

**Zinaida Smutchak**

E-mail:smutchakzv@gmail.com

Doctor of economic sciences, professor,  
Educational and Scientific Institute of Management and Psychology  
of State Higher Educational Institution «University of Educational Management»,  
Kyiv, Ukraine  
<https://orcid.org/0000-0002-6079-9227>

## CONSEQUENCES OF DEMOGRAPHIC COLLAPSE IN UKRAINE

**Abstract:** The article analyzes the demographic situation in Ukraine, which testified to the existence of a deep demographic crisis in Ukraine along with socio-economic problems. The low standard of living, political instability and difficult state conditions caused a dramatic shift in the country's demographic balance. Attention is paid to the problem of migratory activity of the population, in particular forced migration, as a factor influencing the indicators of the demographic situation in the country. Due to the full-scale war caused by Russia, millions of women and children were forced to leave the country. It is worth noting, that many years, Ukraine was the main labour donor country for neighboring Poland, Slovakia, the Czech Republic, and Hungary. The consequences for the economy of Ukraine are determined, as well as the main problems relevant for the labour market based on the results of a general analysis of demographic, statistical and analytical information. In any case, depopulation awaits Ukraine - regardless of whether the forced migrants return or not. This means that there will be a shortage of labour in Ukraine, and human capital will be lost. If nothing is changed, in a few years' time, there will be twice as many pensioners in Ukraine as there are working people. That is why the issue of demography should be a priority today and requires urgent measures. The strategy for overcoming the demographic crisis in Ukraine should primarily include two directions: the returning of Ukrainians home from forced emigration; maximum wide-scale work to restore the reproductive potential of the nation.

**Keywords:** migration, forced migration, demographic crisis, demographic balance, military aggression, human capital

**JEL classification:** J01, J11, J61 J62

**ზინაიდა სმუტჩაკი**

E-mail:smutchakzv@gmail.com

ეკონომიკურ მეცნიერებათა დოქტორი, პროფესორი,  
მენეჯმენტისა და ფსიქოლოგიის საგანმანათლებლო და  
სამეცნიერო ინსტიტუტი მენეჯმენტის უნივერსიტეტი

კიევი, უკრაინა

<https://orcid.org/0000-0002-6079-9227>

## დემოგრაფიული კოლაფსის შედეგები უკრაინაში

**აბსტრაქტი.** სტატიაში გაანალიზებულია უკრაინის დემოგრაფიული მდგომარეობა, რომელიც მოწმობს უკრაინაში ღრმა დემოგრაფიული კრიზისის არსებობას სოციალურ-ეკონომიკურ პრობლემებთან ერთად. ცხოვრების დაბალმა დონემ, პოლიტიკურმა არასტაბილურობამ და მძიმე სახელმწიფო პირობებმა გამოიწვია ქვეყნის დემოგრაფიული ბალანსის დრამატული ცვლილება. ყურადღება ეთმობა მოსახლეობის მიგრაციული აქტივობის პრობლემას, კერძოდ იძულებითი მიგრაციას, როგორც ქვეყნის დემოგრაფიული მდგომარეობის მაჩვენებლებზე გავლენის ფაქტორს. აღსანიშნავია, რომ მრავალი წლის განმავლობაში უკრაინა იყო შრომის მთავარი დონორი ქვეყანა მეზობელი პოლონეთისთვის, სლოვაკეთისთვის, ჩეხეთისა და უნგრეთისთვის. დემოგრაფიული, სტატისტიკური და ანალიტიკური ინფორმაციის ზოგადი ანალიზის შედეგების საფუძველზე განისაზღვრება უკრაინის ეკონომიკისთვის შედეგები, ასევე შრომის ბაზრისთვის აქტუალური ძირითადი პრობლემები. ნებისმიერ შემთხვევაში, უკრაინას ელის დეპოპულაცია - იმისდა მიუხედავად, იძულებითი მიგრანტები დაბრუნდებიან თუ არა. ეს ნიშნავს, რომ უკრაინაში მუშახელის დეფიციტი იქნება და ადამიანური კაპიტალი დაიკარგება. თუ არაფერი შეიცვლება, რამდენიმე წელიწადში უკრაინაში ორჯერ მეტი პენსიონერი იქნება, ვიდრე მშრომელი. ამიტომ დემოგრაფიის საკითხი დღეს პრიორიტეტული უნდა იყოს და სასწრაფო ღონისძიებებს მოითხოვს. უკრაინაში დემოგრაფიული კრიზისის დაძლევის სტრატეგია პირველ რიგში უნდა მოიცავდეს ორ მიმართულებას: უკრაინელების იძულებითი ემიგრაციიდან სახლში დაბრუნება; მაქსიმალური ფართომასშტაბიანი მუშაობა ერის რეპროდუქციული პოტენციალის აღსადგენად.

**საკვანძო სიტყვები:** მიგრაცია, იძულებითი მიგრაცია, დემოგრაფიული კრიზისი, დემოგრაფიული ბალანსი, სამხედრო აგრესია, ადამიანური კაპიტალი

**JEL კლასიფიკაცია:** J01, J11, J61 J62

---

## Introduction and review of literature

The demographic situation in a particular country characterizes the reproduction of the country's population in spatial and temporal certainty. Ensuring conditions for the development of the population of Ukraine should be considered as one of the highest priority of national interests in the foundations of state policy and national security. Since the demographic factor is one of the determining factors for ensuring the stable and safe development of the state, and the problems of its optimal development should be considered as the primary interests of the state, as a factor and at the same time as a result of its functioning. The development of the labour potential and, accordingly, the amount of the total national income depends on the demographic indicators of the working population and indicators of demographic development. The analysis of the current demographic situation, as well as the dynamics of recent years, indicates the existence of a deep demographic crisis in Ukraine along with socio-economic problems.

Theoretical and methodological aspects of social and demographic development have always been and remain the subject of research by many scientists, in particular, E. Libanova (2012), O. Malinovska, V. Onikienko, T. Petrova, S. Pirozhkov (2006), O. Pozniak, I. Prybytkova have made significant contributions in this area, and other. In particular, the famous Ukrainian scientist S. Pirozhkov considered the demographic crisis one of the most significant threats to the national security of Ukraine (Pirozhkov, 2006). Such scientists as E. Libanova (2012), O. Makarova (2015) studied the problem of state regulation of the demographic development of large cities of Ukraine. Methodological, methodical and applied research by V. Antonyuk (2011), O. Grishnova (2011), G. Nazarova, S. Pozdniakova (2011) aimed at ensuring the development of areas, that affect the quality of the formation of the country's human capital. However, the vast majority of scientific works need a radical rethinking from the standpoint of the possibilities of their use under the fundamentally new economic conditions of Ukraine.

## Methodology

The purpose of the article is to analyze the demographic situation in Ukraine, in particular, caused by the full-scale invasion of Russia, as well as its consequences

To solve the set goal, theoretical methods of scientific research were used: analytical - for collecting, summarizing and processing scientific information regarding the development of demographic processes; abstract-logical – to determine motivational factors of population movement; analogies and comparisons – to determine measures of influence on the demographic situation in Ukraine; generalization – for formulating conclusions based on research results.

## Results

Russian aggression in Ukraine has caused a devastating humanitarian crisis, spurring the fastest forced displacement since World War II. After 24 February 2022, more than 5,23 million refugees fled fighting in neighboring countries, namely Poland, Romania, Moldova, Hungary and Slovakia. A significant number of refugees left for other countries. 4,867,106 internally displaced persons are officially registered in Ukraine, and according to international estimates, the number of internally displaced persons exceeds 7 million citizens (The official website of the Ministry of Reintegration of the Temporarily Occupied Territories of Ukraine, 2023). In general, according to estimates, up to 70% of the population of Ukraine was affected by hostilities (Moods of Ukrainians and actions during Russia's full-scale war with Ukraine, 2022).

In addition, 208,000 citizens of countries that are not members of the EU (in particular, many migrant workers and students) fled from Ukraine to neighboring countries. For many years, Ukraine was the main labour donor country for neighboring Poland, Slovakia, the Czech Republic, and

Hungary. These countries not only actively used Ukrainian human capital, they had special programs to attract labour migrants from Ukraine, simplified the rules of their employment and stay, had "social packages" for Ukrainian labour migrants, and actively attracted students and schoolchildren. In ten years, there was a risk of losing about 5 million of the working population both due to declining demographics and due to labour migration. In the end, the losses occurred not in ten years, but in the first month (Struggle for people: Ukraine has lost the battle, but must win the war, 2023).

It is worth emphasizing, that the war deepened the demographic crisis in Ukraine, intensified migratory processes, as well as a drop in the birth rate. According to official statistics, at the beginning of 2022, 41,2 million people lived in Ukraine (not including Crimea, Sevastopol, and certain districts of Donetsk and Luhansk regions).

In March 2023, more than 8 million Ukrainians were in Europe. About 5 million of them requested temporary protection in EU countries. In total, since February 24, 2022, 19,5 million movements from Ukraine abroad, and more than 11 million to Ukraine, have been recorded (Demographic collapse in Ukraine: a critical decline in the birth rate and its consequences, 2023).

The number of people, who left Ukraine, continues to exceed the number of those, who returned. Since the beginning of 2023, 2.2 million people have crossed the border of Ukraine to neighbouring countries, and 1,7 million have returned to Ukraine, which indicates an increase in the number of people fleeing war. It is also worth noting, that there has been a problem of fertility in Ukraine for a long time, and the war intensified this aspect even more, because many people went abroad. It should be noted, that the population of Ukraine decreased from 51,9 million people in 1991 to 41,2 million people in 2022. One of the main reasons for the decrease in the population of Ukraine – is also a large emigration due to a low standard of living. Persons, who have left, not only support the economy of EU countries, but also contribute to the development of local (How many Ukrainians will remain after the war: experts on population reduction and the catastrophic ratio of women and men, 2023).

As known, the legislation of Ukraine limits the ability of men to emigrate, but after the end of the war, this may become relevant for many families.

The low standard of living, political instability and difficult state conditions caused a dramatic shift in the country's demographic balance. About 17 million Ukrainians are currently economically inactive, which is 58,6% of the population. This calls into question Ukraine's ability to recover from the war without foreign aid.

According to the Central Statistical Office (The official website of the State Statistics Service of Ukraine, 2023), there are only 12 million active citizens in Ukraine, while, for example, Poland has more economically active citizens – more than 17 million.

The war also had a negative impact on the birth rate in Ukraine. If in 2021, 1,2 children were born per woman in Ukraine, then the birth rate in 2022 is estimated at 0,9 children. At the same time, for the population to grow, the fertility rate should be more than 2. If nothing is changed, in a few years' time, there will be twice as many pensioners in Ukraine as there are working people. That is why the issue of demography should be a priority today and requires urgent measures.

It is worth noting that in Ukraine, only in the first six months of 2023, the birth rate decreased by 28% compared to the same period before the full-scale war. This is a record drop since Ukraine gained independence in 1991.

In Ukraine, the birth rate was one of the lowest in Europe even before the full-scale invasion of Russia. Now the indicator may become the lowest in the world.

According to a negative scenario, the population of Ukraine may decrease to 30 million over the next two decades compared to 43 million on the eve of the Russian invasion (The official website of the

---

Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, 2023).

The birth rate in Ukraine began to fall (by 12%) even after the occupation of Crimea in 2014. However, after the outbreak of full-scale war, the birth rate generally fell to 1,2. This is at the same time that in order to maintain the population size, this indicator should be 2,1 children per woman. The full-scale war forced millions of women and children to flee the country, and men between the ages of 18 and 60 were banned from leaving, leaving many couples physically separated and others delaying having children. Today, Ukraine is facing a demographic crisis, as a result of which the birth rate in the country has fallen to a critically low level.

Ukraine is experiencing a demographic collapse – the population has decreased to about 29 million people. According to the study of the Ukrainian Future Institute, the birth rate in Ukraine has fallen below 1, which is below the critical level (The official website of the analytical center "Ukrainian Institute of the Future", 2023).

The population of Ukraine decreased from 51,9 million people in 1991 to 41,2 million people in 2022, while, for example, the population of Poland was stable at about 38,5 million people. One of the main reasons for the population decrease is large emigration due to the low standard of living in Ukraine. At the same time, in 2023, Poland can boast a population of 41 million people, many of whom are migrants from Ukraine. These individuals not only support the Polish economy, but also contribute to the development of local companies.

During hostilities, Ukrainian legislation restricts the ability of men to emigrate, but after the end of the war, this may become relevant for many families.

The low standard of living, political instability and difficult state conditions caused a dramatic shift in the country's demographic balance. About 17 million Ukrainians are currently economically inactive, which is 58,6% of the population. This calls into question the ability of Ukraine to recover after the war without foreign aid, especially since there are only 12 million economically active citizens in Ukraine (Ukraine is depopulating, there are fewer people there than in Poland!, 2023).

As for the number of those who left Ukraine, according to the Office of the United Nations High Commissioner for Refugees (UNHCR), more than 6,2 million Ukrainians left the country since the beginning of the war. Of them, more than 5,8 million ended up in Europe. The number of internally displaced persons (IDPs) in Ukraine itself is estimated at 5 million people (The official website of the Office of the UNHCR, 2023).

Although disputes about the exact scale of migration caused by Russian aggression against Ukraine continue, the UN data is considered the most complete, because it is based on access to information from many countries.

Among those, who generally left their homes when the war started, about half are women. As already mentioned, during the martial law, men aged 18-60 are prohibited from leaving Ukraine, so there are significantly more men among the migrants inside the country than among Ukrainians abroad. There, families of Ukrainian refugees are often incomplete and broken.

Another important group is children. According to the UNHCR, more than a third of all Ukrainian refugees abroad are minors. The percentage of children among Ukrainian refugees abroad is higher than among internally displaced people in Ukraine itself. On the other hand, there are significantly more elderly people among internally displaced persons – even if they have left their homes, they rarely dare to leave Ukraine. So, if we talk about Ukrainians who are abroad, then it is more likely women of working age with children, and if we talk about internal migrants, it is rather a full family of

a woman and a man, in which there are both children and elderly people (The official website of the Office of the UNHCR, 2023).

But the most noticeable difference between refugees abroad and internally displaced people is when it comes to economic factors. If among the refugees more than 40% already have a job, then among those who remained in Ukraine, about a third do so. Both refugees and displaced persons rely on social assistance and lump sum payments. But among internally displaced people there are much more of them than among refugees abroad. The difference in the number of Ukrainians re-profiling in order to find a job is especially impressive, among refugees it is already 11%, while among displaced people within the country – only 0,2%. In part, this can be explained by the fact that there are more elderly people among the migrants. However, such discrepancies in numbers also speak volumes about the general attitude and objective possibilities of finding a job or acquiring another profession – in Ukraine and abroad. According to the latest UNHCR survey, most refugees from Ukraine still hope to return home in the future, but will remain where they are now (The official website of the Office of the UNHCR, 2023).

Approximately the same share of refugees and internally displaced persons plan to return home in the next three months – only 14-15%. Among displaced people, there are twice as many who have already decided not to return to where their home was, 12% compared to 6% among refugees. On the other hand, there are three times more undecided among refugees – 18% compared to 6% among displaced persons. Perhaps this is due to the fact that many migrants, who moved from the south and east, simply have nowhere to return physically. But refugees may have a whole house far from the war zone. There is another category – those, who want to be reunited with their family members in Ukraine, and their homes, have not been destroyed.

At the same time, in the states neighboring Ukraine, the share of those, who are ready or hope to return, is higher. The further away from Ukraine refugees live, the less willing they are to return. At the same time, the majority of refugees in countries neighboring Ukraine are from the east and south of the country, while more refugees from Kyiv and Kharkiv went to other countries.

The UNHCR also notes that those who have temporarily returned and visited their home at least once are more inclined to return (The official website of the Office of the UNHCR, 2023).

Those, who returned to Ukraine for a short time, say that the main reasons were the desire to see relatives and friends, as well as to go to doctors or draw up documents. The reasons for returning "forever" are the desire to reunite with family and live in their cultural environment.

If we summarize all this, the least eager to return are Ukrainian refugees of working age without dependent family members, more often from countries that are not neighbors of Ukraine, and left more than a year ago, at the beginning of the war. Elderly people and refugees with children, who rely heavily on social benefits, want to return the fastest. It is clear that the end of the war is the main factor of return or non-return. 90% of Ukrainian refugees abroad say that their decision to return is influenced by the security situation at home. Among internally displaced people, there are even more of them – 95% of respondents. Both refugees abroad and migrants in Ukraine attach great importance to living conditions – the availability of work in the place that was their home before the war, as well as the stability of water supply, electricity, and basic services.

Conditions for living and working, but already in the current place of stay, are also important for three quarters of Ukrainians abroad and more than half of the migrants in Ukraine (The official website of the Office of the UNHCR, 2023).

Taking into account the migratory activity of the population of Ukraine and the depopulation that has been going on for more than a decade, it is worth noting the following options for the development of events:

a). the potential for demographic growth has been exhausted, since for 60 years – since the mid-1960s - the birth rate in Ukraine has not provided even simple reproduction of generations. In order for the next generation to be at least equal to the previous one, 100 women must give birth to approximately 215 children. In 2021, this figure in Ukraine was 120. The lowest level was in 2001 – 109. Accordingly, each subsequent generation in our country is smaller than the previous one.

Since 2015, data on the population of Ukraine provided by Ukrainian statistical authorities exclude the illegally annexed and temporarily occupied Autonomous Republic of Crimea and the city of Sevastopol, as well as part of the temporarily occupied territories of the self-proclaimed separatist entities of Donetsk and Luhansk. This exception explains the reduction of almost 2,5 million people observed between January 1, 2014 and January 1, 2015. Such a sharp drop occurred within the framework of a more general tendency to decrease the population of Ukraine (Fig. 1). From 2015 to 2021, the population of Ukraine decreased by 1,3 million, the total decrease was 3,1%.

b). in Ukraine, premature mortality is high, primarily among men. 42% of twenty-year-old youths in Ukraine do not live to the age of 65 (that is, they die during the period of working age). These are data for 2021, without taking into account the impact of the war, which further worsens the situation. For women, this figure is 19%.

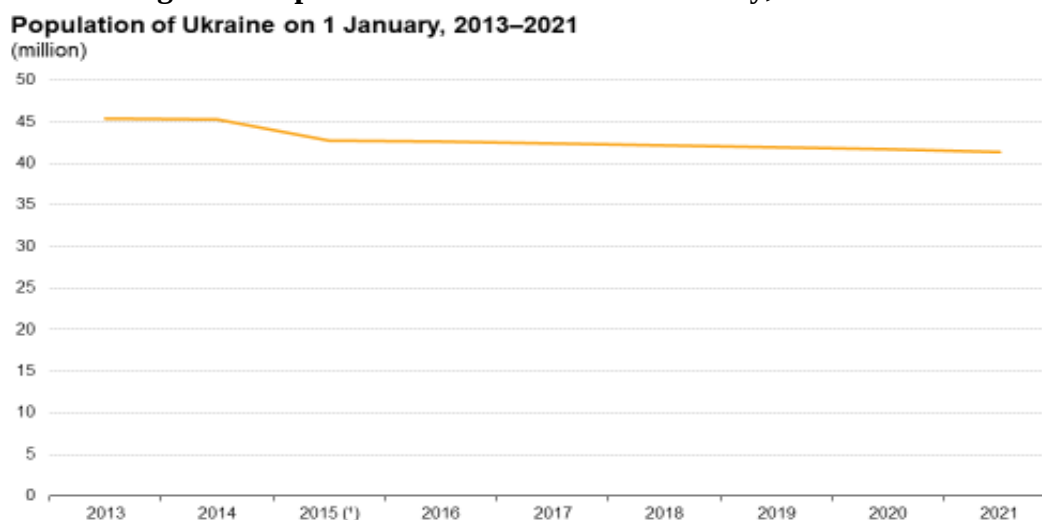
c). the share of people aged 65+ already exceeds the share of youth under 15 by 20%.

d). long-term large-scale population outflow abroad. Before the war, it was believed that approximately 3 million Ukrainians worked abroad, and as a result of the full-scale invasion, approximately 6 million more people left.

According to Eurostat data, as of August 1, 2023, 4,1 million Ukrainians are registered in EU countries (The official website of the Eurostat, 2023).

The largest concentration of our migrants is in Germany, Poland, and the Czech Republic. According to the High Commissioner for Refugees, as of March, there were about 1,2 million people in Russia and Belarus. About a million more are in other countries of the world. These are mainly Great Britain, USA, Canada, Argentina and Japan.

**Figure 1. Population of Ukraine on 01 January, 2013 – 2021**



---

**Source:** Eurostat Statistics Explained, Ukrainian citizens in the EU, 2023.

If talk about the population of Ukraine in 1991 as of January 1, 2023, it is approximately 37,6 million people. Territories controlled by Ukraine are 31,6 million. So Ukraine is in any case depopulation – regardless of whether the forced migrants return or not. This means that there will be a shortage of labour in Ukraine, and human capital will be lost. Until March 10, 2022, approximately 100,000–120,000 people left Ukraine every day. People left mainly from Kyiv and Kharkiv. These are active citizens who were not afraid to leave – not every woman could leave alone with her children. For example, 70% who are in Germany have higher education. Obviously, they can adapt. In addition, a third of those who left are children under 18 years old. If they receive education abroad, it will be very difficult to bring them back.

The smaller our working-age population compared to pensioners, the greater the burden on those who work. And this means that taxation will not be low. And as a result, it will be more profitable for entrepreneurs to open their business in other countries, rather than in Ukraine.

An aging population means a smaller share of youth, the most creative part of the population, which is able to acquire new knowledge, skills and professions.

It is also worth emphasizing, that the war also changed the structure of the economy and became the cause of a whole series of new challenges. According to the results of the general analysis of demographic, statistical and analytical information, the following main problems relevant for the labour market of Ukraine today should be determined:

- massive outflow of labour resources outside and within the borders of the state, which caused "brain drain" and Ukraine's loss of competitive human capital;
- relocation and closure of Ukrainian businesses to relatively safe territories;
- the high level of unemployment in Ukraine and the retraining of the working population due to the reduction of jobs and salaries in the labour market;
- lack of safety of education seekers while studying in educational institutions, transformation of education formats, reduction in the quality of education and the choice of foreign educational institutions by applicants to replace Ukrainian ones;
- psychological support of the population in the conditions of war and the need for adaptation of military veterans, the need for active support of mental health by employers of their employees.

If talk about the consequences for the economy of Ukraine, then it is worth highlighting the following:

- Ukraine is losing its future (about 6 million people, including about 2,5 million children, have left the country since the beginning of the large-scale war;
- the number of working population in Ukraine will decrease to 10 million people;
- Ukraine will lose about 60 billion dollars every year if it does not return its migrants;
- a reduction in the number of people will lead to a decrease in consumer spending, which means a narrowing of the native market and a limitation of GDP growth – it will not grow by more than 2% per year;
- crises in the labour market and in the pension system are inevitable: by 2050, almost a third of the population in Ukraine will be over 60 years old;
- Ukraine's need for migrants from other countries has increased to 1–1,2 million people per year.

Historically, it happened that the territory of modern Ukraine repeatedly became a donor of population for many territories of the European continent, as well as Asia and America. Without going into historical details, it is worth remembering, that a significant ethnic group of Ukrainians formed in

Kazakhstan over several historical waves. According to the country's 2021 census, the official number of Ukrainians was slightly less than 400,000 people – one of the largest ethnic groups, which is mostly concentrated in the north of Kazakhstan. But, based on local archival documents, including international families and carriers of Ukrainian surnames, the number of ethnic Ukrainians may reach more than a million people.

If do not take into account Russia, where according to official statistics there are almost two million Ukrainians, and according to unofficial statistics there may be more, Kazakhstan has the largest diaspora among the former Soviet republics. Only Moldova can compete, but there it is worth counting the number due to the situation in Transnistria. There are about 150,000 ethnic Ukrainians in Belarus, up to 90,000 in Uzbekistan. Tens of thousands live in Kyrgyzstan and Turkmenistan.

It is obvious that the numerous diaspora of the American continents is unlikely to be interested in the standard of living in Ukraine, but the post-Soviet countries have "donor" potential. Since all these countries are authoritarian, and some are despotic, a democratic Ukraine with a clear mentality and interesting perspectives could become a "promised land" for ethnic Ukrainians (Demographic collapse in Ukraine, 2023).

### **Conclusions**

One of the most serious threats to the reproduction and development of human capital in modern Ukraine is the demographic crisis observed in the country. The crisis mainly manifests itself in negative qualitative changes, leads to serious transformations in the structure of the population, which directly threatens the existence and further development of the state. The solution to the problem of the demographic crisis lies in the sphere of public administration. The most important indicator of the effectiveness of such management can be the implementation of measures to overcome negative qualitative changes in the structure of the population.

The strategy for overcoming the demographic crisis in Ukraine should primarily include two directions:

- ✓ return of Ukrainians home from forced emigration;
- ✓ maximum wide-scale work to restore the reproductive potential of the nation.

But this does not exclude the need to develop a migration strategy of Ukraine. And the Ukrainian approach should take into account all the mistakes made by European countries. After all, in many European countries, migrants, most of whom live on social assistance from the state, have become a negative destabilizing factor.

Therefore, it is necessary to be aware of the need to replenish the country with labour force, and to take into account all the threats of migratory processes, which determines the prospects of future research.

### **References**

1. Pirozhkov S. (2006). Formation of market economy: introduction. Democratic development of Ukraine and priority tasks of demographic policy: coll. of science works of the International science and practice conf. Vol. 1. K.: KNEU, 392 p.
2. Libanova E. & Makarova O. (2012). Human development in Ukraine: social and demographic factors of modernization of the national economy: col. monogr.; under the editorship E.M. Libanova. K.: Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, 320 p.
3. Makarova O. (2015). Social policy in Ukraine: monograph. K.: Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, 244 p.

4. Grishnova O. (2011). Accumulation of human, intellectual and social capital of the enterprise as the main form of its capitalization. Bulletin of the Donetsk Institute of Economics and Law. Donetsk, No. 1. P.10-13.
5. Antonyuk V. & Amosha O. (2011). Human capital of the regions of Ukraine in the context of innovative development: monograph., Donetsk: NAS of Ukraine. Institute of Industrial Economics, 308 p.
6. Pozdniakova S. (2011) Assessment of accumulation of human capital at industrial enterprises. Donetsk: Nord-Press, 172 p.
7. The official website of the Ministry of Reintegration of the Temporarily Occupied Territories of Ukraine (2023). Date of access: 08.11.2023. <https://minre.gov.ua/>
8. Moods of Ukrainians and actions during Russia's full-scale war with Ukraine (2022). [https://gradus.app/documents/203/GradusResearch\\_Report\\_KSE\\_citizens\\_13042022.pdf](https://gradus.app/documents/203/GradusResearch_Report_KSE_citizens_13042022.pdf)
9. Struggle for people: Ukraine has lost the battle, but must win the war (2023). Date of access: 10.11.2023. <http://surl.li/mfomp>
10. Demographic collapse in Ukraine: a critical decline in the birth rate and its consequences (2023). Date of access: 13.11.2023. <https://slovoproslovo.info/demografichniy-kolaps-v-ukraini-kritichniy-spad-rivnya-narodzhuvanosti-ta-yogo-naslidki>.
11. How many Ukrainians will remain after the war: experts on population reduction and the catastrophic ratio of women and men (2023). Date of access: 08.11.2023. <https://exclusive/skilki-zalishitsya-ukrayinciv-pislya-viyni-eksperti-poyasnili-chomu-skorochuvatimetsya-kilkist-naseleння-2358379.html>
12. The official website of the State Statistics Service of Ukraine (2023). Date of access: 11.11.2023. <http://www.ukrstat.gov.ua>
13. The official website of the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine (2023). Date of access: 08.11.2023. <https://idss.org.ua/index>
14. The official website of the analytical center "Ukrainian Institute of the Future" (2023). Date of access: 08.11.2023 <https://uifuture.org/>
15. Ukraine is depopulating, there are fewer people there than in Poland! (2023). Date of access: 10.11.2023. <https://obserwatorgospodarczy.pl/2023/06/25/dziennosc-na-ukrainie-jest-katastrofalnie-niska/>
16. Demographic collapse in Ukraine: a critical decline in the birth rate and its consequences (2023). Date of access: 08.11.2023. <https://slovoproslovo.info/demografichniy-kolaps-v-ukraini-kritichniy-spad-rivnya-narodzhuvanosti-ta-yogo-naslidki>
17. The official website of the Office of the United Nations High Commissioner for Refugees (2023). Date of access: 10.11.2023. [https://www.ohchr.org/en/ohchr\\_homepage](https://www.ohchr.org/en/ohchr_homepage)
18. Eurostat Statistics Explained. Ukrainian citizens in the EU (2023). Date of access: 10.11.2023. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ukrainian\\_citizens\\_in\\_the\\_EU#Population\\_of\\_Ukraine](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ukrainian_citizens_in_the_EU#Population_of_Ukraine)
19. The official website of the Eurostat (2023). Date of access: 08.11.2023 <https://ec.europa.eu/eurostat>
20. Demographic collapse in Ukraine. Non-obvious solutions (2023). Date of access: 08.11.2023. <https://nv.ua/ukr/opinion/migraciya-yak-ukrajini-zbilshiti-kilkist-trudovogo-naseleння-50364620.html>