НАЦІОНАЛЬНА ТА РЕГІОНАЛЬНА ЕКОНОМІКА

УДК 338.2(477)

L.A. Kyslova

THE IMPACT OF DEMOGRAPHIC PROCESSES ON NATIONAL ECONOMIC SECURITY

The question of the demographic component of economic security on the depopulation funds and the aggravation of the quality of the population is very relevant for Ukraine. This is associated with an extremely low birth rate, high mortality and morbidity rates, low life expectancy, high migratory losses. All this has a direct impact on the country's economic security, since the demographic component is the resource necessary for its provision.

Key words: demographic processes, migration, depopulation, economic security.

Problem statement. In our time, demographic processes are one of the key to ensuring a stable and safe development of the state, and the demographic factor can be defined as one of the most important factors influencing the economic situation in the country. The role of the population as a carrier of demographic potential is especially important in modern conditions, when it is intellect that becomes the main motive and determining movement.

Therefore, achieving a stable functioning of the demographic component of economic security is a determining factor in improving the demographic situation as the main priority of realizing the national interests of the country.

Analysis of recent research and publications. Problems of demographic policy and the impact of demographic indicators on economic security were investigated by E. M. Libanov, V. L. Manilov, A. M. Martin, A. Poznyak, N. C. Smirnov.

The purpose of work is in-depth research impact of the problems in the demographic sphere on national economic security.

The current demographic situation in Ukraine is alarming, both from the side of authorities and country citizens. Reduced population, reduced life expectancy and fertility, and negative balance of migration have become the hallmarks of the latest demographic trends. The reasons are in the history and accumulated over a long period of time. Experts estimate that the first and second world wars, famines, forced industrialization, forced collectivization, mass repressions of the 1930s and 1950s, the Chernobyl catastrophe, the protracted systemic crisis of the 1990s had negative effect on the normal process of demographic transformation, led to significant deformations of the sex-age population, premature death of about 16 million people. These catastrophic events negatively affected the dynamics of the population, significantly distorted both the sex-age structure and the mode of its reproduction. In this regard, an important prerequisite for ensuring the demographic component of economic security is the study and analysis of natural reproduction of the population.

National and demographic security depends on the size of the population, and its state is affected by depopulation phenomena. In Ukraine, they are manifested on the one hand, a low birth rate, and on the other catastrophically high mortality rate. According to the State Statistics Service, at the beginning of 2018, the number of available population in Ukraine was 42384.4 thousand. During 2016, the population decreased by 182.0 thousand people. The number of Ukraine is steadily decreasing, according to estimates received over the last 27 years, this process is due to a generally stable natural decrease in the population, that is, exceeding the number of deaths over the number of births. From 1991 to the end of 2017, its aggregate value exceeded 6 million people, or almost 12.4% of the total population of Ukraine as of the

beginning of 1991 [8].

The main causes of depopulation trends during the period of 1991-2017 are both the decrease in the fertility rate and the increase in the mortality rate. If in 1991 fertility and mortality rates were almost the same 12.6% and 12.1%, then in 2017, respectively, 10.9% and 14.8%. It is worth noting that the overall birth rate below 12% is considered very low and causes a decrease in the population. Another evidence of the process of depopulation is the net reproduction rate of the population, which in Ukraine is below 1.0, that is, the reproduction of the population is insufficient even for simple replacement of generations. Considering the depopulation of the territories, it should be noted significantly higher level among the villagers, but the difference between the indicators from 1991 to 2017 significantly decreased. An increase in the number of population is observed in 2000-2012, for the years 2013-2017, an increase in depopulation rates is characteristic [2, 3].

Migration movement of population in 2002-2017

Table 1

		1411	gration movement or	population in 2002-201/		
Year	All migration flows			Including interstate migration		
	number arrived	number of exits	migration increase, reduction (–)	number arrived	number of exits	migration increase, reduction (–)
2002	717532	717532	X	42473	76264	-33791
2003	22544	722544	X	39489	63699	-24210
2004	750812	750812	X	38567	46182	-7615
2005	723642	723642	X	39580	34997	4583
2006	721655	721655	X	44227	29982	14245
2007	711785	711785	X	46507	29669	16838
2008	673467	673467	X	37281	22402	14879
2009	609902	609902	X	32917	19470	13447
2010	652639	652639	X	30810	14677	16133
2011	637713	637713	X	31684	14588	17096
2012	649865	649865	X	76361	14517	61844
2013	621842	621842	X	54100	22187	31913
2014	542506	519914	22592	126,2	120,9	5,3
2015	533278	519045	14233	30659	21409	9250
2016	256808	246188	10620	14311	6465	7846
2017	247092	258912	9574	13250	4631	6590

Summarized by the author on the basis of data from the State Statistics Service of Ukraine

A certain factor of counteraction to the general reduction of the population in Ukraine is the migration. Migration processes are not purely demographic issues; they influence the participation in the international division of labor, access to European and world markets, economic and social security, including national security in general. The influence of external migration on social and economic development is primarily due to changes in the supply of labor in the labor markets both in quantitative and qualitative parameters, as well as the change in the size and structure, in particular its disable part and associated with this variation of the level of demoeconomic load, the population's demand for certain goods and services [6].

Migration processes in Ukraine were rather rapid. In early 1990's there was an increase in the influx of migrants to Ukraine due to the return of Ukrainians and representatives of national minorities, which had previously lived in Ukraine (Germans, Crimean Tatars, etc.). Ukrainians return to their homeland after proclamation of Ukraine's independence. However, starting from 1994 and up to 2005, the negative balance of migration prevailed (about 130-150 thousand persons annually). During 2005-2017, migration processes have stabilized due to a decrease in overall migration and a slight positive balance of migration (0.1-0.4%) [2, 5].

Military actions have always irreparable damage to the economy and demographics of the country where they occur. But, the magnitude of what is happening in the Donbas does not change the general indicators of mortality in the country. Can not say that the deaths of hundreds military and peaceful citizens of Ukraine do not cause irreparable damage. Each death is a tragedy. But, moreover, it has more damage to fertility rates.

Over the past decades, Donbas could not boast by a positive dynamics in demography, especially in Donetsk and Lugansk regions. The miner's land was quite safe to call the zone of extinction, since in the entire period (from 01.01.2004 to 01.01.2017) the population of Donetsk district decreased by 477,014 and Lugansk by 333,117 people [1]. At the same time, the decrease was mainly due to natural reduction. The mortality rate in both districts during the decade almost doubled the fertility rate. Thus, only in the first quarter of 2014, the level of natural population decline in the Donetsk and Luhansk districts were 9298 and - 4847 respectively. That is, before the active phase of Russian invasion in these areas declined at a rapid pace.

It is clear that now, when there are ordinary armed gangs in occupied territories, besides highly organized terrorist groups, it is not even worth talking about stabilizing the situation in demography. Today, according to the UN, the number of refugees from Crimea and Donbass are already more than 1.3 million people, but it is clear that such data is not absolute and in practice the number of refugees may be higher. It should be noted that today's wave of migration, caused by military invasion, is only the first and after its completion it is necessary to wait for a second, much more numerous wave.

So, if in the first wave of migration the territory left mainly the pro-Ukrainian population, when level of threat to life was very high, then the second wave of migration could arise already after the end of military campaign. Judging by the latest sabotage operations carried out by organized terrorist groups in the East, one of the directions of their work was the complete elimination of existing infrastructure on the Donbass and adjacent areas. Thus, the terrorists for a long time remove the prospect of a rapid economic potential recovery. In the long run, this means outflow of capital, stop of many enterprises and all this would lead to massive unemployment. In order to stabilize this situation, despite all the optimism of today's government, it will take several years or even decades.

Under such circumstances problem areas will be forced to leave even such a working part of the population, which at the moment feels relatively safe and comfortable in occupied lands. And given that as of May 1, 2014, the total population of both regions was 6,154,903 people, then it is likely that the scale of the second migration wave will be significantly higher. Similar "perspectives" of demographic and ethnic changes are now opening up on occupied by the terroristic group of Donbas. Today, a full-scale anti-Ukrainian campaign has been launched and consequences will be felt here for many years.

Therefore, it will become a problem to return even in a relatively peaceful time for pro-Ukrainian citizens and activists who actively opposed Russian occupation. It is clear that after the active phase ATO is over, the confrontation provoked by mass attacks on the part of the

ISSN 2518-1394 (Online), ISSN 2226-2822 (Print) ВІСНИК МАРІУПОЛЬСЬКОГО ДЕРЖАВНОГО УНІВЕРСИТЕТУ СЕРІЯ: ЕКОНОМІКА, 2018, ВИП 16

Kremlin propaganda will not disappear and for many pro-Ukrainian donors, returning home will have to be postponed for a long time. In quantitative equivalent, this is a small part of population, which nonetheless played a leading role in the revival of all Ukrainian in the Donetsk and Lugansk regions.

Much of the Donetsk citizens are forced to leave and for a long time will not be able to return home due to social, economic and everyday factors. Now, the terrorists are making every effort to turn Donbass into a zone of alienation, the residence where would be impossible and extremely dangerous even to exist. Many residents of Donbass lost their housing, many lost their business. In Donetsk and Luhansk regions, sabotage groups dig in virtually all that they have not yet been able to sort out, sell or destroy during the collapse of USSR.

It is highly expected that such targeted destruction will not contribute to economy development. Years will be spent on the elimination of its consequences. All this time, the settlers from Donbas will need to live, work, study somehow.

According to reports that periodically appear in the Russian media, thousands, more precisely, thousand hundreds of internally displaced persons from Ukraine are now in the Russian Federation, but this information could be false [1]. However, the flow of migrants cannot be avoided, but the nature of migration in its vast majority will be intra-state. Areas that are not currently covered by terrorist threats must now prepare for the development by similar scenario; the scale may become unique for Ukraine and can cause unforeseen consequences.

On one hand, decrease in the number of jobs and low wages are association with population problem of villages and growing migratory losses of the rural population. On the other hand, the influx of population for urban settlements is a positive phenomenon, since man is the main productive force, and any economic growth is impossible without displacement of significant human masses. Particularly distinguished is the problem of internally displaced persons in the regions of Ukraine due to the annexation by the Russian Federation of Crimea, Russia's foreign military aggression in the Donbas and the armed conflict that continues in the Donetsk and Luhansk districts [5]. The issue of counteracting the transit illegal migrants from developing countries and the abandonment of some of the illegal migrants on the territory of the country is also relevant for Ukraine. Thus, migration processes are a kind of demographic and demo-economic "investment" in the recipient regions and, on the contrary, cause ageing and deteriorating labor-intensive potential in donor regions.

Another significant demographic issue is the birth and death rates that were worst over the past ten years. Main part plays the fact that we have a coincidence of negative factors that affect the demographic situation. The war is one of the most painful and unpredictable. It pushes us to the demographic pit. In general, military actions have a negative impact on the demographic situation in the country. Mortality increases due to loss of life. In addition, due to stress and stress associated with the war, people often have a nervous disorder. And this applies not only to those who live directly in ATO zone, but also to people who live far beyond its borders. All this leads to an increase in mortality, especially among the elderly. In certain settlements (first of all, in the occupied territory), there are people who have nothing to eat. This is especially true for pensioners and people with disabilities. The reasons are obvious - shops do not work there, therefore it is possible to count only on humanitarian aid or on the help of militaries who share their food with the local population. It is clear that abnormal nutrition and extremely difficult living conditions affect the physical condition of people and affect mortality rates. However, the war also affects fertility. The couples are trying to delay the appearance of child. Fertility begins to decrease with a gap of about one year [6]. After the wars, demographic processes are usually restored in 2-3, and sometimes in 5 years. But the problem is that we do not know when the war will end in Ukraine. If it lasts for a long time, as it is, for example, in Israel, then the demographic crisis will deepen significantly. The war does not cover the entire territory of the country, but only part of it. Farther Donbas is, less impact of war on mortality and fertility is. But

when the wounded are first taken to treatment in other regions and then these people return home, it also affects the demographics. The war factor is superimposed on other bad trends in the country. It deepens the existing demographic crisis. After all, in our country and before the military events in Donbass (as early as the 90's) mortality exceeded the birth rate and population gradually declined. According to scientists forecast and calculation, in the middle of this century (in the 50's and 60's) the population of Ukraine should have been about 35 million. But then the loss of Crimea and present losses due to the war in the east were not taken into account. To this add a factor such as the deterioration of economic situation in the country. After all, people are also less likely to give birth and die more often [3].

So today in Ukraine all the negative factors have come to pass: war, difficulties in economy and changes in demographic behavior in the realm of fertility (women produce an average of 27 years, not 24, as in the 1990s). In addition to fertility and mortality, we periodically affect the so-called phenomenon of demographic waves. When, during the Second World War, certain generations were "knocked out", they rebuilt, but gave birth to fewer children. Then these children also gave birth to fewer children. As a result, there are a whole few generations. And this in certain periods also affects fertility. In the projection for the future, we can say that the modern factor of war will still have its own demographic echo, because we are still reaping the consequences of 1939 - 1945 war.

To ensure the health care development, primary health care reform is being reformed on the basis of family medicine, primarily in countryside. In the area of overcoming the negative effects of ageing, state's demographic policy involves a creation of mechanisms for providing life to the elderly, their involvement in active lifestyles outside the sphere of labor activity by raising level of social security for retired persons and others [7]. In order to regulate migration processes, government adopted the Concept of State Migration Policy, which states that it is aimed at ensuring effective state management of migration processes, creation of conditions for sustainable demographic and socio-economic development of the state, raising level of national security by preventing emergence of uncontrolled migration processes and liquidation of their consequences, harmonization of national migration legislation with international standards, strengthening the social and legal protection of Ukrainian citizens who are working abroad [4].

Conclusion. In today's conditions, when public life continues to be in a state of crisis and uncertainty, when a sound economic strategy has not been developed at the state level, the demographic situation has become a big problem. The main demographic issue in Ukraine is the depopulation, its economically active part. Its main causes are a combination of factors, namely low fertility and high population losses due to natural processes. There is an intensification of migration processes; their impact on demographic and socio-economic indicators is contradictory and often negative. With regard to the structural characteristics, the main features are a high coefficient of ageing and a low youth index, which leads to an increase in "load" on the able-bodied part. Positive changes are improving the number of men in relation to women and raising the age of balancing in general, the state of the demographic component of economic security can be defined as a crisis.

List of references

1. Беззубко Л.В., Беззубко Б.І. Розробка стратегії відновлення Донбасу як складник державної політики України. / Л.В. Беззубко, Б.І. Беззубко // Публічне адміністрування: теорія та практика, 2017, вип. 1(17) [Електронний ресурс]. — Режим доступу: http://www.dridu.dp.ua/zbirnik/2017-01(17)/15.pdf Bezzubko L.V., Bezzubko B.І. Rozrobka strategiyi vidnovlennya Donbasu yak skladny'k derzhavnoyi polity'ky' Ukrayiny'. / L.V. Bezzubko, B.І. Bezzubko // Publichne administruvannya: teoriya ta prakty'ka, 2017, vy'p. 1(17) [Elektronny'j resurs]. — Rezhy'm dostupu: http://www.dridu.dp.ua/zbirnik/2017-01(17)/15.pdf

ISSN 2518-1394 (Online), ISSN 2226-2822 (Print) ВІСНИК МАРІУПОЛЬСЬКОГО ДЕРЖАВНОГО УНІВЕРСИТЕТУ СЕРІЯ: ЕКОНОМІКА, 2018, ВИП 16

- 2. Внутрішня міграція: куди їдуть українці в пошуках кращого життя [Електронний ресурс]. Режим доступу: https://ukr.segodnya.ua/economics/enews/vnutrennyaya-migraciya-kuda-edut-ukraincy-v-poiskah-luchshey-zhizni-1118542.html Vnutrishnya migraciya: kudy` yidut` ukrayinci v poshukax krashhogo zhy`ttya [Elektronny`j resurs]. Rezhy`m dostupu: https://ukr.segodnya.ua/economics/enews/vnutrennyaya-migraciya-kuda-edut-ukraincy-v-poiskah-luchshey-zhizni-1118542.html
- 3. Демографические потери Украины в XX веке [Електронний ресурс]. Режим доступу: https://zn.ua/SOCIETY/demograficheskie_poteri_ukrainy_v_hh_veke.html Demograficheskie poteri ukrainy v XX veke [Electronic resource]. Access mode: https://zn.ua/SOCIETY/demograficheskie poteri ukrainy v XX veke.html
- 4. Лібанова Е. М. Інноваційні важелі демографічної політики / Е. М. Лібанова // Проблеми інноваційно-інвестиційного розвитку. 2011. № 2. С.156-168. Libanova E. M. Innovacijni vazheli demografichnoyi polity`ky` / Е. М. Libanova // Problemy` innovacijno-investy`cijnogo rozvy`tku. 2011. # 2. S.156-168.
- 5. Миграция на Украине. Инфографика. [Електронний ресурс]. Режим доступу: http://www.aif.ru/dontknows/infographics/migraciya_na_ukraine_infografika My`gracy`ya na Ukray`ne. Y`nfografy`ka. [Elektronny`j resurs]. Rezhy`m dostupu: http://www.aif.ru/dontknows/infographics/migraciya_na_ukraine_infografika
- 6. Романюк М. Д. Міграційні загрози національній безпеці України: сучасні виклики, проблеми подолання / М. Д. Романюк // Демографія та соціальна економіка. 2015. № 3. С. 99-111. Romanyuk M.D., Migration Threats to National Security of Ukraine: Modern Challenges, Problems of Overcoming / M. D. Romanyuk // Demography and Social Economics. 2015. No. 3. P. 99-111.
- 7. Цвігун І. А. Соціально-економічні чинники демографічної безпеки України / І. А. Цвігун // Науковий вісник Волинського національного університету імені Лесі Українки: Економічні науки. Ternopil, 2010. №4. С.90-94. Zvigun IA Socio-economic factors of demographic security of Ukraine / І. А. Zvigun // Scientific Bulletin of the Volyn National University named after Lesia Ukrainka: Economic sciences. Ternopil, 2010. №4. р. 90-94.
- 8. Central statistics office [Electronic resource]. Access mode: https://www.cso.ie/en/releasesandpublications/ep/p-plfp/populationandlabourforceprojections2017-2051/populationprojectionsresults/

Стаття надійшла до редакції 08.09.2018.

Л.А. Кислова

ВПЛИВ ДЕМОГРАФІЧНИХ ПРОЦЕСІВ НА НАЦІОНАЛЬНУ ЕКОНОМІЧНУ БЕЗПЕКУ

У статті розглянуті питання демографічної складової економічної безпеки, що є вельми актуальними для України на фоні депопуляції та погіршення якості населення. Це пов'язано з надзвичайно низькою народжуваністю, високими показниками смертності та захворюваності, низькою очікуваною тривалістю життя, високими міграційними втратами. Все зазначене безпосередньо впливає на економічну безпеку країни, так як демографічна складова є ресурсом, необхідним для її забезпечення. Тому, досягнення стабільного функціонування демографічної складової економічної безпеки є визначальною умовою поліпшення демографічної ситуації як головного пріоритету реалізації національних інтересів країни.

Досліджено, що основним демографічним питанням в Україні є депопуляція, основними причинами якої є комбінація чинників, а саме низька народжуваність та високі втрати населення через природні процеси. Також виявлено, що відбувається посилення

міграційних процесів; їх вплив на демографічні та соціально-економічні показники суперечливий і часто негативний. Що стосується структурних характеристик, то основними рисами є високий коефіцієнт старіння та низький показник молоді, що призводить до збільшення "навантаження" на працездатну частину.

Характерною особливістю нинішньої міграційної ситуації в Україні є тенденція до значного збільшення обсягів міжрегіональних міграцій, а також інтенсивних міждержавних міграційних переміщень населення, що пов'язано з масовими потоками біженців та економічних мігрантів, викликаних війною, етнічними особливостями та низьким рівнем економічного і соціального розвитку з країн Північної Африки та Близького Сходу (Сирії, Лівії, Алжиру та ін.). Серед іммігрантів, які прибувають до України, за національним складом домінують дві групи — українці та росіяни, третє місце займають кримські татари.

В процесі дослідження демографічних загроз та їх впливу на економічну безпеку, розглянуто морально-етичні аспекти формування демографічної ситуації та девіантні явища в Україні. Основними індикаторами, в даному випадку, виступають злочинність та вбивства, а також самогубства, алкоголізм та наркоманія.

Аналіз дав можливість визначити найбільш уразливі місця в демографічній сфері, показав, що в Україні спостерігається кризовий рівень демографічної небезпеки, який потребує розроблення певних стратегічних напрямків діяльності та зміну соціально-демографічної політики в країні. Тому, необхідним є створення на всіх рівнях управління програм підвищення економічної безпеки, які включали б результати досліджень реальних і потенційних демографічних загроз і критеріїв безпеки.

Ключові слова: демографічні процеси, міграція, депопуляція, економічна безпека.

УДК 339.926

V. Dergachova, N. Pysar

PROSPECTS FOR THE FORMATION OF THE POLARIZED ENERGY SPACE: APPROACH TO DATA ANALYSIS

The study emphasizes the urgency of the formation of the polarized energy space in the context of globalization and threats to Ukraine's energy security. To study regional imbalances, a methodology has been developed for the analysis of the density of resources in the regions. A multi-resource model of fuel and energy resources for exploring the region's energy potential has been presented. The proposed approach to the analysis and assessment of concentration of the density of resources allows to characterize certain regional imbalances, which is instrumental in the formation of spatial polarization. The regions with the greatest concentration of fuel and energy resources have been identified on the basis of the comparative analysis. Among the advantages in the implementation of spatial polarization in terms of regional convergence is the possibility of reducing imbalances in the structures of various economic activities, which are one of the main socio-economic problems, since concentration of production and finance facilitates the redistribution of resources in their favor, leaving the periphery without a real chance of overcoming threats to economic development. The study has showed that the analysis of concentration of the density of resources and spatial polarization are two interdependent processes aimed at equalizing the development of territories.

Key words: fuel and energy resources, spatial polarization, growth poles, energy security, region, globalization.