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International Scientific-Practical Conference

Economic Growth in the Face of Global Challenges

Strategies for Sustainable Growth, Demographic Resilience, and Social Equity

SCIENTIFIC SESSION

„BUILDING DEMOGRAPHIC RESILIENCE: STRATEGIES FOR SUSTAINABLE POPULATION DEVELOPMENT"

Volume III

XIXth edition • October 9-10, 2025

Chisinau, 2025

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FROM CHALLENGES TO THE SUSTAINABILITY OF THE PENSION SYSTEM IN MOLDOVA[1]

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Abstract. The article assesses the sustainability of the pension system in the Republic of Moldova, considering demographic ageing, economic vulnerability, and institutional change. Using a comparative approach, the study draws on national statistics, international databases, and policy documents to evaluate Moldova's pension system alongside selected European Union countries - Bulgaria, Hungary, Latvia, and Romania, with similar historical and demographic backgrounds. Key indicators gauge both pension adequacy and the sustainability of financing. The analysis reveals how demographic shifts, migration, and labour market trends influence pension outcomes, highlighting Moldova's specific vulnerabilities compared to its regional peers. The discussion also explores reform options suited to the Moldovan context, focusing on short-term measures to reinforce the public pay-as-you-go system and on long-term strategies to develop supplementary mechanisms, such as voluntary savings. By placing Moldova's challenges within a broader European framework, the paper contributes to the debate on how countries with fragile economies can develop resilient pension systems that ensure social protection amidst ongoing demographic challenges and economic pressures.
Keywords: pay-as-you-go, sustainability

Introduction. Pension systems represent a cornerstone of social protection policies, as they secure not only the financial well-being of the older population but also the stability of the entire society. In the case of the Republic of Moldova, the challenges are particularly severe: accelerated population ageing, massive emigration of the working-age population, low wage levels, and persistently high poverty rates put tremendous pressure on the public pension system.

Although the World Bank classifies Moldova as a lower-middle-income country, other international indicators place it closer to the low-income or vulnerable country category. The poverty rate, which exceeded 30% in 2024, underscores the fragile economic situation and households' limited ability to accumulate resources for old age. These demographic and socio-economic realities make the analysis of pension sustainability both a scientific necessity and a priority for policymaking.

The objective of this study is to evaluate the sustainability of Moldova's pension system, identify the main demographic and economic pressures, and compare Moldova's indicators with those of selected EU countries—Bulgaria, Hungary, Latvia, and Romania. These countries were chosen because they share

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[1] The report was presented in the plenary session.

similar institutional legacies and demographic trajectories, while being integrated into the EU policy framework.

The pension system's sustainability means being robust to future development with respect to demographics, economic conditions and changes in productivity (Group of Thirty, 2019).

Pension system sustainability refers to the system's ability to:
- Provide an adequate level of pension benefits for all categories of the population;
- Maintain financial stability without excessive increases in public debt or budget deficits;
- Adapt to demographic changes, such as population ageing and shifts in the worker-to-retiree ratio;
- Sustain public trust through transparency and fairness.

Methodology. The analysis relies on official national statistics, international databases (Eurostat, OECD), and national policy documents. A set of key comparative indicators is used to measure both the adequacy and sustainability of pension systems.

Comparative Overview of Pension Systems. In Moldova, the statutory retirement age is currently 63 years for men and 60 years for women, with a gradual increase of the female threshold towards equalisation by 2028. In contrast, the statutory retirement age in Bulgaria, Hungary, Latvia, and Romania is already at 65 or above for both sexes.

Moreover, the required contribution periods are longer in EU countries. For example, in Hungary and Latvia, full pensions are typically linked to career contributions of 35-40 years.

In Romania, reforms gradually increased both retirement age and contribution periods to align with demographic trends. In Moldova, effective contribution periods are shorter, and gaps in employment histories due to migration or informal work further reduce pension entitlements. This discrepancy means that Moldovan workers retire earlier and contribute for fewer years, yet still spend a significant amount of time in retirement, which puts the system under structural strain.

The benefit ratio in Moldova (the average pension as a percentage of the average wage) is 32,5%, considerably lower than the EU average, which often exceeds 40%.

The replacement rate (pension/salary) in Moldova is also significantly lower than in these comparator countries, increasing pensioners' vulnerability to poverty. Over the last decade, this indicator has remained at 27%.

The pension system dependency ratio (the number of pensioners per 100 taxpayers (insured persons who pay contributions into the system) in Moldova is 55:100 in 2023. In other countries, this indicator is higher, except for Romania, with 49:100.

The old-age dependency ratio (ratio of the population aged 65+ to the working age population (20–64 years)) also shows unfavourable dynamics. Moldova already has around 31,2 persons aged 65+ per 100 working-age individuals, close to the EU average, but with a much weaker economic base to support them. Projections indicate that by 2050, the ratio may double, further undermining system sustainability.

Although life expectancy at birth is lower in Moldova than in EU countries, the *expected duration of life spent in retirement* (EDLR) remains significant: men in Moldova can expect to spend around 14 years in retirement, and women around 19. In comparison, the average EDLR in Latvia is 12.6 for men and 15.3 for women; in Romania, 14.5 and 18.8; in Hungary, 13.8 and 17.1; and in Bulgaria, -13.5 and 18.8. Thus, Moldovan retirees spend almost as long in retirement as their EU counterparts, despite retiring earlier and contributing less, deepening financial imbalances.

The 2024 budget of the Moldovan state social insurance system recorded a deficit representing 30% of total social insurance rights. This level of deficit is among the highest in European countries. In Romania, the pension budget is strained, but deficits are partly offset by EU funds and more substantial tax collection. Latvia and Hungary have managed to balance PAYG expenditures more efficiently due to higher employment rates and stronger compliance with contributions.

A structural weakness in Moldova is households' low saving capacity. According to the National Transfer Accounts (NTA 2023), private asset income exceeds savings throughout most of working life, indicating that income is consumed rather than saved. As a result, people enter retirement without significant private assets, relying almost exclusively on the public pension.

Conclusions. Introducing a mandatory second pension pillar in Moldova is not advisable at this time. Experiences from Central and Eastern European countries (e.g., Poland, Hungary, Romania) show that such reforms require a stable macroeconomic context, developed financial markets, and robust regulatory frameworks. Moldova, facing high inflation, economic volatility, and fiscal constraints aggravated by the war in Ukraine, does not yet meet these prerequisites.

The Moldovan pension system faces more severe sustainability challenges than most EU countries with comparable demographic structures. The earlier retirement age, lower contribution histories, high dependency ratios, and low savings capacity all converge to create a fragile system highly dependent on the state budget. In contrast, countries such as Bulgaria, Hungary, Latvia, and Romania, despite facing their own demographic pressures, benefit from stronger economic bases, more extended contribution periods, and partial diversification of pension provision.

For Moldova, short-term priorities must focus on stabilising the PAYG system and tackling informality, while long-term strategies should prepare the ground for complementary private savings mechanisms. Any reform must carefully balance fiscal sustainability with the social imperative of ensuring a dignified old age for future generations.

Thus, the transition from a fragile to a sustainable pension system is not merely a technical adjustment but a fundamental condition for Moldova's socio-economic future.

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MEASURING ACTIVE AGING IN A NON-EU CONTEXT: THE CASE OF THE REPUBLIC OF MOLDOVA

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Abstract. The paper details a transparent methodological pathway for applying the UNECE/European Commission Active Ageing Index (AAI) outside the EU, using the Republic of Moldova as a case study. Building on earlier national AAI editions (2016, 2020), we describe a reproducible approach that triangulates official statistics, census-based structural covariates, and survey microdata; specifies principled proxies where original indicators are unavailable; and conducts robustness checks on weights, thresholds, and missingness. The same architecture will underpin forthcoming 2024 estimates for Moldova, integrating multiple data sources to maximize comparability with EU practice and to ensure transparent reporting. Beyond the case study, the paper positions this pathway as a practical blueprint for monitoring active ageing in heterogeneous statistical environments, enhancing policy relevance while maintaining clarity about assumptions and limits of comparability.
Keywords: Active Ageing Index, non-EU adaptation, proxies, Moldova

Introduction. The current demographic structure of the Republic of Moldova is marked by a pronounced process of demographic aging, with one in four inhabitants (25.9%) aged 60 or over (BNS, 2024), puts pressure on the labor market, pension systems, and care services, but at the same time creates opportunities for greater social participation by older people. In this context, the concept of "active aging" becomes relevant: active aging means growing old in optimal health, with the active involvement in society and independence in daily life (Zaidi et.al., 2013).

The rationale for applying the AAI outside the EU. The Active Ageing Index (AAI) was initially developed under the auspices of the European Commission and UNECE to assess the progress of EU countries in harnessing the economic and social potential of older people. Although the official calculation of the AAI initially covered only EU Member States, extending this tool to non-EU countries is essential for several reasons. First, non-EU countries such as the Republic of Moldova, face similar challenges related to aging and can benefit from a comparable monitoring tool that provides a quantitative framework to highlight the strengths and weaknesses of active ageing across various areas (employment, participation, healthy and safe living, capacity, and environment). Secondly, the use of AAI outside the EU is encouraged by international frameworks such as the Madrid International Plan of Action on Ageing (UNECE, 2016). Thus, measuring the AAI in the Republic of Moldova helps to report progress towards international goals and align national

active ageing policies with best practices. The adoption of the AAI provides an evidence-based advocacy tool that can help change perceptions of aging – from a burden to an opportunity for societal development.

The AAI methodology and its adaptation to the Republic of Moldova's context. The Active Ageing Index is a multidimensional composite index comprising 22 individual indicators grouped into four domains: (1) Employment; (2) Social participation; (3) Independent, healthy, and secure living; (4) Capacity and environment conducive to active ageing. The index measures the extent to which people aged 55 and over realise their potential to contribute economically and socially, and highlights the factors that support or limit their participation. Each indicator is defined so that a higher value indicates more successful active ageing, with values normalised on a scale of 0 to 100 (where 100 represents the full realisation of theoretical potential). The original methodology involves aggregating indicators into domain scores and then into a total index score, using predefined weights to reflect the relative importance of the domains and indicators (UNECE, 2018). By design, the AAI focuses on outcome indicators (actual achievements of older people) rather than input or process indicators, ensuring comparability across countries and over time, provided the data come from harmonised sources and the methodology is applied uniformly.

The Republic of Moldova was among the first countries outside the EU to calculate its own Active Ageing Index, initially as a pilot exercise in 2016. The aim was to obtain an overview of the situation of older people from a comparative perspective and to identify areas requiring intervention. In the absence of national data sources equivalent to those used by the AAI at the EU level (such as EU-LFS, EU-SILC, EQLS, etc.), methodological adaptation was necessary (Table 1). *The first round* (2016) mainly used statistical proxies for the original indicators: of the 22 indicators, 13 were calculated using proxy variables that did not precisely match the original definitions (Buciucenu-Vrabie, M., 2016). *The second round* of calculations (2020) benefited from substantial improvements to the database. In 2019–2020, the Republic of Moldova participated in the international Generations and Gender Survey (GGS), which provided up-to-date data for numerous indicators on people aged 50and over (Buciuceanu-Vrabie M., 2021) Thus, in the 2020 AAI for Moldova, the number of proxies was significantly reduced (to only 2 out of 22 indicators). Meanwhile, the National Bureau of Statistics (BNS) has taken concrete steps to align national statistics with EU standards. For example, the Labor Force Survey (LFS) was updated to reflect international definitions of employment and inactivity. Similarly, the Household Budget Survey (HBS) improved the measurement of income and consumption, including poverty indicators. These methodological adjustments brought Moldova's 2020 AAI calculation closer to the original UNECE/EC model, significantly enhancing the international comparability of the results.

Table 1. **The main data sources used in Moldova's AAI rounds: 2016, 2020, 2024**

AAI Domain (Indicators)	Data sources		
	2016 (13 proxy/22)	**2020 (3 proxy/22)**	**2024 (4 proxy/22)**
Employment	*Labour Force Survey (LFS)* 2013 (BNS)	*LFS 2020* (BNS)	*LFS 2023/24* (BNS); *2024 Census* – structural variables (urban/rural).
Participation in society	*Time Use Survey 2012* (3 proxies); *Public Opinion Barometer (POB)* 2011 (1 proxies)	*Generations and Gender Survey (GGS)* 2020 – direct measures of 3 indicators; *POB 2018/2020* – data on political participation	*GGS Wave 2 (2024)* – updated indicators for volunteering & care *POB 2024* - civic engagement /political participation proxies
Independent, healthy and secure living (income, poverty, access to health care, physical exercise)	*Demographic statistics* (up to date, NBS) *Household Budget Survey (HBS) 2013* – relative median income, risk of poverty, material deprivation; *Time Use Survey 2012* – proxy for physical activity. *VAN 2014* (proxy for access to health)	*Demographic statistics 2019/2020*; *HBS 2020* *GGS 2020* – access to health care/dental care, material deprivation, lifelong learning, physical exercise. *POB 2020* - data on safety measures	*Demographic statistics 2023/24* – updated life expectancy and healthy life years; *HBS 2024* – new income and poverty data; *2024 Census* – housing and living arrangements; *GGS Wave 2 (2024)* – updated indicators for health access, and learning. *POB 2024* - data on safety measures
Capacity & enabling environment (education, mental well-being, ICT use, social connectedness)	*LFS/HBS* - Mostly calculated using proxies: education and internet access *VAN 2014* - mental well-being and social connectedness proxies	*GGS 2020* – WHO-5 mental well-being scale, ICT use, social connectedness; *LFS 2020* – education level.	*2024 Census* - education; *GGS Wave 2 (2024),* mental well-being proxies *POB 2024* - material-deprivation proxies.

Source: author's compilation

The third round (2024) continues this progress, integrating the latest available sources. The 2024 Population and Housing Census (RPL 2024) provides essential structural data. Similarly, the second wave of the GGS study (2024) provides updated information on volunteering and caregiving, access to health services, and lifelong learning among younger cohorts of older adults. However, in 2024, some data gaps required the use of proxies.

The adaptation of the AAI to the non-EU context must be carried out with care to preserve as much as possible the original meaning of the indicators and their comparability with the reference values. In the case of Moldova, the principle of "best possible comparability" was applied, selecting proxies that conform to the definitions of the measured concepts. At the same time, methodological consistency was maintained across rounds, so that the evolution over time (2016-2020-2024) would reflect fundamental changes as accurately as possible, rather than

inconsistencies arising from methodological change. With each round, the quality and accuracy of the AAI for Moldova have improved, but full international comparability remains a target not yet fully achieved.

Moldova's experience shows that it is feasible to calculate the AAI outside the EU, and this process has highlighted the need to strengthen the national information system on older persons. Challenges encountered include: the lack of a permanent institutional mechanism for updating the AAI (the work was carried out in ad hoc projects), the difficulty of obtaining consistent time series from different sources, and the impossibility of regional disaggregation due to limited data. The key lesson is that integrating AAI elements into the current statistical research program (including adding special modules to LFS, HBS, or other surveys) would facilitate the continuous monitoring of active aging.

Conclusions. The implementation of the Active Aging Index in the Republic of Moldova provided an integrated perspective on the situation of older persons and highlighted both existing deficits and opportunities. The results of the three AAI rounds converge on the conclusion that the active ageing potential of Moldovan older people is underutilized, particularly in social and economic participation. With a total AAI score of around 28–29 points, Moldova ranks well below the EU average – 36.8 points (UNECE & EC, 2020). This indicates the need to intensify public policy efforts to create an environment in which older people can remain active, healthy, and involved.

The AAI has demonstrated the usefulness of a multidimensional approach: support policies for older people must be holistic. For example, raising the retirement age has increased older people's labour market participation. Still, if this is not accompanied by measures to address discrimination and create suitable jobs, the impact on actual employment will be limited. Similarly, promoting volunteering among seniors may be ineffective if older people face health and mobility problems; therefore, concomitant policies are needed to improve health services, adapted transport, active community centres, etc. Finally, the experience of countries leading the AAI 2020 (such as Sweden (47.8 points), the Netherlands (43.7) and Denmark (43.3) show that long-term investments in the human and social capital of older people bring results: where older people have a high level of education, consistent active aging policies, and cultures that encourage participation in community life, AAI scores are the highest. Moldova can learn from these models by adapting interventions to the local context.

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FROM EARLY TO LATE FERTILITY: COMPARATIVE EVIDENCE FROM ROMANIA AND MOLDOVA

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Abstract. This study examines fertility dynamics in Romania and the Republic of Moldova, two Eastern European countries with common cultural roots but divergent political, social, and economic trajectories after the 1990s. Using vital statistics for 1971–2023, the analysis finds that the total fertility rate (TFR) in 2023 was 1.5 in Romania and 1.6 in Moldova, marginally above the levels recorded in many other European countries. Applying the postponement–recuperation model proposed by T. Frejka, we investigate shifts in both the tempo and quantum of fertility. Romania experienced an earlier onset of fertility postponement, around 1994, with the mean age at first birth rising from 22.6 years in the early 1990s to 27.2 years in 2023. By contrast, Moldova underwent a later and slower transition, beginning around 1997, with the mean age at first birth increasing only to 24.4 years by 2023. The postponement index rose steadily in both countries, surpassing 0.70 in Romania but stabilizing around 0.65 in Moldova. These results emphasize the divergent pace of adaptation to late fertility regimes and highlight the influence of social, economic, and cultural conditions on reproductive behavior.
Keywords: fertility transition, fertility postponement and recuperation, Frejka model, Romania, Moldova

Introduction. Romania and the Republic of Moldova, although sharing common historical and cultural roots, have followed different socio-demographic trajectories shaped by their distinct status during the socialist period and by the specific developments of the post-communist transition. The evolution of fertility dynamics in both countries was strongly influenced by these differentiated social and economic contexts established before 1990. Demographic policies, economic conditions, and family norms shaped both the timing and intensity of childbearing, leading to divergent demographic trajectories in the two countries.

Literature review. The literature on fertility decline highlights the central role of fertility postponement and the challenges associated with the recuperation of delayed fertility, particularly in Central and Eastern Europe (Sobotka, 2017), (Frejka, T., Gietel-Basten, S., 2016). Profound socio-economic transformations during the post-socialist period have shaped reproductive behaviors, leading to a decline in cohort fertility and a rationalization of family size (Lesthaeghe, R., Zeman, K ., 2024), (Beaujouan, É., Zeman, K., & Nathan, M., 2023). Research points to factors such as rising female educational attainment, increased labor market participation, and economic insecurity, which contribute to delays in family formation and the onset of parenthood (Neels, K., Murphy, M., Ní Bhrolcháin, M., & Beaujouan, É., 2017), (Zeman K., Beaujouan, É., Brzozowska Z., Sobotka T., 2018), (Berrington, A., Ellison, J., Kuang, B., Vasireddy, S., & Kulu, H., 2022). In Moldova, recent studies show a slower fertility transition than in other former Soviet republics. The country displays an intermediate model, combining traditional and modern reproductive behaviors, with delayed adoption of postponement norms and persistent traditional patterns, especially in rural areas (Gagauz, O., & Grigoraş, E., 2018), (Grigoraş, E., Gagauz, O., 2022). At the same time, the literature underlines the need for a more detailed parity-specific analysis and careful selection of reference cohorts to avoid misleading interpretations in international fertility comparisons.

Research methodology. The study draws on vital statistics provided by the National Bureau of Statistics of the Republic of Moldova and the National Institute of Statistics of Romania for the period 1970–2023, covering the number of births and their distribution by the mother's age and year of birth. To ensure international comparability, the analysis uses the de facto population, which excludes long-term emigrants (Penina O., Jdanov, D.A., Grigoriev, P., 2015). For Romania, the analysis is based on data series detailing the distribution of births by the mother's age and birth order; starting from 2002, it employs the usual resident population, aligned with international definitions, to ensure the consistency and accuracy of fertility indicators.

Main results. The transition from traditional to delayed fertility marks a major demographic shift, as postponed motherhood reshapes birth timing and drives fertility decline and changes reproductive behaviors. Romania and Moldova fall into the group of low-fertility countries, though not in the category of very low fertility, recording in 2023 a total fertility rate (TFR) of around 1.5 children per woman of reproductive age in Romania and 1.6 in the Republic of Moldova. These levels place them above the average of several European countries, such as Poland (1.3), Spain (1.2), and Italy (1.2), but below the levels observed in France (1.8) and Denmark (1.7). In the regional context, both Romania and Moldova occupy an intermediate position, reflecting a fertility transition process similar to that of other Central and Eastern European countries, marked by fertility postponement, rising socio-economic uncertainty, and reduced realization of reproductive intentions.

Demographic transformations are reflected in a changing age structure of fertility between 1970 and 2023, with a continuous shift from decade to decade. The

evolution of fertility reveals several distinct stages, closely linked to changes in TFR levels and tempo shifts in reproductive behavior in both countries.

In Romania, the mean age at first birth (MAFB) increased from 22.6 years in the 1990s to 27.2 years in 2023, reaching one of the highest levels in the region, though still below the EU average of 30 years in 2022. In Moldova, although the upward trend is evident, the values remain lower: from around 22.3 years in the 1990s, the MAFB has increased to 24.2 in recent years, reaching 24.4 years in 2023 approximately three years lower than in Romania. This gap indicates that Moldova has maintained an early fertility pattern for a longer period, whereas Romania has shifted more rapidly toward the Western model of postponed childbearing. Recent studies confirm that, despite the general trend of delayed motherhood, younger mothers continue to play a significant role in Moldova's fertility structure, reflecting the persistence of a reproductive pattern distinct from that of other Eastern European countries.

According to the definition proposed by Kohler and their colleagues (Kohler, H.-P., Billari, F. C., & Ortega, J. A., 2002) , the onset of the fertility postponement transition is identified as the first year in a sequence of three consecutive years in which the MAFB increases by more than 0.3 years. Applying this criterion, Romania exhibits an earlier and more pronounced onset of postponement, estimated to have started around 1994. In contrast, Moldova experienced a later onset, around 1997, placing it among the Central and Eastern European countries with a delayed entry into the post-transition period.

Table 1. **Total fertility rate (TFR), mean age at first birth (MAFB), and onset year of fertility postponement**

Country	Total fertility rate						Onset year of fertility postponement	Mean age at first birth					
	1990	1995	2000	2015	2020	2023		1990	1995	2000	2015	2020	2023
Romania	1,83	1,33	1,31	1,65	1,91	1,49	**1995**	22,6	23,0	23,7	26,4	27,2	27,1
Moldova	2,36	1,81	1,48	1,61	1,76	1,62	**1997**	22,3	21,9	22,6	24,2	24,3	24,4

Source: authors' calculations based on vital statistics from the National Bureau of Statistics (Moldova) and the National Institute of Statistics (Romania)

The index of birth postponement followed an upward trend in both countries, reflecting a significant demographic shift after the 1990s. During the early years of the post-communist transition (1990–2000), values were low, reaching a minimum around 1995. In this period, the Republic of Moldova and Romania exhibited similar levels, around 0.30–0.35 children per woman, indicating a relatively limited postponement of childbearing. Starting in the 2000s, a steady increase in the index

can be observed in both countries, signaling a more pronounced trend toward delayed motherhood. Especially after 2010, Romania surpassed the Republic of Moldova, reaching levels above 0.70 children per woman between 2013 and 2023. This suggests a faster alignment with Western demographic transition patterns.

Figure 1. **Indicator of birth postponement, period 1971-2023**
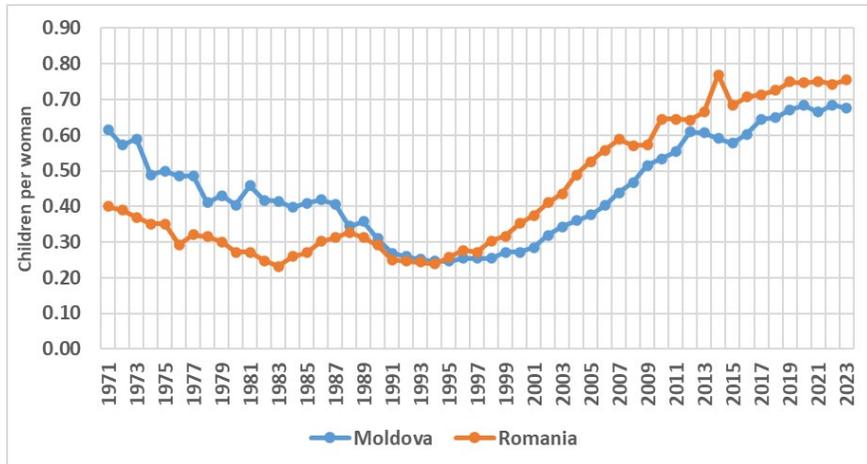
In contrast, Moldova has experienced a slower but steady increase, reaching around 0.65–0.68 children per woman in recent years, yet still below Romania's level. Thus, although the gap between the two countries has narrowed significantly, the Republic of Moldova remains slightly behind in the pace of fertility postponement, which may reflect differences in economic, social, and cultural factors.

Discussion and conclusions. The findings highlight both commonalities and differences in the fertility transitions of Romania and the Republic of Moldova. While both countries have shifted from traditional to delayed fertility patterns, Romania experienced an earlier and faster postponement, aligning more closely with Western European trends. In contrast, Moldova followed a slower trajectory with persistent early fertility, especially in rural areas. These differences reflect distinct socio-economic, cultural, and historical contexts that have shaped reproductive behaviors over time. Overall, both countries occupy an intermediate position in the European fertility landscape, facing similar challenges of delayed fertility, low fertility, and changing family norms.

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PERCEPȚIA EGALITĂȚII DE GEN ÎN REPUBLICA MOLDOVA: TENDINȚE, SCHIMBĂRI ȘI PROVOCĂRI

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Abstract. This article examines recent developments and key determinants of gender equity in the Republic of Moldova during the period 2015–2024, within a context shaped by institutional reforms, international pressures, and internal cultural resistance. Baced on analysis of data from the International Men and Gender Equality Survey (IMAGES), conducted in 2015 and 2024, authors provides a comprehensive overview of gender relations dynamics, starting from the theoretical distinction between equality and equity, applying an intersectional sociological approach. Using a multi-theoretical framework – gender role theory, family decision-making theory, social change theory, and institutional theory – the article highlights significant progress in strengthening the legislative framework, promoting female leadership, and increasing the flexibility of family policies. The analysis focuses on the interconnection between cultural norms, institutional processes, and civil society initiatives, exploring not only the progress achieved but also the persistent systemic resistances.

The findings reveal a positive evolution in the field of gender equity but also highlight enduring structural challenges: deeply rooted gender stereotypes, economic inequalities, and the politicization of the gender equality discourse, and provide opportunities for developing evidence-based programs on gender equality, as well, guidens fordesigning of public awareness campaigns.

Keywords: gender equity, gender equality, gender roles, family decision-making, social change, public policies

Introducere. Problematica echității de gen a devenit, în ultimele decenii, un reper normativ și analitic esențial în evaluarea progresului democratic, a dezvoltării durabile și a coeziunii sociale. Într-un context marcat de tranziții politice, economice și culturale profunde, Moldova oferă un teren fertil pentru analiza multidimensională a modului în care sunt construite, negociate și transformate relațiile de gen. Deși discursul public și cadrul legal privind egalitatea de șanse între femei și bărbați au cunoscut o expansiune notabilă, realitatea socială rămâne tensionată de inegalități structurale, norme tradiționaliste persistente și bariere simbolice subtile.

Cadrul conceptual, teoretic și methodologic. Din perspectivă sociologică, echitatea de gen se referă la distribuția justă a resurselor, responsabilităților și oportunităților, ținând cont de istoricul inegalităților, de diferențele de putere și de barierele instituționale și culturale care afectează diferit femeile, bărbații și

persoanele cu identități de gen diverse. Pentru a înțelege tendințele și factorii de schimbare în domeniul echității de gen, acest articol se sprijină pe o abordare interdisciplinară care îmbină teoria rolurilor de gen (Eagly, Wood, 2016), teoria deciziilor familiale (Paolucci, Hall, & Axinn, 1977), teoria schimbărilor sociale (Durkheim, 1923; Paoletti, 2022) și teoria instituțională (Scott, 2008). Aceste perspective teoretice sunt îmbinate cu datele Scalei Echității de Gen (GEM) (Nanda, 2011), dezvoltată de Consiliul Populației și Promundo, utilizată pe larg în cercetările IMAGES (Promundo-US, 2021, Equimundo, 2022). GEM este un instrument metodologic-cheie pentru a măsura atitudinile referitoare la normele de gen în relațiile intime, sănătatea reproductivă, violența în bază de gen, responsabilitățile familiale și deciziile în gospodărie.

Pentru a analiza percepția echității de gen, prezentul articol apelează la datele cercetării IMAGES-2 (Cheianu-Andrei, Zaporojan-Pîrgari, Grosu, & Andrei, 2024), realizată pe metodologia complexă aplicată la nivel internațional. Conform metodologiei internaționale, sondajul IMAGES cuprinde două eșantioane distincte, respectiv, în Republica Moldova acesta a cuprins un eșantion principal format din 1014 bărbați și un eșantion secundar format din 515 femei, pentru a analiza diferențele de percepție, atitudini și practici. Eșantioanele au fost probabiliste, stratificate.

Rezultate. Există diferențe semnificative în percepția corectă a echității de gen în Moldova, între bărbați și femei. S-a constata o rată mai ridicată a percepției corecte în rândul femeilor în cele patru domenii analizate.

Violența bazată pe gen este domeniul în care percepția corectă este cea mai ridicată. Astfel, 85% dintre femei și 70% dintre bărbați recunosc și înțeleg corect problematica violenței bazate pe gen, ceea ce reflectă o conștientizare relativ înaltă a aspectelor de echitate de gen legate de violență, iar acest lucru, cel mai probabil, este datorat activităților și discuțiilor frecvente la subiectul respectiv în societate.

În domeniul sănătății reproductive și a drepturilor asociate acesteia, 77% dintre femei și 62% dintre bărbați au o percepție corectă. Diferențele de percepție se explică prin faptul că femeile sunt direct afectate de problemele legate de sănătatea reproductivă și mai informate în legătură cu aspectele respective, pe de o parte, și atitudinile tradiționale, de gen, ale bărbaților că anume ei ar avea putere de decizie asupra corpului femeii, iar acestea ar trebui să respecte deciziile luate de soți/parteneri, pe de altă parte.

Înțelegerea corectă a echității de gen în contextul relațiilor sexuale este ușor mai ridicată în rândul femeilor (65%), decât în rândul bărbaților (60%). Deși decalajul de percepții între bărbați și femei aici este mai mic față de alte domenii, acesta sugerează că încă există diferențe în modul în care fiecare gen percepe rolurile și egalitatea în relațiile intime, fiind necesare eforturi suplimentare de educare și sensibilizare.

Domeniul responsabilităților casnice este cel în care percepția corectă asupra echității de gen este cea mai redusă, cu doar 64% dintre femei și 55% dintre bărbați care recunosc distribuția echitabilă a responsabilităților casnice drept o chestiune de echitate de gen. Situația constatată reflectă faptul că, în multe gospodării din

Moldova, diviziunea tradițională a responsabilităților casnice încă mai predomină, iar percepția rolurilor de gen rămâne puternic influențată de normele culturale.

Discuții și concluzii. În pofida progreselor semnificative realizate în ultimul deceniu, echitatea de gen în Republica Moldova rămâne un proces în tranziție. Datele IMAGES-2 subliniază necesitatea de a îmbunătăți înțelegerea echității de gen în toate cele 4 domenii, cu accent special pe responsabilitățile casnice, un aspect esențial pentru construirea unei societăți echitabile. Pentru a obține o echitate de gen reală, este esențială educația și sensibilizarea atât a femeilor, cât și a bărbaților, pentru a reuși depășirea stereotipurilor și normelor tradiționale existente în prezent în societate.

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NOT NOW, MAYBE NEVER: FERTILITY HESITATION, SPIRITUAL REFRAMING AND SELF-CARE CULTURES IN URBAN ROMANIA

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Abstract. This study explores fertility hesitation as a cultural syndrome shaped by emerging self-care ideologies and spiritual practices among urban Romanian women. In a context of declining birth rates and shifting life transitions, it examines how yoga functions as more than a physical discipline - offering a framework for navigating existential uncertainty, emotional resilience, and evolving concepts of fulfillment. Drawing on seven semi-structured interviews with female yoga practitioners aged 25–40, the research highlights a move away from traditional reproductive expectations toward individualized well-being narratives. Participants often described motherhood as a source of potential disruption to personal autonomy and emotional balance. Yoga served not only as a coping mechanism, but also as a lens through which participants redefined what it means to live a meaningful life.

Rather than treating fertility decline purely as an economic or demographic issue, the study frames it as part of a broader cultural reorientation. Spiritual self-care becomes a symbolic system that prioritizes introspection, autonomy, and holistic well-being - frequently at odds with institutional pronatalist messages. These findings contribute to understanding how demographic behaviors are embedded in deeper shifts in identity, belief, and quality of life in post-communist societies.

Keywords: fertility hesitation, self-care ideologies, spiritual practices, yoga, emotional well-being, autonomy

Introduction. This paper investigates fertility hesitation among urban Romanian women as a culturally embedded phenomenon shaped by self-care ideologies and spiritual practices, especially yoga. Moving beyond demographic explanations centered on economic insecurity or policy gaps, we explore how delayed or uncertain reproductive choices reflect transformations in values, identity, and emotional priorities. Fertility hesitation is not only postponement or rejection of motherhood, but an existential negotiation shaped by autonomy, introspection, and well-being.

Through interviews with women aged 25-40, we trace how spiritual self-care counters motherhood as duty, opening space for alternative meanings of maturity and connection. This study thus illuminates the symbolic reorganization of womanhood and life planning in contemporary Romania.

Literature Review. Fertility hesitation appears as existential ambivalence shaped by self-care and individualized fulfillment (Giddens, 1991; Illouz, 2007). Practices like yoga provide emotional regulation, identity work, and spiritual autonomy. Romania's history, from authoritarian pronatalism to post-1989 liberalization, situates hesitation between inherited maternal norms and contemporary narratives of self-development (Kligman, 1998). A qualitative, interpretive design (Creswell, 2013; Denzin & Lincoln, 2018) enables attention to these subjective experiences.

Late modernity emphasizes reflexivity in constructing life trajectories (Bauman, 2000). Fertility hesitation thus becomes a form of ethical self-fashioning, balancing motherhood against psychological coherence and existential alignment.

Research Methodology. The current paper is based on a qualitative research design aimed at understanding how women construct meaning around fertility decisions within broader cultural and spiritual frameworks. The study draws on semi-structured interviews with seven Romanian women, ages 25-40, all with higher education, regular yoga practice, and no children. The guide covered values, motherhood, yoga, and emotional well-being. Participants were purposively selected and coded (e.g., I_5_35).

Main Results. Fertility hesitation emerged as a value-laden process negotiated between inner conviction and external pressure.

Autonomy was central. Some rejected motherhood from an early age: "Even as a child, I knew I didn't want to be a mother" (I_1_40). Others reclaimed autonomy later, resisting societal timelines.

Emotional risk was another theme. Participants feared parenthood might destabilize psychological balance or reproduce trauma: "What if I hurt the child? What if I pass on unresolved trauma?" (I_2_33). Hesitation functioned as boundary-setting rather than indecision.

Yoga provided existential clarity, described as "an anchor" (I_6_37) and "a way of coming back to myself" (I_3_34). It legitimized hesitation as "an act of clarity and responsibility" (I_7_35).

Participants also distanced themselves from pronatalist discourses through avoidance or boundary-setting: "I've built a bubble where societal noise doesn't reach me" (I_2_33). Rather than paralysis, hesitation appeared as a culturally legible stance aligned with sovereignty and coherence.

Beyond reproduction, women redefined fulfillment and maturity as emotional sovereignty, meaningful work, creativity, and communities of shared values, challenging the equation of femininity with motherhood. Taken together, these narratives highlight fertility hesitation as both an individual coping strategy and a collective cultural redefinition of womanhood.

Discussion and conclusions. Findings confirm that fertility hesitation among urban Romanian women is a culturally embedded stance, not reducible to demographics. Yoga exemplifies how self-care functions as a symbolic system for interrogating normative life paths. Hesitation is framed not as selfishness but as ethically grounded and culturally coherent.

Temporality was marked by deliberate openness: some left space for motherhood "if it happens naturally," rejecting imposed timelines. This fluid orientation challenges assumptions of urgency and positions hesitation as an active mode of inhabiting uncertainty.

Overall, fertility hesitation reflects identity and well-being transformations in post-communist societies. Yoga provides vocabulary for articulating maturity and connection beyond motherhood. Fertility choices thus appear as acts of cultural negotiation, rethinking reproduction as a site of ethical and symbolic reorientation. This research contributes to the broader understanding of how identity, belief, and well-being are reconfigured in post-communist societies. The concept of fertility hesitation as a cultural syndrome enables us to see beyond the binary of motherhood vs. childlessness, and instead attend to the ambivalence, timing, and meaning-making that animate contemporary reproductive subjectivities. Practices like yoga provide not only existential clarity, but also a counter-institutional vocabulary for articulating maturity, connection, and purpose. In this light, fertility choices are not simply demographic behaviors but acts of cultural negotiation. By highlighting the intersection of embodiment, spirituality, and autonomy, this study offers a framework for rethinking fertility not as a biological imperative, but as a site of ethical and symbolic reorientation.

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DEMOGRAPHIC RESILIENCE IN TIMES OF CATASTROPHE: WHAT THE GLOBAL COMMUNITY CAN LEARN FROM THE UKRAINIAN EXPERIENCE

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Abstract. The Russian invasion of Ukraine has caused one of Europe's largest demographic shocks since World War II. Over 5.6 million Ukrainians live abroad as refugees, and more than 3.3 million are internally displaced (UNHCR, IOM, 2025). The population has dropped by almost 25%, threatening human capital, labor markets, and long-term sustainability. This study analyzes Ukraine's demographic resilience under war, focusing on demographic losses, adaptive policies, and recovery scenarios to 2050. Despite severe declines, Ukraine shows resilience through community support, innovative health and social measures, and gradual adoption of European family and migration policies, offering lessons for global crises.
Keywords: demographic resilience, Ukraine, war, migration, human capital.

Introduction. The concept of demographic resilience has gained particular importance in the context of global instability manifested in wars, pandemics, and climate-related disasters. Ukraine represents a unique case where war has directly shaped demographic processes, leading to a sharp population decline, mass forced migration, and increased risks for long-term sustainability. At the same time, adaptive mechanisms have emerged, making the Ukrainian experience essential for understanding resilience in times of catastrophe.

Literature review. Previous studies on wars and disasters highlight the importance of demographic stability for economic recovery and state viability (Lane & Catling, 2016). Resilience studies (Clarke, 2014) stress community initiatives and the integration of social and health policies, while UN and UNFPA extend the concept to human rights and inclusiveness. Ukrainian scholars define demographic resilience as the capacity to maintain generational replacement, preserve balance, and minimize the negative effects of shocks (Gladun and ect., 2024).

Research methodology. The methodology is based on demographic forecasting to assess the size and structure of Ukraine's population up to 2040, taking into account wartime mortality, fertility decline, and large-scale migration flows. Scenario modeling is combined with comparative analysis of EU policies in migration management, social protection, and family support. The empirical base includes data from UNHCR, IOM, the Ministry of Justice of Ukraine, and the Ptukha Institute for Demography and Quality of Life Research of the National Academy of Sciences of Ukraine.

Main results. The findings reveal the scale and multidimensional nature of Ukraine's demographic crisis. Over the last three decades, the country has lost more than 20 million people: from 54 million in 1991 to about 34 million by July 2025 (around 30 million on government-controlled territory). Projections suggest only 28 million inhabitants by 2040 in the optimistic scenario and 22 million in the pessimistic one. Such a decline is unprecedented in Europe and signals the risk of a "demographic winter," when the ratio of working-age to dependent population becomes critically adverse.

The war has severely aggravated the fragile situation of generational replacement. The total fertility rate fell from 1.13 children per woman before 2022 to a historic low of 0.8–0.9, largely due to the emigration of women of reproductive age, delayed marriages, and growing uncertainty. Mortality has risen both from direct combat losses and indirect causes — reduced access to healthcare, shortages of medicines, and worsening chronic illnesses. Men aged 20–50, the elderly, and people with chronic diseases are the most affected, reshaping the age-sex structure.

Migration adds further strain: by August 2025 nearly 5.7 million Ukrainians were abroad (excluding incomplete data on Russia) and over 3.3 million were internally displaced. This has caused substantial human capital losses and structural imbalances: a shortage of working-age men alongside a deficit of young women of childbearing age (*Figure 1*).

Despite these challenges, elements of demographic resilience are evident. As highlighted in the joint publication of Ukrainian scholars, resilience is not confined to statistics but shaped by adaptive social and institutional mechanisms. These include local community support for internally displaced persons, innovative socio-medical programs, and gradual alignment of state policies with European standards in family and migration management. In the long term, controlled immigration may also serve as a compensatory resource to restore the working-age population.

Thus, while Ukraine has endured dramatic demographic losses, its experience demonstrates the possibility of resilience through a combination of demographic policy, institutional reform, and social adaptation. This underscores the need to integrate traditional demographic analysis with broader resilience concepts that encompass social solidarity, international assistance, and prospects for the return of human capital.

Figure 1. **Losses in the age-sex structure of Ukraine's population**
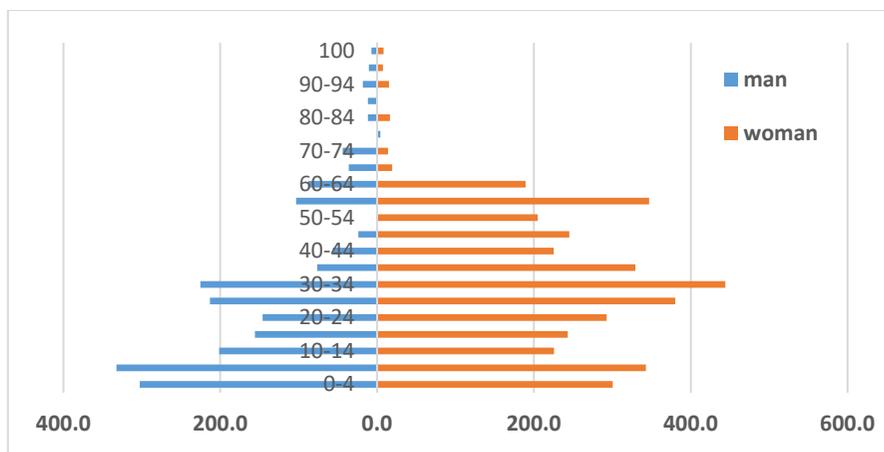
Source: Assessment by the Institute of Demography and Quality of Life Research of the National Academy of Sciences of Ukraine

Discussion and conclusions. The Ukrainian experience shows both the destructive impact of war on demographic sustainability and the potential for recovery through social solidarity and targeted policies. Despite heavy losses, innovative measures in social protection, family support, and migrant integration demonstrate that resilience is possible even during catastrophe. For the global community, this case highlights the need for a comprehensive approach combining demographic projections with proactive interventions in migration, healthcare, and human capital.

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MIGRATION TRENDS AND
THEIR SOCIO-ECONOMIC CONSEQUENCES

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Abstract. *This paper aims to examine the migration phenomenon in the current socio-economic context of Romania, with a focus on identifying the main determinants that act as either triggering or motivational factors. The analysis is based on a multidimensional framework that incorporates variables such as the unemployment rate, fluctuations in average wages both in Romania and across other EU member states, the estimated impact of remittances on economic growth, and other economic or political drivers that significantly contribute to the scope and complexity of migration. In the broader European context, Romania—alongside several other states—is currently facing serious demographic challenges, including the depopulation of rural areas, increasing migratory flows, declining birth rates, population aging, and the large-scale emigration of qualified professionals. These socio-demographic trends produce adverse effects across multiple sectors, including economic productivity, social cohesion, cultural sustainability, and environmental protection. Moreover, these dynamics are embedded in the broader post-communist transformation processes and the intensification of free labor mobility within the European Union, which, in some cases, reaches levels that disrupt the functioning of key systems such as industrial production, public health services, and vocational education and training.*
Keywords: determinants of migration, socio-economic context, Romania

The proposed study aims to analyze the phenomenon of international migration from Romania in the context of recent socio-economic transformations and the intensification of mobility flows at the European level. The main objective of the research is to highlight the economic, social, and political determinants of migration and to capture its impact on demographic structures, the labor market, and economic development. In particular, the study investigates the relationship between migration and poverty, focusing on the role of remittances in supporting families left behind and their implications for reducing social inequalities.

The objectives of the research are to identify the triggering factors of Romanian emigration (wage differentials, unemployment rates, government stability, social inequality), to assess the long-term socio-economic and demographic effects, and to analyze regional specificities, with a focus on the North-East

Development Region. The study also includes a bibliometric analysis of the specialized literature on migration and poverty, in order to outline the current state of knowledge and future research directions.

The hypotheses start from the assumption that Romanian migration is primarily driven by economic factors, but is amplified by social, political, and cultural conditions. Remittances reduce the level and severity of poverty in the country of origin, yet their contribution to sustainable investment and development remains limited. Migration is interpreted as a form of 'escape from poverty,' but in the long term it generates human capital loss, depopulation, and population ageing.

The methodology integrates statistical and econometric analyses (polynomial regressions, cluster analysis, hierarchical classifications), combined with data from Eurostat, TEMPO-INS, the World Bank, and the International Organization for Migration. The bibliometric analysis was carried out using the Web of Science platform (1976–2025), with VOSviewer employed for visualization of thematic similarities. Quantitative analysis was complemented by qualitative interpretations, including case studies and cultural and political perspectives on the phenomenon.

The results highlight Germany as the main destination for Romanian migrants, followed by Italy and Spain, while countries such as Austria, Belgium, or the Nordic states attract moderate flows. Between 2012 and 2022, emigration experienced fluctuations linked to economic and health crises, yet remained a constant feature of Romanian society. Remittances reached a record level of €6.5 billion in 2023 (2.76% of GDP), almost equal to foreign direct investment, underlining the diaspora's importance for macroeconomic stability. At the regional level, Iași County stands out with high levels of permanent emigration, correlated with lower wages and above-average unemployment rates.

The general conclusions show that migration produces ambivalent effects: it financially supports families through remittances, but at the same time it exacerbates demographic imbalances, the loss of skilled human capital, and regional disparities. Public policies should therefore aim to reduce inequalities, encourage return migration, and foster the productive use of remittances for sustainable development.

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EVOLUȚIA TENDINȚELOR ÎN COMPORTAMENTUL MARITAL AL POPULAȚIEI REPUBLICII MOLDOVA

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Abstract. The paper analyzes the evolutionary trends in the marital behavior of the population of the Republic of Moldova, using data provided by population censuses from recent decades. The research highlights major transformations in family structures and in the models of forming marital unions, determined both by socio-economic changes and by cultural and demographic shifts. The results indicate a decline in the share of married individuals and an increase in the share of divorced persons. This situation reflects an upward trend, emphasizing marital instability and directly affecting household structures and children's well-being. Disparities between urban and rural areas remain significant, with visible differences in the pace and magnitude of change. At the same time, an increase in the share of consensual unions and a diversification of family patterns are observed, reflecting tendencies toward the individualization and flexibilization of couple relationships. Thus, uniformity in the life cycle no longer exists; each person shapes their life trajectory depending on personal ideals and the socioeconomic obstacles they face. The analysis underscores that the evolution of marital behavior in the Republic of Moldova aligns with general trends observed in the European context, while also exhibiting specific features shaped by the country's social, economic, and migratory contexts. The study provides an important empirical foundation for formulating demographic and family policies that support family stability and adapt to new socio-demographic realities.
Keywords: family, nuptiality, divorce rate, family policy

Introducere. În contextul transformărilor socioeconomice și culturale ce caracterizează societățile contemporane, analiza structurii populației după starea civilă reprezintă o componentă fundamentală pentru înțelegerea dinamicii demografice și sociale. Studiile sociologice moderne recunosc faptul că statutul civil nu doar că reflectă situația individuală, ci și inserează indivizii în anumite modele de comportament, valori și norme sociale, influențând în același timp evoluția proceselor demografice. În acest sens, analiza datelor statistice privind repartizarea populației pe grupe de vârstă și după starea civilă permite identificarea tendințelor majore, precum amânarea căsătoriei, creșterea ratei divorțurilor și feminizarea îmbătrânirii. Acest profil demografic devine astfel un indicator al schimbărilor în valorile, modelele sociale și structurile familiale, oferind o perspectivă esențială pentru elaborarea politicilor publice și strategii de gestionare a resurselor sociale.

Analiză a literaturii de specialitate. Cercetătorii în domeniu consideră că creșterea progresivă a autonomiei individuale în plan etic, religios și politic determină schimbări în formarea familiei (Rosina & Fraboni, 2004). De asemenea, pe lângă aceste schimbări culturale, manifestările celei de a doua tranziții sunt în mare măsură legate și de numeroase schimbări structurale - modernizare, economia serviciilor, statul bunăstării, extinderea învățământului superior și schimbări tehnologice - adoptarea contracepției moderne, progrese în domeniul reproducerii asistate, explozia noilor tehnologii informaționale (Sobotka, 2008). Pentru a scoate în evidență aceste transformări unii autori vorbesc despre „dezinstituționalizarea familiei” descriind schimbarea percepțiilor culturale despre conviețuire și căsătorie și creșterea complexității și destandardizării traiectoriilor de formare a uniunilor matrimoniale (Cherlin, 2004).

Metodologia acestui articol se bazează pe analiza comparativă a datelor statistice obținute de la recensămintele populației din 2014 și 2024 privind structura populației după stare civilă, vârstă și sex. Prin urmare, cercetarea de față își propune să analizeze structura civilă a populației în contextul evoluției socio-demografice, contribuind la înțelegerea complexității și diversității proceselor de schimbare socială și familială în societatea modernă.

Rezultatele studiului. Analiza structurii populației după starea civilă legală evidențiază anumite tendințe și schimbări demografice între anii 2014 și 2024 (*Tabelul 1.*). Astfel, ponderea persoanelor care nu au fost niciodată căsătorite s-a diminuat atât în rândul bărbaților de la 31,5% în 2014 la 28,5% în 2024, cât și al femeilor de la 20% în 2014 la 19,3% în 2024. De asemenea a scăzut ușor și proporția celor căsătoriți de la 59% la 58,8% pentru bărbați și de la 55,5% la 53,3% pentru femei. Totodată, în pofida accentuării îmbătrânirii demografice s-a redus și ponderea văduvilor de la 4,5% la 3,8% și a văduvelor de la 17,6% la 15,7%. Creștere esențială se înregistrează în ceea ce privește ponderea persoanelor cu statut de divorțat - de la 5% la 8,9% pentru bărbați și de la 6,9% la 11,7% pentru femei. Această Creșterea incidenței divorțului poate sugera o acceptare mai mare a separării legale ca soluție socială normalizată, reflectând schimbări în percepțiile legate de căsătorie și relații. De asemenea, Creșterea marcantă a numărului de persoane divorțate poate fi, de asemenea, influențată de metodologia utilizată în recensământul din 2024, unde s-a solicitat IDNP-ul respondenților. Aspectele legate de statutul familial sunt adesea sensibile, iar cercetările indică prezența efectului dezirabilității, unde indivizii tind să raporteze ceea ce este perceput ca fiind normal și pozitiv în societate. Astfel, în cadrul recensămintelor anterioare, este posibil ca persoanele să nu fi declarat cu acuratețe starea civilă reală, influențând astfel datele disponibile despre structura populației după starea civilă. De asemenea, este important de menționat că recensământul din 2014 poate să nu fi acoperit întreaga populație din Chișinău, unde se înregistrează o pondere mai mare a persoanelor divorțate. Această lacună poate sugera ipoteza că numărul real de persoane divorțate a fost, de fapt, mai mare chiar și înainte de recensământul din 2024, iar datele recente reflectă mai fidel această realitate demografică.

Tabelul 1. **Structura populației după starea civilă legală**

Anul	Niciodată căsătorit/ă		Căsătorit/ă		Văduv/ă		Divorțat/ă	
	Bărbați	**Femei**	**Bărbați**	**Femei**	**Bărbați**	**Femei**	**Bărbați**	**Femei**
2014	31,5	20	59	55,5	4,5	17,6	5	6,9
2024	28,5	19,3	58,8	53,3	3,8	15,7	8,9	11,7

Sursa: Recensământul Populației din Republica Moldova, 2014 și 2024

Datele prezentate reflectă structura populației după starea civilă legală, defalcată pe vârstă și sex, ceea ce permite observarea tranziției maritale și a dinamicii familiei pe parcursul ciclului de viață (*Tabelul 2*). Se conturează clar etapele de formare, stabilizare și destrămare a uniunilor conjugale, precum și disparităților de gen în aceste procese. La grupa 15–19 ani, aproape întreaga populație (98–100%) este necăsătorită, ceea ce confirmă extinderea perioadei de adolescență socială și amânarea debutului conjugal. Între 20–24 ani, diferențele între sexe devin vizibile: 92% dintre bărbați sunt necăsătoriți, comparativ cu 69,5% dintre femei. Aceasta indică faptul că femeile intră mai devreme în căsătorie decât bărbații, în acord cu modelele tradiționale de roluri de gen, însă ambele sexe prezintă o tendință de întârziere a căsătoriei comparativ cu generațiile anterioare. În intervalul 25–29 ani, 63,4% de femei sunt căsătorite și 37% de bărbați. Între 30–39 ani, ponderea căsătoriților depășește 70% în rândul femeilor și 60% în rândul bărbaților, iar cea a necăsătoriților scade semnificativ. Totodată, în aceste grupe apare deja categoria divorțaților, mai ales în rândul femeilor (8–11%), ceea ce indică o creștere a instabilității maritale și a frecvenței destrămării uniunilor. După 40 de ani scade treptat ponderea persoanelor căsătorite, pe când la bărbați această tendință se înregistrează abia după 70 de ani. Femeile sunt mult mai afectate de văduvie (până la 13,5% la 55–59 ani) comparativ cu bărbații (3%), ceea ce se explică prin diferența de speranță de viață între sexe. Începând cu 60 de ani, văduvia devine o stare civilă predominant feminină. La grupa 80+, 69,9% dintre femei sunt văduve, comparativ cu doar 38% dintre bărbați. Această feminizare accentuată a bătrâneții reflectă un dezechilibru demografic cu implicații sociale majore — singurătate, vulnerabilitate economică și dependență socială în rândul femeilor vârstnice. Scăderea ponderii căsătoriților la vârste înaintate (doar 16% femei vs. 56% bărbați la 80+) confirmă că recăsătorirea este rară. Bărbații, deși se căsătoresc mai târziu, păstrează mai des statutul de căsătoriți, inclusiv datorită ratelor mai mari de recăsătorire.

Vârsta	Niciodată căsătoriți		Căsătoriți		Văduvi		Divorțați	
	Bărbați	Femei	Bărbați	Femei	Bărbați	Femei	Bărbați	Femei
15–19	100	97,9	0	2,0	0	0,0	0	0,1
20–24	92	69,5	8	28,9	0	0,1	0	1,5
25–29	60	31,0	37	63,4	0	0,2	2	5,4
30–34	36	18,0	59	72,9	0	0,5	5	8,5
35–39	25	13,8	67	73,7	0	1,0	8	11,4
40–44	21	13,3	68	70,6	0	2,0	11	14,2
45–49	17	11,7	68	67,2	1	4,2	14	16,8
50–54	11	8,3	71	65,7	2	7,7	17	18,3
55–59	7	5,8	74	63,7	3	13,5	16	16,9
60–64	4	4,6	77	58,4	5	21,4	13	15,5
65–69	3	4,3	78	50,9	9	31,2	10	13,6
70–74	2	4,8	76	40,7	14	42,3	8	12,3
75–79	1	5,1	72	30,7	20	53,4	7	10,8
80+	1	6,0	56	16,3	38	69,9	5	7,7

Sursa: Recensământul Populației din Republica Moldova, 2024

Discuții și concluzii. Datele ultimului recensământ evidențiază schimbări în structura populației după stare civilă. Flexibilitatea și schimbările care se evidenţiază în iniţierea relaţiilor conjugale denotă că familia din Republica Moldova tinde să se alinieze foarte rapid modelului occidental. Transformările socioeconomice din societate își lasă amprenta și asupra numărului mare de divorţuri, iat realizarea şi menţinerea solidarităţii şi stabilităţii familiale este un proces dificil. Toatea acestea subliniază necesitatea adaptării politicilor sociale și familiale pentru a răspunde noilor provocări ale unei populații în continuă schimbare.

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DEMOGRAPHIC RECOVERY POLICIES ADOPTED IN THE MEMBER STATES OF THE EUROPEAN UNION

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Abstract. Among the Sustainable Development Goals of the United Nations 2030 Agenda is Goal 3 "Health and well-being for all". Starting from this objective, the paper aims to analyze the demographic recovery policies adopted at the level of the European Union member states, taking into account the fact that at this moment, the international demographic context is marked by declining fertility, accentuated labor migration and population aging. At the same time, in recent years there has been an increased public attention to promoting active and healthy aging, friendly to the environment.
One of the premises of the research is that the decision to have children is being postponed more and more. The reasons are diverse and will be explored within the research theme. On the other hand, there are couples who do not want children at all. Another premise of the research is that some member states of the European Union have managed to adopt successful policies in promoting families/couples with children.
Keywords: demography, European Union, member states, fertility, women, family policies

Introduction. Among social policies shaped by structural and institutional factors as well as political actors, family policies are influenced by cultural factors, values and gender attitudes. There is also a current de-familiarisation pressure of policies due to work-life balance, and increase access to children support public services (Anghel, 2023, 31-32). Increasing resilience in addressing demographic change is based on proper answers to all identified factors across four areas: data-

policy, human capital, system reform and public support (UNFPA, 2024). From a gender lens, disproportionate impact of COVID-19 on women (Romero-Leiton et all, 2025) influenced their decision to have children. Ensure gender-sensitive approach to both EU and member states policies could f properly tackle this aspect (Kuiper et all, 2025).

Main results Marked by 2020 COVID-19, the average population in total constantly increased starting with 2021 as it can be seen in the figure bellow.

Figure 1. **Average population (total)**
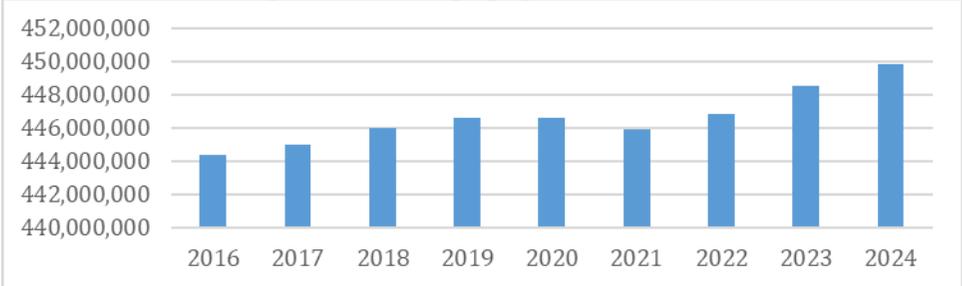
Source: Eurostat (demo_gind)

Analysis of 2003-2023 EU life expectancy at birth show a constant higher value for women especially in 2023: 78.7 for men and 84 for women.

Figure 2. **Life expectancy at birth in the EU, 2003-2023**
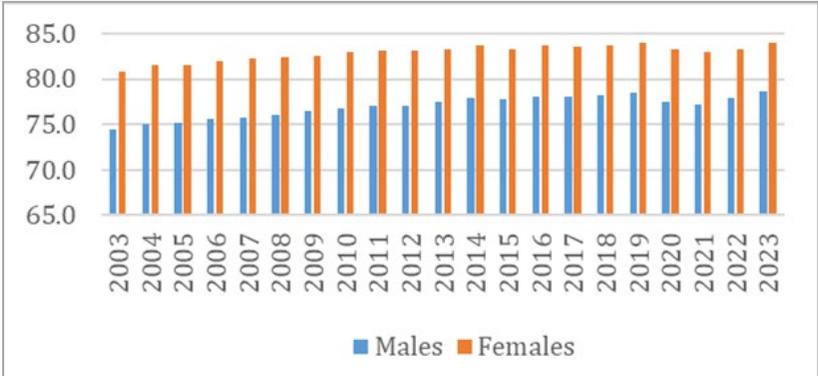
Source: Eurostat (demo_mlexpe)

The EU total fertility rate constantly varied for the period 2012-2023 with a constant decrease starting with post-COVID 2021.

Figure 3. **EU total fertility rate**
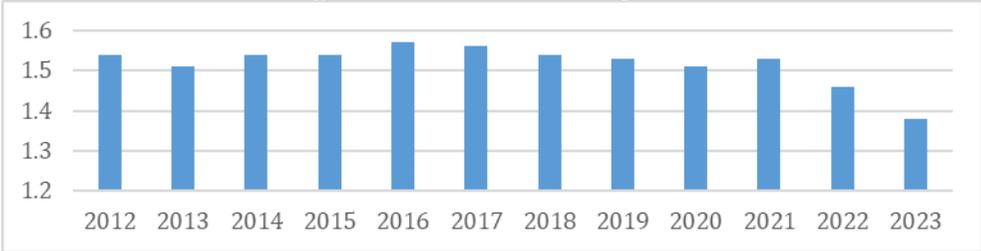
Source: Eurostat [tps00199]

Discussions and conclusions. The EU demographic answer is focus on four pillars: support for parents, support and empowerment of youth, empowerment of elderly, and management of labour shortages related migration (EC, 2023). Youth can be supported by education reforms focus on promoting both inclusive education and training systems, and prestige of the teaching profession (EC, 2024). Concerning EU member states 'refugee systems further fair distribution of responsibilities and uniformity harmonisation is desirable (Forte et all, 2025). The paper contributes to enriching literature searching an adequate answer to demographic changes.

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MIGRATION IN THE EUROPEAN UNION IN THE POST-PANDEMIC PERIOD. ECONOMIC IMPLICATIONS

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Abstract. Migration has existed since ancient times, but has recorded different intensities from one historical stage to another and has developed new forms. The aim of the paper is to analyze the phenomenon of migration and remittances in the European Union in the post-pandemic period (2021-2024), and their economic implications (effects on the labor market, economic growth and demographic balance). The methodology used is descriptive and empirical, by calling on various bibliographic sources, with a preponderance of foreign specialized literature, as well as a quantitative methodology, for the processing and analysis of data taken from international databases.
Keywords: migrants, personal transfers, labor market, demography, economic growth, European Union

Introduction. Theoretically, migration is the phenomenon by which individuals or groups of people change their residence from one area to another, either within the same country (internal migration) or from one country to another (external migration). Usually, when we say migration, we also bring into discussion the term remittances/personal transfers of employees and compensations, the latter having a special role in the economic development of the respective states. If we consider the definition of remittances, which are amounts of money sent by emigrants to families in the country of origin, practically, through these amounts, consumption increases (and therefore income to the budget of the state of origin), investments, quality of life, on the one hand, but also the labor market, entrepreneurship, consumption, increased income for the state where the immigrant carries out his activity. It is a win-win process, if we look at it from the perspective of economic growth.

Research methodology. We use a descriptive and empirical methodology, as we refer to migration and remittence, in European Union, in the period 2020-2024 (for remittances, data is available until 2023 inclusive), personal transfers and compensations statistical data coming from the Eurostat portal or the International Organization for Migration (IOM).

Migration in the European Union and the economic effects. According to UN DESA (2024), Europe hosted 94,1 million international migrants at mid-year 2024, compared to 83 million at mid-year 2020 (+13%). In detail, 4,3 million people migrated to the EU from non-EU countries in 2023, a decrease of around 18% (around 1 million) compared with 2022. 1,5 million people previously residing in one EU country migrated to another EU country in 2023. 1,5 million people

emigrated from an EU country to a country outside the EU in 2023, an increase of around 25% (around 0,3 million) compared with 2022. Compared to 2020, the number of immigrants increased by approximately 2,37 million people, and the number of emigrants increased by 0,55 million people.

Tabel 1. **Number of immigrants from outside the EU and emigrants to outside the EU, 2020–2023**

Year	Immigration from outside EU	Emigration to outside EU
2020	1.975.903	937.742
2021	2.564.853	1.296.312
2022	5.296.568	1.188.288
2023	4.349.013	1.491.262

Source: based on data from Eurostat, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration_to_and_from_the_EU

Germany reported the largest total number of immigrants (1 271 200) in 2023, followed by Spain (1 251 000), Italy (439 700) and France (417 600). Spain and Germany also reported the highest number of emigrants in 2023 (respectively 608 700 and 574 200), followed by France (266 400), Romania (239 200) and Poland (194 100). In 2023, as in 2022, all 27 EU countries reported more immigration than emigration. Additionally, compared with 2022, 15 EU countries recorded a decrease in the total number of immigrants in 2023, while 12 EU countries recorded an increase. The highest decreases in relative terms between 2022 and 2023 were observed in Czechia, Latvia and Estonia, while the largest increases were observed in Finland, Bulgaria and Cyprus.

Table 2. **Evolution of personal transfers and compensation of employees in EU 27 in the period 2020- 2023, mil euro**

	2020	2021	2022	2023
EU 27	24.308,3	25.653,8	27.682,5	29.554,4
Belgium	295,0	803,0	1.228,0	1.414,0
Bulgaria	1.307,6	1.156,0	1.204,1	1.440,9
Czechia	800,3	867,2	899,0	916,1
Germany	6,0	11,0	20,0	14,0
Estonia	133,3	155,7	60,3	60,5
Ireland	0,0	0,0	0,0	0,0
Greece	333,4	363,8	345,7	292,4
Spain	2.933,0	3.145,0	2.989,0	3.000,0
France	254,0	222,0	231,0	324,0
Croatia	1.839,0	2.051,0	2.404,0	2.624,0
Italy	1.950,0	1.927,3	2.070,0	2.212,6
Cyprus	205,5	207,6	216,7	222,4
Latvia	478,0	622,0	714,0	639,0
Lithuania	663,1	618,2	645,5	835,0
Luxembourg	91,0	86,0	146,0	234,0
Hungary	394,8	475,9	390,6	574,8

	2020	**2021**	**2022**	**2023**
Netherlands	139,6	114,0	107,0	121,0
Austria	242,0	242,0	254,0	280,0
Poland	2.793,8	2.630,1	2.768,4	3.043,4
Romania	3.421,7	3.872,0	4.426,4	4.599,8
Slovenia	75,0	72,5	88,2	93,6
Slovakia	259,3	246,7	264,5	265,9
Finland	76,0	76,0	76,0	76,0
Sweden	296,8	299,7	344,2	408,7
Iceland	37,5	42,9	52,0	62,7

Source: elaborated based on data from Eurostat,
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Personal_transfers_and_compensation_of_employees

Regarding the personal transfers and compensation of employees in EU 27, these reached the highest levels in 2023, of 29.554,4 mil euro (Eurostat), 7 % more than in 2022 and approximately by 22% more than in 2020. Among EU countries, Croatia, Latvia, Luxembourg and Romania were most dependent on personal transfer and compensation of employees inflows in 2023, while the least reliant economies in the EU were Ireland, Greece, Finland and the Netherlands. We mention the year 2020, when the level of remittances decreased in all EU states, then recovering considerably. The most consistent increases in the post-pandemic period were in Romania and Croatia.

Next, we refer *to some economic effects of migration,* namely on economic growth in the respective states, the labor market, and the demographic structure.

Economic growth. For some countries, net inflows of personal transfers and compensation of employees are important sources of external funding and contributors to a recipient's disposable income and GNI. We refer to Portugal, which showed a current account surplus of 1,3 billion euros; without these net incoming flows, this surplus would have turned into a considerable deficit of 3,4 billion euros in 2023 (Eurostat), Croatia showed a current account surplus of 0,5 billion, which would have turned into a current account deficit of 3,9 billion euros, Hungary or Bulgaria, which recorded a surplus of 0,8 billion euros. On the other hand, France, Romania and Belgium, could considerably reduce their negative current account balances through these net inflows. For Romania, the current account deficit would have been 30,5 billion euros instead of 22,6 billion, which includes transactions related to personal transfers and compensation of employees.

Labor market. The European Union's migration labor market from 2020-2024 saw a recovery from the COVID-19 pandemic, with employment growth driven by both non-EU immigration and increased labor participation, which offset challenges like an aging population and skilled labor shortages. Non-EU migrants have been crucial for filling gaps in key sectors such as technology, health, and construction, but integration into the labor force remains a significant challenge, with persistent skill gaps and a high rate of over-qualification among this group (Melendez, 2025). EU labor markets in 2022, 2023 and 2024 were marked by record low unemployment levels, high vacancy rates and strong employment growth. Only

average hours worked remained below pre-pandemic levels, extending a long-run decline (Caselli, 2024).

We consider migration had a role in these dynamics; at the end of 2023, euro area employment reached three million (about 2 percent), above pre-pandemic projections, determined by the increase in the foreign working- age population and higher-than-expected domestic worker participation (European Commission, 2023); out of 4,2 million EU jobs created between 2020- 2023, close to two-thirds (2,7 million) were filled by non-EU citizens; it is important to note that the non-EU citizens had an essential share in total EU employment in the years after the pandemic.

Demographic structure. The European Union's migration demographic structure between 2020 and 2024 saw a significant increase in foreign-born residents, driven by non-EU immigration, particularly in 2022 and 2023. This influx, especially from non-EU countries, helped to offset some of the region's overall population decline and aging, with the number of immigrants rising substantially, especially from outside the EU.

As of 1 January 2023, there were 41,2 million migrants residing in the EU Member States, accounting for 9,2% of the EU population (447,6 million) (Fasani, 2024). The majority of this migrant population (66%) were citizens of non-Member States (non-EU migrants), representing 6,1% of the EU population. The remaining 13,9 million individuals (3,1% of the EU population) were citizens of another EU Member State (EU mobile citizens). More precisely, the largest numbers of non-nationals residing in EU Member States were found in Germany (12,3 million), Spain (6,1 million), France (5,6 million), and Italy (5,1 million). These four Member States accounted for 70,6% of all non-nationals living in the EU, despite representing only 57,9% of the EU's total population.

In relative terms, Luxembourg had the highest share of non- EU, with non-nationals of 47,4% of its population. Other Member States with significant proportions of foreign citizens (over 10% of the resident population) included Malta, Cyprus, Austria, Estonia, Germany, Ireland, Latvia, Belgium, Spain, and Denmark.

Conclusion. The COVID-19 pandemic has been one of the biggest socio-economic disruptions in recent decades, with a significant impact on migration and remittances in the European Union. Mobility restrictions, economic crises and structural changes in the labour market have influenced both migration flows and financial transfers sent by migrants to their countries of origin. After a decline in employment in 2020, the labour market has rebounded above previous levels in the following period, with migrants accounting for a significant share of the labour force growth (≥41% of labour force growth in a post-pandemic period). Remittances sent outside the EU increased after 2020: 34,1 billion euros in 2020, aprox 38- 43,5 billion euros in 2021-2022, then 50,9 billion in 2023. The increase reflects both the economic recovery in the EU and probably the desire of migrants to help families left behind in a global context of crisis. The pandemic also led to a natural decline in the EU population in 2020-2021, but migration reversed this trend starting in 2022, when the trend returned to growth.

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EARLY CHILDHOOD EDUCATION SYSTEM IN UKRAINE DURING WARTIME: PROBLEMS AND CHALLENGES

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Abstract. Work-life balance has long been a subject of public and academic debate in countries with varying degrees of social policy development. Preschools are one of the tools for achieving such a balance, as they provide care and education for children while their parents have the opportunity to pursue professional activities. The study analyzed the changes in the preschool education system during the full-scale war in Ukraine, characterized the impact of the war on infrastructure, accessibility and functioning of care services, the possibilities of restoring access under martial law, and regional characteristics. The set of factors determining functioning and quality of the preschool system in conditions of full-scale war was supplemented by the security situation at the regional level, territorial accessibility of institutions for both parents and preschool staff, and the availability of shelters equipped for children.
Keywords: preschool educational institutions, russian war against Ukraine, family policy, childcare

Introduction. The quality and accessibility (financial and territorial) of childcare services have a positive impact on child development, parents' professional activities, employment level, and the quality of life of families and the population as a whole. Preschools are also one of the tools for achieving work-life balance.

Literature review. In the period before the full-scale war, researchers drew attention to the problems of low accessibility of preschool institutions for children in rural areas and in families in difficult life circumstances, low level of staff competence (Peters, 2018), low salaries, difficult working conditions, and high stress levels among staff (Dutchak, Strelnyk & Tkalich 2020), overload and unsatisfactory material support of institutions (CES 2019). During the full-scale invasion, increased risks of poverty were identified due to problems with placing a child in a preschool institution (Cherenko, Sarioglo & Sitnikova, 2023).

Research methodology. The study analyzed the changes in the preschool education system during the full-scale war in Ukraine, characterized the impact of

the war on infrastructure, accessibility and functioning of care services, the possibilities of restoring access under martial law, and regional characteristics.

The study used data from the State Statistics Service of Ukraine, the Institute of Educational Analytics (IEA), the Ministry of Education and Science of Ukraine (MES), the State Service for the Quality of Education (SSEQ), as well as the results of sociological surveys.

Main results. The study identified the dominant problems in the development of the early childhood education system during full-scale war:

1) A significant reduction in the network of preschool institutions due to destruction, damage, occupation, closure of institutions in regions close to the front due to a high level of danger, closure of institutions due to the lack of reliable shelter. The decrease in the number of children attending preschool institutions (due to mass emigration and the long-term decline in fertility in Ukraine) is also a factor in their closure.

2) Remote (online) provision of services by preschool institutions has become another challenge for parents. In 2023–2025, the number of institutions working remotely or mixed in Ukraine decreased, but in May 2025 there were 21% of them. Remote work of preschool institutions does not contribute to achieving work-life balance

3) The problem of staff shortage, especially of narrow-profile specialists, has intensified. This field of activity is not very attractive to young people. The problem is also exacerbated by the departure of young specialists abroad.

4) Insufficient training of personnel is manifested in new aspects, in particular, there is a low level of awareness of actions in extreme.

5) Despite the fact that in general, in Ukraine, during the period of the full-scale invasion, there was no recorded overload of preschool institutions in cities (in 2024, there were only 90 children per 100 places, while in 2015 – 126), such a problem remained (or arose) in a number of regions, especially that received a large number of IDP.

6) The availability of reliable shelter is a pressing issue, the lack of which can make it impossible to provide services in a preschool. Although 6% of preschools are reported to have no access to shelter (SSEQ, 2024), not all such shelters are equipped to meet the needs of children.

7) Declining quality of child care and education services due to reduced demands for such services from parents, which generally negatively affects the development of the early childhood education system.

Discussion and conclusions. In the context of a full-scale war, the preschool system in Ukraine continues to perform educational and care functions, but faces a number of challenges. The mass migration of families with children from Ukraine abroad, and the long-term decline in fertility have led to a decrease in the number of children in preschools, which, in turn, has raised the issue of their closure. However, policy-making decisions regarding the closure of preschool institutions should be thoughtful and balanced, taking into account previous experience (the consequences of the closure of institutions in Ukraine in the 1990s), focusing on regional

characteristics and needs (current and future), directing efforts not on quantitative, but on qualitative indicators of child development, and diversifying the types of preschool institutions.

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PECULIARITIES OF DEMOGRAPHIC DEVELOPMENT IN TAJIKISTAN

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*Abstract. **The importance of the topic:** The current demographic situation in Tajikistan is to some extent a continuation of the demographic behavior that took place before the collapse of the Soviet Union, especially in matters of reproductive and matrimonial behavior of the population.*

Currently, the population of Tajikistan is about 10.3 million people in 2024, of which the share of the labor force is -57.5%, the population under the working age is 35.9%, and the population older than the working age is 6.6%. At the same time, the latest official statistical sources show that the population growth in 2023 was - 2.1% and the total fertility rate is 3.0 in 2023.

***The purpose of the study** is to identify the features of demographic development in Tajikistan and develop practical measures to achieve a demographic optimum.*

***The main objectives** of the research include studying the relationships between demographic phenomena and processes such as fertility, mortality, marriage, migration; modeling and forecasting these processes; developing methods for studying demographic processes and forecasting.*

***The results:** We have found that demographic development has its own characteristics in Tajikistan. The lack of productive employment, especially for women and men, a large proportion of the rural population (71%) and the preserved traditions and customs in matters of fertility serve as features of demographic development*

***Keywords:** population, fertility, family, birth rate, population migration, demographic development*

Introduction. Many developing countries, including the Republic of Tajikistan, are still experiencing a population explosion due to the continued high birth rate in conditions of low mortality. The rapid growth of the population, especially its working-age part, is holding back the process of economic modernization and improving the standard of living. The population of the Republic of Tajikistan in 2024 was 10,288.3 thousand people. It is young. Thus, the share of the population under 15 years of age in Tajikistan in 2024 is 35.9% [1]. In other CIS countries with high birth rates, respectively, in Kazakhstan - 30%, in Uzbekistan - 30%, in Kyrgyzstan - 33%. This share is noticeably lower in countries with low birth rates, such as, for example, Russia - 17%, Belarus - 17%. A high share of children in the country's population indicates prospects for population growth and the number of births in the country. According to the scale of the famous Polish demographer E. Rosset [3], the population is considered young if the share of people aged 60 and older in the entire population does not exceed 8%.

Literature review. In the Holy Quran, there are verses that serve as a prerequisite for stimulating the birth of children: "There is not a single living creature on earth but Allah provides for it." Quran. Surah "Advice" 42:27.

"And do not kill your children for fear of poverty, for We provide for them and you. Indeed, killing children is a grave sin." Quran. Surah "Night Journey" 17:31.

According to the theory of G. Becker, low income, deurbanization, low education and lack of productive employment of the population contribute to the maintenance of high birth rates, because the economic and social roles of children in families are still very large, since a large proportion of the population lives in rural areas, where having children is economically beneficial, according to the theory proposed by

In the Republic of Tajikistan, the birth rate of the population was studied in detail by the demographer S.I. Islamov. In his monograph "Birth rate of the population (based on the materials of a sociological survey)" (2009) identifies the following main factors influencing the birth rate, namely: the level of development of productive forces, the degree of development of urbanization, the level of income of the population, the level of education of the population, and especially women, the level and structure of employment of the population.

Research methodology. To study the issues of demographic development, a literature review was conducted, statistical data from official sources, data from sociological surveys personally by the authors, the results of a survey of medical and demographic studies for 2012, 2017 and 2023 were collected. The research methodology is the use of static calculations, diagrams were compiled, comparative calculations of the birth rate with the CIS countries were made, the SPSS program (statistical package for social sciences) was used for factor analysis of the birth rate of the population and a special program (spectrum) for forecasting demographic indicators.

Main results. Official statistics data were used for the sake of analyze the dynamics of the birth rate of the population of the republic in order to identify its patterns, as well as the results of medical and demographic surveys (Demographic Health Survey), or DHS, conducted in Tajikistan in 2012, 2017 and 2023. It should be noted that the results of these surveys, as in other countries of the world where they were conducted, are representative. Tables 1 and 2 reflect the dynamics of the total fertility rate of the population of Tajikistan over the years of independence according to these two sources.

As official statistics show, in general, the birth rate in the republic has been declining from 5.1 births per woman in 1990 to 3.0 in 2023. The data presented in the tables clearly show an accelerated decline in the birth rate in rural areas: by 2020, the birth rate in cities and villages will be equalized. Everyone knows that the composition and lifestyle of families in urban areas differ greatly from rural ones in terms of education level, economic status, reproductive and self-preservation behavior, worldview, culture, etc. One of the factors that determines the differences in the reproductive behavior of the urban and rural populations is religion, or more precisely, the degree of religiosity of the population.

Figure. 1. **Urban and rural population in Tajikistan, 1990–2024[1] (in %)**
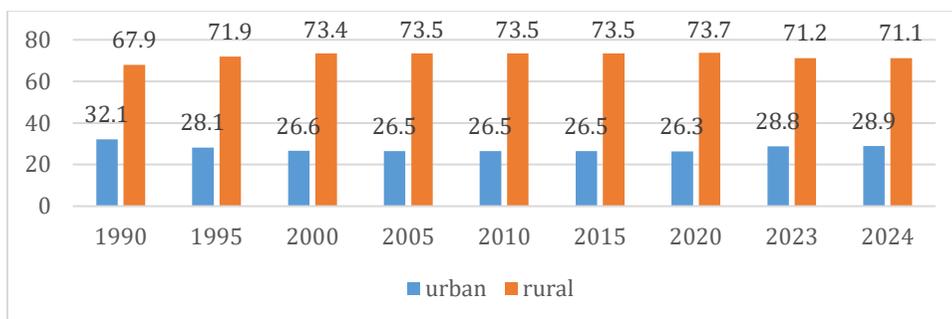
Table 1. **Total fertility rate (TFR) in Tajikistan for 1990–2023 [1]**

Years	Total	Urban	Rural
1990	5,1	3,6	5,9
2010	2,9	2,6	3
2020	3	3	3
2023	3,0	3,1	3,0

Table 2. **Total Fertility Rate (TFR) in Tajikistan according to the results of the Demographic and Health Surveys (DHS) [5]**

Years of DHS	Total	Urban	Rural
2012	3,8	3,3	3,9
2017	3,8	3,0	4,0
2023	3,5	3,2	3,5

At the same time, it should be noted that the results of medical and demographic surveys in Tajikistan show a higher birth rate compared to official statistics, and its greater differentiation between urban and rural areas. Thus, according to the results of the 2017 DHS, the total fertility rate in the republic was 3.8 births per woman, in urban areas - 3.0, in rural areas - 4.0. The results of the DHS conducted in 2023 show a TFR in rural areas equal to 3.5, and in urban areas equal to 3.2. In any case, the birth rate in Tajikistan significantly exceeds the level that ensures the simple reproduction of the population, namely 2.1 births per woman. The values of the total coefficient indicate that the republic is still in the transition from the traditional type of reproduction to the modern one, from an agrarian economy to an industrial one. In our opinion, the DHS results reflect a more realistic picture of fertility than the official data, and such a large discrepancy in the figures confirms the presence of errors in official statistics.

Conclusion. The birth rate issues will be in the center of attention for the Republic of Tajikistan, as the demographic burden on the labor force increases, and the positive effects of economic growth decrease. In this regard, the issues of regulating international migration of the population are also relevant.

The practice of developed countries shows that the measures developed to increase the birth rate do not give the expected effect, because the traditional values of families and children are replaced by other, "temporary", material values, the uselessness of which a person especially feels in old age. In this regard, it is necessary to expand the exchange of opinions between scientists from different countries on the restoration of traditional norms and values of families and children for the benefit of social development. Since the norms and principles of the Islamic religion are aimed at preserving traditional families and children, its experience should be taken into account when developing demographic policy measures in countries with low birth rates.

Countries receiving migrants should develop effective measures for the integration and adaptation of migrants from countries with higher birth rates, taking into account their "high" value attitudes towards creating families with children. This will allow, on the one hand, to obtain new law-abiding citizens, and on the other hand, to increase the birth rate in the host country.

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STRENGTHENING DEMOGRAPHIC RESILIENCE THROUGH RETURN MIGRATION AND DIASPORA IN MOLDOVA

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Abstract. Return migration and diaspora engagement are increasingly recognized as potential levers for strengthening demographic and socioeconomic resilience in Moldova, a country marked by persistent emigration, population decline, and aging. This article examines how the scale and characteristics of Moldovan return migration affect demographic decline and how national policies attempt to capitalize on the potential of return migrants and the diaspora. Using disaggregated data on international migrant flows by citizenship, we provide a novel analytical perspective on the magnitude and characteristics of return migration.
The findings reveal that over the past decade, Moldovan citizens accounted for 93.4% of the total negative migration balance, underscoring that demographic imbalances are primarily driven by the outflow of the native population, while the contribution of foreign nationals to net migration remains limited. Nevertheless, specific groups of foreign residents—particularly Romanian and Russian citizens—exerted a compensatory demographic effect, partially offsetting net losses in certain years. In practice, in certain years, population decline caused by Moldovan emigration was mitigated by positive net inflows from Romania and Russia. These results highlight both the demographic vulnerability associated with continued emigration and the potential role of selective immigration in alleviating population loss.
Keywords: return migration, diaspora, migration policy, demographic resilience, Moldova

Introduction. The Republic of Moldova faces persistent emigration, generating demographic imbalances, labour shortages, and accelerated population ageing (Gailey, Gagauz & Pahomii, 2025; Bogdan, 2024). In this context, return migration and diaspora engagement have emerged as key mechanisms for enhancing demographic resilience. Return migrants can contribute through human and social capital, newly acquired skills, and entrepreneurial initiatives, thereby supporting demographic revitalization.

Although existing research highlights the positive effects of migration and diaspora involvement – particularly through remittances, knowledge transfer, and professional experience – the sustainable reintegration of returnees remains insufficiently explored (Hachi, Morozan & Popa, 2021). For a country with chronically high emigration levels, understanding and leveraging the developmental potential of return migration is crucial.

This study addresses the questions concerning the scale and profile of return migration in Moldova, as well as the valorization of return migration and diaspora potential as strategic instruments for strengthening demographic resilience.

Data and methods. This study is based on the analysis of statistical data on international migration obtained from the National Bureau of Statistics (NBS), referring to migration flows disaggregated by sex, major age groups, and citizenship for the period 2014-2023. A particularly valuable recent addition is the availability of data disaggregated by citizenship, which, for the first time, allows a rigorous examination of return migration in Moldova. In the context of this study, return migration refers to the return of Moldovan citizens after a long period of residence abroad (more than 12 months). The calculated indicators include: net migration by age, sex, and citizenship.

Main results. The cumulative absolute value of net migration during 2014–2023 amounts to -370.3 thousand persons (Table 1), equivalent to an estimated 13% decline in the resident population. Net migration among Moldovan citizens represents the main driver of this demographic shift, accounting for -345.9 thousand, or 93.4% of the total negative balance. In contrast, the net migration of foreign nationals is negative to a lesser extent, standing at -24.4 thousand.

Tabel 1. **Net migration by citizenship of migrants, thousand persons**

	2014	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*
Total	-24.2	-21.4	-46.1	-50.7	-42.0	-37.1	-7.2	-45.4	-63.6	-32.6
R.Moldova	-17.8	-18.7	-37.7	-40.5	-44.3	-45.1	-6.9	-47.3	-61.4	-26.2
Other countries:	-6.4	-2.7	-8.4	-10.2	2.3	8.0	-0.3	1.9	-2.2	-6.4
among which:										
Romania	-1.1	-0.8	-8.2	-9.7	3.4	4.1	-0.3	-0.4	0.2	-1.5
Russia	-6.0	-1.8	-1.1	-0.4	-0.3	2.9	0.8	2.1	1.5	1.2
Ukraine	0.7	-1.0	0.6	-0.2	-0.7	0.4	-0.1	0.4	-3.6	-7.2

Source: calculated by the author based on NBS data

The data also reveal a slight net inflow of foreigners from certain countries, notably Romania and Russia. Romanian citizens recorded positive net balances in 2018, 2019, and 2022, while Russian citizens showed positive net migration during 2019-2023. Additionally, there was a positive inflow of immigrants from Ukraine in 2022-2023, a situation directly influenced by the ongoing military conflict in the neighbouring country.

A noteworthy observation is that the positive net migration recorded among Romanian and Russian citizens partially offset the overall population loss caused by Moldovan emigration. In certain years, the decline in population due to emigration of Moldovan citizens was mitigated by net inflows from Romania and Russia, which helped reduce the total demographic deficit resulting from international migration.

The return of Moldovan migrants reached its highest level in 2014, followed by a general downward trend and a low point in 2017, after which a gradual recovery was observed until 2021 (Table 2). In 2022, the volume of return migration was estimated at around 46 thousand citizens, followed by approximately 38 thousand in 2023, reflecting a slight decline due to the regional crisis. Men consistently

accounted for the majority of returnees, a trend that can be attributed to their higher participation in international labour migration compared to women.

Return migration, disaggregated by age into three groups – 0-14 years, 15-64 years, and 65 years and over – also exhibits distinct patterns. The working-age population (15-64 years) has consistently represented the largest share of returnees. The highest volume was recorded in 2014 (around 52 thousand persons), followed by a sharp decline during 2017-2018, when the number of return migrants fell to approximately 32-33 thousand.

Tabel 2. **Return migration of Moldovan citizens, thousand persons**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total	57.1	51.3	40.4	38.1	37.6	43.4	45.9	35.6	29.8	38.6
Male	34.1	29.4	22.1	20.5	20.3	23.7	24.5	18.2	16.2	22.1
Female	23.0	21.9	18.3	17.6	17.3	19.7	21.4	17.5	13.6	16.4
Age groups:										
0-14	4.0	4.3	4.0	3.8	3.8	4.1	2.8	3.5	2.6	4.0
15-64	52.3	46.0	35.3	33.1	32.3	37.6	40.9	30.1	25.3	32.8
65+	0.9	1.0	1.1	1.3	1.5	1.8	2.1	2.1	1.8	1.7

Source: elaborated by author based on NBS data

Conclusions. Moldova has made notable progress in developing an institutional and programmatic framework aimed at harnessing the potential of its diaspora and facilitating the reintegration of returning migrants. Although a relatively solid policy framework has been established, these initiatives remain insufficient at the current stage, and the effectiveness of many programmes falls below expectations. In this context, the study underscores the urgent need to diversify and expand measures designed to unlock the human, social, and economic potential of Moldovan migrants.

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DECODING LIFE EXPECTANCY GAPS: A LONG-TERM DECOMPOSITION ANALYSIS OF THREE WHO EUROPEAN REGION COUNTRY GROUPS

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Abstract. Life expectancy at birth serves as a proxy measure of community health, indicating socio-economic development, healthcare accessibility, and the success of health policies. This study examines the development and variability of life expectancy at birth among three geographically, politically, culturally, but also climatically distinct groups of countries in the WHO European Region: Former Soviet Countries (FSC), Central & Eastern European Countries (CEEC), and Western European Countries (WEC), using data from the World Bank spanning from the mid-1960s to 2021. A quantitative analysis evaluated mortality disparities, applying the principle of mean differences in values of life expectancy at birth, both within- and between- the studied groups of countries. This methodology enables the study of long-term patterns over several decades, includes gender-specific analyses, and emphasizes internal diversity within each group. The results show that mortality disparities have either stayed constant or decreased gradually, with the largest life expectancy gap between FSC and WEC (over 12 years for males and nearly 10 years for females). CEEC countries exhibit significant internal heterogeneity, with some countries converging toward WEC levels, while others resemble FSC patterns.
Keywords: life expectancy at birth, decomposition analysis, mortality gap, WHO European Region, societal development, political transition, health inequalities, demographic analysis

Introduction. Persisting mortality differences in the WHO European Region remain a crucial issue, particularly concerning the 2030 Agenda (Goal 10), which aims to limit inequalities among countries and within societies. The WHO European Region comprises a diverse group of European and Central Asian countries, marked by significant historical and political transformations that have shaped current health outcomes. Countries that emerged from communism constitute a distinct subgroup requiring in-depth understanding for efficient health policy application. This is

evidenced by lower average life expectancy at birth and worse health outcomes in post-communist countries, trends further exacerbated during the COVID-19 pandemic. Addressing these challenges is critical for mitigating mortality transitions and improving overall population health outcomes.

Literature review. Previous research has highlighted the complex factors influencing mortality patterns across the WHO European Region. Studies by Rechel & McKee (2009) demonstrated how elevated alcohol intake has been a major factor in mortality across numerous post-communist nations, with diseases linked to alcohol significantly impacting life expectancy disparities. Mackenbach et al. (2013) identified that healthcare systems, governmental regulations, and socioeconomic status, alongside lifestyle risk factors such as smoking, obesity, and alcohol consumption, greatly influence health outcomes in these regions. Environmental and geographical factors add complexity to health inequities, with regions experiencing extreme weather conditions or high pollution rates encountering additional health challenges.

Research methodology. This study evaluated data on life expectancy at birth for 48 out of the 53 member countries of the WHO European Region, using World Bank data spanning from 1966 to 2021. The studied countries were classified into three distinct groups: **FSC** – Former Soviet; **CEEC** – Central and Eastern European Countries; **WEC** – Western European Countries.

A novel analytical approach was proposed for quantifying life expectancy differences among and within the defined groups. To quantify the average difference in life expectancy at birth between all pairs of countries within the whole WHO EUR, we used the measure of **Total mean difference** *(TMD)*. The formula for *TMD* could be expressed as:

$$TMD = \frac{\sum_{a=1}^{n} \sum_{b=1}^{n} |x_a - x_b|}{n^2} \ (1),$$

where *a* and *b* represent particular countries; the total number of analysed countries equals *n*, and *x* is the studied measure (in this case, life expectancy at birth). The approach can be easily used for other measures, too.

Within-group differences are calculated as:
- Differences within FSC (MD_{11})

$$MD_{11} = \frac{\sum_{a=1}^{n_1} \sum_{b=1}^{n_1} |x_a - x_b|}{n_1^2} \ (2)$$

- Differences within CEEC (MD_{22})

$$MD_{22} = \frac{\sum_{a=1}^{n_2} \sum_{b=1}^{n_2} |x_a - x_b|}{n_2^2} \ (3)$$

- Differences within WEC (MD_{33})

$$MD_{33} = \frac{\sum_{a=1}^{n_3} \sum_{b=1}^{n_3} |x_a - x_b|}{n_3^2} \ (4)$$

Between-group differences are calculated as:
- Differences between groups FSC and CEEC (MD_{12})

$$MD_{12} = \frac{\sum_{a=1}^{n_1} \sum_{b=1}^{n_2} |x_a - x_b|}{n_1 * n_2} \ (5)$$

- Differences between groups FSC and WEC (MD_{13})

$$MD_{13} = \frac{\sum_{a=1}^{n_1}\sum_{b=1}^{n_3}|x_a-x_b|}{n_1*n_3} \ (6),$$

- Differences between groups CEEC and WEC (MD_{23})

$$MD_{23} = \frac{\sum_{a=1}^{n_2}\sum_{b=1}^{n_3}|x_a - x_b|}{n_2 * n_3} \ (7)$$

The total mean difference can then be easily decomposed into within-group and between-group components:

$$TMD = \frac{\sum_{a=1}^{n}\sum_{b=1}^{n}|x_a-x_b|}{n^2} = \frac{MD_{11}*n_1{}^2+MD_{22}*n_2{}^2+MD_{33}*n_3{}^2}{n^2} +$$

$$+\frac{2*[MD_{12}*n_1*n_2+MD_{13}*n_1*n_3+MD_{23}*n_2*n_3]}{n^2} =$$

Component of differences within groups +

+ Component of differences between groups (8)

This decomposition demonstrates the extent to which the total mean difference stems from differences within each group and between the groups.

Main results. Life expectancy at birth increased across all country groups from 1966 to 2021, rising from approximately 65 years (males) and 70 years (females) to 73 years (males) and 80 years (females). Females consistently showed higher life expectancy than males, reflecting global mortality gender gaps attributed to biological and behavioral factors (Luy and Gast 2014). The COVID-19 pandemic caused observable decreases across all groups. Throughout the study period, WEC maintained the highest life expectancy levels, while FSC showed the lowest, with gender gaps being wider for males than females.

Figure 1. ***Decomposition of Mortality Variability into Within - and Between-Group Components, WHO EUR, 1966 - 2021, males, females.***
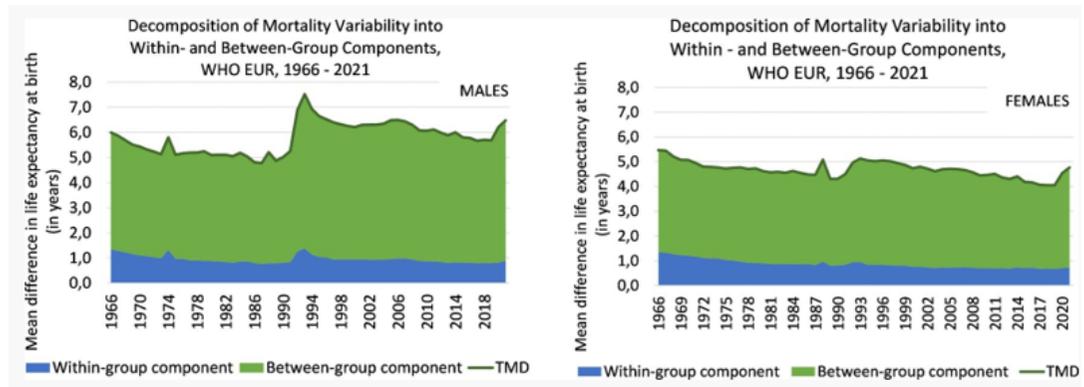
Note: "TMD" represents the value of the total mean difference in life expectancy at birth for the WHO EUR region.

Source: The World Bank, 2024; authors' calculation

The final decomposition confirms that between-group variability dominates overall mortality differences in the WHO European Region. Most total mean difference peaks correspond to increased between-group disparities, with notable exceptions during the 1974 Cyprus conflict and the 1990s transformation period when within-group heterogeneity also increased in FSC and CEEC countries.

Discussion and conclusions. The study provides extraordinary analysis of how between-group and within-group differences interact to shape life expectancy across three distinct country groups in the WHO European Region. The findings reveal stark disparities, particularly between Former Soviet Countries and Western European Countries, underscoring the long-term impact of political and economic transitions on health outcomes.

Key findings demonstrate that mortality disparities have either remained constant or decreased gradually over the study period. However, the largest life expectancy gap persists between FSC and WEC groups (over 12 years for males and nearly 10 years for females). The substantial internal heterogeneity within CEEC, where some countries converge toward WEC levels while others remain at FSC levels, represents a crucial area for future research and policy intervention.

These results highlight the need for targeted strategies to address enduring health inequalities and enhance life expectancy in underperforming regions. The methodology and findings are potentially important for stakeholders and policymakers working toward the 2030 Agenda's goal of reducing health inequalities between countries.

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SEASONAL MORTALITY IN MOLDOVA:
AN ANALYSIS OF THE MAIN CAUSES OF DEATH, 2018–2023

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Abstract. The distribution of deaths varies unevenly across calendar years due to seasonal peaks in mortality when certain conditions worsen because of temperature changes, and the limited capacity of healthcare systems to operate during high demand or public holidays. Additional factors that influence the mortality fluctuations are caused by the professional activities and behavioural patterns of the population. This research analyses the seasonal mortality in Moldova during the 2018–2023 period with a focus on the leading causes of death. The results show a higher mortality during the cold season of the year, particularly in January and December. During the COVID-19 pandemic, a sharp increase in the number of deaths occurred in October–November 2020 and March–April 2021. A visible difference in the number of deaths is observed between the days of the week, especially for those caused by diseases of the circulatory system and external factors. The results will contribute to a better understanding of mortality trends in Moldova, enabling adjustments to the health system's capacity according to population needs during peak seasons.
Keywords: seasonal mortality, causes of death, mortality fluctuations

Introduction. A seasonal variation in cause-specific mortality was reported in multiple studies. The evidence shows that high and low temperature peaks increase the short-term mortality (Zhang, et al. 2018, Bennett, Dear and McMichael 2014). Among the external causes of death, the fatalities resulting from car accidents, cold and heating incidents, accidental drowning and submersion, as well as those caused by self-harm, also display seasonality and vary significantly across the months of the year (Lantos, Nyari and McNally 2019). Additionally, the literature emphasises an uneven distribution of deaths within the days of the week among patients with severe conditions, who have a higher risk of dying in the health facilities on weekend days (Bell and Redelmeier 2001, Honeyford, et al. 2018).

This research analyses the seasonal and short-term mortality from major causes of death in Moldova during recent years. The study results enhance our understanding of how seasonality affects mortality patterns, which is crucial for designing effective health policies and adjusting healthcare services according to the population's needs.

Research methodology. The research is primarily based on the data on cause-specific deaths obtained from the National Agency for Public Health (NAPH). The data includes information on age, sex, date of death, comorbidities, and cause of death of the persons who died between 2018 and 2023. By using the available

information, the deaths were grouped according to the following criteria: major causes of death (cancer, COVID-19, diseases of the circulatory system, diseases of the digestive system, diseases of the respiratory system, external causes of death, and other causes of death), distribution of deaths by months and days of the week.

Results and discussions. During the analysed period, a noticeable rise in the number of deaths during winter seasons was observed (Figure 1), especially among those caused by diseases of the circulatory system, external factors, and respiratory system diseases in both males and females (Figures 2 and 3). During the summer, a slight increase could be observed in the number of deaths from circulatory system diseases, while a higher proportion of deaths from diseases of the digestive system was observed in the late autumn months. These mortality fluctuations are partially explained by temperature variability, as populations with certain conditions are more vulnerable during hot and cold temperatures (Zhang, et al. 2018). Additionally, behavioural factors contribute significantly to seasonal mortality from external factors (Lantos, Nyari and McNally 2019).

During the pandemic period, a sharp increase in COVID-19 deaths was observed in 3 peaks: October-November 2020, March-April and September 2021. Within the period with a high COVID-19 mortality, a significant increase in the number of circulatory system diseases has also been observed.

Figure 1. **Distribution of the overall monthly deaths for males and females, 2018–2023**
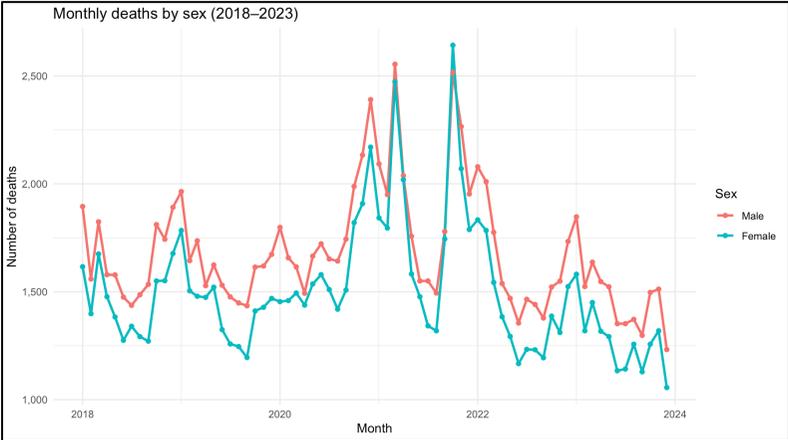
Source: The National Agency for Public Health

During the week, among males, deaths from diseases of the circulatory system tend to occur more often on Monday, deaths from external causes mainly between Friday and Sunday, and those from respiratory system diseases predominantly from Monday to Wednesday. In females, the distribution of deaths from respiratory system diseases peaks on Wednesday, while those caused by external factors peak on Monday.

Figure 2 and *Figure 3.* **Monthly deaths by leading causes of death for males and females, 2018–2023**
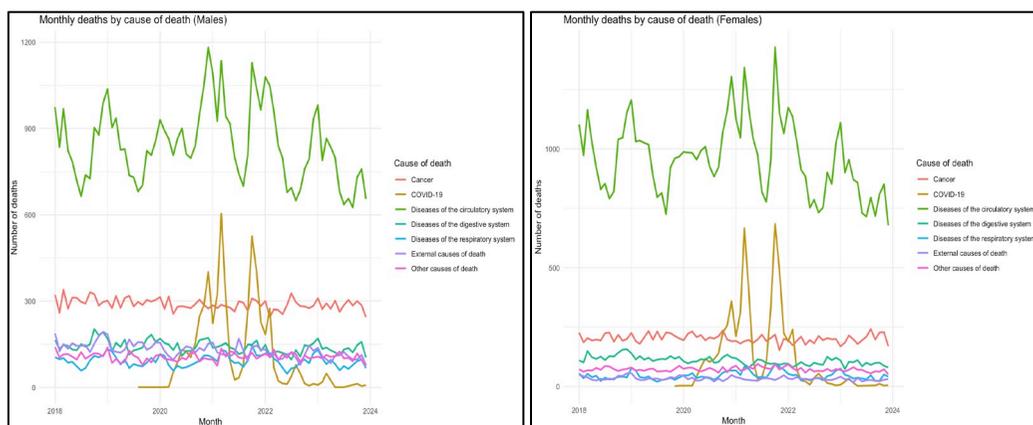
Source: The National Agency for Public Health

Considering the combination of socioeconomic, demographic, and environmental factors, the seasonal mortality might visibly vary between the country's districts. Firstly, the existing regional disparities in cause-specific mortality patterns (Penina 2022) may influence short-term mortality at the district level. Secondly, colder winters or hotter summers in certain regions can worsen the health of the population with specific chronic diseases.

Thirdly, the population engaged in agriculture, industry, and mining, among other occupations, has a higher risk of exposure to occupational hazards. Lastly, the existing disparities in healthcare access intensify the differences in short-term mortality between regions.

Conclusions. The results of the study highlight a short-term mortality pattern in Moldova similar to those documented in the literature, with higher mortality rates during the cold months of December-January and in the summer season. The cause-specific mortality, particularly from circulatory system diseases, external factors, and respiratory system diseases, emphasises a strong seasonal effect.

This study provides a better understanding of how the short-term mortality fluctuations influence cause-specific mortality patterns in Moldova, and might be considered in the design of health policies and improvements in the healthcare system services. While the focus of the presented research is concentrated on seasonal and cause-specific mortality, some important factors, such as age-specific death distribution and regional mortality disparities, were overlooked, which may be considered in future research.

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NEET YOUTH INTEGRATION INTO THE LABOUR MARKET IN THE REPUBLIC OF MOLDOVA: BARRIERS AND OPPORTUNITIES FROM A REGIONAL PERSPECTIVE

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Abstract. The integration of young people not in education, employment, or training (NEET) into the labor market is a pressing challenge in the Republic of Moldova, where demographic decline, large-scale emigration, and persistent skill mismatches limit employment opportunities. These constraints are most acute in rural and socioeconomically disadvantaged regions, where structural inequalities restrict access to decent work, training, and mobility. This study examines the determinants, barriers, and opportunities for NEET youth integration into the labor market, with a focus on regional disparities. Qualitative evidence was collected through 9 focus group discussions and 14 in-depth interviews with NEET youth aged 16–35 across six regions (Chisinau, Balti, Soroca, Ungheni, Orhei, and Edinet).

The findings reveal persistent vulnerabilities: reliance on informal and seasonal employment, low wages, limited institutional support, and inadequate transport infrastructure. High commuting costs, poor working conditions, and gender-related constraints, especially for young women with childcare responsibilities, further intensify exclusion. Short-term training and employment programs provide only fragmented and temporary support. Overall, the study demonstrates that NEET youth face multidimensional risks, requiring coordinated social, economic, and labor market policies that strengthen employment structures, reduce territorial inequalities, and create sustainable pathways for youth integration and inclusion.
Keywords: youth, NEET, labor market, barriers, opportunities, regions

Introduction. Across Europe, the integration of young people not in education, employment, or training (NEET) has become a pressing policy concern, as this group faces heightened risks of long-term social exclusion, poverty, and marginalization. In the Republic of Moldova, the challenge is particularly acute due to a combination of demographic decline, large-scale emigration, and persistent mismatches between the skills of young people and the demands of the labour market. These structural pressures are further reinforced by pronounced regional disparities: rural and economically disadvantaged areas register disproportionately higher NEET rates and limited access to quality education, vocational training, and decent employment opportunities (Crismaru et al., 2018). Although these issues are widely acknowledged in policy debates, empirical evidence on the mechanisms shaping NEET youth trajectories across regions remains limited. This study seeks to fill this gap by analysing the determinants, barriers, and opportunities for their labour market integration, with particular attention to regional contexts.

Literature review. NEET youth constitute a heterogeneous group whose risks and outcomes are shaped by the interaction of macro-, meso-, and micro-level determinants (Caroleo et al., 2020). At the macro level, NEET status is influenced by national economic conditions (Shanahan, 2000; O'Higgins, 2017), labour market policies, and the structure of education-to-work transition systems (Walther, 2006). At the meso level, family background, peer networks, and community support play a critical role in shaping young people's trajectories (Salvà-Mut et al., 2017). At the micro level, individual disadvantages such as poverty, early school leaving, gender, early pregnancy, disability, and rural residence are consistently associated with a higher risk of becoming NEET, though these factors do not affect all youth equally (Tamesberger & Bacher, 2014; Caroleo et al., 2020).

In the Moldovan context, studies have shown that the formation, size, and structure of the NEET youth category are shaped by a complex interplay of social, economic, personal, and family factors, which together contribute to maintaining the persistently high NEET rate (Crismaru et al., 2018). Studies also point to systemic challenges in the school-to-work transition, including limited and poor-quality jobs, low wages, informality, migration and reliance on remittances, regional and rural-urban disparities, gender gaps in employment, and persistent skill mismatches (Ganta et al., 2016; Buciuceanu-Vrabie et al., 2017; Prohnițchi, 2023). These structural challenges are further compounded by the persistence of early school leaving, which over recent decades has sustained high NEET rates in Moldova (Gagauz et al., 2017; Crismaru & Gagauz, 2024).

These barriers are often reinforced by regional inequalities, with rural youth being more exposed to poverty, limited access to quality education, and fewer employment opportunities. Socioeconomic and developmental disparities across Moldova's regions contribute to significant variation in NEET rates, underscoring the need to approach youth integration through a regional lens. Against this background, qualitative evidence is essential to capture how these structural imbalances are experienced locally and to identify both barriers and opportunities for NEET youth inclusion in the labour market.

Research methodology. There were conducted focus group discussions with NEET youth aged 16 to 35 in six regions of the Republic of Moldova (Chișinău, Bălți, Soroca, Ungheni, Orhei, and Edineț). The discussions were organized into two categories: (1) NEET youth who were beneficiaries of Employment Agency services, with separate groups including participants from different rural localities within the targeted districts; and (2) NEET youth not engaged with Employment Agency services, with sessions conducted specifically in rural areas. In total, 9 focus group discussions and 14 in-depth interviews were carried out with NEET youth aged 16–35.

Main results. The qualitative research highlighted and reiterated several critical findings concerning the size, dynamics, and determinants of the NEET group. The persistence of these determinants reflects the combined influence of individual, socioeconomic, and institutional factors, which together contribute to the reproduction and maintenance of young people within this category. A strong

interdependence with broader socioeconomic conditions was also evident. The seasonal character of economic activities, particularly in agriculture and processing industries, generates significant fluctuations in employment opportunities, disproportionately affecting young people with low levels of education and in regions where agriculture constitutes a dominant source of income. These structural vulnerabilities not only limit the stability of youth employment but also reinforce regional inequalities, as rural areas remain highly dependent on low-productivity sectors. Consequently, many young people are compelled to either accept precarious forms of work or resort to migration as a survival strategy, which further undermines local labour market potential and contributes to the long-term demographic decline.

The study further revealed the widespread prevalence of informal and occasional employment among NEET youth. A substantial proportion reported working without contracts or social protection, a practice that not only deepens their economic vulnerability but also reinforces instability in their labour market trajectories. As a result, many young people remain exposed to heightened economic insecurity, with limited prospects for long-term integration and financial autonomy. In this context, the motivation to register with the Employment Agency is shaped not only by access to job opportunities and training programs but also by the prospect of qualifying for social benefits, an aspect that becomes particularly salient during the winter months.

Access to professional development opportunities was also shown to be discontinuous and strongly conditioned by labor market seasonality. Short-term training and skills development programs may facilitate temporary exits from the NEET category; however, only a small fraction of participants manage to secure stable labor market integration. These findings underscore the fragility of current activation measures and highlight the need for sustained and structurally embedded interventions.

In terms of barriers to labor market participation, the absence of stable employment opportunities in rural and small urban areas emerged as a structural constraint, perpetuating economic vulnerability and maintaining a high proportion of NEET youth. Regional and rural–urban disparities remain pronounced, with Chișinău representing the country's primary economic hub and concentrating the majority of job vacancies. Seasonal and occasional employment, particularly in agriculture, further prevents young people from building predictable and sustainable career pathways.

Low and uncompetitive wages constitute another critical barrier. For many youth, local labor market conditions do not provide sufficient financial incentives to remain employed domestically, resulting in temporary or permanent migration in search of better-paid and more stable employment abroad. The study highlighted two key dimensions of wage-related constraints: the limited capacity of employers to offer competitive salaries due to broader economic pressures, and the anchoring effect of the national minimum wage, which often serves as a reference point for remuneration. At the same time, the mismatch between young people's high wage

expectations and their insufficient professional skills creates further imbalance in the integration process.

Other structural barriers include poor transportation infrastructure, which limits mobility and access to both employment opportunities and training programs. High commuting costs represent an additional financial burden, particularly in the context of already low wages, reducing the attractiveness of available jobs and hindering participation in professional training. Informal employment practices, the absence of formal contracts, and the violation of labor rights exacerbate precariousness, while unfavorable working conditions, marked by constant pressures and low-quality jobs, further discourage young people from entering or remaining in the local labor market. Limited access to flexible working arrangements emerged as an especially relevant obstacle for young women, whose ability to balance family responsibilities with employment and training opportunities remains constrained.

Overall, the findings point to a multidimensional vulnerability of NEET youth in Moldova, shaped by overlapping individual, structural, and institutional constraints, and exacerbated by persistent regional disparities. These dynamics underscore the urgent need for integrated policy responses that simultaneously address labor market structures, education-to-work transitions, and the broader social protection system.

Discussion and conclusions. The findings of this qualitative study indicate that the integration of NEET youth into the Moldovan labor market is severely constrained by structural vulnerabilities, further amplified by broader socioeconomic and regional disparities. Limited access to stable and adequately paid employment opportunities, combined with weak institutional support, reflects persistent dysfunctions in the labor market and perpetuates economic exclusion.

Regional and rural-urban disparities remain a defining characteristic of the Moldovan context. Inadequate transport infrastructure, coupled with limited access to professional services and training opportunities in rural areas, reinforces structural unemployment and inactivity. The absence of effective mechanisms for socio-professional integration leaves young people with few viable alternatives, often pushing them toward temporary or permanent migration.

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SUICIDAL IDEATION AMONG OLDER ADULTS IN EUROPE: THE ROLE OF MIGRATION AND SOCIO-GEOGRAPHICAL CONTEXTS

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Abstract. Suicidal behavior among older migrants remains underexplored, despite the complex interplay of different factors that contribute to its development and persistence. These challenges are heightened for older migrants due to cultural dissonance, language barriers, social isolation, and limited healthcare access (Caidi et al., 2020; Anantapong et al., 2024). Socioeconomic inequalities, loneliness, and declining health are factors associated with suicidal ideation (Borrell et al., 2020; McClelland, 2020; Nesturi & Nasufi, 2025), while migration adds stress through integration and acculturation difficulties (Berry, 1980; APA Council on Geriatric Psychiatry & Llorente, 2019). Using SHARE data, this study found that individual factors such as advanced age, lower education, loneliness, and depression were significant predictors of suicidal ideation across both migrant and non-migrant populations. Even though migration status itself was not identified as a significant predictor of suicidal ideation, the results showed that place of residence (rural-urban) plays an important role in the case of migrants, with those living in rural areas at increased risk. This study calls for effective policy and practice to improve mental health and prevent suicidal behavior among older adults with a migration background.
Keywords: late-life suicide, migration, aging, SHARE, logistic regression, ICC, European populations

Introduction. Suicidal behavior among older adults remains a neglected area in mental health research and policy. Compared to younger populations, suicidal ideation in later life is often misunderstood or dismissed as an inevitable part of aging, based on long-standing assumptions that well-being cannot improve at advanced (Simon, 1989). Yet, older people frequently struggle with profound anxieties over loss of autonomy, identity, and capacity for self-care (Kjølseth et al., 2010; Crocker et al., 2006).

For migrants, these challenges are often compounded by cultural dissonance, language barriers, social isolation, and unequal access to healthcare (Caidi et al., 2020; Anantapong et al., 2024). Despite the importance of these issues, few comparative studies have examined how migration status and socio-geographical contexts interact with individual-level factors to shape suicidal ideation in later life. This study addresses that gap.

The study aims to: 1) Assess the prevalence and predictors of suicidal ideation among older adults in Europe. 2) Investigate whether migration status influences suicidal ideation directly or indirectly. 3) Examine the role of socio-geographical contexts, including rural-urban differences, in shaping risks.

Literature review. Socioeconomic inequalities, loneliness, and aging-related challenges such as declining health and social isolation have been found to be consistent predictors of suicidal ideation (Borell et al., 2020; McClelland 2020; Nesturi & Nasufi, 2025). Migration can be considered a determinant of suicidal ideation through stress and social integration challenges (Berry, 1980; APA Council on Geriatric Psychiatry & Llorente, 2019). Amiri (2022) reported that the prevalence of suicidal ideation among immigrants and refugees was 16%, although their overall risk of suicide was lower that of non-migrants, they were more prone to non-fatal suicidal behavior. Older migrants and their suicidal behavior have received limited attention in academic literature, particularly within the European context.

Methods. Data from the Survey of Health, Ageing and Retirement in Europe (SHARE), covering older adults across multiple European countries were used. Multilevel modelling (ICC) was applied, a method rarely used in this field, to account for both individual-level and regional-level influences. Variables included demographic factors (age, education, gender), psychosocial factors (loneliness, social connectedness), and health conditions (with a focus on depression). Migration status was incorporated as a key explanatory factor.

Main results. The results demonstrate that migration status alone was not an independent predictor of suicidal ideation. Individual factors such as advanced age, lower education, loneliness, and particularly depression emerged as consistent and significant predictors across both migrant and non-migrant populations. Socio-geographical disparities were evident: older migrants living in rural areas faced higher risks of suicidal ideation compared to those in urban areas, highlighting the importance of place-based inequalities.

Discussion and conclusion. The findings underscore that suicidal ideation in later life cannot be understood solely as an individual mental health issue. Instead, it is shaped by the interplay of demographic characteristics, psychosocial stressors, and socio-geographical contexts. Migrants, especially those in rural areas, face distinct challenges that exacerbate their vulnerability.

This study contributes to the understanding of late-life suicidal ideation by linking migration status with broader socio-geographical contexts through multilevel modelling. It emphasizes the need for integrated suicide prevention strategies that target both individual-level risks (such as depression and loneliness) and contextual inequalities (such as service accessibility in rural areas). In line with the United Nations Sustainable Development Goals (SDG 3.4), which prioritize mental health improvement and suicide prevention, the study highlights the urgent need for policy and practice to address the growing mental health challenges of an aging population. With global projections indicating that by 2050, 16% of the world's population will be 65 or older (UN, 2019), developing effective interventions for vulnerable groups, including older migrants, is crucial for reducing risks of suicidal ideation and improving late-life well-being.

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SOCIOCULTURAL ADAPTATION OF MIGRANT CHILDREN IN THE FIELD OF EDUCATION: EUROPEAN EXPERIENCE AND THE REPUBLIC OF MOLDOVA

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Abstract. The research examines the level of integration of immigrants – foreign citizens, especially children – into the educational system of the Republic of Moldova. Integration becomes a key factor in ensuring social cohesion, avoiding exclusion, and preventing social collisions. The analysis was conducted on the dynamics and structure of immigration flows of foreigners by age, sex, and country of origin, as well as data on the enrollment of foreign children in the national educational system. The systematization and generalization of data from various national and international statistical and administrative sources allowed their comparative analysis and graphical representation. The results indicated the constant increase in the number of foreigners and the share of children among them, as well as the diversification of countries of origin, where social, cultural, economic, and religious traditions differ essentially from those in the Republic of Moldova. The practice of European states regarding the integration of immigrant children into the educational system was studied, in correlation with the international commitments undertaken by the Republic of Moldova and the country's national priorities. A lack of a series of indicators is observed, which does not allow the evaluation and monitoring of the level of integration in the educational system, the correlation of school performance between foreign and native children, the post-educational trajectory of foreigners, etc., a fact that does not allow an objective estimation of the costs and effectiveness of integration measures.
Keywords: immigrant integration, education system, foreign children, Moldova

Introduction The immigration of foreign nationals to the Republic of Moldova and the integration of foreign children into the national education system remains a relatively underexplored topic, largely due to the comparatively small number of foreigners residing temporarily or permanently in the country. However, a gradual increase in their share of the local population has been observed. This trend calls for a critical assessment of the effectiveness of integration policies, the anticipation of social exclusion, and the mitigation of risks associated with civilizational differences. An analysis of European practices — including those of Germany, Romania, the United Kingdom, Italy, Ireland, and Switzerland — reveals that the most effective strategies are those that promote the early integration of foreign children into the education system. Such policies not only facilitate the children's adaptation but also generate a multiplier effect that supports the integration of adult family members.

Literature Review The integration of foreign children as a subject of study focuses primarily on their rights and the conditions of access to education, as well as on learning the host country's language — a mandatory initial measure that facilitates integration and access to the educational system (Chen, 2009; Ryan, 2010; Grieve & Haining, 2011; Wallace, 2011; Evans et al., 2016; Evans & Liu, 2018). Research shows that students whose linguistic background differs from the dominant language have a distinct set of needs that schools must address appropriately. Another key area of study is the strong relationship between schools and parents, which, according to the literature, yields mutual benefits. Evidence suggests that parental involvement in children's schooling significantly contributes to their educational success. In the Republic of Moldova, research has primarily focused on the extent to which international treaties and European directives concerning children's right to education have been transposed into national legislation, as well as on the measures required to ensure access to education for refugee children (Ombudsmanul copilului, 2023).

Research Methodology The study incorporates statistical data provided by the National Bureau of Statistics (NBS), open data from national administrative sources (Ministry of Internal Affairs, Public Services Agency, Ministry of Education and Research), as well as international sources (UNDESA, EUROSTAT). The research employed methods of data systematization and generalization, along with comparative analysis of the number of foreign nationals aged 0–14 by country of origin, immigration flow dynamics, age and gender distribution, place of residence in the Republic of Moldova, graphical data representation, and other relevant indicators.

Key Research Findings An analysis of data from 1993 to 2023 reveals a steady increase in the number of foreigners immigrating to the Republic of Moldova for the purpose of family reunification, with this category accounting for over 30% of all individuals granted residence rights in the country. Notable deviations from this trend occurred in 2020 and 2022, due to extraordinary circumstances related to the COVID-19 pandemic and the armed conflict in Ukraine. Foreign nationals residing in Moldova originate from 116 countries (Figure 1), primarily from former Soviet states (Ukraine, the Russian Federation), EU member states (Germany, Romania, Bulgaria), as well as a significant share from Middle Eastern and Asian countries (Israel, Turkey, Syria). There is a consistent upward trend in family reunification among foreign nationals in Moldova. Between 2014 and 2023, the proportion of children aged 0–14 among total immigrants has also increased (Figure 2), ranging from 22% to 30% depending on the country of origin. This growing share of children among immigrants is a key indicator of the shift from temporary to permanent migration.

Figure 1. **Immigration to the Republic of Moldova, 1993–2023, by Reason for Immigration and Region of Origin**
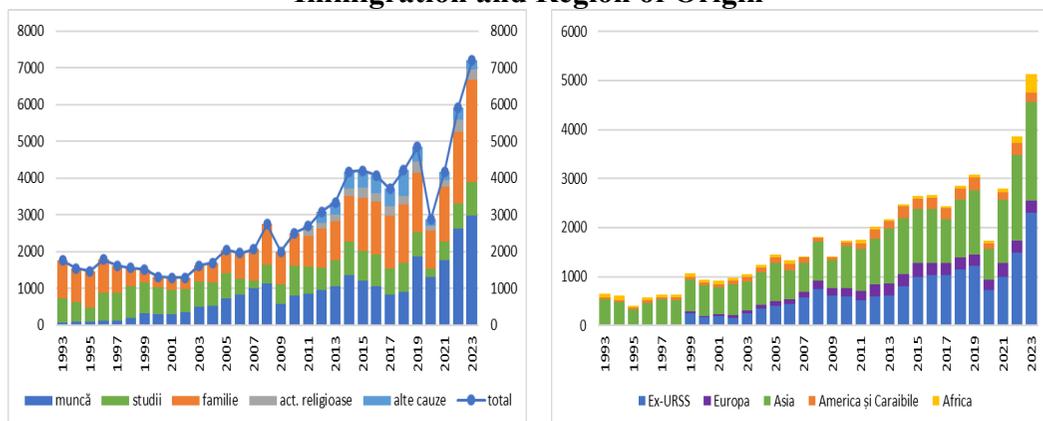
Source: Calculated based on data from the National Bureau of Statistics

The growing number of immigrant children from countries with significant linguistic, cultural, social, and religious differences compared to the local context necessitates child-centered approaches. These include ensuring their inclusion in the educational process, facilitating Romanian language acquisition, and providing social and cultural mediation measures. National legislation — particularly the Law on the Integration of Foreigners in the Republic of Moldova (No. 274/2011) and the Education Code (No. 152/2014) — is notably flexible, granting foreign children rights comparable to those of Moldovan citizens. Access to education, including compulsory general education, is guaranteed regardless of the legal or illegal status of the child's stay in the country, without additional enrollment conditions. This legislative framework aligns with standards promoted in several European countries, such as Ireland, Italy, Germany, and the United Kingdom. Institutional support is provided for Romanian language learning, including joint programs with adults, especially for vulnerable categories of children. Romanian language instruction is offered during the first year of schooling, alongside intercultural mediation. Nonetheless, challenges persist in Romanian language acquisition due to the overlapping linguistic diversity of immigrant children and the multilingual context of Moldova itself, where schools operate in Romanian, Russian, and English. This situation places additional demands on the educational system, creating pressure on infrastructure in areas with high immigrant populations and on the teaching staff involved. Currently, the country lacks formalized and regular data collection mechanisms to assess the level of integration of foreign children into the educational system, their academic performance compared to local children (e.g., MIPEX indicators), and the monitoring of their socio-professional trajectories after graduation. This gap hinders objective evaluation of the effectiveness of integration programs, as well as the estimation of additional costs, resource availability, and public budget planning in this domain.

Figure 2. **Immigration of Children Aged 0–14, 2014–2023, by Country of Origin**
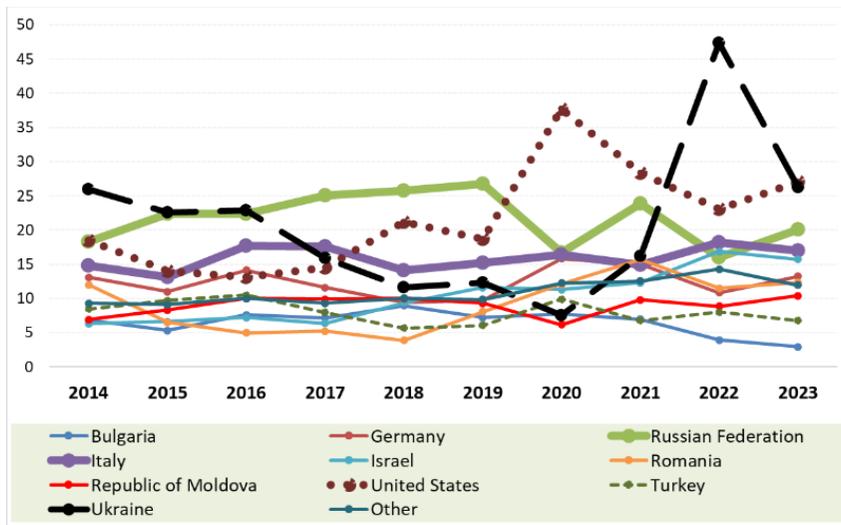
Conclusions and Recommendations The integration of immigrant children into the educational system requires ongoing examination. Fragmentation and inconsistency within the legal framework, coupled with institutional instability and the absence of monitoring indicators to assess the integration level of foreign children relative to local peers, hinder objective evaluation of the process. When designing integration measures for foreign children in education, it is essential to consider the linguistic particularities of their countries of origin and to allocate additional resources for Romanian language instruction. This includes extending the duration of language programs and training teachers to teach Romanian as a foreign language. Furthermore, the development of mentorship programs — involving school counselors and civil society actors — is recommended to provide psychosocial support and guidance. Simplifying the recognition and adaptation of competencies is also crucial, through streamlined procedures for validating prior studies and the implementation of remedial programs for students with educational gaps.

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BRIDGING MIGRATION AND RURAL REGENERATION: EU LINGUISTIC INTEGRATION POLICIES FOR DEMOGRAPHIC SUSTAINABILITY

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Abstract. As demographic shifts accelerate across Europe, rural depopulation, migration, and refugee resettlement increasingly challenge policy-makers. This paper examines how EU strategies—particularly linguistic integration initiatives—can address rural migration and asylum reception while promoting economic sustainability and demographic resilience. Building on previous research on unaccompanied foreign minors (UFMs) in Southern Italy, the current study investigates language policies, certification frameworks, and community support mechanisms that shape integration outcomes in underserved regions. Through qualitative fieldwork and policy analysis, the study highlights how language proficiency facilitates legal recognition, improves employment prospects, and fosters social cohesion—key components of demographic renewal. The research also explores how AI-powered tools, such as adaptive learning platforms and instant translation applications, can supplement traditional education approaches by tailoring programs to individual learners and lowering linguistic barriers.

By bridging migration realities through inclusive language strategies—enhanced by technology—EU policies have the potential to harmonize asylum reception with rural development goals. Linguistic integration emerges not only as an educational tool but also as a strategic asset for resource efficiency, intergenerational equity, and sustained growth. The paper advocates for more nuanced, intersectional frameworks that align local demographic needs with digital innovation and inclusive governance.

Keywords: linguistic integration, Italy, refugees, education, L2, demographic resilience, AI education

Introduction. Across Europe, rural territories face persistent demographic challenges marked by aging populations, declining birth rates, and youth outmigration. Southern Italy, in particular, reflects this crisis, with regions such as Calabria, Campania, and Sicily experiencing steep population declines and structural economic fragility (OECD, 2024). In response, several small municipalities have adopted refugee resettlement strategies as a countermeasure to demographic decay. Research has increasingly recognized migration as a potential catalyst for rural

revitalization (ISMU, 2025; Whole-COMM, 2024), yet the alignment between asylum governance and local development policy remains tenuous.

Existing literature emphasizes the importance of migrant labour, housing access, and community support, but our study wants to focus on the pivotal role of linguistic integration—particularly for migrants settled in rural areas. Bourdieu's (1991) concept of linguistic capital is crucial to understand how language proficiency influences educational access, performance, and future opportunities.

Furthermore, this study aims to highlight how EU-driven language certification programs and local linguistic initiatives shape integration outcomes and demographic renewal in Southern Italy. Through fieldwork, interviews, and policy analysis, it investigates the role of language proficiency in promoting asylum access, employment, and social cohesion. In addition to institutional efforts, the integration process can be further enhanced by incorporating emerging AI-supported language tools. These technologies—ranging from mobile translation apps to adaptive language learning platforms—offer flexible, accessible, and personalized support for language acquisition and mediation. Crucially, they can facilitate linguistic integration even in non-standard or informal settings, empowering migrants to navigate everyday interactions, access services, and build social connections beyond formal education systems.

Literature review. This study draws upon a multi-layered theoretical foundation that combines migration systems theory, rural sociology, linguistic integration models, and identity-focused frameworks from multilingual education. Together, these perspectives offer a nuanced lens for analyzing how language acquisition contributes to the demographic and social revitalization of depopulated rural areas in Southern Italy.

Migration Systems Theory (Mabogunje, 1970) emphasizes the reciprocal linkages between sending and receiving regions. Southern Italy's small municipalities are embedded within dynamic migration systems where international flows can either reinforce or reshape local social structures. Linguistic integration is conceptualized as a feedback mechanism—language proficiency facilitates access to legal residency, education, and employment, which in turn influences migrants' decisions to settle and integrate long-term.

Rural Restructuring and Peripheralization: Woods (2011) describes rural restructuring as the transformation of local territories under global and national pressures, often resulting in peripheralization. Southern Italy exemplifies this marginalization. By positioning migrants as agents of change, this study challenges narratives of rural decline and reframes language programs as tools for territorial revalorization, enabling migrants to contribute meaningfully to local revitalization.

Language Socialization and Identity Formation: Language socialization theory (Duff, 2010; Norton, 2013) underscores how language learning is embedded in identity formation and power structures. In multilingual contexts, language is not merely a tool for communication but a medium through which individuals negotiate belonging, agency, and visibility. This study extends this framework to rural integration, where informal learning environments—such as community hubs—play a critical role in shaping migrants' identities and social inclusion.

Social Identity and Linguistic Capital: Social Identity Theory (Tajfel & Turner, 1979) and Bourdieu's (1991) concept of linguistic capital further illuminate the intersection of language and identity. Language serves as a marker of group membership and social power. Migrants who acquire dominant or prestigious languages gain access to social capital and institutional recognition, while those speaking marginalized languages may face exclusion. This dynamic is particularly salient in rural educational and social settings, where linguistic hierarchies influence integration outcomes.

Policy Feedback and Institutional Adaptation: Pierson's (1993) policy feedback theory provides a lens to examine how language certification policies influence local governance. EU-driven linguistic initiatives create incentive structures that reshape municipal asylum practices. This study explores how such policies, when locally adapted, enhance the capacity of rural towns to retain population and foster demographic resilience.

Research methodology. This study adopts a qualitative research design to explore how linguistic integration strategies contribute to demographic resilience in rural Southern Italy. The methodology combines fieldwork, document analysis, and case study expansion to provide a comprehensive understanding of the intersection between migration, language policy, and rural revitalization.

Main results. The study finds that linguistic integration acts as a strategic driver of migrant retention and community revitalization in rural Southern Italy. Municipalities such as Camini, Riace, Badolato, and Sutera that implemented inclusive language programs reported higher levels of migrant participation and settlement (The Parliament Magazine, 2023; Sarlo & Martinelli, 2016). Access to contextualized language learning—especially when incorporating local dialects and intercultural exchanges—was associated with improved outcomes in employment, education, and social cohesion (ISMU, 2025).

Demographic data from ISTAT and Eurostat confirm that over 60% of rural municipalities experienced accelerated depopulation between 2020 and 2025 (ISTAT, 2025; Eurostat, 2025). However, regions with active integration strategies saw partial demographic recovery, including a modest rise in youth populations aged 20–35 (OECD, 2025). These trends suggest that migration, when supported by targeted linguistic initiatives, can mitigate population decline.

Despite these successes, policy and funding gaps persist. ESPON and JRC reports highlight that less than 40% of EU territorial cohesion funds were allocated to rural integration efforts, and the absence of standardized municipal language policies created disparities in migrants' access to services and education (Curtale et al., 2025; ESPON & JRC, 2024).

Community-based practices emerged as key enablers of integration. Horizontal governance models, such as Riace's "hospitality dorsal," improved service delivery and autonomy (Sarlo & Martinelli, 2016). Informal language acquisition through volunteer networks, co-housing, and local employment proved effective in fostering long-term inclusion (Lomonaco et al., 2023).

Discussion and conclusions. The study's findings underscore that linguistic integration remains a cornerstone of sustainable inclusion, particularly in rural regions where institutional capacity is limited and social infrastructure is thin. Across

municipalities surveyed and policy documents reviewed, language acquisition emerges not merely as an educational goal but as an enabler—a prerequisite for legal recognition, employment access, education continuity, and community participation. A prominent theme is the efficacy of digitally mediated and AI-supported tools in bridging linguistic gaps where traditional infrastructure falls short. These technologies offer tailored feedback, flexible scheduling, and multilingual accessibility—benefits especially salient in low-service or geographically isolated municipalities. From adaptive mobile applications that support CEFR-aligned progression to voice-recognition engines that correct pronunciation in real time, digital tools replicate core components of classroom instruction while enabling self-paced, situational learning.

Comparative reviews reveal that such tools can lower barriers for both learners and service providers. Migrants juggling irregular hours or limited mobility can engage with language supports asynchronously. Administrators and frontline workers benefit from smart translation platforms and guided intake systems that reduce reliance on human mediation. This reflects and reinforces scholarship suggesting that early, frequent, and context-aware exposure to host-country language is one of the strongest predictors of integration success.

Importantly, the study identifies a shift from monolithic, classroom-based instruction toward hybrid models of language acquisition, combining informal practice with AI-enhanced scaffolding. In rural areas, community hubs and digital channels together allow learners to acquire usable linguistic capital in authentic contexts—whether through app-based conversation challenges or voice-enabled guides for navigating public services. A compelling example is provided by our case stydy, in a town of fewer than 1,000 residents, Pietradefusi, in Southern Italy, a cafè has evolved into a community anchor point where newcomers and long-time residents interact daily over coffee, pizza, and conversation. Its inclusion in the research illustrates how non-institutional environments, when paired with accessible technology, can foster spontaneous language learning, social bonding, and cultural exchange—key ingredients for durable integration in peripheral regions. However, ethical design, human oversight, and attention to digital literacy and privacy are essential. To support demographic resilience, rural municipalities should prioritize mobile-first language access, human-guided digital supports, and cross-sector coordination. Ultimately, AI is not a substitute for human connection—it is a catalyst that amplifies it, transforming language from a classroom subject into a living tool of community life.

In sum, the convergence of inclusive language strategies and cross-sector partnerships represents a transformative pathway for integration—one that empowers individuals, strengthens communities, and redefines rural resilience.

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MOLDOVAN PENSION RESILIENCE
UNDER DEMOGRAPHIC PRESSURE
UP TO 2040

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Abstract. Population aging and mass emigration challenge the sustainability of Moldova's pay-as-you-go pension system, raising questions about its future, the standard of living for Moldovan pensioners in the coming years and possible reforms. The purpose of this research is to attempt to answer these questions by projecting the average pension in Moldovan lei at constant 2021 PPP values for the period from 2025 up to 2040. Drawing on official demographic and macroeconomic data for 1991-2024, official demographic projection for Moldova until 2040 and using econometric modeling with endogenous and exogenous economic growth models, 120 scenarios of average pensions in Moldova for 2025-2039 were developed. Despite demographic headwinds, Moldova can expect significant positive growth in average pension levels by 2040 in real terms, provided that economic growth will be either at average level projected according to endogenous growth models (3.34%) or at average level projected according to exogenous growth models (4.54%) and pension expenditures will be slightly above current proportions of GDP or at average EU level. Results of the study indicate that pension system sustainability depends primarily on economic growth rather than structural reforms such as mandatory funded components.
Keywords: Moldova, pensions, sustainability, demographic projection, economic growth model

Introduction. Demographic transitions characterized by population aging and emigration pose fundamental challenges to pension system sustainability in many European countries (Hinrichs, 2021). Moldova faces significant pressure from rather small fertility rate since 1990s, low level of employment rate in comparison to EU countries and substantial outmigration, threatening the viability of its pay-as-you-go pension scheme. This study examines pension sustainability through econometric modeling. The research addresses a critical policy question: whether Moldova's pension system can maintain adequate benefit levels despite adverse demographic trends, and what role economic growth plays in ensuring long-term sustainability.

Literature review. Contemporary pension research emphasizes the complex relationship between economic growth, demographic change, and system sustainability. Altiparmakov and Nedelkovic (2016) demonstrate that pension privatization does not necessarily enhance economic growth in Eastern European countries, while studies of pay-as-you-go systems highlight their dependence on contribution base expansion. Temsumrit (2023) shows how demographic transitions affect both formal and informal sector dynamics in emerging economies,

emphasizing the importance of labor force participation rates. The authors of publications about welfare and sustainable development, for example, Clements (2014), Devesa and Doménech (2020) consistently identify economic growth as a primary determinant of pension system viability, with demographic factors serving as important but secondary considerations.

Research methodology. This analysis employs econometric modeling techniques incorporating both endogenous and exogenous growth models to project average pension scenarios in Moldova in 2025-2039. The methodology combines official statistical data of the World Bank, the International Monetary Fund and the National Bureau of Statistics of the Republic of Moldova for 1991-2024, official demographic projection until 2040 (Gagauz et al., 2024). Capital stock estimation utilizes ordinary least squares regression on International Monetary Fund data, while labor force projections incorporate World Bank demographic indicators to project the number of GDP at PPP for Moldova until 2040 together with shares of investment in education (for endogenous growth models) or without them (for exogenous growth models). The research generates 120 distinct scenarios of average pensions for 2025-2039 by varying growth assumptions, education investment levels (only for endogenous growth models), and pension expenditure ratios.

Main results. The econometric analysis reveals that Moldova's pension system demonstrates remarkable resilience under most growth scenarios examined. According to NBS data from the Republic of Moldova and the Centre for Demographic Research of NIER projections, the demographic burden in Moldova steadily increases from 2014 to 2040, as shown in *Figure 1*.

Figure 1. **Dependency ratio in Moldova according to NBS data from January 1, 2014 to January 1, 2025 and CDR of NIER projections from January 1, 2026 to January 1, 2040**
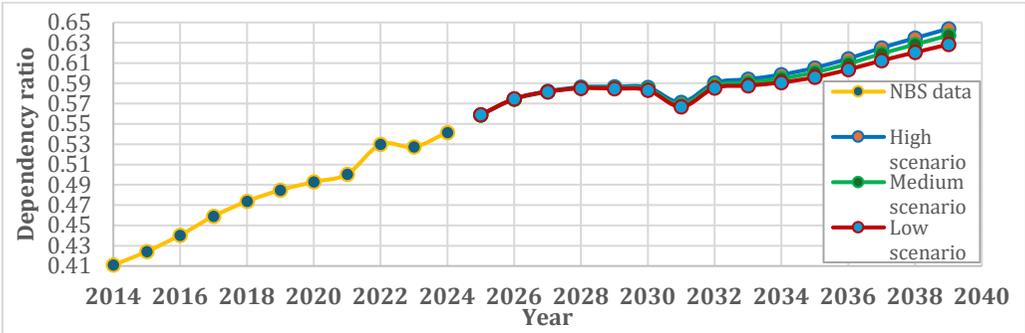
Source: author's calculations

The level of capital stock is the main factor for the level of economic development for each of the models developed. Despite demographic headwinds including population decline and aging, average pension levels show significant positive growth potential through 2039 when economic growth maintains levels of 3.34% (average level for endogenous growth models) or 4.54% (average level for exogenous growth models).

The most favorable and most adverse scenarios of pension dynamics in 2021 PPP Moldovan lei, as well as the most favorable and most adverse scenarios of pension levels under both endogenous and exogenous economic growth are presented in *Table 1.*

Table 1. **Projected Average Pensions in Moldova (2025–2039): Most Favorable and Most Adverse Scenarios in 2021 PPP Moldovan Lei**

Year	Most Favorable Scenario (out of 120)	Most Adverse Scenario (out of 120)	Most Favorable Scenario Under Average Rate of Growth For Endogenous Growth Models	Most Adverse Scenario Under Average Rate of Growth For Endogenous Growth Models	Most Favorable Scenario Under Average Rate of Growth For Exogenous Growth Models	Most Adverse Scenario Under Average Rate of Growth For Exogenous Growth Models
2025	3828.8	2881.2	3669.7	2966.4	3712.3	3000.9
2026	4214	2901.6	3830.6	3076.6	3920.1	3148.5
2027	4659.1	2942.8	4011.4	3203.3	4152.8	3316.2
2028	5142	2985.7	4200.8	3333.5	4399.3	3491.1
2029	5654.8	3019.9	4392.2	3462.2	4653.2	3667.9
2030	6142.4	3033.7	4553.6	3564.4	4880.2	3820
2031	6681.9	3066.7	4735.4	3679.8	5134	3989.5
2032	7254.3	3079.6	4926.8	3799.4	5403.5	4167.1
2033	7852.2	3093.9	5122.8	3919.6	5683.8	4348.8
2034	8474	3106.3	5322.9	4039.9	5974.3	4534.3
2035	9126.7	3114.9	5531.3	4163.4	6280.4	4727.2
2036	9819.1	3120.4	5752.5	4293.2	6607.4	4931.1
2037	10540.6	3123	5981.3	4425.1	6949.9	5141.7
2038	11290.8	3123	6216.7	4558	7307.3	5357.5
2039	12120.4	3136.4	6479.2	4707.1	7704.3	5597.1

Source: author's calculations

Discussion and conclusions. The findings challenge conventional assumptions about demographic determinism in pension sustainability. While population aging creates fiscal pressures, economic growth emerges as the dominant factor determining system viability. To ensure a solid pace of economic growth (at the level of the arithmetic average for exogenous growth models—around 4.5%), Moldova needs to improve the efficiency of public investment in education. This, in turn, is only possible if the proportion of young Moldovan citizens oriented toward working domestically rather than abroad increases significantly. It is also important to raise the employment rate of the population. The research contributes to growing evidence that pension sustainability depends primarily on economic fundamentals rather than institutional architecture, with implications extending beyond Moldova to other demographically challenged emerging economies.

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CHANGES IN THE DEMOGRAHIC PROFILE AND SPATIAL DISTRIBUTION OF UKRAINIAN WAR MIGRANTS IN THE CZECH REPUBLIC

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Abstract. The research examines the demographic characteristics of Ukrainian war migrants to the Czech Republic following Russia's full-scale invasion and the spatial distribution of refugees across this country. The study aimed to analyze the dynamics of the sex-age structure of war migrants and to characterize changes in their demographic profile over the past three years. It also identifies the spatial distribution of groups of migrants (children, adult persons, including seniors) regarding the territorial allocation of infrastructure that they need in Czechia. The research utilized data provided by the Ministry of the Interior of Czechia, the Czech Statistical Office, and Eurostat, and applied methods of systematization and generalization, comparative analysis, structure and dynamics analysis, graphical representation of data, and spatial analytical techniques. Czechia ranks third in the number of war migrants from Ukraine in the EU. Among migrants, there is a particularly high share of women aged 36 to 45, children aged 6 to 14, and boys aged 15-17 years. Over the recent years, the number and share of seniors (65 and over) and males aged 18-64 have increased. Based on Gini coefficients, medical infrastructure in Czechia is more unevenly distributed relative to children than to adult migrants (including seniors).
Keywords: *migration, war, demographic characteristics, social infrastructure, Ukraine, Czech Republi*

Introduction. The full-scale invasion of Ukraine by Russia has triggered the most significant wave of forced migration since the Second World War. Among the EU member states accepting Ukrainians, the Czech Republic holds a special position. While it ranks third in absolute numbers of individuals registered for temporary protection (373.8 thousand as of the end of June 2025) after Germany and Poland, however, this country stands out with the highest relative load: 34.4 individuals under temporary protection per 1,000 inhabitants, compared to 26.9 in Poland and 14.3 in Germany. In fact, as a direct result of this influx, Ukrainian citizens now account for more than half (53%) of all foreigners registered in the Czech Republic. Therefore, the impact of this war-driven migration on the nation is more pronounced than in larger countries like Germany or Poland, where Ukrainians constitute a much smaller share of the total migrant population.

Literature review. The large-scale forced migration from Ukraine has prompted a body of research. To date, attention has predominantly focused on several key areas: the integration of refugees into the educational system and the labor market of Czechia, their economic activity, health-related challenges, including mental well-being, and intentions regarding return to Ukraine (e.g., PAQ Research, 2023; Postepska, A., & Voloshyna, A., 2024). While these studies provide crucial insights, the demographic profile of the war migrants themselves has received comparatively less attention. Most research tends to present a static demographic

snapshot from the initial phase of the influx. The dynamic nature of these characteristics remains particularly under-examined. Thus, there is a gap in understanding how these demographic shifts impact the evolving needs of war migrants themselves and the corresponding demands on social infrastructure. This study aims to address the gap by analyzing changes in the demographic structure of war migrants and their spatial distribution in the Czech Republic.

Research methodology. We used methods of systematization and generalization, comparative analysis, statistical methods of analyzing structure and dynamics, graphical data representation. The spatial analytical techniques to examine regional concentration are also applied.

Main results and discussion. As of mid-2025, among all Ukrainian war migrants residing in the Czech Republic, 71.5% were of economically active age (18–64 years), 24.0% were children under 18, and 4.5% were senior individuals aged 65 and above. Women account for approximately 57% of all persons under temporary protection in this country; the most numerous among them are the age cohorts from 36 to 45 years. Comparative analysis of the sex and age structure indicators of child cohorts of war migrants over the past years shows a steady decline in the share of children under 14 years and a significant increase in the share of male adolescents aged 15–17 years. In absolute terms, between mid-2022 and mid-2025, the number of children under temporary protection in Czechia declined, with the largest decrease observed among the youngest (under 3 years) — by more than 40% — and the smallest decrease among female adolescents aged 15–17 years (by 27%). In contrast, the number of male adolescents of the same age remained virtually unchanged. Broad age groups whose numbers increased during the war years — both in absolute and relative terms — included males of economically active age and older adults (Fig. 1). Even so, the seniors still constitute only a small share of war migrants in Czechia, in contrast to Germany (65 and over - 7% of all individuals), which offers substantially greater social guarantees for this demographic group of migrants.

Different demographic groups of migrants generate additional demand and place a burden on relevant social infrastructure facilities in their areas of residence. Table 1 shows that, given the current regional distribution of migrants, general practitioners are moderately unevenly distributed, but the location of medical facilities exhibits a significantly higher degree of inequality.

Figure 1. **Share of Selected Sex and Age Groups in the Total Number of Ukrainian War Migrants** (as of mid of the year)
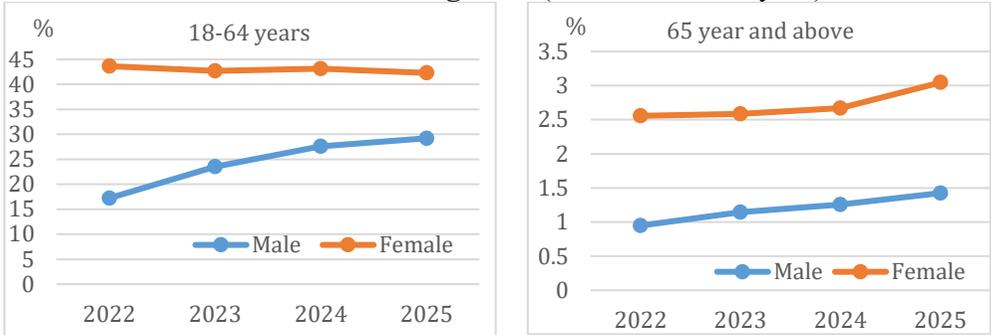
Source: own calculations based on data of the Ministry of the Interior of Czechia

Table 1. **Gini Coefficient of Medical Infrastructure Distribution Relative to War Migrants Distribution Across Czech Regions (*Kraje*)**

Migrant group	Outpatient medical facilities	Doctors in outpatient medical facilities
All adult migrants	0.474	0.352
Seniors	0.468	0.332
Children and adolescents	0.530	0.366

Source: own calculations based on data of the Czech Statistical Office on medical infrastructure: adult facilities for adults, pediatric facilities for children

The distribution of medical infrastructure relative to the adult migrants (including seniors) in Czechia is moderately unbalanced, whereas the mismatch is greater for children, indicating higher spatial inequality in access. The greatest regional shortages for children (matching index: migrant children/ pediatricians) are found in Prague and in Plzeňsky, Central Bohemian, Karlovy Vary regions, while the greatest imbalances by doctors for adults are shown in Moravskoslezský, Olomoucký, Zlínský, and Ústecký regions.

Conclusion. The demographic profile of war migrants merits continuous examination. The composition of Ukrainian migrants in Czechia has shifted toward a smaller share of children, a slightly larger share of working-age adults, and a notable rise in those aged 65+, who nevertheless remain a small minority. Spatial inequality in access to medical services for adult migrants is moderate, though some regions display imbalances. The distribution of relevant resources relative to child refugees reveals slightly higher inequality.

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COMPARATIVE PERSPECTIVES ON THE SITUATION OF THE ELDERLY IN MOLDOVA AND THE EUROPEAN UNION

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Abstract. The purpose of this article is to provide a comparative analysis of the situation of the elder population in the Republic of Moldova in relation to the European Union average. The study evaluates the employment and the opportunities for continuing labour activity among elder persons (aged 60 and over). It analyses the overall employment rate in the country and identifies the types of economic activities where the share of older workers is most prevalent. In assessing the standard of living of the elder population, replacement rates, and pension levels in the agricultural and non-agricultural sectors, with particular attention to gender differences. It also estimates poverty risks among elder persons. The characteristics of the elder population in Moldova are examined in comparison with corresponding indicators for the EU average and individual member states. The research applies methods of analysis and synthesis, graphical representation, and systemic methodological approach. Based on the findings, several proposals are formulated to improve the situation of the elder population in the Republic of Moldova.
Keywords: elder population, pension, poverty

Introduction. According to international UN documents (United Nations, 1982; United Nations, 2002), the population aged 60 and over is considered "elderly". The Republic of Moldova adopted the Active and Healthy Ageing Programme for 2023-2027 (Decision of the Government of the Republic of Moldova, 28.06.2023), which provides for measures to solve the problems of elderly population, oriented towards ensuring a decent standard of living, respect for rights, and social inclusion in the socio-economic and public life of the country. However, the real situation in which elder persons find themselves remains difficult, characterized by a low standard of living and a high risk of poverty.

**Research methodology**. To obtain the research results, methods of analysis, synthesis, calculation of secondary and tertiary indicators based on statistical data, graphical were used, as well as complex and systemic methodological approaches were applied.

Main results. An analysis of demographic ageing processes and, as a consequence, the increase in elderly population in both the Republic of Moldova and

the European Union countries showed that the principal category of elder population constituted the pensioners. At the beginning of 2025, according to statistical data, the share of elder population of the country amounted to 25.9% of the total population with a usual place of residence, of which 60.2% were females, including one in three people (31.0%) in the 60-64 age group and 9.8% over the age of 80. At the same time, there has increase in average life expectancy (by 0.8 years for males and 1.2 years for females for the period 2019-2024).

The main source of income for pensioners is their pension. However, the growth of prices for food products, medicine and utilities are the factor of reducing the real growth of pensions, which are not enough for to ensure vitally necessary goods and services (in 2022, with a 128.74% growth in the Consumer Price Index, amount of pensions fell to 94.7%) (*Figure 1*.). There is also a difference in the amount of pensions, including at the end of 2024, when male's pensions are 16.3% higher than female's, in the agricultural sector, it amounted to 70.1% of the average monthly age pension in the country, in the non-agricultural sector – 112.0% or above the national average, and 22.2% of pensioners receive the minimum pension.

Figure 1. **Index of Pension Growth, RM, %**
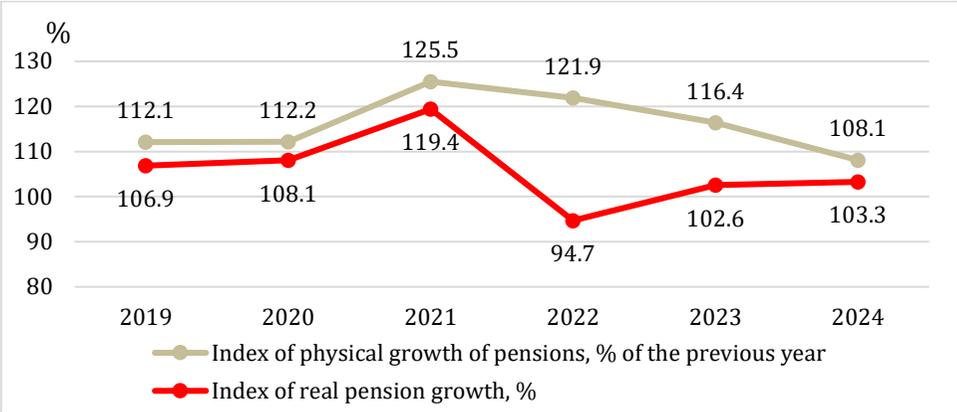
Source: NBS RM, authors' calculations

A comparative analysis of age pension amount showed that Moldova has one of the lowest indicators (in 2022, the average annual pension in the Republic of Moldova was 52.9% of the old-age pension in Bulgaria and 11.9% of the average old-age pension in the European Union). For the last four years, pension replacement rate was only 28-30%, despite the fact that the Strategy for Reforming the Pension System of the Republic of Moldova (Decision of the Parliament of the Republic of Moldova, 1998) provided for a rate of 42%. The ILO Convention No. 102 on Minimum Standards of Social Security, 1952, the replacement rate was set at 40%, and subsequently, in Recommendation 167 (ILO, 1983), the rate for developed countries was set at 45% and currently stands at 50% or more.

Elder persons are the most vulnerable to the risk of poverty. In 2024, the absolute poverty rate among elder persons was 43.4%, and since 2022, every 5th person does not have enough money to buy food products.
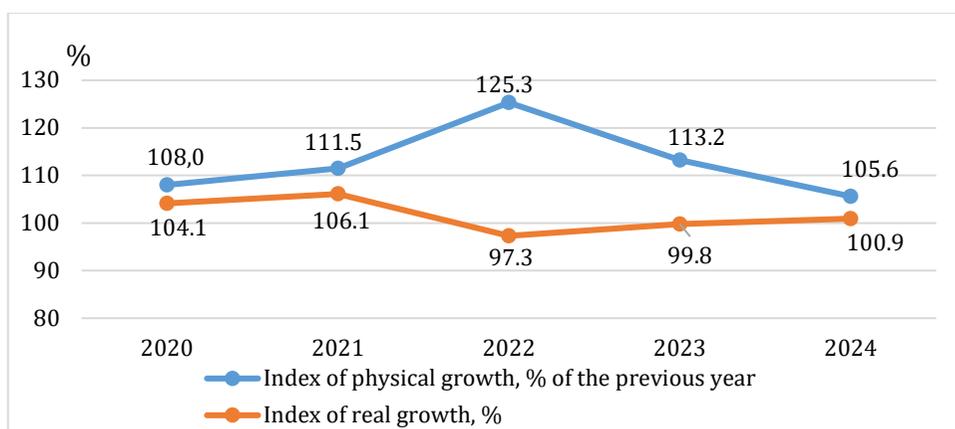
To ensure their survival with low pensions, elder persons are forced to seek various sources of additional income. One of the main sources of income is labour activities. In 2024, the elder persons in labour market were 24.2% of the total number of age pensioners. Older workers are mainly employed in Public administration, Education, Health and Social assistance, as well as Agriculture, forestry and fisheries. A comparative analysis of employed population in the Republic of Moldova and the European Union showed that the employment rate for the 60-64 age group in the Republic of Moldova is 21.0 p.p. lower than the average employment rate for this age group in the EU. However, the employment rate for the 65+ age group in the EU and the Republic of Moldova is identical (in 2024, 6.7% and 6.6% respectively).

Discussion. Population ageing is one of the most important demographic trends of the given century. In 2002, at the Second World Assembly on Ageing, the Madrid International Plan of Action for the Creation of a Society for All Ages was adopted, and the period 2021-2030 was pronounced by the UN General Assembly as the "Decade of Healthy Ageing" and the necessity to adapt policies to the requirements of elderly population. An important factor was the World Health Organisation's use of the concept of "active longevity" in developing a policy framework strategy on ageing. This concept, along with physical health, implies a person's ability to work or continue to participate in socially useful activities, their contribution to the development of society. This, in turn, necessitates the creation of conditions for its realization. The WHO Concept of Active Ageing notes that chronological age is not a criterion for the changes that accompany ageing, and that social policies can ensure the well-being and active ageing of elder persons. In the given context, a complex approach should be used, focused on ensuring a decent standard of living, respect for the rights of elder persons, and social inclusion in the economic and social life of the country.

Conclusions. The results of the research on the situation of elderly population showed that elder persons are one of the most vulnerable categories of the population, the amount of their pensions is one of the lowest in the EU, there is age discrimination in the legal sphere when hiring or in the process of the economic activities. Social policies are imperfect and not enough focused on improving the living standards of elderly population. Given the Republic of Moldova's vector of European integration, following measures are considered appropriate:

- improve the normative and legislative base, including the eliminating of age-based barriers and limitations in recruitment and in the process of the economic activities;
- development a non-state pension system;
- improvement the addressability of social assistance and development types of social services at the local level in accordance with the needs of elder persons;
- promoting programmes for the inclusion of elder people in socio-economic, cultural and public life.

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DEATH CYCLICALITY BY BIRTH MONTH IN MOLDOVA

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Abstract. *The month of birth is a proxy for the conditions of the fetal and early infant development. Previous studies showed that individuals born in spring have higher mortality than those born in autumn. This study explores the mortality inequalities by birth month among Moldovans dying from 2014 to 2019, with an additional inquiry into mortality from 2020 to 2023. The six most common primary causes of death in this period were chosen for this: chronic ischemic heart disease (I25.9), cirrhosis (K74.6), hypertension with heart failure (I11.0), thrombosis of precerebral arteries (I64.0), atherosclerotic heart disease (I25.1), and COVID-19 (U07.1). Due to the data limitations, the average age of death was used as a dependent variable. There are some substantial deviations from the general pattern of better health among autumn-born and worse health among spring-born individuals. For men and women, the positive effects of the month of birth are concentrated at the beginning of the year, while the negative ones are concentrated at the end. Additionally, men born from August to October have a higher lifespan. Men and women differed in the cardiovascular diseases that had significant seasonality, but such seasonality of cirrhosis and COVID-19 deaths was not detected.*
Keywords: mortality, birth month mortality, inequality

Introduction. The conditions of the fetal and first months' development are one of the most important factors of mortality. The month of birth is a good proxy for some of these factors. For example, thanks to better nutrition and hygienic practices, children exposed to Ramadan fasting during the first trimester of their fetal development have better nutritional outcomes (Chu et al., 2022). The skin cancer has higher rates among those born in late spring and early summer, which corresponds to the higher exposure to direct sunlight (La Rosa et al., 2014). The general conclusion of the previous studies was that the individuals born in autumn (i.e., after the warm season) are healthier than those born in spring (i.e., after the cold season). This is true for both Northern and Southern Hemispheres of the globe (Doblhammer & Vaupel, 2001). However, no study attempted to compare the differences in the causes of death. The research also did not cover the Eastern European societies. This is an exploratory study of the mortality inequalities by month of birth in the region. Such inequalities are to be analyzed here for the individuals dying in pre-pandemic Moldova from every cause of death and from six specific causes: the five most common causes in 2014-2019 and COVID-19 in 2020-2023.

Literature review. The previous studies show that the season of birth influences the probability of cancer (La Rosa et al., 2014), cardiovascular problems (Huang et al., 2015; Reffelmann et al., 2011), respiratory diseases (Smith & Springett, 1979), personality (Castrogiovanni et al., 1998), and mortality overall

(Doblhammer & Vaupel, 2001; Ueda et al., 2013). The effect exists for both men and women and is robust against socio-economic status (Ueda et al., 2013). The main conclusion that the previous studies drew is that due to the in-utero and early development, the spring- and summer-born individuals tend to be less healthy than their autumn-born counterparts. There are several exceptions to it, e.g., the autumn-born have higher suicide rates (Rock et al., 2006), sclerosis (Willer et al., 2005), and asthma (Smith & Springett, 1979).

At the same time, a substantial number of studies have shown that life outcomes in general are influenced by the month of birth. In Northern Ireland, those born right before the beginning of the school year are younger than their classmates and hence obtain worse grades and are less likely to advance in their education (Doebler et al., 2017). Those studying rural China obtained similar results, but they detected that those born in early spring have the greatest disadvantage (Chen & Ren, 2022). The health inequalities by birth timing have mixed evidence regarding the unequal distribution of education by the month of birth (Abeliansky & Strulik, 2020; Doblhammer & Vaupel, 2001; Ueda et al., 2013). Since health practices are strongly related with the level of education, this could additionally complicate the analysis, although the advanced studies show that the health inequalities prevail after controlling for education (Ueda et al., 2013). Finally, some of the effects are expected to be unequally distributed among the cohorts. As Ueda et al. (2013) show, the effect of the inequalities is primarily present in the earliest ages, and the greater is the age, the more homogenously robust are the individuals.

The high number of findings detected on a large span of samples raises the question of whether the same results can be found if only tested on the same sample. This exploratory study is the first step to answer this question. Specifically, it aims at establishing whether the pattern of the varying diseases having the greatest presence among the spring-born individuals is robust.

Research methodology. The data for this study is given by the Ministry for Health, which is a registry of the deaths in 2014-2023. The data for 2023 was only available for the first three trimesters. Since COVID-19 has had a very strong period effect, the sample was divided in two parts: 2014-2019, the main part, and 2020-2023, the additional part. COVID-19 was the sixth most common cause of death, and a complete deletion of it was deemed undesirable. Thus, the overall sample and six specific causes of death were considered: chronic ischemic heart disease (I25.9), cirrhosis (K74.6), hypertension with heart failure (I11.0), thrombosis of precerebral arteries (I64.0), atherosclerotic heart disease (I25.1), and COVID-19 (U07.1). While some of the previous studies used the large causes of deaths, the four cardio-vascular diseases were not united here to track if they have different distributions. The data for the individuals who died younger than 18 was deleted.

Since the data on the population is unavailable and is fluctuating, the age of death is used as the dependent variable. The data were analyzed with ANOVA. This method detects whether the subsamples of a continuous variable have the same distribution. They are compared by mean and their variance. This allows us to directly compare the age of death among the twelve subsamples by the month of birth. The seasonality of the age of death is tested with the Walter-Elwood test for seasonality (Walter & Elwood, 1975).

The descriptive statistics of age of death for the overall population and the cause-specific deaths are presented below.

Table 1. **Descriptive statistics. Mean and variance of the age of death based on the cause of death**

Sex	Overall	I25.9	K74.6	I11.0	I64.0	I25.1	U07.1
Men	65.7 (214.4)	74.4 (135.3)	58.8 (133.0)	76.3 (89.6)	74.8 (105.5)	77.6 (105.9)	68.9 (127.6)
Women	74.0 (179.6)	80.2 (89.1)	62.9 (139.8)	79.9 (75.7)	79.4 (88.9)	82.0 (70.3)	70.1 (120.9)

Source: Ministry for Health, author's calculations

Main results. The results for the ANOVA and Seasonality tests are presented below in Tables 2 and 3. The results show substantial differences in death inequalities by birth month. First, the average age of death significantly varied for men and women, with the difference between the minimum and the maximum being roughly two years. The average age of death also had a significant level of seasonality. For both the whole sample and the subsamples by the causes of death, the shortest lifespan is generally recorded among those born in November or December (nine out of fourteen), while the longest lifespan is generally recorded among those born in January (eight out of fourteen). Men and women have different patterns. While the average age of death is relatively high for both genders in the first three months, men also have an additional increase among the August – October cohorts. First, it shows that men and women should be studied separately in this domain. Second, the results make it hard to blame the natural environmental conditions for higher mortality. At the same time, the seasonality test indicates that the seasonality is present in both full samples as well as in five subsamples out of twelve. A possible explanation could be the inequality of birth month among the various social strata, but this requires further research.

The results also show that the diseases have different patterns of inequality (or a lack of them). The sample size is unable to explain the lack of patterns. Neither cirrhosis nor COVID-19 has an unequal distribution of deaths by monthly birth cohorts for men or women. The genders also differ in the deaths from the considered cardiovascular diseases' patterns. Namely, men show a seasonality in thrombosis, while women have a seasonality in hypertension and atherosclerosis. Both have a seasonality in an unspecified ischemia.

Table 2. **Results of ANOVA tests for men**

Monthly birth cohort	Overall	I25.9	K74.6	I11.0	I64.0	I25.1	U07.1
January	66	75.1	58.31	76.6	76.19	78.53	69.05
February	65.92	74.57	59.48	76.5	75.66	78.25	69.38
March	65.77	74.36	59.07	76.98	74.95	78.28	68.56
April	65.49	74.43	58.56	75.88	74.86	76.47	68.17
May	65.92	74.54	58.35	76.57	75.67	77.79	69.22
June	65.45	74.46	58.87	76.4	76.12	78.46	68.49
July	65.47	74.32	58.69	75.95	72.76	77.09	68.01
August	66.24	74.66	59.33	76.58	74.1	77.49	69.58
September	66.11	74.42	59.6	76.38	74.52	77.47	69.92

October	65.86	74.57	59.13	76.31	74.6	77.5	69.2
November	65.06	74.06	58.05	76.25	73.72	**76.35**	68.67
December	**64.2**	**73.3**	57.96	**74.85**	75	77.01	**67.67**
N	114882	23045	7751	4445	4064	3005	5455
P-value	>0.1%	1.8%	16.9%	54%	>0.1%	26%	10.2%
Seasonality	1.6%	75%	48%	78%	0.2%	43%	38%

Source: Ministry for Health, author's calculations. Note: The maximum and minimum are highlighted in bold. Green indicates the values that are significantly different from the minimum value, red indicates the values that are significantly different from the maximum value, and yellow indicates both.

Table 3. **Results of ANOVA tests for women**

Monthly birth cohort	Overall	I25.9	K74.6	I11.0	I64.0	I25.1	U07.1
January	**75.32**	**81.05**	63.24	**81.72**	80.01	**83.22**	**70.82**
February	74.11	80.3	62.96	80.11	79.96	82.62	70.42
March	74.23	80.69	62.92	80.45	79.47	81.93	70.34
April	73.7	80.15	62.19	80.36	79.1	81.66	70.07
May	74.46	80.49	62.77	80.32	**80.11**	82.52	69.72
June	73.63	**79.58**	62.55	79.73	**78.79**	82.2	70.52
July	73.7	79.82	62.88	79.38	78.9	**81.12**	70.61
August	73.89	79.61	63.35	79.08	78.67	81.48	69.48
September	73.89	79.83	**63.63**	79.53	79.04	81.42	69.93
October	73.85	80	63.13	79.46	79.42	81.26	69.77
November	**73.38**	80.15	63	79.05	78.85	82.67	69.99
December	73.54	80.34	**61.3**	**78.54**	79.81	81.58	**68.89**
N	103711	31256	7026	7197	5726	4465	5695
P-value	>0.1%	>0.1%	22%	>0.1%	12.2%	0.3%	39.6%
Seasonality	>0.1%	>0.1%	31%	>0.1%	1.4%	>0.1%	42%

Source: Ministry for Health, author's calculations. Note: The maximum and minimum are highlighted in bold. Green indicates the values that are significantly different from the minimum value, red indicates the values that are significantly different from the maximum value, and yellow indicates both.

Discussion and conclusions. In this study, the exploratory analysis of the inequalities by birth months was conducted. The ANOVA and Walter-Elwood tests were used to analyze the distributions of the age of deaths in 2014-2019 overall and those caused by six specific illnesses (including COVID-19 in 2020-2023). The results show that for both genders, those born in January have a longer lifespan than those born in the last year. However, unlike women, men born in August – October also have a significantly higher lifespan. Cirrhosis and COVID-19 do not show inequalities by birth month, while the considered cardio-vascular diseases do, but the presence of seasonality varies for men and women.

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FAMILY RESILIENCE AS A FACTOR IN ENSURING THE STABILITY OF UKRAINIAN SOCIETY IN CONDITIONS OF EXTREME CHALLENGES

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Abstract. *Family resilience is its ability to adapt, self-organize in crisis conditions. In periods of social and economic transformations, economic crises, and especially in extreme conditions of war, family resilience is a prerequisite for the stability of society. The purpose of this study is to identify the strengths of the Ukrainian family, which determine its resilience, and its problems. Ukraine is a country with a strong family archetype, strong family ties. The advantages of the Ukrainian family are family solidarity, mutual assistance, exchange of services and material resources between family members. This provides operational assistance to relatives in extreme situations. The adaptive capabilities of the family make it possible to adapt to war conditions and maintain a certain quality of life. The hierarchy of family functions is transformed: the protective function of the family is strengthened; but the family continues to perform the most important demographic functions. At the same time, in conditions of a long war, a significant challenge to the resilience of the Ukrainian family are the deformation of the family structure of the population (especially the increase in single-parent families), an increase in the number of divorces, and the aggravation of gender problems.*
Key words: family, resilience, population, society, family solidarity, war

Introduction. The prerequisite for the resilience of society, its balanced socio-economic development is demographic resilience, and its most important component is the resilience of the family [1]. Family resilience is its ability to adapt, self-organize in crisis conditions. In extreme conditions of epidemics, wars, acute economic crises, the importance of the family increases to ensure the resilience of society. It is important to identify the strengths of the modern Ukrainian family, which determine its resilience in the conditions of full-scale war, and the problems that can disrupt its resilience.

Literature review. The work is based on approaches to determining the resilience of Ukrainian society, including its demographic resilience, by Libanova E., Gladun O., Aksyonova S., Kurylo I. Family resilience and its various aspects are considered in the works of Folkman S., Moskowitz J. T., Olson D. H., MacPhee D., Lunkenheimer E., Riggs N.

Data and methods. The research was carried out on the basis of data of the State Statistics Service of Ukraine, the Department of State Registration of the

Ministry of Justice, media publications, expert assessments, and sample survey materials. The methods of comparative analysis, generalization and induction, surveys, and statistical methods were used in the research.

Main results. Family resilience as a social institution is its ability to adapt to crisis conditions, to preserve the essence of family relations in the process of changing their form, changing economic, social, and security conditions of existence. The historical experience of Ukraine shows that the family combines resilience (the ability to adapt) and constancy (the ability to preserve the essence of its basic functions) in periods of upheaval and changing models of socio-economic and political organization. The family has a natural property of self-organization and self-regulation, flexibility, and adaptation to a new socio-economic and security environment.

Ukraine is a country with a strong family archetype, strong family ties. The advantages of the Ukrainian family, its strong properties are family solidarity, mutual assistance, exchange of services and material resources between family members, high marriage rate. At the same time, there are "weaknesses" of the Ukrainian family: instability of marital relations and, as a result, a high level of divorce; the spread of archaic practices of gender relations in the family.

In modern Ukraine, the family is under the powerful influence of war and its destructive processes. The study examined the mechanisms of adaptation of the Ukrainian family to this extreme situation: changes in functions, forms of family solidarity, marriage, divorce, forms of placement of children who have lost their parents, the situation with family violence. It is proven that the hierarchy of family functions is changing primarily due to the strengthening of the protective function, family solidarity and mutual assistance are increasing. Family mechanisms of mutual protection in conditions of military danger take on different forms. A significant part of the forced internal migrants, who left their homes due to occupation, hostilities, and the threat of shelling, received assistance and often moved to live with relatives in safe regions. This is confirmed by the results of a survey in April 2022 by employees of the IDQLR. A survey of women with children whose husbands were mobilized, conducted in August 2025, also showed that these women immediately began to receive assistance from relatives.

The family's economic functions are adapted to the challenges of wartime in order to maintain a certain level of quality of life - this is a transition to alternative sources of electricity, heating of housing, water supply, and communication. A survey confirms this [2].

In wartime, the family continues to perform its main demographic functions: reproductive, educational, socialization and maintenance of children. In these difficult conditions, children are born, although their number is decreasing (from 273.8 thousand in 2021 to 176.7 in 2024), the distribution of families by number of children has changed (the share of one-child families has decreased) [3].

In the conditions of a full-scale war, the marriage rate of Ukrainians remained high, although the "surge" of marriage in the first years of the war ended. However, the number of divorces is increasing (according to our estimates, from 91.7 thousand

in 2022 to 142.5 thousand in 2024), which is due to long-term separation of partners due to forced emigration (primarily of women and children) and mobilization of men; behavioral changes of persons who participated in military operations; being in conditions of constant stress and psychological exhaustion of partners, etc.

In Ukraine, family forms of child support for children deprived of parental care as a result of the war are widespread: the number of cases of taking such children into care is increasing, national adoption continues.

The problem of domestic violence remains unresolved.

Conclusion. In the conditions of a full-scale war, the Ukrainian family demonstrated stability, adaptability, flexibility, that is, a high level of resilience. This is evidenced by the spread of practices of family solidarity and mutual assistance, changes in family functions, family forms of support for children who were left without parental care due to the military aggression of the Russian Federation, and a fairly high level of marriage. Family resilience is important for ensuring the economic and social stability of Ukrainian society in wartime. At the same time, in conditions of a protracted war, numerous risks and problems: a decrease in marriage and reproductive potential, an increase in the number of divorces, an increase in psycho-emotional tension and conflicts in families, the spread of domestic violence, the deformation of the family structure of the population (especially the increase in the number of single-parent families) are a significant challenge to the resilience of the Ukrainian family and for society as a whole.

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YOUTH MIGRATION BETWEEN CONSTRAINTS AND OPPORTUNITIES: A COMPARATIVE LITERATURE REVIEW

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Abstract. This paper provides a synthesis of the specialized literature on youth migration, based on the analysis of more than twenty studies and reports identified in international databases (Web of Science, Scopus, OECD, Eurofound, UNDP, IOM). Youth emigration emerges as a complex and multi-causal process, shaped by economic, institutional, and socio-cultural factors. Wage disparities, difficulties in the transition from education to the labor market, and employment precarity intersect with aspirations for educational and professional advancement. At the same time, weak governance and corruption further exacerbate migratory pressures. While classical push–pull and neoclassical models offer a solid explanatory foundation, contemporary theories, such as the aspirations–capabilities approach (Carling; de Haas), highlight the gap between mobility intentions and actual opportunities. Education and human capital increase the likelihood of mobility, whereas NEET status and limited labor market prospects intensify emigration intentions. In the case of the Republic of Moldova, research specifically dedicated to youth migration remains insufficient. This analysis highlights the existing gaps while underlining the need for public policies that transform migration from a constrained option into a genuine choice, embedded within a broader framework of sustainable sociodemographic development.
Keywords: youth migration, emigration determinants, push–pull models, aspirations–capabilities framework

Introduction. Youth emigration has become one of the defining demographic challenges of the twenty-first century, reshaping population structures, labour markets, and the long-term sustainability of social protection systems. Across Central and Eastern Europe, countries such as the Republic of Moldova, Romania, Georgia, Ukraine, Poland, Serbia, Greece, and Italy are experiencing sustained outflows of young adults, a trend that intensifies demographic ageing and accelerates the decline of national human capital.

The Republic of Moldova stands among the countries with the highest levels of emigration in Europe: between 2014 and 2020, the emigration rate reached 58‰, with young adults aged 20–34 consistently representing nearly one third of all annual departures (Tabac T. , 2021). Comparable dynamics characterize Romania, where more than 3.6 million individuals reside in OECD states (OECD, 2019), and are likewise evident in Poland, Georgia, and Ukraine, where youth migration has contributed to losses of skilled labor and increasing developmental asymmetries (Vasyltsiv, T., Lupak, R., Mulska, O., Levytska, O., Baranyak, I., 2024).

Against this backdrop, the present review aims to synthesise the main findings of the contemporary literature on youth emigration, examining both the

structural and proximate drivers that shape young people's mobility. The analysis employs a multi-level (macro–meso–micro) framework to disentangle economic pressures, institutional contexts, social networks, and individual aspirations, thereby providing a comprehensive understanding of the determinants of youth migration in Moldova and comparable European settings.

Conceptual Framework. The migration of young people is commonly understood in the scholarly literature as the outcome of a complex interplay between economic, institutional, and socio-cultural determinants. These factors are embedded within successive theoretical models that mirror the evolution of scientific thought on human mobility.

Early conceptualizations, most notably the classical push–pull framework (Lee, 1966) and the Harris–Todaro expected-income model (Todaro, 1969), conceptualize migration as a rational response to spatial disequilibria in wages, employment, and opportunities. While these models remain foundational for explaining flows shaped by economic disparities, they are limited by their predominantly individualistic orientation and their insufficient attention to social, structural, and institutional dynamics.

From the 1990s onward, migration research increasingly embraced a multidimensional perspective. The influential synthesis by Massey et al. (Massey, 1993) consolidated several complementary paradigms, such as the new economics of labour migration, social network theory, social capital, migration systems, and cumulative causation, highlighting migration as a collective and path-dependent process. These frameworks emphasise the role of networks, community norms, and institutional contexts in sustaining and amplifying mobility decisions over time.

A major conceptual advancement is represented by the aspirations–capabilities framework (Carling, Migration in the age of involuntary immobility: Theoretical reflections and Cape Verdean experiences., 2002), (Hass, 2021), which brings together individual agency and structural opportunity. This paradigm posits that migration arises from the interaction between aspirations (the desire to migrate) and capabilities (the real opportunities and resources enabling migration). It captures both the enabling and constraining effects of policies, socio-economic inequalities, and legal barriers, providing a more nuanced understanding of why some individuals migrate while others remain immobile.

This framework is particularly pertinent in the context of Eastern Europe and the Republic of Moldova. Here, high educational and professional aspirations among young people frequently coexist with restricted capabilities, limited institutional support, and uncertain labor-market trajectories. Consequently, youth migration reflects not only a reaction to constrained domestic opportunities but also a pursuit of self-development and upward mobility within structurally restrictive environments.

Methodology of the Literature Review. The literature selection process followed a structured and systematic approach, drawing primarily on internationally recognized academic databases, including Scopus, ScienceDirect, SpringerLink, and institutional repositories of OECD, ICMPD, IOM, the World Bank, and the Joint Research Centre (JRC). In addition, key policy reports produced by international organizations were consulted to capture recent analytical developments and

empirical trends relevant to youth mobility. The review covered studies published between 2010 and 2025, with a deliberate emphasis on contributions from the last decade, reflecting the rapid socio-economic transformations and shifting migratory patterns in Central and Eastern Europe. The inclusion criteria were structured around three core dimensions. First, the review focused on studies that examined young people, broadly defined as individuals aged 15–39, consistent with international classifications of youth transitions. Second, priority was given to research that explored the determinants of migration, whether economic, institutional, social, or cultural, with explicit attention to decision-making processes or mobility outcomes. Finally, only empirical or comparative analyses involving the Republic of Moldova or countries with similar demographic and socio-economic contexts in Europe were retained, ensuring the regional relevance and analytical comparability of the selected literature.

Results of the analysis literature review. The analysis of 2010–2025 literature reveals a consistent pattern across European and Eastern Partnership countries: youth emigration is shaped by a multi-level interplay of macroeconomic conditions, meso-level social structures, and individual (micro-level) aspirations, with marked regional specificities.

Across all reviewed studies, macroeconomic constraints remain the most powerful drivers of youth emigration. Wage gaps, high unemployment, low productivity, and limited institutional performance significantly influence mobility intentions. In Moldova and Romania, persistent wage disparities relative to EU member states continue to be a central push factor (Simionescu, 2016), (OECD, 2025). Moldova's labour market, characterized by low earnings and limited diversification—generates particularly high emigration risks among young adults aged 20–34 (Tabac T. , 2021).

Southern European evidence shows similar dynamics. The 2008 economic crisis intensified the outflow of highly educated youth ("brain drain"), with long-term effects despite subsequent recovery (Theodoropoulos, D., Kyridis, A., Zagkos C., Konstantinidou, Z., 2014), (Tintori, 2017). Conversely, Poland demonstrates a notable transition from net emigration to near-balanced migration, supported by sustained economic growth and structural reforms (Fihel, 2023). Western Balkan states such as Serbia and Montenegro continue to experience high youth outflows due to low wages and declining institutional trust (WFD, 2019).

Diaspora networks play a decisive role by reducing the costs and risks associated with migration. Evidence shows that Moldovan transnational networks, especially toward Italy, Germany, and France, are well consolidated and facilitate both temporary and long-term mobility (ICMPD, 2024). Family-based and informal networks are central in Moldova, Ukraine, and Georgia (Bastianon, 2018), while intra-EU mobility has created circular migration regimes in Poland and Slovakia that normalize short-term mobility among youth (Kratzmann, 2011).

At the individual level, educational attainment and career aspirations strongly predict migration intentions. Romanian and Moldovan studies indicate that youth with higher education and global career expectations exhibit the highest propensity to migrate (IOM, 2017), (Roman, 2016). Subjective perceptions, such as

limited meritocracy, restricted opportunities for advancement, and the desire for autonomy, further reinforce these intentions.

Comparative country patterns. A cross-country assessment shows that youth emigration remains concentrated in rural areas and among graduates of upper-secondary education (IOM, 2017), (ICMPD, 2024). In Moldova, approximately one-third of young people consider permanent emigration. In Romania, post-2000 transformations positioned the country among the EU's largest sources of young migrants, driven by wage differentials, job insecurity, and precarious early-career employment (Simionescu, 2016), (OECD, 2025). Student mobility and graduate emigration continue to accelerate.

Recent evidence also highlights compound movements, simultaneous inflows and outflows, especially in Central and Eastern Europe, complicating demographic balances (IOM, 2024). Western Balkan studies report that more than half of young people intend to migrate, citing corruption, weak institutions, low incomes, and limited social infrastructure (WFD, 2019).

In Georgia, motivations have shifted from political and security constraints to predominantly economic drivers (Bastianon, 2018). In Ukraine, war-related insecurity has dramatically intensified the emigration of young and highly educated individuals (Vasyltsiv, T., Lupak, R., Mulska, O., Levytska, O., Baranyak, I., 2024). Russia has also experienced rising high-skilled emigration, strongly linked to geopolitical uncertainty (ICMPD, 2024).

Conclusions. Youth emigration can no longer be interpreted solely as a response to limited economic opportunities; rather, it increasingly represents an active strategy of personal and professional self-realisation. For many young people, migration is a silent form of resistance to systems perceived as rigid, non-transparent, or inequitable. For others, it reflects an aspiration to participate in meritocratic environments where skills and effort are rewarded. As such, migration becomes a mirror of the society of origin, revealing not only material inequalities but also deficits of trust, credibility, and long-term prospects.

In the Republic of Moldova, wage disparities and labour market insecurity remain structural drivers of youth emigration. Yet recent literature demonstrates the growing importance of psychological and symbolic factors. The desire for autonomy, recognition, and meaningful life trajectories increasingly transforms mobility into a quest for dignity and personal fulfilment rather than solely a pursuit of higher income.

Transforming migration from a constrained option into a genuinely free choice requires a paradigm shift. This involves restoring trust in public institutions, fostering meritocracy, and providing credible opportunities for development at home.

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CONTRIBUȚIA CAUZELOR DE DECES
ÎN EVOLUȚIA MORTALITĂȚII PREMATURE
ÎN RÂNDUL BĂRBAȚILOR ÎN ȚĂRI EUROPENE SELECTATE

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Abstract. Premature mortality among the adult population is a significant concern in contemporary demography. However, a thorough understanding of the progress made requires a more detailed examination of causes of death and, more specifically, their role in the development of premature mortality. This study aims to evaluate recent changes in the age and cause-specific structure of premature mortality among the male population of selected European countries, focusing on the varied impact of causes of death on lifespan disparity. The calculation of cause-specific contributions to lifespan disparity was carried out using the stepwise replacement algorithm, applied to both age structure and cause-of-death profiles.

The findings show a notable shift away from reducing early-life mortality towards improvements seen in adulthood, where non-communicable diseases – especially cardiovascular conditions and neoplasms – are central. In many cases, the continued or renewed rise in chronic disease-related deaths among adults undermines earlier progress. In this context, further reductions in lifespan inequality will rely on more effectively targeted health policies, focusing on preventing and managing chronic conditions and promoting health equity throughout the entire life course.

The article was elaborated under the research subprogramme 030102: Demographic Transition in the Republic of Moldova: Specific Features, Socio-Economic Implications, and the Consolidation of Demographic Resilience (2024-2027).
Keywords: premature mortality, lifespan disparity, causes of death.

Introducere. Analiza cauzelor de deces este esențială pentru înțelegerea dinamicii mortalității premature, întrucât bolile netransmisibile, în special afecțiunile cardiovasculare și neoplasmele, joacă un rol dominant în structura mortalității adulte. Problema mortalității premature este mult mai accentuată în cazul bărbaților, care înregistrează niveluri semnificativ mai ridicate comparativ cu femeile (Ledesma-Cuenca, Montañés, & Simón-Fernández, 2022). În acest context, scopul prezentei cercetări este de a analiza în profunzime contribuția diferitelor cauze de deces la evoluția mortalității premature exclusiv în rândul bărbaților, utilizând metode de decompoziție care evidențiază specificul pe grupe de vârstă și pe cauze de deces, cu accent pe diferențele dintre țările europene.

Review-ul literaturii. Literatura de specialitate subliniază constant rolul cauzelor de deces, în special al bolilor netransmisibile – precum afecțiunile cardiovasculare, neoplasmele, diabetul și bolile respiratorii cronice – ca principale

determinante ale deceselor premature, acestea însumând cea mai mare parte a poverii aferente (Ray, 2017; Megyesiova & Lieskovska, 2019). Impactul cauzelor netransmisibile de deces asupra sănătății populației este recunoscut și la nivelul politicilor internaționale de sănătate publică, fiind consacrat în Ținta 3.4 a Obiectivelor de Dezvoltare Durabilă (SDG), stabilită de UNDP, care prevede până în 2030, reducerea cu o treime a mortalității premature cauzate de bolile netransmisibile prin prevenție și tratament și promovarea sănătății mintale și a bunăstării (UNDP, 2015).

Date și metode. În această cercetare au fost utilizate date referitoare la numărul și structura populației, precum și la decesele înregistrate în următoarele țări europene: Cehia, Estonia, Franța, Olanda, Rusia și Ucraina. Informațiile au fost preluate din baza de date Human Mortality Database. Pentru toate țările analizate, cu excepția Rusiei și Ucrainei, perioada de observație acoperă intervalul 2000-2019, în timp ce pentru Rusia și Ucraina seriile de date disponibile se încheie în anii 2014 și respectiv 2013. Cauzele de deces pentru tarile analizate au fost preluate de pe pagina OMS (Organizația Mondială a Sănătății). Analiza a presupus estimarea contribuției cauzelor de deces netransmisibile prevenibile la diferența în lifespan disparity dintre anul inițial al observațiilor (2000) și anul final (2019 sau 2013-2014, după caz). Analiza contribuției cauzelor de deces în evoluția disparității lungimii de viață a fost realizată prin aplicarea metodei stepwise replacement algorithm propus de Andreev, Shkolnikov și Begun (2002).

Rezultate. În cadrul acestei cercetări sunt analizate opt țări europene, grupate în trei categorii distincte, în funcție de nivelul actual al mortalității premature: țări cu valori scăzute (Franța și Olanda), țări cu niveluri intermediare (Cehia și Estonia) și țări cu mortalitate prematură ridicată (Rusia și Ucraina).

În intervalul 2000-2019, mortalitatea prematură, măsurată în această analiză prin intermediul indicatorului disparității în lungimea de viață ($e^\dagger$), a înregistrat reduceri semnificative: cu 1,24 ani în Franța și Olanda, cu 1,02 ani în Cehia și 2,67 ani în Estonia, respectiv cu aproximativ 1 an în Rusia și Ucraina. Aceste reduceri reflectă, în esență, diminuarea numărului de ani de viață pierduți prematur. Totuși, deși valorile absolute ale scăderilor pot părea comparabile, dinamica lor a fost modelată de factori structurali diferiți în funcție de contextul național, precum și de o distribuție inegală pe grupe de vârstă (*Figura 1*).

Datele denotă că în Franța și Olanda aportul populației vârstnice este destul de semnificativ, în Franța evidențiindu-se și populația adultă. În Cehia și Estonia se evidențiază mai mult aportul adus de reducerea mortalității infantile, dar se accentuează și populația adultă, modelul Cehiei din această perspectivă chiar fiind unul mai apropiat de țările din Vest. Pentru țările din Est impactul mortalității infantile este extrem de accentuat, fiind destul de înalte și contribuțiile aduse de reducerea mortalității în populația tânără, totuși în populația adultă și peste 65 ani se observă o creștere a mortalității, ceea ce în mare parte contrabalansează aportul pozitiv adus de vârstele mai tinere.

În Franța contribuția cea mai mare a fost determinată de reducerea mortalității prin tumori, iar în Olanda practic în exclusivitate de reducerea mortalității prin bolile sistemului cardiovascular. Reducerea mortalității prin tumori fiind specifică în primul rând pentru bărbații adulți tineri în Franța, iar în Olanda evidențiindu-se
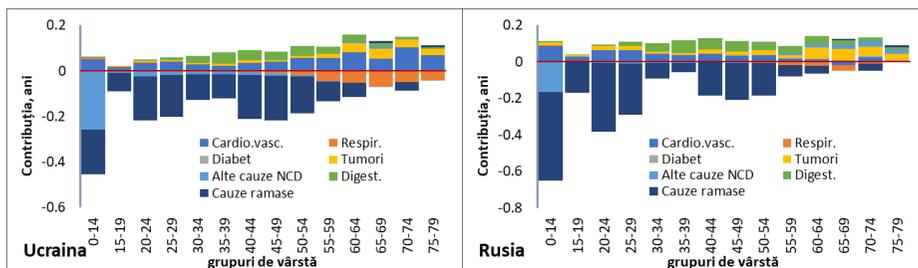
reducerea mortalității prin bolile sistemului cardiovascular în bărbații 55+ ani. Totuși în ambele țări este observată o creștere a mortalității prin alte cauze non-comunicabile în bărbații 60+ ani. Este important să menționăm că în aceste cauze se evidențiază afecțiunilor mintale și neurodegenerative.

În Cehia reducerile în mare parte sunt determinate de reducerea mortalității prin tumori și bolile sistemului cardiovascular, care se evidențiază începând cu grupul de vârstă 40-44 ani, însă începând cu 55 ani poate fi observată o creștere a mortalității prin diabet, bolile sistemului respirator, dar și alte cauze non-comunicabile. Deși în Estonia a fost sesizată cea mai înaltă reducere a disparităților în longevitate, aceasta a fost în principiu determinată de reducerea mortalității prin alte cauze decât cele non-comunicabile preventibile. Totuși începând cu grupul de vârstă 55-59 ani, se observă o reducere destul de substanțială a mortalității prin bolile sistemului cardiovascular, dar și o ușoară creștere a mortalității prin bolile sistemului digestiv, urmată ulterior și de creșterea mortalității prin tumori în grupele de vârstă mai avansată.

Estonia a prezentat cele mai avansate reduceri din țările analizate, însă acestea au fost determinate în mare parte de alte cauze decât cele netransmisibile preventibile. De asemenea, impactul mortalității infantile este mult mai substanțial decât cel observat în țările din Vest. Totuși în populația adultă, 55+ ani, se atestă o reducere a mortalității prin cauze cardiovasculare prevenibile. Totodată, începând cu grupul de vârstă 65-69 ani este observată și o creștere a mortalității prin tumori, cauze digestive, dar și alte cauze de deces, care în mare parte contrabalansează câștigurile obținute de reducerea mortalității prin bolile sistemului cardiovascular în aceste grupe de vârstă.

Figura 1. **Contribuția pe vârste și cauze la diferențele în disparitatea longevității**
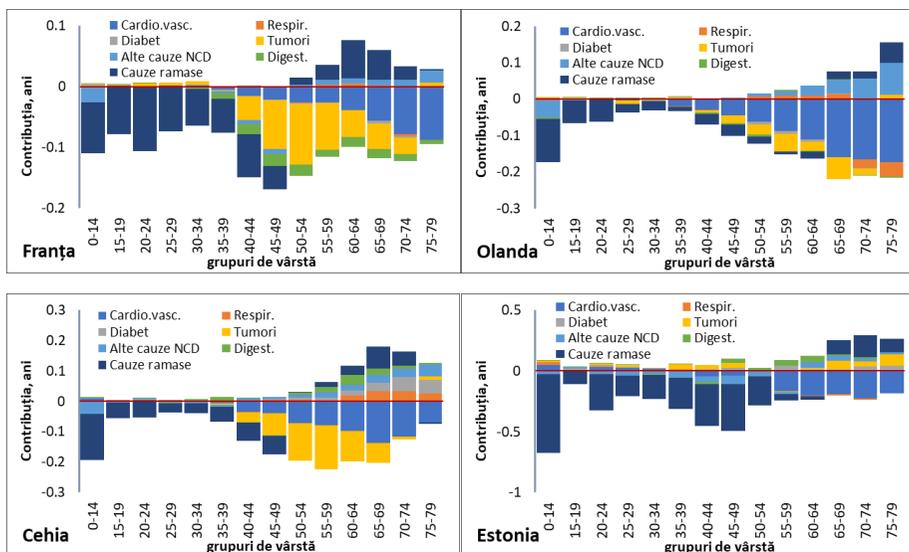
Sursa: Calculele autorului în baza datelor OMS

Pentru țările din Est – Ucraina și Rusia, putem observa un patern diferit. Reducerea mortalității premature este mult mai modestă pe de o parte, iar cauzele netransmisibile și preventibile au un impact mai degrabă invers asupra acestui proces. Reducerea mortalității premature este asigurată de reducerea mortalității prin alte cauze de deces decât prin cele netransmisibile și preventibile, manifestându-se atât în populația tânără, cât extinzându-se și în bărbații adulți. În Ucraina, însă, poate fi observată reducerea mortalității prin bolile sistemului respirator în populația bărbaților din grupul de vârstă 55+ ani. În ambele țări este sesizată creșterea mortalității prin bolile sistemului digestiv, începând din grupurile tinere și continuând către cele mai avansate de vârstă. Diferența dintre țări o constituie faptul că pentru Rusia aceasta este completată cu creșterea mortalității prin bolile sistemului cardiovascular începând cu grupul de vârstă 45-49 ani, iar ulterior și cu creșterea ușoară a tumorilor începând cu vârsta de 60 ani, pe când în cazul bărbaților din Ucraina este observată o creștere doar pentru mortalitatea prin tumori.

Concluzii și discuții. Structura contribuției pe vârste și cauze de deces evidențiază diferențe semnificative între grupurile de țări. Franța și Olanda au beneficiat în mod special de scăderi în mortalitatea prin tumori și boli cardiovasculare, cu un aport important al populației vârstnice. Totuși, creșterea deceselor prin alte cauze non-comunicabile la bărbații de peste 60 de ani indică o nouă provocare de sănătate publică, strâns legată de îmbătrânirea populației. Cehia și Estonia au înregistrat progrese considerabile datorate reducerii mortalității infantile și a deceselor la vârste adulte prin cauze tratabile, însă aceste câștiguri sunt parțial contrabalansate de creșterea mortalității prin diabet, boli respiratorii și cauze digestive în grupele de vârstă mai avansată.

Pentru Rusia și Ucraina, modelul observat este mai puțin favorabil, cu reduceri modeste ale disparității longevității și cu persistența unui nivel ridicat al mortalității premature. Contribuțiile pozitive vin preponderent din reducerea mortalității infantile și a unor cauze nespecifice, dar sunt erodate de creșterile constatate în mortalitatea prin boli cardiovasculare, digestive și tumori la populația adultă, indicând vulnerabilități structurale ale sistemelor de sănătate și ale condițiilor socioeconomice.

Concluzia studiului este că reducerea inegalităților în mortalitatea prematură rămâne posibilă, însă necesită politici diferențiate, integrate și adaptate la specificul fiecărei țări.

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STATISTICAL INDICATOR USUALLY RESIDENT POPULATION (PRO): CONCEPTUAL APPROACHES AND IMPLEMENTATION PERSPECTIVES IN THE REPUBLIC OF MOLDOVA

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Abstract. The "Usually Resident Population" (URP) indicator has become the international standard for demographic statistics, serving as a basis for public policies in migration, labor markets, education, and health. This paper examines the conceptual foundations of URP, the international and European regulatory frameworks, and the specific challenges of its implementation in the Republic of Moldova. The research relies on a comparative analysis of UN and Eurostat guidelines, national legislation, and the 2014 and 2024 census experiences. Findings highlight the advantages of URP for international comparability and evidence-based policymaking, while also revealing difficulties caused by large-scale emigration and weak administrative registers. The experience of the Republic of Moldova demonstrates that PRO can become a strategic tool in socio-economic planning, provided that administrative sources are connected and methodological harmonization is achieved with the European Statistical System.
Keywords: usually resident population, census, demographic statistics, migration, Moldova, administrative registers

Introduction. The concept of the usually resident population has gained increasing importance in contemporary statistical practice, being promoted internationally through the UN *Principles and Recommendations for Population and Housing Censuses* (UN Principles, 2017) and the European regulatory framework, particularly Regulation (EC) No 763/2008 of the European Parliament and of the Council. Under these standards, the usually resident population includes all persons who have lived in a country for at least twelve months prior to the reference date, or who intend to remain for at least the following twelve months.

In the Republic of Moldova, adopting this indicator is both a methodological requirement linked to harmonization with international and European standards, including through the approval of the legal framework for official statistics, and a practical necessity driven by profound demographic transformations caused by massive emigration. The 2014 Population and Housing Census (PHC) marked the first step toward integrating this concept, while the 2024 census strengthened its application, including in field operations through digital tools and attempts to integrate administrative data sources on the population, e.g., the State Population Register (NBS, 2014, 2024).

Literature Review. Specialized literature underscores the importance of using the usually resident population as a core demographic indicator. International experts emphasize its role in ensuring cross-country comparability against the backdrop of globalization and transnational mobility (Handbook, UN, 2022). Other

authors (Baštecká & Kurkin, 2018) note that, although the concept is increasingly accepted, uncertainty persists about applying the twelve month criterion to components of vital statistics, which is not mandatory for civil registration. With certain caveats, the URP constitutes an emergent solution for small states with intense emigration that face significant methodological difficulties, as many citizens remain formally registered in the country but are physically absent for extended periods.

At the level of the European Union, Regulation (EU) No 1260/2013 requires Member States to produce demographic statistics based on the URP, ensuring methodological consistency within the European Statistical System and compliance with the European Statistics Code of Practice (Code, 2017). Comparative practice shows that in countries such as Sweden, Belgium, the Netherlands, and Italy, well-functioning population registers facilitate precise implementation of the indicator, whereas in states with less-developed registers, including Moldova and Romania censuses and other surveys remain the main sources of information. In the Moldovan context, methodological debates published by the National Bureau of Statistics during 2020-2024, as well as the work of local demographers, highlight the difference between earlier population counts and URP-based estimates, pointing out both the advantages for public policy and the limitations concerning data accuracy.

Research Methodology. The study is based on a comparative analysis of the international legal framework and national documentation, supplemented by an examination of census materials. The analysis relies on UN and Eurostat recommendations (Principles UN, 2017 and UE Regulations n0 763/2008 and 1260/2913), the Law of the Republic of Moldova on official statistics (Law no 93/2017) and the methodologies of the 2014 and 2024 censuses (NBS, 2014, 2024). Using a case-study approach, the paper presents Moldova's transition from traditional censuses where net migration was underestimated (Penina et al. 2015), to estimates based on the usually resident population, linking PHC results with border-crossing data for individuals and capturing both methodological aspects and practical outcomes.

Main Results. The results show that the usually resident population has gradually established itself as a central demographic indicator, offering relevance and international comparability. Conceptually, the URP allows a clear demarcation among permanent residents, temporary migrants, and cross-border workers, while the twelve-month criterion reduces distortions in measuring migration (Handbook, UN, 2022). International practice shows that Nordic countries rely almost exclusively on population registers to determine the URP, for example in Denmark this exercise can be done daily (Lange, 2014), Western European states combine registers with sample surveys, whereas in Eastern Europe there is a gradual shift away from traditional censuses and a progressive, partial use of administrative registers.

In the Republic of Moldova, applying the URP has revealed both structural difficulties and major opportunities. Long-term emigration complicates the accurate measurement of the usually resident population, as many citizens retain their legal domicile while living abroad (Penina et al. 2015). At the same time, the lack of integrated administrative registers hampers validation of census data, a challenge

particularly visible in the 2014 census. Nevertheless, the 2024 census benefited from digitalization and linkages with certain registers and information systems, which improved the quality and accuracy of statistical data.

URP-based measurement is especially relevant for social and economic policies because it underpins key indicators such as GDP per capita, labor-force participation rates, and demographic dependency ratios. It also supports planning for public education and health services and provides a stronger framework for analyzing rural depopulation and population aging. Moreover, Moldova's alignment with the European Statistical System strengthens the international comparability and credibility of national statistics.

Discussion and Conclusions. The analysis confirms that adopting the usually resident population indicator in the Republic of Moldova is both timely and necessary. The concept ensures methodological harmonization with the international statistical community and reflects the realities of a society affected by high emigration. However, its effective application depends on the quality of data sources, which in Moldova remain vulnerable due to limited accessibility of administrative registers and the large number of citizens residing abroad, which, according to the estimate of the Demographic Research Center, is over 1 million citizens (Tabac, 2021).

The national experience shows that censuses continue to be the main instrument for estimating the URP, but the future lies in strengthening the institutional and legal framework for integrating administrative registers. Public awareness campaigns, methodological innovation, and international cooperation will be essential to overcoming current limitations. In this way, the usually resident population will not only be a statistical standard, but also a strategic tool for evidence-based public policies in a society deeply marked by migration, which accentuates demographic changes.

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SCHIMBĂRI ÎN COMPORTAMENTUL CONTRACEPTIV ȘI AUTONOMIA REPRODUCTIVĂ: PERSPECTIVE DIN REPUBLICA MOLDOVA

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Abstract. Reproductive autonomy is a central dimension of women's rights and gender equality. This paper analyses the evolution of reproductive decision-making among women aged 18–49 in the Republic of Moldova, based on secondary analysis of microdata from the Generations and Gender Survey (GGS) conducted in 2020 and 2024. The findings indicate an increase in women's participation in sexual and reproductive health (SRH) decision-making from 73% in 2020 to 77% in 2024.

Despite progress, significant disparities persist across age, region, income level, and education. These results reflect the importance of strengthening SRHR policies aligned with Sustainable Development Goals 3.7 and 5.6, expanding access to comprehensive sexuality education, and addressing socio-economic vulnerabilities. The study highlights the need for multisectoral interventions that enhance gender equity, reproductive rights, and informed decision-making.

Keywords: reproductive autonomy; SRHR; decision-making; gender equity; GGS; empowerment.

Introducere. Autonomia reproductivă reflectă capacitatea femeilor de a adopta decizii informate și voluntare privind propria sănătate sexuală și reproductivă, constituind un indicator fundamental al exercitării drepturilor reproductive. În cadrul Obiectivelor de Dezvoltare Durabilă, țintele ODD 3.7 și ODD 5.6 subliniază necesitatea accesului universal la servicii de sănătate sexuală și reproductivă, precum și asigurarea drepturilor reproductive pentru toate femeile. Indicatorul ODD 5.6.1 – proporția femeilor care iau singure sau împreună cu partenerul decizii privind sănătatea sexuală și reproductivă – reprezintă un indicator global de monitorizare, folosit pentru măsurarea progresului în domeniul autonomiei decizionale (United Nations, 2023; UNFPA, 2022). În Republica Moldova, analiza autonomiei reproductive este esențială în contextul transformărilor demografice, al tranzițiilor familiale și al schimbărilor socio-economice care influențează comportamentele reproductive. Studiul Generații și Gen (GGS), desfășurat în 2020 și 2024, constituie o sursă robustă de date pentru evaluarea tendințelor în participarea femeilor la deciziile privind sănătatea sexuală și reproductivă și pentru identificarea disparităților socio-demografice.

Review-ul literaturii. Literatura internațională evidențiază faptul că autonomia reproductivă este influențată de determinanți sociali, economici, culturali și psihologici. Kabeer (1999) conturează conceptul de empowerment prin prisma

accesului la resurse, agenție și realizări, în timp ce Sen (1999) subliniază libertatea individuală ca element fundamental al dezvoltării. Blanc (2001) demonstrează că dinamica puterii în relațiile de cuplu influențează direct deciziile privind contracepția și sănătatea reproductivă. Studiile lui Do și Kurimoto (2012) arată că alegerea metodelor contraceptive este strâns legată de autonomia decizională și statutul socio-economic. În regiunea Europei Centrale și de Est, Szalma și Djundeva (2020) evidențiază distribuția inegală a autonomiei reproductive între mediul urban și rural, iar Perelli-Harris et al. (2017) explică modul în care tranzițiile familiale influențează comportamentele reproductive. UNFPA (2024) și OMS (2023) confirmă rolul autonomiei reproductive în consolidarea echității de gen și îmbunătățirea indicatorilor de sănătate sexuală și reproductivă.

Date și metode. Studiul utilizează un design observațional și analitic, bazat pe analiza secundară a microdatelor din Studiul Generații și Gen (GGS), edițiile 2020 și 2024. GGS este un studiu internațional longitudinal, coordonat de Generations and Gender Programme (GGP) și implementat în Republica Moldova de Biroul Național de Statistică. Eșantionul analizat include femei cu vârste între 18 și 49 de ani aflate într-o uniune maritală sau consensuală. Datele au fost ponderate conform metodologiei GGP pentru a reflecta structura populației feminine. Analiza descriptivă a examinat: participarea la deciziile privind sănătatea sexuală și reproductivă, variațiile pe vârstă, nivel de educație, venit, statut ocupațional și mediul de reședință. Indicatorul analizat corespunde definiției ODD 5.6.1.

Rezultate. Analiza datelor GGS din 2024 arată că aproximativ 77% dintre femeile de 18–49 de ani aflate în căsătorie sau în uniune consensuală participă la deciziile privind relațiile sexuale, utilizarea contracepției și sănătatea reproductivă, în timp ce aproape un sfert rămân neimplicate, ceea ce confirmă persistența unor bariere structurale ale autonomiei reproductive. Participarea crește odată cu vârsta până la 40–44 de ani, după care scade la 45–49 de ani, evidențiind vulnerabilități atât în rândul femeilor tinere, cât și la limita superioară a vârstei fertile. Teritorial, Sudul și Nordul înregistrează cele mai ridicate niveluri ale autonomiei, iar Centrul cele mai scăzute, ceea ce indică disparități regionale consistente.

În ceea ce privește factorii socio-demografici, nivelul educațional nu prezintă o relație liniară cu autonomia reproductivă, sugerând influența majoră a normelor culturale și familiale. Femeile căsătorite sunt mai implicate în deciziile privind sănătatea reproductivă decât cele aflate în uniuni consensuale, iar femeile angajate manifestă cele mai ridicate niveluri de autonomie. Tinerele care încă studiază constituie grupul cel mai vulnerabil, iar distribuția veniturilor arată că nivelurile medii și intermediare sunt asociate cu valori mai bune ale autonomiei, în timp ce extremele economice se corelează cu implicare mai redusă.

Compararea celor două runde GGS confirmă o evoluție pozitivă. În 2020, aproximativ 73% dintre femeile aflate în uniune consensuală participau la deciziile privind sănătatea reproductivă, iar în 2024 nivelul a atins 77% în rândul femeilor de 18–49 de ani. Deși eșantionul din 2024 exclude adolescentele de 15–17 ani – grup cu autonomie mai scăzută, ajustarea metodologică arată că tendința ascendentă este reală și reflectă o consolidare treptată a autonomiei reproductive în Republica Moldova.

Concluzii și discuții. Autonomia reproductivă reprezintă un indicator esențial al progresului Republicii Moldova în direcția ODD 3.7 și ODD 5.6. Deși s-au înregistrat progrese importante între anii 2020 și 2024, persistă diferențe marcate între grupurile sociale. Pentru reducerea acestor disparități sunt necesare: extinderea serviciilor SRHR, promovarea educației sexuale comprehensive, abordări multisectoriale și intervenții în mediile vulnerabile.

Consolidarea autonomiei reproductive contribuie la împuternicirea femeilor, la dezvoltarea capitalului uman și la promovarea echității de gen, fiind un element esențial al unei societăți incluzive și durabile.

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