provision of EU funding to countries hosting Ukrainian refugees.

It is also worth adding that on 21 April 2022 the United States announced an assistance programme that fulfils President Biden's commitment to welcome Ukrainians fleeing the Russian invasion. The programme, called 'Uniting for Ukraine', is the largest private US sponsorship programme for refugees in decades. 'Uniting for Ukraine' and other programmes provide an opportunity to accept up to 100,000 Ukrainian citizens in the United States and their immediate family members (European Parliament 2022).

To create jobs, the Ministry of Economy has developed a programme to stimulate entrepreneurial activity. It will provide grants of up to 250,000 UAH to help people start a business and restore the processing industry. The government plans to bring people back to work by creating a large government order. If a person returns to his or her hometown and cannot find a job, the government will provide 'socially useful work' with a minimum wage (6,500 UAH); at the same time, employment centres will endeavour to find a job that matches the individual's specialty.

Another way to save jobs is through a programme to relocate businesses from the war zone. The government helps businesses relocate to safe regions and transfer employees. Since the start of the programme, about 700 companies employing 85,000 people have relocated. All these plans are costly for the national budget, their implementation depends on raising funds from international partners. It is not only the government's responsibility to return people. Large companies will play an important role in this, and in keeping people from emigrating, as they must create comfortable living conditions for their employees (*Economic Truth* 2022b).

We believe that a labour market policy should focus on both internal and external migrants; that is, migrants who have been forced to leave the country. Obviously, during the reconstruction period, there will be a demand for the labour associated with overcoming the consequences of economic destruction and restoring territories, enterprises, and housing stock. This will require the relocation of labour. In parallel, the structural transformation of the economy must take place with a corresponding transformation of the labour market.

The key to a rapid economic recovery is to provide jobs and decent employment opportunities (Luchko and Shesterniak 2021). This alone requires renewed employment policy for the post-war economy, which should include three main areas. First, it should focus on emergency employment and income generation while stabilizing security and social and humanitarian stability for war-affected groups. Second, the conditions should be created for the recovery and reintegration of the local economy of host communities. Third, the creation of jobs should be based on the concept of decent work and include the development of the institutional capacity of the labour market and social dialogue at the national level.

It should be noted that facilitating the return and reintegration of migrants is the least developed area of Ukraine's migration policy. The Ukrainian authorities pay attention to it only because of the prospect of a visa-free regime with the EU. The Visa Liberalization Action Plan, which was devoted to migration management, set out to approve legislative documents that would provide, among other things, measures for the reintegration of Ukrainian citizens returning voluntarily or by the EU-Ukraine readmission agreement. At the end of 2015, the Law 'On External Labour Migration' was adopted in Ukraine as part of the package of documents required to fulfil the conditions for obtaining a visa-free regime with the EU. Thanks to the activity of civil society, primarily migrant associations, whose representatives participated in the drafting of the law, for the first time in Ukrainian legislation we find 'creating conditions for the return to Ukraine and reintegration into society of labour migrants and members of their families'.² A separate article of the Law is devoted to reintegration (Article 14) and identifies the Ministry of Social Policy of Ukraine as the central executive body responsible for the reintegration of labour migrants (Verkhovna Rada of Ukraine 2015). Thus, the first step was taken to formulate policy and legislation in the field of return and reintegration of migrants. Yet, despite the importance of introducing the relevant provision in the Law, the procedure for its implementation remains unclear. The Law 'On External Labour Migration' suffers from a declarative nature and does not contain

² This is in addition to the existing protection of migrants' rights and international agreements on combating illegal migration.

direct action provisions. Its implementation will depend on the adoption of bylaws and amendments to existing legislation.

Let us now look at key points for the post-war recovery of Ukraine's economy.

First, Ukraine must gain full access to the markets of the G7 and the European Union. The governments of these countries should abolish all quotas and import duties, including protective and anti-dumping duties for Ukrainian goods. Thus, Ukrainian producers would be able to export freely their products to markets covering 54% of the global economy (Xu et al. 2019). In the past, access to the markets of developed countries allowed countries such as South Korea to recover successfully from the war.

Second, Ukraine's full accession to the European Union, expected in 2024, is the country's path to true democracy and freedom.

Third, a complete deregulation and minimal government interference in business would be needed. Since the beginning of the Russian invasion, the government has started a large-scale deregulation, transferring 48 permits, 19 licenses and about 500 other public services for business to the declarative principle. Businesses should focus on their core production processes, not on their relations with the state. Therefore, where possible, inspections should be replaced by insurance or other similar mechanisms.

Fourth, fast logistics should be developed. It should take no more than 72 hours from Ukraine to Europe. Due to the Russian aggression, Ukraine has limited logistical capabilities. It is already clear that in the future, goods will move mainly to the west, to the European Union, which is why road crossings and checkpoints towards the EU should be expanded as much as possible, and rail logistics through dry ports and narrow-gauge trans-shipment hubs should be increased. Even ports will resume work, better logistics with the EU will become the foundation for Ukraine's economic integration into the European economy.

Fifth, the country's is betting on the export of processed products in industries, such as food and metallurgy, where it has a competitive advantage in global market. At the end of 2020, Ukraine was the sixth largest exporter of food in the world, with 74 million tons (Tipayalai 2020). Corn and wheat are the country's main export products. Given the limited logistics, it is necessary to optimize the tonnage of exports by converting them into exports of finished products; that is, move from a large volume in tons to a large volume in currency. Processed products cost two to three times more than raw materials and create more jobs in the country: the positive experience in processing sunflower into sunflower oil we can extend to corn and wheat. There are opportunities to start processing corn into bioethanol, alcohol and starch, and as feed for poultry, pork, beef and eggs. The production should be increased of niche high-margin products from corn and wheat, specialized proteins used in the cosmetics, pharmaceutical and food industries. Thanks to the opening of the EU market and the construction of new facilities, Ukraine would process most of its ore into metals, which will be processed into finished products. This is how the country would achieve economies of scale. Ukraine is the world's ninth-largest metal exporting country (19 million tons per year). It exports a large quantity of ore that needs to be processed domestically. After all, a ton of ore costs \$100-150, a ton of metal costs \$500-1000, and a finished metal product costs \$1,500-2,000. If these metal products are used to make power machines, the price goes up to

\$15-20 thousand per ton. Modernization of metallurgy would also contribute to the decarbonization of the economy in the region, in particular through the introduction of modern ore processing methods that reduce the carbon footprint along the entire production chain. Ukraine's security depends only on us. Ukraine has demonstrated to Europe and the democratic world that it is capable of defending itself. But to do so, it needs weapons, which it needs to produce. For this purpose, it has established military-industrial enterprises and it is asking its Western partners to transfer military technology to enable it to start producing as soon as possible all major types of weapons, from air defence to armoured vehicles, missiles, small arms, ammunition, aircraft and ships (Colas and Ge 2019).

Sixth, Ukraine's task is to build a powerful military-industrial complex that will become the basis for the further development of aerospace technologies. IT would play an important role in this sector, as Ukraine would rely on military tech. In this regard, Israel can serve as a role model, demonstrating how high military technology can be the engine of the civilian economy.

Seventh, to implement this programme, Ukraine needs to increase its energy capacity. Electricity, in Ukraine, is cheap by European standards. The country has great competence in nuclear energy, which can be used to build more nuclear units and increase clean energy. Ukraine can build nuclear power plants on its own, from design to production of power equipment, except the reactor vessel; but the necessary skills can be developed using existing industrial facilities.

Eighth, the next step in the energy sector would be to achieve energy independence. In record time, in 3-5 years, the country should be fully self-sufficient, based on its own production of gas. This is an achievable goal because Ukraine is the second largest country in Europe in terms of deposits of natural gas. At the same time, a thermal modernization programme would help to reduce the energy consumption of the country's economy. Refining facilities of petroleum products should be built in order to cover fully the country's needs. The experience of Brazil should be taken as an example to produce a significant part of fuel through agriculture: by adding 15% bioethanol to gasoline and 20% biodiesel to diesel fuel (Parreñas et al. 2019).

Ninth, climate modernization should become the central idea of economic transformation. This is a clear concept for Ukraine's Western partners. Under this programme, significant financial resources are available to Ukraine. In addition, the construction of new industrial facilities in metallurgy, food processing and energy is immediately possible on the principles of a green economy; that is, minimal carbon footprint and low dependence on fossil fuels. It is important to understand how to make this happen. Ukrainian companies need two things: partnership with Europeans and Americans in the form of technology transfer; and access to financial resources.

In a narrow sense, we propose a 'Marshall Plan 2.0' for Ukraine's recovery. In the original Marshall Plan, the U.S. government bought specially issued shares of European companies to provide them with capital to invest in their production in Europe. Given that the global financial market has moved on in the last 70 years, Ukraine can offer its European and American partners a new approach. Partner governments could issue state guarantees to their companies to raise funds for investment in Ukraine. Such guarantees would cover the country's risk and allow investment in the implementation of major industrial projects in Ukraine. The concept of nearshoring is promising — turning Ukraine into an industrial zone for Europe. This will also stimulate the development of

the service sector. It is imperative to ensure the maximum restoration of Ukraine's transport and social infrastructure within 24 months; it is essential for further development to rebuild within this proposed period of time what has been destroyed during the war.

The last key requirement is that Ukrainians need to be involved in the reconstruction, maximizing the use of domestic resources, such as building materials, cement and metal. Ukraine insists that Russia must pay for all the destruction it has caused. Russia's violations of international law are so significant that its frozen assets should be confiscated; given that the Russian Federation supplies mainly commodities, this will not burden the buyer, and the aggressor country will have to reduce the price of the supply. The funds thus collected can be transferred to finance recovery projects in Ukraine.

The economic part of the recovery plan should include the full opening of the G7 and EU markets for Ukrainian goods. It should also envisage the large-scale development of the military-industrial complex through technology transfer and military-technology, a focus on exports of finished goods in the traditional agricultural and metallurgical industries and the rapid development of energy and logistics based on the principles of the green economy.

Discussion

Prime Minister Denys Shmyhal has recently called on businesses to move to a martial law economy in order to 'Restore the effective work of all necessary enterprises, mobilize resources, create new logistics'. A programme was launched to relocate production to the western part of the country. More than 700 companies have taken advantage of the relocation, and 500 of them have resumed operations. According to the Prime Minister, the government has been placing orders with companies to cover the most critical needs (Khamidov 2022).

In general, with the outbreak of the large-scale war, Ukrainian businesses found themselves in an extremely difficult situation: supply chains were disrupted and seaports were blocked. Ukraine tried to establish exports by rail, but this transport option could not meet the volume handled by seaports. The situation posed a huge worldwide risk of famine, as Ukraine is the largest grain supplier. Only in late July 2022 an agreement was reached in Istanbul that unblocked the ports in the Black Sea. However, the export of metal, which provided a significant inflow of foreign currency to the country before the war, is still impossible.

The Ukrainian government had to take emergency measures. Due to fuel shortage, the excise tax on fuel was abolished and VAT was reduced from 20% to 7%; this helped to provide fuel at affordable prices to the general population and to farmers during the sowing season. With the outbreak of the war, labour market activity practically stopped. For some time, businesses tried to retain staff. To prevent mass layoffs, the government paid 6.5 thousand UAH to entrepreneurs and officially registered private sector employees living in the war-torn areas. However, as the war continues and the economic situation does not improve, businesses have started to optimize costs, including payroll. The ranks of the unemployed have been joined by Ukrainians forced to move from the areas where the hostilities are taking place. As a result, according to the NBU, the unemployment rate has reached 35%. To provide employment, the Cabinet of Ministers launched

the eWork programme, under which it has disbursed 52.7 million UAH to help 227 entrepreneurs start their businesses.

The monthly deficit of the state treasury is \$5 billion. Since the beginning of the full-scale invasion, the sources of financing for the state budget have been military bonds, loans from international financial organizations, bilateral loans and grants. From the beginning of the full-scale invasion until July 27, the NBU printed 240 billion UAH.

Ukraine's current economy is organized according to market principles. The public sector generates only about 9% of the country's GDP. With such an economic organization, the state cannot directly order enterprises what to produce and how to do so and can influence them only through the system of public procurement, preferential loans, preferential taxation, and so on. Of course, state order in the defence sector increased during the war. Some enterprises that used to produce civilian products have partially or completely switched to manufacturing military products. However, it cannot be said that the economy has undergone dramatic changes and reoriented itself to the needs of the army. The Ukrainian Institute for the Future believes that the country needs to conduct an audit of the ability of enterprises to produce military products and repair equipment.

Development projects that are supposed to stimulate employment through the micro grants are questionable. Allowing men to go abroad to work is still debatable. On the one hand, this would help to increase foreign exchange earnings; on the other hand, it would reduce pressure on the budget. At the same time, a new tax reform is being discussed, which envisages the introduction of a 10% income tax, 10% personal income tax and 10% VAT (a significant reduction in rates); it also envisages a 3% increase in military expenditure and the abolition of the unified social tax. The question would, therefore, arise: how will the budget and the Pension Fund be filled? There is, experts say, probably no alternative to international assistance for Ukraine's wartime economy, and austerity — the abolition of bonuses, allowances and development projects — is inevitable (Inventure 2022).

Ukrainian migrants bring benefits to the economy and help the stability of the currency; after all, investments in Ukraine are small, and imports far exceed foreign exchange earnings from exports. Migrants' remittances to their home countries are growing dynamically. It should be noted that the growth rate of remittances is much higher than the corresponding increase in the number of migrants. Indeed, remittances are increasingly accounting for a significant portion of gross domestic product and are a constant source of foreign exchange earnings for developing countries. Thus, migrants and their remittances offset economic crises and provide better living conditions for households in labour-donor countries (Liu et al. 2020); for example, in 2019-2021, migrants' remittances contributed to a balance of payments surplus of plus \$8 billion.

While addressing the current problems, the state should also develop strategic plans for the return of Ukrainians to their homeland, as economic recovery will require a significant amount of labour. In this regard, we can look to the experience of other countries, such as India, Pakistan, the Philippines, Indonesia, Mexico and Sri Lanka, which have created a special infrastructure for the training and temporary resettlement of people who need or want to work. The authorities supply migrants with legal, banking, insurance and mortgage instruments during the migration cycle and, then, encourage them to return home. In these countries, the authorities have information on 99%

of their migrants and can therefore offer them appropriate return programmes. In Ukraine, more than 90% of emigrants are ‘illegal’ for the authorities — in 2020, out of more than 5 million Ukrainians abroad, only about 450,000 were registered with the consular authorities in their countries of employment (Kravets 2021a).

The central government should work with local authorities, businesses and migrants. Some programmes involve all participants. For example, in Mexico, a social programme called *TresperUno* (3x1) is being successfully implemented in small towns to restore or build roads, schools and hospitals. The government, the state and the municipality add a dollar to each migrant’s dollar, which is periodically expanded to 4x1 or 5x1: the fourth dollar can be provided by a donor (for example, USAID), and the fifth by a financial institution (in Mexico, the Western Union regularly provides such support). Of course, migrants or their representatives in their home countries take the initiative in choosing the facilities to be built. They come with a ready-made project to submit to the local authorities. Banks, as project partners (and not only as settlement institutions), must participate in the implementation of all three areas because both clients and financial resources are involved (Kravets 2021b). Unfortunately, none of the four state-owned banks in Ukraine specializes in banking services for migrants.

The government only needs to provide a vision and parameters for the country’s recovery, and businesses will work out options.

Conclusions

The problem of migration existed in Ukraine before the full-scale invasion of the Russian Federation, due to unregulated and imperfect legislation and the lack of a policy to attract migrants or re-migrate its citizens. With the outbreak of the war, the scale of the problem has grown to a level never seen before either in Ukraine or in the modern world as a whole. This problem is complicated by several issues related to the assistance given to Ukrainian refugees in other countries, which may discourage them from returning home. Ukraine needs to create its own re-migration vector, with the participation of countries that host its citizens, international organizations and migrants themselves.

For the post-war recovery of the economy, Ukraine must gain full access to the markets of the G7 and the European Union. As a consequence, the governments of these countries should abolish all quotas and import duties, including protective and anti-dumping duties for Ukrainian goods. There should be full deregulation and minimal government interference in business operations. A focus would be necessary on exports of processed products in industries where Ukraine has a competitive advantage in global markets (food and metallurgy). The basis of the country’s industrial policy should be to stimulate processing of raw materials to be exported; there are opportunities to start processing corn for bioethanol, alcohol, starch, and as feed for poultry, and pork, beef and eggs. The production should be increased of niche high-margin products from corn and wheat, specialized proteins used in the cosmetics, pharmaceutical and food industries.

It is important to build a powerful military-industrial complex that will become the basis for further development of aerospace technologies. IT would play an important role in this sector, with a central role played by military technology. In this regard, Israel can serve as a role model,

demonstrating how military technology can be the engine of the civilian economy. To implement this programme, Ukraine needs to increase its energy capacity and achieve energy independence.

It is also important to work with Western partners to create an effective post-war reconstruction plan. Partner governments can issue state guarantees to their companies to attract funds for investment in Ukraine and allow the implementation of major industrial projects. The concept of nearshoring is promising, turning Ukraine into an industrial zone for Europe, which will also actively stimulate the development of the service sector.

Ukrainians should be involved in the reconstruction, maximizing the use of domestic resources: building materials, cement and metal. Russia must pay for the destruction it has caused. The economic part of the recovery plan should include the full opening of the G7 and EU markets for Ukrainian goods, large-scale development of the military-industrial complex through technology transfer and military-tech, a focus on exports of finished goods in the traditional agricultural and metallurgical industries and the rapid development of energy and logistics based on the principles of the green economy.

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