

# Peculiarities of Migration Processes and Dynamics of Labor Potential in Ukraine after the Beginning War

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## ABSTRACT

The full-scale military invasion of the Russian Federation on the territory of Ukraine has provoked the emergence of significant destabilizing factors in the development of the economy and the society. Along with this, it has had the greatest impact on migration processes, provoking significant destructive changes in the country's labour potential. The purpose of the academic paper lies in studying the theoretical and applied principles of population migration as a factor of changing the labour potential in Ukraine since the beginning of the war. The methodological base of the present research consists of fundamental and applied methods of economic analysis, namely: functional-systemic approach; process approach method; comparative analysis and synthesis; observation and system analysis; statistical analysis and comparison; generalization and systematization; graphical and tabular methods. The obtained results of the conducted research make it possible to establish that population migration has a significant impact on the labour potential of Ukraine, which is manifested in the departure of a significant number of the population abroad (the volume of which reached 5,7 million people in 2022, of which 43,5 % constitute the working population age); consequently, this unbalances the national and international labour market. It has been revealed that 40 % of pupils and student youth have emigrated from Ukraine since the beginning of the Russian-Ukrainian war and continue their studies in foreign educational institutions, which threatens the outflow of highly qualified specialists in the future and the dominance of the domestic labour market by specialists of the middle and older age categories. It has been proven that the existing threat to the labour potential of the country lies in the forced deportation of the population of Ukraine to the territory of Russia, the volume of which is estimated at the level of 1 million 2 thousand people, without taking into account prisoners of war of the Armed Forces of Ukraine. It is proposed to focus the main efforts in the direction of the cessation of hostilities and the formation of a set of measures regarding interstate cooperation of Ukraine with other countries of the world in the field of population migration and development of labour potential.

## HIGHLIGHTS

- The purpose of the academic paper lies in studying the theoretical and applied principles of population migration as a factor of changing the labour potential in Ukraine since the beginning of the war.
- It is proposed to focus the main efforts in the direction of the cessation of hostilities and the formation of a set of measures regarding interstate cooperation of Ukraine with other countries of the world in the field of population migration and development of labour potential.

**Keywords:** Labour resources, migration flows, labour potential, migration, labour market, employment, unemployment.

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The intensification of the development of migration processes is observed in Ukraine over a long period of time and is caused by a deep social-economic and social-political crisis. It is obvious that the intensively developing democratization of the society after Ukraine had gained independence expanded the prospects for the population to go abroad and created unhindered conditions for satisfying consumer demand for luxury goods, which stimulated the development of migration outside the country. Over time, population migration has turned into a significant factor in the development of globalization, which has a significant impact on the country's labour potential, and the growing scale of migration flows has turned into a threat to the country's national interests, causing crisis phenomena and processes. The events caused by Russia's military aggression against Ukraine have only exacerbated the existing crisis phenomena and led to a significant increase in both internal and external migration flows. Taking into account the tendencies outlined, the issue of studying the features of population migration as a factor in the change of the labour potential in Ukraine in the conditions of the Russian-Ukrainian war becomes of particular urgency and relevance.

## Literature Review

Population migration, as a complex global social-economic phenomenon, is caused by a number of various factors that are constantly changing and characterized by individual features. Tatary (2020) claims that solving the issues of migration depend significantly on understanding the causes of its occurrence and the consequences it causes. At the same time, the interpretation of the term "population migration" lies not only in the physical crossing of the borders of a certain country, but also in overcoming linguistic, cultural and national barriers, in changes in the social-economic life of the country and in the need to adapt to new conditions of life.

Pieńkowski (2020) adheres to the viewpoint that migration processes outside the country reduce the supply of labour in the country and contribute to higher wages for those workers who remain in the country. However, the scientist emphasizes that significant destructive changes are observed in the structure of the country's labour potential,

which are caused by the loss of emigrants' skills which, in case of leaving Ukraine, lose their skills, because they work abroad outside their qualifications or perform simple work that is not related to professional activity. At the same time, Pieńkowski (2020) substantiates the positive effect of external migration by the inflow of remittances to Ukraine, the volume of which is estimated at the level of about 8 % of GDP annually. It goes without saying that the motivational priorities of external migrants play a significant role in deciding whether to leave the country and find employment in the labour market of a certain country. In particular, this especially applies to highly qualified specialists who, according to the viewpoint of Nikolaiets & Ozhelevskaya (2022), have reasons to participate in competition at the international level and position themselves as experienced and able to meet high standards and international requirements.

The issue of migration flows and their regulation was studied by scientists Oliinyk, O., Bilan, Y., Mishchuk, H., Akimov, O., & Vasa, L. (2021). The issue of labor resources in the context of sustainable development was dealt with Koval, V., Mikhno, I., Udovychenko, I., Gordiichuk, Y., & Kalina, I. (2021). The issue of training labor resources was studied Zinovieva, I.S., Artemchuk, V.O., Iatsyshyn, A.V., Popov, O.O., Kovach, V.O., Iatsyshyn, A.V., Radchenko, O.V. (2021).

Bilan (2017) investigated that external migration from Ukraine is a rather unpredictable and ambiguous phenomenon that has acquired global dimensions, and its constant intensification has led to the formation and activation of the development of the world's largest diaspora. At the same time, the current conditions of the development of the world economy have a favourable effect on the mobility of the population, and the liberalization of migration regimes, transport, communication and technological opportunities have created appropriate conditions for travelling abroad and employment outside of Ukraine.

Libanova (2019) is convinced that population migration is a primary factor of globalization and transnational development of the international labour market. Along with this, for Ukraine, labour migration is characteristic, which is driven by aspirations to receive higher wages and additional opportunities for self-fulfilment. At the same time,

the scientist claims that flows of external labour migration from Ukraine are mainly directed to countries with a higher level of social-economic development and living standards of the population. However, the main problem lies in taking up residence by highly qualified migrants in the country of destination, where they receive much better preferences and do not plan to return to the Motherland.

The events accompanying the development of Ukraine in 2022, according to the standpoint of Sandvic & Garnier (2022), have provoked the beginning of a new migration crisis, the humanitarian consequences of which will be devastating for the labour potential. Vogt Isaksen (2019) believes that the intensification of migration processes is observed in the period of economic instability, social-economic and social-political crises, and there is fierce competition on the labour market for high-paid employment. Considering the fact that the war in Ukraine led to catastrophic consequences, which were manifested in large-scale destruction and the outflow of significant amounts of labour resources outside the country, Gilchrist (2022) believes that the negative consequences will be felt not only for the country that suffers from armed aggression, but also for the countries of the European Union, which have received a significant number of migrants and are forming a set of measures to normalize the sudden influx of refugees.

In this case, Stepanek (2022) claims that population migration negatively affects the structure of the labour force, causes demographic changes and affects the formation of macroeconomic indicators of the country's development. Concurrently, the scientist proves that the reduction of effective labour supply will lead to a decrease in economic growth by approximately 4.4 % of GDP in the perspective up to 2050.

Hazans (2019) adheres to the similar viewpoint; the scholar complements the outlined destructive changes with significant population losses due to emigration and increased population ageing processes, forasmuch as a significant share of the working population leaves the country's borders.

In Ukraine, the issue of changing the labour potential as a result of migration processes became

relevant as early as 2014, and by 2022 it intensified and took on new forms. In particular, international labour migration, characterized by cyclicity, is supplemented by forced migration and the problems of Ukrainian refugees. Pavlov (2022) proves that under such conditions, the vector of social-economic problems of population migration has shifted to a political one, and the demographic situation continues to escalate in both donor and recipient countries. At the same time, the scientist proposes to divide the factors of change of labour potential in Ukraine into external and internal ones. He considers the Russian-Ukrainian war, the geopolitical location of Ukraine, the international context of migration, demographic processes, the migration policy of countries of destination, visa-free regime, the need for low-paid work, etc. to be external factors; and dissatisfaction with one's material situation, lack of opportunity to get a job in Ukraine, tense political situation, high corruption of social relations, uncertainty and unpredictability of social-economic and social-political development are internal ones. Tytarenko & Sacalo (2021) have investigated that it is population migration that is the most significant factor in the following changes in the labour potential in Ukraine, namely:

1. a decrease in the number of young people and highly qualified specialists in the structure of the labour potential;
2. the transformation of a part of labour migrants into permanent ones, which leads to reduction of labour resources;
3. deterioration of the demographic situation in the country.

It is obvious that the labour potential of Ukraine, which Rudik (2020) defines as a set of existing and potential possibilities of quantitative and qualitative parameters of work, which is in the possession of the society and individuals at a specific level of the country's development, is characterized as the most important and most dynamic component of the country's economic potential. It ensures the formation of a highly qualified workforce, and it is an effective tool for ensuring stable economic growth. Another problem of destructive changes in labour potential is the impossibility of its full implementation, which is affected by global challenges and dangers. It is beyond argument

that globalization processes have dramatically intensified migration flows, the most significant trends of which, according to Aleshkovski (2016), are as follows:

1. qualitative changes in the global labour market, which have a significant impact on national markets;
2. growth of illegal labour migration;
3. the dual nature of migration policy at the national, regional and global levels.

The existence of significant problems related to population migration is observed both in Ukraine, from where the economically active population and young people leave, and in the countries where they move to. The migration crisis is most felt in Poland, which has accepted the lion's share of Ukrainian refugees and provided a significant part of them with a place of work. It becomes obvious that the process of restoring the labour potential should be started now, without waiting for the end of the military conflict. Specialists of the Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine emphasize the urgent need to revive national institutions, markets and business entities, as well as infrastructure reconstruction (Mobility of the labour force of Ukraine in the conditions of the military economy, 2022). Along with this, the main emphasis is placed on implementing the maximum opportunities for labour mobility within the country and the ability to adapt to changing workplaces. After all, destabilizing factors of a military nature entail the forced displacement of the population for the safety and preservation of the lives of citizens, and the flow of migrants to European countries with the start of the Russian-Ukrainian war is characterized as the most powerful. Accordingly, the national policy of balancing the labour market should focus on both internal and external segments at the same time, and the period of post-war reconstruction will require overcoming the consequences of the destruction of the economy, reconstruction of territories, infrastructure and housing stock, which will lead to the creation of appropriate conditions for the development of internal mobility.

Taking into account the outlined challenges and dangers, Sadova (2019) suggests that the main efforts should be directed to the formation of a state

mechanism for regulating population migration, as well as to the development of the conceptual fundamentals of the regional policy concerning creation of workplaces, as a tool for regulating the migratory activity of the population, forasmuch as not all regions will be able to develop equally during the war and post-war reconstruction.

The issue of interdependence of migration processes and economic development was investigated Liudmyla Ladonko, Nataliia Mozhaikina, Zoriana Buryk, Ihor Ostrovskiy, Volodymyr Saienko (2022) as well as the strategic influence of adaptation of the public administration system on economic development was studied by such authors: Shebanina, O., Buryk, Z., Kliuchnyk, A., Shebanin, V., Rybachuk, V., (2021).

### Research Aims

The purpose of the academic paper lies in studying the theoretical and applied principles of population migration as a factor of changing the labour potential in Ukraine since the beginning of the war.

### MATERIALS AND METHODS

The methodological base of the research consists of fundamental and applied methods of economic analysis, namely: a functional-systemic approach in order to generalize and systematize the state and trends of population migration; the method of the process approach with the aim of identifying the main problems of labour potential development in Ukraine; comparative analysis and synthesis in order to study the factors of changing the labour potential in Ukraine, which are caused by the war; observation and systematic analysis in order to identify the essence of population migration and labour potential concepts; statistical analysis and comparison in order to characterize modern trends in migration processes; generalization and systematization for the purpose of forming conclusions based on research results; graphical and tabular methods for displaying the results of the empirical research.

The information base of the research consists of the scientific works of leading foreign and domestic scientists, reporting data of international organizations and national research institutions, in particular, as follows: Inflation Report of the National Bank of Ukraine for July 2022 by indicators

of the level of employment and unemployment; The situation on the labour market and the activity of the State Employment Service of Ukraine, 2013–2021 according to indicators of the level of employment, unemployment and labour force; World Migration Report 2020 and Nearly 5 million jobs have been lost in Ukraine since the start of the Russian aggression, says ILO, 2022 based on the indicator of the volume of external migration of the population; the Report on internal displacement in Ukraine by the number of forcibly displaced persons.

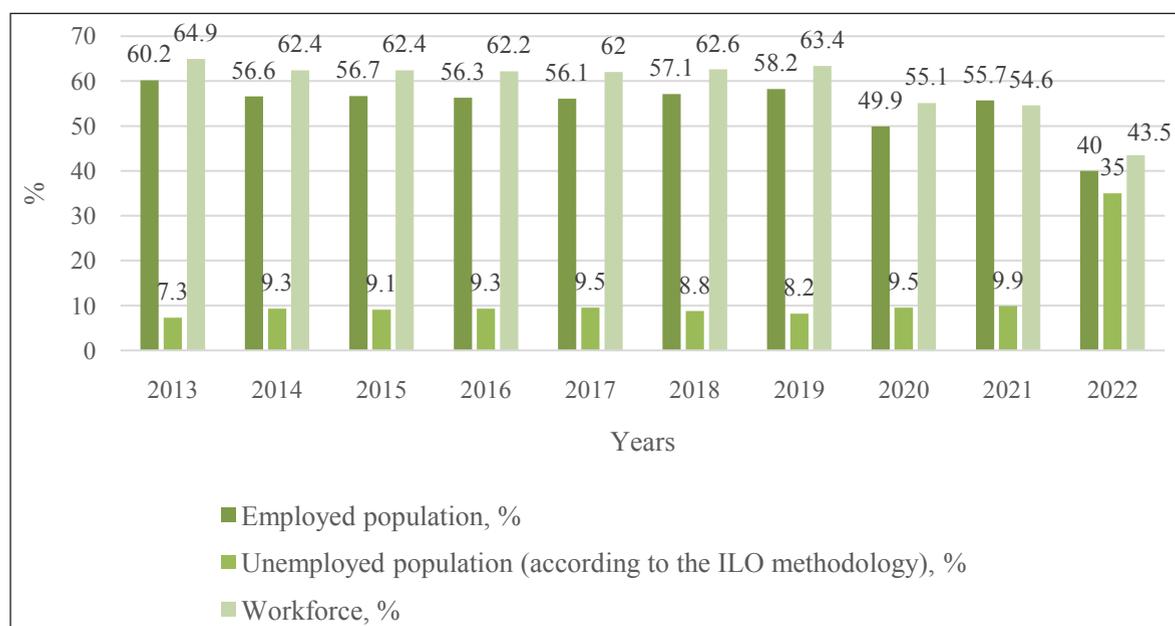
## RESULTS

The problems existing in modern conditions in Ukraine and provoked by social-economic and socio-political instability and armed aggression of the Russian Federation have enhanced the processes of intensification of population migration and significantly affected the parameters of the country's labour potential. At the moment, the country is not able to effectively counteract the destabilizing factors in the labour market of Ukraine, as a result of which the destructive changes in the labour potential continue to deepen.

The conducted studies of the main indicators of the Ukrainian labour market for the period 2013–2022 (Fig. 1) give grounds for asserting that problematic aspects of employment and unemployment existed

throughout the analysed period. In particular, a gradual reduction in population employment from 60.2 % in 2013 to 58.2 % in 2019 is observed. The period of spreading the COVID-19 pandemic, which fell on 2020–2021, further deepened the problems of employment, the share of which decreased to 49.9 % in 2020 and slightly increased to 55.7 % in 2021, however, it didn't not reach the pre-crisis level of 2019. The Russian-Ukrainian war of 2022 has provoked an unprecedented decrease in the level of employment to 40 %.

According to estimates made by the International Labour Organization (The Impact of the Ukraine crisis on the World of Work: Initial assessments, 2022), over 4,8 million workplaces were lost in Ukraine during the full-scale war, and based on forecasts, with further escalation of military conflict, this indicator may reach the mark of 7 million. At the same time, the existing situation on the labour market has significantly worsened due to the external migration of the population, the volume of which is estimated at the level of 5,7 million people, of which 2,75 million people are of working age, and 43.5 % or 1,2 million people have been previously employed (Nearly 5 million jobs have been lost in Ukraine since the start of the Russian aggression, says ILO, 2022).



**Source:** Compiled based on: *The situation on the labour market and the activity of the State Employment Service of Ukraine, 2013–2021*; *Inflation Report of the National Bank of Ukraine for July 2022*.

**Fig. 1:** Dynamics of labour market indicators of Ukraine in 2013–2022

It is obvious that the decrease in population employment indicators led to an increase in the unemployment rate, which was the lowest in 2013 (7.3 %), and it was characterized by further stable growth. The crisis period of spreading the COVID-19 pandemic deepened the processes of unemployment, the level of which reached 9.9 % in 2021. In the conditions of 2022, it is quite problematic to reliably estimate the level of unemployment, as well as the level of employment, however, as evidenced by the data of the National Bank of Ukraine (Inflation Report of the National Bank of Ukraine for July, 2022), the unemployment rate is 35%. Attention should be paid to the fact that the introduction of the wartime posture has led to a situation in which the population refuses to register as unemployed, which is due to:

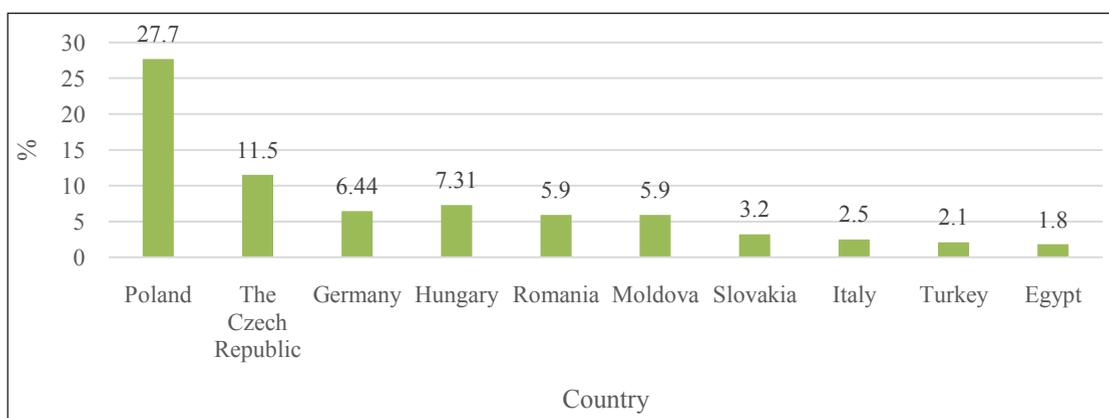
1. the departure of a significant number of the able-bodied population abroad and to other regions;
2. impossibility of obtaining complete and reliable information from the temporarily occupied territories;
3. lack of opportunity for the population to apply to employment centres and register as unemployed;
4. in accordance with current legislation, in wartime, employers terminate the employment agreement without dismissing employees.

The problems of the Ukrainian labour market are not limited to national borders. Crisis and

threatening tendencies spread to the labour markets of neighbouring countries, in particular, as follows: Poland, Romania, Slovakia, the Czech Republic, Germany, Hungary, Italy, Turkey, Egypt and Moldova, which have accepted the largest number of refugees from Ukraine (Fig. 2). Accordingly, the labour market of recipient countries feels additional pressure, and the social protection system is unable to withstand such challenges. As a result, the processes of unemployment and other destructive phenomena are intensifying on the territory of European countries.

As the data of the figure show, since the beginning of the war, external migration from Ukraine has had the greatest impact on Poland due to the fact that 27.7 % of the total number of refugee emigrants have moved to its territory; by the way, 11.5 % have moved to the Czech Republic, 7.31 % – to Hungary and 6.44 % – to Germany. However, it should be noted that these countries faced the problems outlined far before 2022 and prior to the start of a full-scale war. It is obvious that migration processes have been accompanying the development of the countries of the analysed group over a long period of time, which is confirmed by the annual reports on migration. In particular, such a document as of 2020 (World Migration Report, 2020, 2022) states that 6,05 million people (12.2 % of the total population of Ukraine) are migrants who left the country, mainly for the purpose of obtaining earnings, the size of which is much higher outside of Ukraine.

Taking the tendencies outlined into account, we consider it expedient to monitor the dynamics of



Source: Compiled based on: Nearly 5 million jobs have been lost in Ukraine since the start of the Russian aggression, says ILO, 2022.

Fig. 2: Ranking of countries that have accepted the largest number of refugees from Ukraine in 2022

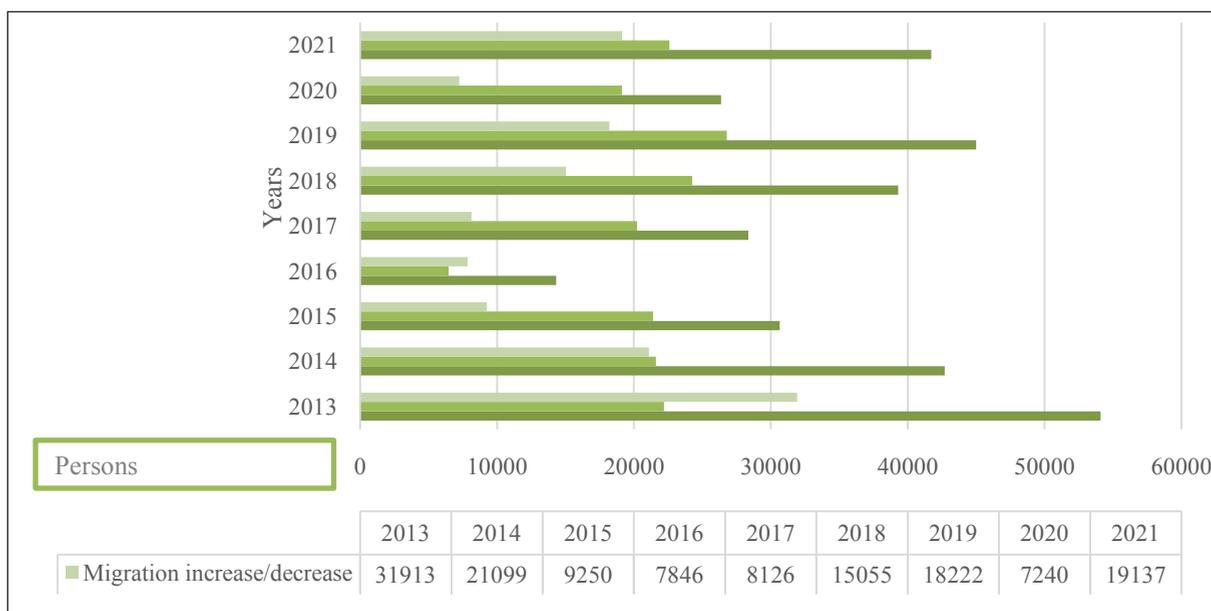
the number of interstate migrants in 2013–2021 (Fig. 3). The results of the conducted studies have revealed that in the pre-war period, no clear and stable dynamics were observed in the number of interstate migrants; however, during periods of financial-economic and social-political crises, the value of the analysed indicators decreased sharply. The highest number of arrivals was in 2013 (54 100 people), and, by 2016, it decreased to 14 311 people. The subsequent period of 2017–2019 is characterized by a slight upward trend; in 2020, there was a sharp decrease again to 26 361 people. 2021 again showed an increase in the number of arrivals to 41 724 people.

As for the dynamics of the number of persons left, it has similar trends as migration growth, which proves that the number of persons arrived exceeded the number of persons left during the analysed period.

Analysing the state and tendencies of population migration in the conditions of 2022, it has been revealed that migration flows have shifted the vector of their direction from labour migration to migration in order to preserve life, health and ensure safe living conditions. According to official data of the International Organization for Migration (Report on internal displacement in Ukraine. Round 8, 23.08.2022), as of August 2022, the total number of forcibly displaced persons is

13,7 million people, among whom 5,7 million people left Ukraine. Most of the forcibly displaced persons, regardless of where they are, are on a job search. What is more, only in some cases qualifications, professional abilities and skills are of fundamental importance, however, basically, searchers agree to any job. Accordingly, there are changes in the labour potential both inside the country and outside its borders. Moreover, highly qualified specialists, having received a highly paid job abroad, do not seek to return to an economically and politically unstable country, which is confirmed by surveys of Ukrainian emigrants, among whom only 4 % plan to return home.

The departure of young people abroad can be specified as a catastrophic phenomenon of changing the labour potential of Ukraine, which is confirmed by the estimates of international organizations, according to which 40 % of pupils and students are currently outside Ukraine. Taking into account the fact that even in the pre-war period, the countries of the European Union were interested in attracting capable applicants to the educational process on their territory, offering loyal and attractive conditions for training and further employment, there is a growing threat that the majority of Ukrainian youth will not return home, as a result of which the labour market will be formed by specialists of the middle and older age categories.



Source: Compiled based on: Population migration by type of area in 2002–2021

Fig. 3: Dynamics of the number of interstate migrants in 2013–2021

The intensification of labour migration processes in Ukraine can be considered as one of the biggest threats after the Russian-Ukrainian war, forasmuch as a significant part of the working population left the country, and the other part came to protect the state and moved from the real industrial sector to the security and defence sector. Undoubtedly, population migration, regardless of its types, has a significant impact on changes in the country's labour potential. Moreover, the global problem of another type of migration is of particular significance, which is poorly investigated and has arisen as a result of the Russian-Ukrainian war. This is the forced deportation of the population from Ukraine to Russia, the volume of which, according to data (Dinyak, 2022), has reached 1 million 2 thousand people as of April 2022, not including captured servicemen of the Armed Forces of Ukraine. It has to be noted that the changes in the labour potential in Ukraine during the period of military confrontation are impressive, and the losses are colossal, which requires the immediate adoption of appropriate measures at the national and international level, the first of which is the cessation of hostilities on the territory of Ukraine.

## DISCUSSION

The threats, challenges and dangers caused by the full-scale military invasion of the Russian Federation on the territory of Ukraine have caused the emergence of crisis phenomena in the development of labour potential, and population migration has become the most significant factor in its destructive changes. Wide-scale damages and destruction of infrastructure, estimated at 2 078 million US dollars, significant losses of the civilian population, which according to official data alone are estimated at 4 031 people killed and 4 735 people injured, 1 million 2 thousand people forcibly deported and the territory of Russia, 13,7 million people forcibly displaced, of which 5,7 million people have left the country, confirm significant imbalances in the development of labour potential and aggravate the problem of its preservation.

It has to be noted that migration as a factor of changes in the labour potential of Ukraine is not a new problem that has arisen under the influence of the war, but it is experienced throughout the entire period of the country's independence and

significantly unbalances the situation on the labour market. The growing scale of population migration in 2022 taking into account internal displacement and migration abroad has been increased by the need to preserve life, health and guarantee safe living conditions. The consequence of mass migration flows from Ukraine was destructive changes in the labour market of such countries as: Poland, the Czech Republic, Hungary, Germany, Italy, Turkey, Egypt, Romania, Slovakia and Moldova, which received the largest number of Ukrainian emigrants.

Under such conditions, the normalization of migration processes at the regional, national, and international levels is of primary importance, which can be achieved thanks to the cessation of hostilities on the territory of Ukraine, the de-occupation of captured regions, and the return of the economically active population to Ukraine. However, the period of post-war reconstruction, unfortunately, will take long time, and it will not be possible to quickly overcome the negative phenomena of the development of the labour potential, which is caused by the emigrants' mood to stay in the recipient countries. Moreover, and after repeal of martial law and cancellation of the ban on men travelling abroad, a significant proportion of men will leave Ukraine to avoid conscription or to reunite with their families. Therefore, the formation and implementation of interstate cooperation programs in the field of population migration and labour potential development is of particular importance.

## CONCLUSION

Thus, the results of the conducted research on the theoretical and applied principles of population migration as a factor of changes in the labour potential in Ukraine since the beginning of the war give grounds for asserting that migration processes were a significant factor in changing the labour potential even prior to the beginning of the Russian-Ukrainian war, and during the period of the full-scale invasion, they have only intensified and deepened. It has been proven that population migration threatens the development of the labour potential by the outflow of highly qualified specialists, a decrease in the volume of the workforce, and also destabilizes processes

and phenomena on the labour market. It has been established that negative tendencies are observed not only in the domestic labour market, but also extend to the labour markets of those countries that accepted the largest share of refugees from Ukraine, in particular, such as: Poland, the Czech Republic, Hungary, Germany, Italy, Slovakia, Turkey, Moldova, Romania and Egypt. Significant losses of Ukraine's labour potential due to population migration and other reasons were revealed. In particular, 13,7 million forcibly displaced people were recorded in Ukraine, of which 5,7 million people went abroad, 4 031 people were killed and 4 735 people were injured, and 1 200 000 people were forcibly deported to the territory of Russia. In order to get out of the crisis situation, it is proposed to form and develop a set of measures to implement programs of interstate cooperation of Ukraine with other countries of the world in the field of population migration and labour potential development.

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