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CHANGING TRENDS IN UKRAINE'S DEMOGRAPHIC SECURITY AS A KEY INDICATOR OF SOCIOECONOMIC STABILITY

ABSTRACT

The study is devoted to the determination of the assessment of the state and the resolution of demographic security trends in Ukraine according to the methodology, its comparison with integral threshold values, and the determination of the most significant threats in this area from the standpoint of economic security. The article identifies the level of demographic protection in Ukraine according to modern methodology, compares it with integral threshold values, and identifies the most significant threats in this area from the social security standpoint. The list of indicators of demographic security is highlighted, which may change depending on the depth and tasks of the research. Therefore, each indicator is assigned a threshold value. In particular, the dynamics of the indicator change (positive/negative), which makes it possible to compare them on the same scale to identify threats. Retrospective analysis and assessment of the current state of Ukraine's demographic security confirms its critical level during the studied period of Ukraine, particularly the war unleashed by Russia. This situation creates a significant threat to national security. Based on this, the conclusions were made that the current trends in the population change, taking into account the military situation in Ukraine, indicate a significant decrease in the rate of its growth; in Ukraine, there was a process of substantial deterioration of natural population growth indicators; since 2010, a steady trend towards an increase in the share of the elderly population in the total population has formed in Ukraine; the scale of the migration inflow is insignificant and according to the criteria of economic security corresponds to an unsatisfactory level of migration growth of the population. As a result, the most critical threats are outlined, and practical recommendations are given to the leadership of Ukraine to eliminate existing problems in the demographic sphere, namely the importance of applying systemic mechanisms aimed at increasing the standard of living of the population, increasing the number of jobs in the state, and increasing birth rates.

Keywords: demographic security, demographic situation, demographic problems, assessment of the current state of demographic security, indicators of demographic security, economic security

JEL Classification: J20, J28, H56, O15

INTRODUCTION

The current demographic situation in Ukraine, which many scientists interpret as crisis or catastrophic, requires a comprehensive assessment of the significant crisis moments in demographic reproduction. The demographic situation in Ukraine shows the existence of several severe socio-demographic problems [1]. Socio-demographic issues such as a low birth rate, the level of which does not ensure the simple replacement of generations, the mass spread of one- and two-child families, high morbidity and mortality of the population, especially men of working age, low life expectancy, which is one of the weakest among the countries of the European region. The demographic factor is one of the determining factors for ensuring the stable and safe development of the country, and the issue of demographic growth should be considered as a factor and, at the same time, as a result of the functioning of the state [2]. Ukrainian society will only prosper and stabilize if its population has appropriate living conditions and feels fully secure to implement normal demo-reproductive behaviour. Every family and individual will not

see prospects for existence and development. Therefore, in Ukraine, the problem of the country's demographic security is becoming particularly urgent. At the same time, although demographic security is closely related to other national security types, it is its most crucial component. The multisystemic nature of the demographic security concept indicates a person's balanced existence in the political, economic, psychological, cultural, informational, ecological, and other spheres of social life. The state of well-being and standard of living, the stability of social relations and organizational structure, the level of society's culture, the presence of conditions for the prevention and resolution of social conflicts, the processes of desocialization of community, etc., depending on the level of demographic security [3].

At the same time, at the current stage, the situation is complicated primarily by the lack of a single methodological approach to the issue of demographic security. All this requires scientists to conduct additional research on this issue, especially regarding defining concepts (categories) and structuring national security, a complex, multisystemic phenomenon. One of the priority components of economic security, especially in conditions of military aggression, is demographic security. The military aggression of the Russian Federation against Ukraine, the open war that began on February 24, 2022, became a new difficult challenge for the national, in particular, demographic security of Ukraine. The Russian invasion of Ukraine is the next stage of the Russian-Ukrainian war started by Russia in 2014. In the conditions of military aggression, the role and importance of further developing knowledge about security in the broad sense are strengthened [4]. The mentioned topic is also relevant in the context of the further development of economic security aimed at solving specific problematic issues regarding the social aspects of Ukraine's demographic security in the conditions of military aggression.

LITERATURE REVIEW

Scientists from different angles consider demography as an object of socio-economic research. Many scientists compare the demographic situation [5, 6, 7, 8]. Several scientists investigate the main problems of demography [9, 4, 10, 11]. Quite often, factors affecting the country's demographic status are determined in scientific publications [12, 13]. It should be noted that the Institute of Demography and Social Research of the National Academy of Sciences of Ukraine deals with demographic security issues in Ukraine. However, the demographic composition of society's development is only sometimes considered an element of national economic security [14, 15, 11, 12, 10, 21].

The study [17, 18, 19] carried out a quantitative analysis of the potential demographic losses of the population of Ukraine, taking into account the social threats of the 20th century and their impact on the total population in the corresponding period. N. Levchuk [20] studied the dynamics of calendar and cohort life expectancy in Ukraine in historical retrospect: for 1850–2013 and birth cohorts 1850–1923. E. Libanova [15] assessed vital demographic trends in Ukraine, comparing them with global trends, forecasting further development, and characterizing the socio-economic consequences. Other scientists [22, 23, 14, 24, 25] in their research emphasized the relationship between the concepts of "demographic development" and "human development," which were considered within the framework of the subjects of relevant scientific knowledge. The work [15, 26] analyzes individual indicators of demographic security, summarizes trends in the demographic development of Ukraine over the past thirty years, determines the characteristic features of the current demographic situation, and proposes measures to alleviate the demographic crisis. In the mentioned and other works [27, 28, 29], an analysis of some demographic indicators was carried out, trends in the demographic development of Ukraine were outlined, characteristic features of the current demographic situation compared to global trends were determined, further, development was predicted, and socio-economic consequences were characterized. Obvious measures were proposed to alleviate the demographic crisis, mainly a significant economic rise. Despite all the importance of the performed studies, determining the dynamics of demographic security in general, considering all essential indicators, i.e., the quantitative assessment of the level of demographic protection compared to integral threshold values, was overlooked.

Not many works are devoted to assessing the level of demographic security and substantiating its indicators. Only one [30] has been brought to a logical conclusion - the development of a system of indicators of demographic security and threshold values of the leading indicators characterizing threats to demographic security, the construction of an integral index of demographic safety, its calculation for the past and forecasting for the future period. Recognizing the significant contribution of work [31] to the study of Ukraine's demographic security, we must note certain unused reserves of the methodology of these calculations. They concern, first of all, the setting of one limit-critical value for each indicator with its subsequent normalization (instead of determining a vector of threshold values), normalization of stimulating indicators according to a linear function, and destimulating indicators according to a nonlinear function (hyperbola equation), which has the consequence "suppression" of normalized indicator values, the principle of building weights for indicator blocks, the impossibility of comparing the dynamics of the integral index of demographic security with critical threshold values (because they are not calculated), as a result - a subjective scale of assessment of the essential index of demographic security and inaccurate conclusions.

AIMS AND OBJECTIVES

Given the relevance and necessity of a comprehensive study of the issue of strengthening demographic security, especially in the conditions of modern war, as well as the conceptual definition of the mechanisms (tools) for its provision, scientific intelligence of human security as an object of demographic security research is needed. In the conditions of military aggression and threats of globalization, the solution to social problems becomes even more critical and urgent. A particular threat in Ukraine is the war, which significantly affects the state of Ukraine's national security, particularly the demographic one. Its negative consequences are direct and indirect, a real social threat. The impact of military aggression on human security requires the justification of new, more effective mechanisms and tools for its strengthening.

Despite certain developments in the solution to the mentioned issues, the relevance and necessity of their study and resolution as soon as possible, the case of the democratic security of Ukraine has not yet become an independent and full-fledged object of research and has been considered for the most part in an incomplete manner, which actualizes the research topic and is an object of economic security research. This work aims to identify Ukraine's demographic security level according to modern methodology, compare it with integral threshold values, and determine the most significant threats in this area from the standpoint of social security.

METHODS

Demographic security protects the state, society, and the labour market from demographic threats, which ensures the development of Ukraine, considering the set of balanced demographic interests of the state, community, and the individual following the constitutional rights of Ukrainian citizens. In this work, quantitative methods were used for analysis and assessment of the state and trends of changes in demographic security, which should be applied on a systematic, comprehensive basis, evaluating the indicators of the components of the state of economic security of Ukraine, namely: the size of the existing population, percentages to the level of 1990; life expectancy at birth, years; infant mortality rate (children under one year of age died), per 1,000 live births; coefficient of natural increase, per 1,000 people of the existing population; share of the elderly population in the total population (as of the end of the reporting period), percentages (ageing ratio); demographic the load does not work of the able-bodied population, per cent; the overall coefficient of migration growth, reduction (-) (per 10,000 people).

For each indicator of the components of the state of economic security of Ukraine, characteristic values have been developed that determine the level of financial security. The range of expected values of each indicator (indicator) is measured from 0 to 1 (or from 0 to 100 per cent) and is divided into the corresponding intervals presented in Table 1. The period for which relevant data was selected is 1991–2022.

Table 1. Characterization of trends in changes in demographic security through the prism of indicators of the components of the state of economic security of Ukraine.

Indicator of components of the state of economic security of Ukraine (U)	Characteristics of the indicator	Indicator threshold values (%)	Indicator change dynamics (positive/negative)
Y_0	a hazardous level of economic security	$Y_0 \rightarrow 0]$ ↓ $Y_0 \rightarrow 20)$	Negative Positive within the category
$Y_{critical}$	critical level of economic security	$Y_{critical} \rightarrow 20]$ ↓ $Y_{critical} \rightarrow 40)$	Negative Positive within the category
$Y_{dangerous}$	dangerous level of economic security	$Y_{dangerous} \rightarrow 40]$ ↓ $Y_{dangerous} \rightarrow 60)$	Negative Positive within the category
$Y_{unsatisfactory}$	unsatisfactory level of economic security	$Y_{unsatisfactory} \rightarrow 60]$ ↓ $Y_{unsatisfactory} \rightarrow 80)$	Negative Positive within the category
$Y_{satisfactory}$	satisfactory level of economic security	$Y_{satisfactory} \rightarrow 80]$ ↓ $Y_{satisfactory} \rightarrow 100)$	Negative within the category Positive
$Y_{absolute}$	absolute level of economic security	$Y_{absolute} \rightarrow 100)$ ↓ $Y_{absolute} \rightarrow 100]$	Positive

RESULTS

The study aims to determine the trends of change in the above indicators based on. According to the information shown in Figure 1, in Ukraine during the years 1990-2021, there was a process of reducing the number of the existing population.

The indicator - "number of the existing population, percentage to the level of 1990" has the following characteristic values: the critical level is 85%, dangerous - 90%, unsatisfactory - 95%, satisfactory - 97%, optimal - 100% of the population to the class of 1990. Values of this indicator below 85% are a hazardous level of demographic security. In particular, out of 51.8 million people as of January 1. 1990, the studied indicator decreased to 41.2 million people as of January 1. 2022, that is, by 20.5%, which is a highly negative phenomenon. It should be emphasized that following the Methodological recommendations for calculating Ukraine's economic security level, the critical level of the dynamics of the existing population of the state compared to the class of 1990 is a 15% reduction. Since 2015, the demographic situation in Ukraine regarding removing the current population has exceeded a critical level and directly threatens the state's security.

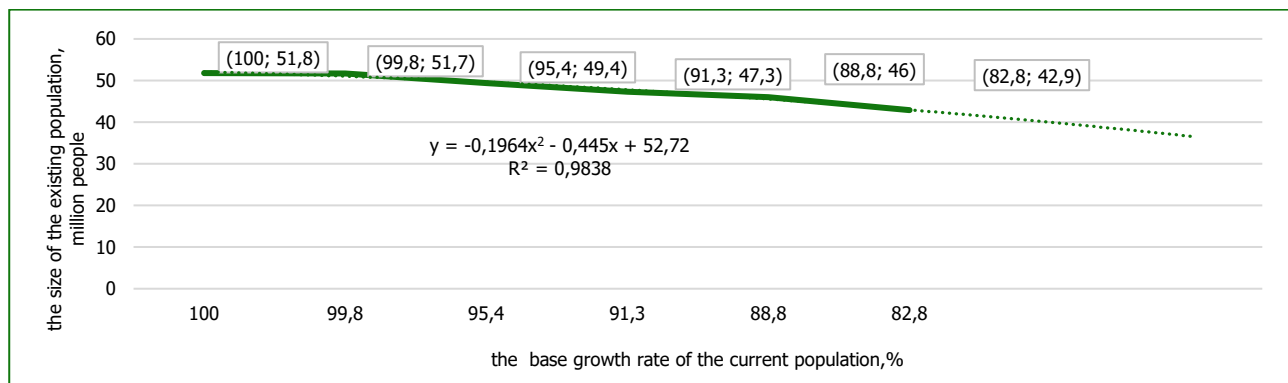


Figure 1. Trends in changes in the size of the existing population of Ukraine. Note: excluding the temporarily occupied territories of the Autonomous Republic of Crimea and the city of Sevastopol.

Current trends in population change, considering Ukraine's military situation, indicate a significant decrease in its growth rate. This issue is particularly relevant today, given the difficult situation in Ukraine [4]. The war started by the Russian aggressor led to colossal losses of human lives throughout Ukraine. It is not only about the dead. Many people left the country, i.e., went abroad. It should be noted that this is evidence of a critical level of the country's demographic security, accompanied by a decrease in the birth rate, deterioration of national health, and a reduction in life expectancy. The Office of the UN High Commissioner for Human Rights has confirmed 8,766 civilian casualties - 4,031 killed and 4,735 injured - due to Russia's full-scale war against Ukraine. These are data from February 24 to midnight on May 26 (UNHCR) [32].

For clarity, a trend analysis of forecasting changes in the existing population of Ukraine until 2025 should be applied (Table 2).

№	Indexes	Quadratic function	Forecast values for the period		
			2023	2024	2025
1	The size of the existing population, million people	$y = 0.0071x^2 - 1.7786x + 54.346$ $R^2 = 0.9747$	40.57	38.91	37.27
2	The base growth rate of the current population, %	$y = 0.0125x^2 - 3.4256x + 104.91$ $R^2 = 0.9748$	78.31	75.09	71.90

In addition, such trends will be caused by losses from the increase in the intensity of the temporary external labour migration transition into a permanent form. Although this process began in Ukraine long before 2022, due to the events in Donbas since 2014, the number of external labour migrants who do not return to Ukraine constantly increases. Experts from the World Bank believe that more than 80% of internally displaced persons who do not have the opportunity to return to their places of permanent residence within five years do not return at all. Such a statement only confirms the decrease in the country's demographic security level. In addition, it is necessary to consider that the industrialized regions actually stopped working, which is another negative factor that will directly impact the country's demographic situation. That is why the main task of this study is a general assessment of the demographic security of Ukraine, an analysis of the

main problems of the demographic security of Ukraine, and the determination of the main directions of state regulation of demographic processes.

Life expectancy is a demographic predictor that shows the average expected interval between birth and death for a given generation. It estimates the average number of years left and which a person of a certain age can expect to live. Regarding life expectancy, Ukraine ranks 150th in the world, competing with Honduras, Belize, and Bolivia. High life expectancy rates are maintained in Andorra (84.36 years), Japan (82.12 years), San Marino (81.97 years), Australia (81.63 years), France (80.98 years), Canada (81.23 years) [26, 19].

Ukraine has a relatively old population. According to this parameter, Ukraine is among the 20 countries with the most senior population [28]. If, according to the results of the 1959 population census, the share of people aged 60 and over was 10.5%, then in 2001, this indicator reached 21.4%; in 2010 - 26%, and until now, its value fluctuated within 25% Ukraine ranks 11th in terms of the share of the population aged 60 and older (Figure 2) [36, 38].

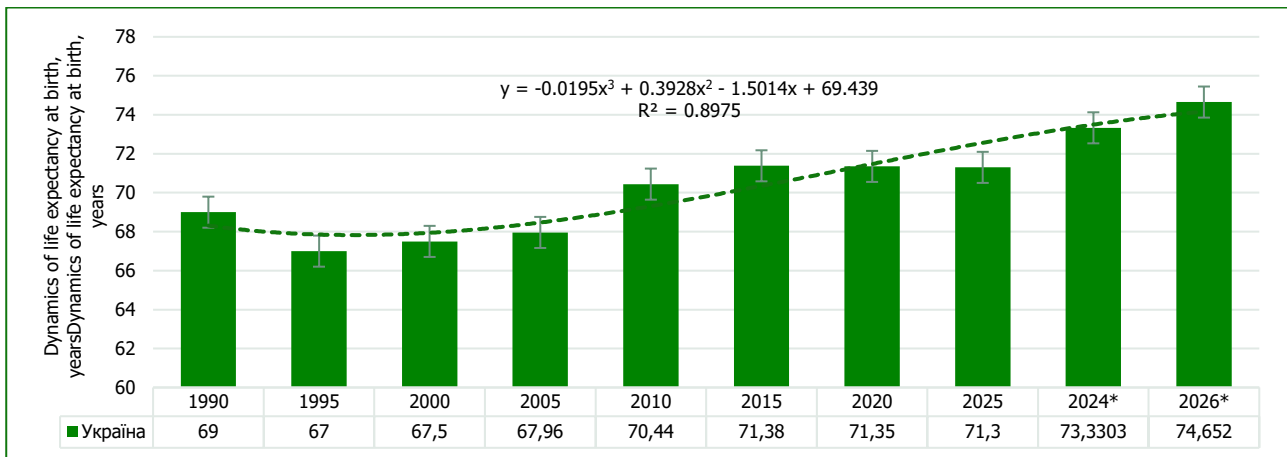


Figure 2. Dynamics of life expectancy population of Ukraine for the period 1990 - 2026, years. Note: * - forecast values. (Source: analyzed based on [32-35, 37])

Characterizing this indicator, it should be noted that for Ukraine, the critical level of life expectancy at birth is 66 years, threatening - 68 years, unsatisfactory - 70 years, satisfactory - 75 years, and optimal - 78 years. Accordingly, it can be emphasized that during 1990-2022 the indicator of life expectancy in Ukraine was between critical and unsatisfactory levels. In particular, in 1990, the studied indicator was 69 years, corresponding to a threatening level. In 1995, the indicator was 67 years. In 2000 – 67.5 years, in 2005 – 67.9 years corresponds to a critical level. In 2010, the indicator was 70.4 years. In 2015 – 71.4 years, in 2020 – 71.4 years corresponds to an unsatisfactory level. In this process, a positive phenomenon is that starting from 2000, the dynamics of the studied indicator showed a positive trend, which has been slightly disrupted since 2020.

The next indicator is the mortality rate of children under the age of 1, calculated as the ratio of the number of dead children under the age of 1 to the number of live births (Figure 3).

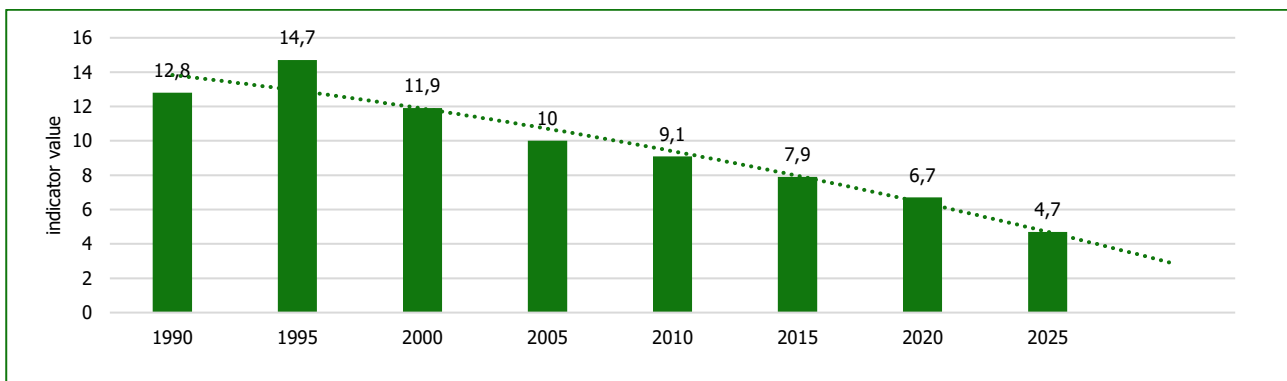


Figure 3. Dynamics of the child mortality indicator (deaths of children under the age of one year) per 1,000 live births during 1990-2025. Note: 2025 - forecast values. (Source: analyzed based on [32-35])

Characterizing this indicator, it should be noted that the optimal level of child mortality for Ukraine is 4 per thousand, satisfactory - 5 per thousand, unsatisfactory - 7 per thousand, threatening - 9 per thousand, and critical - 11 per thousand. According to the information shown in Figure 3, in 1990, in Ukraine, the child mortality rate was 12.8 per 1,000 live births; that is, it exceeded the critical level. In 1995, the studied indicator increased to 14.7 ppm. From 2000 to 2020, there was a downward trend in the infant mortality rate, which in 2020 was 6.7 per 1,000 live births, 8 points below the level of 2000. This trend with the dynamics of the child mortality indicator is a significant positive change. According to the demographic security criteria, the child mortality indicator in Ukraine as of 2020 corresponds to a fair value (5 per mille) and an unsatisfactory level (7 per mille).

The next indicator of demographic security is the coefficient of natural population growth, calculated by the ratio of natural population growth (decrease) during the calendar year to the average annual number of the existing population (Figure 4). The study of trends in this indicator shows that for Ukraine, the critical level of natural decline is minus two ppm, threatening – is minus one ppm, unsatisfactory – is zero ppm, satisfactory is one ppm of natural increase, and optimal is a natural increase of 1.5 ppm.

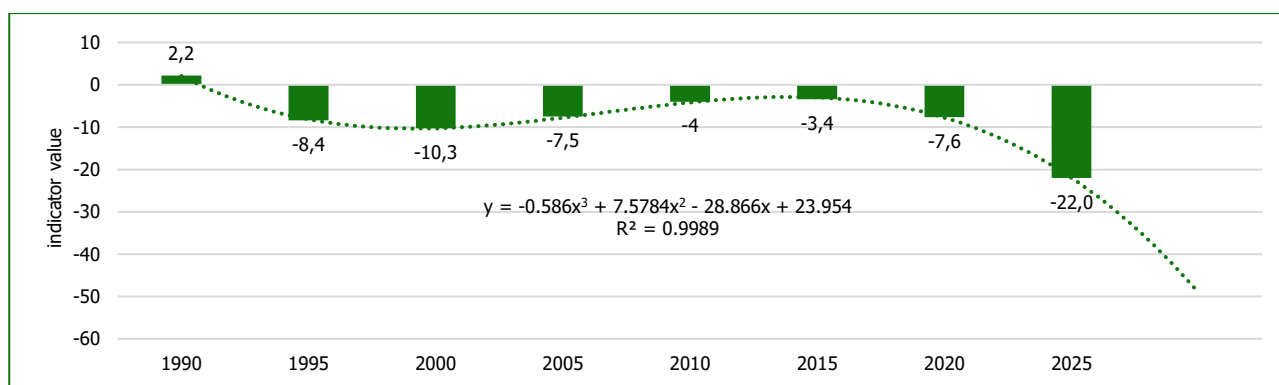


Figure 4. Dynamics of the indicator of natural growth per 1,000 people of the existing population during the years 1990-2025. Note: 2025 - forecast values. (Source: analyzed based on [32-35])

According to the information shown in Figure 4, during the 1990-2000 years, Ukraine underwent a process of significant deterioration of natural population growth indicators. In particular, during 1995-2020, there was a natural population decline in Ukraine, and the pace of this process significantly exceeds the critical level of its assessment following the demographic security criteria of Ukraine. From 2.2 ppm of natural growth in 1990, the studied indicator decreased to minus 10.3 ppm of the natural decline in 2000; that is, it changed from the optimal level in 1990 to the state in 2000, which, according to the demographic security criteria of Ukraine, is five times higher than the critical level of this indicator. During 2005-2015, there was an improvement in the indicator of natural population growth, which went from minus 10.3 per thousand in 2000 to minus 3.4 per thousand in 2015. In the next five years, the value of the indicator of natural growth in Ukraine significantly deteriorated and amounted to minus 7.6 ppm in 2020, which is 3.8 times higher than the critical level of this indicator. Trends in the natural increase indicator per 1,000 people of the existing population will decrease by about 20 ppm by 2025.

The next indicator is the share of the elderly population in the total population. It should be noted that the population aged 60 years and older belong to the elderly (Table 3).

Table 3. Dynamics of the share of the elderly population in the total population during 1990-2025. Note: 2025 - forecast values. (Source: analyzed based on [32-35])

№	Indicator	Year							
		1990	1995	2000	2005	2010	2015	2020	2025
1	The population aged 60 years and older, million persons	9.5	9.5	10.2	9.8	9.5	9.3	10.0	11.0
2	Population, million persons	51.6	51.3	49.1	47.1	45.8	42.8	41.7	37.27
3	The share of the elderly population in the total population, %	18.4	18.5	20.5	20.8	20.7	21.7	24.0	26.9

When characterizing the aging population indicator, it should be considered that it belongs to the mixed type. That is, up to a particular value, the indicator is a stimulator. In the case of a further increase in the matter, it becomes a destimulator

of the state of the economic security component. In particular, the optimal level for this indicator is from 18 to 20%; satisfactory from 17 to 18% and from 20 to 21%; unsatisfactory from 15 to 17% and from 21 to 22%; dangerous - from 13 to 15%, and from 22% to 23%; the critical level for this indicator is from 11 to 13% and from 23 to 25%. The indicator's value is less than 11%, and more than 25% is a supercritical level. Given the above, it can be stated that during 1990-1995 the share of the elderly population in the total population of Ukraine was at an optimal level (18.4% and 18.5%, respectively), during 2000-2010 - at a satisfactory level (20.5; 20.8 and 20.7%, respectively), in 2015 the indicator was 21.7%, which corresponds to an unsatisfactory grade, and in 2020 the indicator reached 24.0%, which is approaching the limit of the critical level of assessment of this indicator. Since 2010, a steady trend toward an increase in the share of the elderly population in the total population has been formed in Ukraine.

The next indicator is the demographic load of the disabled population on the able-bodied population. This indicator is calculated as the ratio of the non-working age population (0 - 14 and over 65 years) to the number of working age (15 - 64) (Table 4).

Table 4. Dynamics of the demographic burden of the disabled population on the able-bodied population in Ukraine during 1990-2025.
 Note: 2025 - forecast values. (Source: analyzed based on [32-35])

№	Indicator	Year							
		1990	1995	2000	2005	2010	2015*	2020*	2025
1	Number of populations aged 0-14, million people.	11.08	10.53	8.78	6.99	6.48	6.45	6.39	8.21
2	Population over the age of 65, million people	6.17	6.96	6.82	7.51	7.17	6.68	7.15	7.46
3	The number of the population of disabled age,	17.25	17.49	15.06	14.50	13.65	13.13	13.54	44.40
4	Population of working age,	34.30	33.81	33.52	32.60	32.13	29.64	28.20	25.36
5	Demographic burden of the disabled population on the able-bodied population, %	50.3	51.7	44.9	44.5	42.4	44.3	48.0	58.10

When studying this indicator, it should be considered that it belongs to the mixed type. That is, up to a specific value, the indicator is a stimulator. In the case of a further increase in the matter, it becomes a destimulator of the state of the economic security component. In particular, the optimal level for the population demographic load indicator is 45 to 50%; satisfactory from 40 to 45% and from 50 to 51%; unsatisfactory from 38 to 40% and from 51 to 52%; dangerous - from 36 to 38%, and from 52% to 53%; the critical level for this indicator is from 35 to 36% and from 53 to 55%. An indicator value of less than 35% and more than 55% is a supercritical level, which is dangerous.

Based on the information presented in the table. 6, from 1990 to 2010, the demographic burden decreased from 50.3% in 1990 to 42.4% in 2010. During 2015 and 2020, this indicator increased from 44.3% in 2015 to 48.0% in 2020.

If the value of this indicator in 1990 was satisfactory, then in 2020, it is optimal. These parameters were achieved mainly because, during the studied period in Ukraine, there was a significant reduction in the birth rate, affecting the population under the age of 14. In particular, in 1990, there were 11.08 million people under 14 in Ukraine. In 2020, their number was only 6.39 million, which decreased by 42.3% (Table 5).

Table 5. Dynamics of the general indicator of migration growth (decline) in Ukraine in 1990-2025. Note: 2025 - forecast values. (Source: analyzed based on [32-35])

№	Indexes	The value of indexes							
		1990	1995	2000	2005	2010	2015	2020	2025
1	Migration growth, reduction, thousands of people	78.3	-131.6	-133.6	4.6	16.1	14.2	9.3	6.4
2	Number of available populations, million people	51.8	51.7	49.4	47.3	46.0	42.9	41.9	37.27
3	Total coefficient of migration growth, reduction (-) (per 10,000 people)	1.5	-2.6	-2.7	0.1	0.4	0.3	0.2	-0.3

Migration processes also affect the dynamics of the state's population.

The indicator of migration growth also belongs to a mixed type's economic security indices. That is, up to a specific value, the indicator is a stimulator. In the case of a further increase in the value, it becomes a destimulator of the state of the economic security component. In particular, the optimal level for the indicator of population migration growth is 2 to 3%; satisfactory from 1 to 42% and from 3 to 3.5%; unsatisfactory from 0.0 to 1% and from 3.5 to 4%; dangerous - from minus 1 to 0.0%, and from 4% to 4.5%; the critical level for this indicator is from minus 2 to minus 1% and from 4.5 to 5.0%. The indicator's value is less than minus 2%, and more than 5.0% is a supercritical level.

Based on the information presented in Table 4, we can state that in 1990, Ukraine had a migration growth of the population, which was 1.5 per mille and, according to the relevant criteria of economic security, corresponded to a satisfactory level of migration growth. During 1995 and 2000, the migration reduction of the population of Ukraine took place on a scale that significantly exceeded the critical level of demographic security. Since 2005, the process of migratory population growth has resumed in Ukraine due to the influx of foreigners into the country. The scale of the migration inflow could be more significant and, according to the criteria of economic security, corresponds to an unsatisfactory level of migration growth of the population.

DISCUSSION AND CONCLUSIONS

After analyzing the demographic security indicators of Ukraine, it can be stated that the country is undergoing a process of population depopulation. The level of depopulation from 2020 to 1990 is 19.1%, which significantly exceeds the critical limit of 15%. Population reduction occurred both naturally and through migration. In particular, due to the decrease in the birth rate, the number of people aged 0 to 14 years from 11.1 million hryvnias in 1990 decreased to 6.4 million in 2020. During 1990-2000, the scale of population migration abroad was catastrophic for the state. In particular, in 1995, the indicator of migration reduction of the population reached 2.6 per mille, and in 2000 – 2.7 per mille, which is much higher than the critical level of this indicator, which is minus 2 per mille.

As a result of the demographic processes listed above, the population is ageing. In 2020, the share of the elderly population in the total population reached 24%, corresponding to a critical level of demographic security. At the same time, positive changes in the dynamics of indicators of life expectancy at birth, infant mortality, and the demographic burden of the disabled population on the able-bodied population should be noted. Life expectancy at birth in 2020 was 71.35 years, up from the 1990 level. The infant mortality rate in 2020 was 6.7 per 1,000 live births, almost half of the 1990 level. The demographic burden of the disabled population on the working population in 2020 was 48%, 2.3 percentage points below the level of 1990, and corresponded to the optimal level.

To eliminate existing problems in the demographic sphere, the leadership of Ukraine needs to apply systemic mechanisms aimed at increasing the population's standard of living, increasing the number of jobs in the state, and increasing the birth rate. Regarding the experience in the systematic increase of birth rates, in 2005, Ukraine already introduced restorative measures in this field. They gave positive results but were curtailed due to a shortage of state funds, which resulted from Russia's aggression against Ukraine in 2014. The state's restoration of systemic measures to stimulate the birth rate should consider the best world achievements in this field. In particular, along with assistance at the birth of a child, it is worth implementing deferred non-monetary measures to encourage multiple children, which consist in reducing the retirement age for one parent depending on the number of children, providing state loans for higher education to children who have brothers or sisters, etc.

In global practice, the stimulation of large families by credit policy measures through preferential terms of granting and partial repayment of housing loans at the expense of budget funds at the birth of the second and subsequent children has proven itself positively. Tax policy measures that relate to the reduction of income tax for natural persons-parents depending on the number of children also have a significant potential impact.

The leadership of Ukraine is obliged to take adequate measures to increase the number of jobs and raise the standard of living of the working population. A real struggle of the state against corruption and the shadow economy must accompany these measures. Without a radical limitation of the volume of the shadow economy, which annually bleeds the national economy of Ukraine by 20-25 billion US dollars, the state's measures to fight corruption and stimulate employment will not be successful. The practical experience of the leadership of Ukraine in the period 2000-2022 years ago is convincing proof. Currently, entire programs to stimulate the birth rate and improve the standard of living of the population in Ukraine operate only at the level of territorial communities that are financially capable enough to implement such programs. For example, in the Belobozhnytskyi territorial community of the Chortkiv district of the Ternopil region, during the years 2022-2024, it was planned to financially support more than 75 families in which a child was to be born during this period. All program funds were to be generated from the income of the territorial community.

ADDITIONAL INFORMATION

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ТЕНДЕНЦІЇ ЗМІНИ ДЕМОГРАФІЧНОЇ БЕЗПЕКИ УКРАЇНИ ЯК КЛЮЧОВОГО ІНДИКАТОРА СОЦІАЛЬНО-ЕКОНОМІЧНОЇ СТАБІЛЬНОСТІ

Дослідження присвячене визначенню оцінювання стану та визначенню тенденцій демографічної безпеки України за методикою, порівнянню його з інтегральними пороговими значеннями та визначенню найвпливовіших загроз у цій царині з позиції економічної безпеки. У статті здійснено ідентифікацію рівня демографічної безпеки України за сучасною методологією, порівняно його з інтегральними пороговими значеннями та визначено найвпливовіші загрози в цій царині з позицій соціальної безпеки. Виокремлено перелік індикаторів демографічної безпеки, який може змінюватися залежно від глибини та завдань дослідження. Відтак кожному індикатору присвоєно порогове значення, зокрема динаміка зміни індикатора (позитивна / негативна), що дає можливість порівняння їх в одному масштабі для визначення загроз. Ретроспективний аналіз та оцінювання поточного стану демографічної безпеки України засвідчує його критичний рівень за досліджуваний період, зокрема період війни, розв'язаної Росією, а це, у свою чергу, створює суттєву загрозу національній безпеці. На основі цього зроблено висновки, що сучасні тенденції зміни кількості населення з урахуванням воєнного стану в Україні свідчать про значне зниження темпу його зростання; в Україні відбувся процес суттєвого погіршення показників природного приросту населення; починаючи з 2010 року, в Україні сформувалася стійка тенденція до зростання частки населення похилого віку в загальній кількості населення; масштаби міграційного притоку є незначні та, згідно з критеріями економічної безпеки, відповідають незадовільному рівню міграційного приросту кількості населення. У результаті окреслено найважливіші загрози та наведено практичні рекомендації керівництву України для ліквідації існуючих проблем у демографічній сфері, а саме важливості застосування системних механізмів, спрямовані на зростання рівня життя населення, збільшення кількості робочих місць у державі та підвищення показників народжуваності.

Ключові слова: демографічна безпека, демографічна ситуація, демографічні проблеми, оцінювання поточного стану демографічної безпеки, індикатори демографічної безпеки, економічна безпека

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