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THE POPULATION

OF THE REPUBLIC OF MOLDOVA AT THE HORIZON OF 2040

Chisinau, 2024

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This analytical report was prepared at the request of the Government of the Republic of Moldova, under Government Decision No. 284/2024, to address rapid demographic changes through evidence-based policies to anticipate future demands for resources and social services.
The population projection is intended for use by central and local authorities in planning and effectively implementing public policies, ensuring the management of demographic and economic changes and the efficient allocation of resources for the sustainable development of local communities.
The national-level population projections is prepared annually by the National Institute for Economic Research (Centre for Demographic Research) of the Academy of Economic Studies of Moldova under the auspices of the Ministry of Labour and Social Protection of the Republic of Moldova.

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INTRODUCTION

Population projection is critical for understanding future demographic dynamics and providing a robust foundation for strategic decision-making in national and local development. In Moldova, demographic shifts are shaped by complex factors, including high migration rates, declining birth rates, accelerated population ageing, and structural transformations in family composition. These trends significantly affect various economic and social life dimensions, including the labour market, social protection systems, public infrastructure, and balanced territorial development.

Amid ongoing demographic decline and a shrinking labour force in Moldova, population projections are increasingly indispensable for anticipating future challenges and ensuring the efficient allocation of budgetary and infrastructural resources. Neglecting demographic trends without adequate policies risks exacerbating regional disparities in infrastructure development and social equity, undermining economic productivity, and endangering the sustainability of healthcare and pension systems. Furthermore, understanding population dynamics at the territorial level is essential for fostering regional development and tailoring public services to local needs, mainly as population size and structure in different localities are shaped by fertility, mortality, international migration, and internal migration patterns.

Since 2024, official demographic projection will be produced in Moldova in compliance with Government Decision No. 284/2024. This decision mandates the preparation of annual projection at the national level and triennial updates for administrative-territorial units. The Centre for Demographic Research (CDR) of the National Institute for Economic Research within the Academy of Economic Studies of Moldova, has been designated as the responsible institution.

The CDR's demographic projection is based on the analysis of long-term fertility, mortality, and migration trends, offering insights into the most probable trajectories of demographic change for fertility and mortality, particularly under low scenarios. This report aims to provide a comprehensive outlook on population projections for the Republic of Moldova up to 2040, covering national and administrative-territorial levels, with a projection horizon of 10 years. This research presents a detailed and realistic vision of Moldova's demographic future by employing state-of-the-art demographic projection methods and accounting for multiple scenarios—from those extrapolating current trends to those incorporating significant policy and economic interventions.

Beyond examining general population size and structure trends, the report delves into the long-term effects of external and internal migration, fertility and mortality patterns, and population ageing. The administrative-territorial projections are particularly valuable for spatial planning and local policy development, equipping local public authorities with the data needed to design strategies that address the specific needs of individual communities.

This analytical report aims to support the developing of public policies based on rigorous and reliable data, enabling Moldova to address the demographic challenges of the

coming decades effectively. Long-term projections serve as a vital tool for decision-makers, guiding the adaptation of economic and social infrastructure to future demographic realities and fostering sustainable and equitable development at both national and regional levels.

1. RECENT DEMOGRAPHIC TRENDS: CHALLENGES AND IMPLICATIONS

1.1. Population at the national level

In recent decades, Moldova has faced a sustained decline in population size, driven by a complex interplay of factors, including mass external migration, declining birth rates, evolving reproductive behaviours, and demographic ageing. These dynamics pose significant challenges for maintaining a sustainable demographic balance and addressing these changes' far-reaching economic and social implications.

A key driver of this negative trend is external migration, which disproportionately impacts young people and individuals of reproductive age groups that are critical to the country's demographic and economic foundation. In the context of economic globalization, the outmigration of young individuals seeking improved economic and social opportunities leads to a continued decline in birth rates and creates a substantial deficit in skilled labour. This shortage of specialised human capital undermines the development of competitive economic sectors, stifling innovation, limiting productivity, and slowing economic growth. These challenges exert additional pressure on Moldova's already strained social and economic systems.

The exodus of young people further accelerates population ageing, resulting in a predominantly elderly population increasingly reliant on social protection and healthcare systems. These systems, already under considerable strain, face intensified challenges due to the diminishing base of young contributors. This dynamic exacerbates fiscal pressures, as reduced contributions to social funds make it increasingly difficult to support the growing elderly population. Consequently, addressing the dual challenges of demographic ageing and external migration requires urgent and comprehensive public policy interventions.

The declining number of births, combined with shifts in family planning behaviours and socio-economic trends, has also contributed to a substantial reduction in younger generations. This decline has profound implications for the demographic structure and the country's ability to ensure a sustainable future. Decisions by young couples to have fewer children or to delay childbirth reflect significant socio-cultural and economic changes. These shifts are often influenced by economic uncertainty, labour market volatility, and prioritisation of individual career aspirations. Additional contributing factors include the high cost of raising children, limited access to childcare and early education services, and the financial pressures associated with achieving stability before starting a family.

Another contributing factor to Moldova's demographic decline is the relatively high level of mortality, particularly among the working-age population. Precarious economic conditions, low living standards, and unhealthy lifestyles determine stagnation or low increases in life expectancy. Chronic financial insecurity, challenging working conditions, and limited opportunities for personal and professional advancement contribute to risky behaviours such as excessive alcohol consumption and poor dietary habits. These issues negatively impact life expectancy, increase the prevalence of chronic illnesses, and reduce the overall

quality of life for the active population.

The combined effect of these factors—a low number of births and a high number of deaths—led to a sustained negative natural growth rate (Table 1). At the beginning of 2019, Moldova's population stood at 2,684.8 thousand; by 2024, it had declined to 2,423.3 thousand. Of this decline, natural change accounted for a reduction of 48.9 thousand people, while net migration led to a population decrease of 212.6 thousand. During the COVID-19 pandemic, Moldova experienced relatively limited mobility compared to pre- and post-pandemic periods; however, the rise in the number of deaths has played a significant role in the population decline. Between 2022 and 2023, the combined effects of negative net migration and falling birth rates resulted in a population reduction of 141.7 thousand people—the steepest decline recorded in the past two decades.

Table 1. Main demographic indicators, 2019–2024

Year	Population at the beginning of the year	Live-births	Deaths	Population decline	Natural increase	Migration increase
2019	2684772	32423	36411	-41097	-3988	-37109
2020	2643675	30834	40717	-17087	-9883	-7204
2021	2626588	29320	45464	-61558	-16144	-45414
2022	2565030	27018	36196	-72752	-9178	-63574
2023	2492278	24033	33733	-68991	-9700	-59291
2024	**2423287**			**Total -261485**	**-48893**	**-212592**

Source: calculated based on NBS data

The demographic structure of a population profoundly influences its dynamics, shaping both natural growth and long-term trends such as ageing and depopulation. Changes in the age and gender structure reflect the cumulative impact of various demographic processes and their interdependence. Natural growth and migration are inherently linked, influencing each other and playing a pivotal role in determining the future configuration of the population.

The age and gender pyramid for 2023 (Fig. 1) illustrates an advanced stage of demographic ageing, characterised by an imbalance between younger and older generations. The narrow base of the pyramid represents the declining young population, while the broad top signifies the growing elderly population. This imbalance directly results from a persistently low number of births over the past decades. For instance, the reduction in the number of individuals aged 20 to 30 highlights the long-term impact of these low births. This trend creates a cyclical effect: smaller parental generations result in fewer children, perpetuating a downward spiral in births.

The working-age population, which constitutes approximately 60% of the total population, forms the backbone of the age pyramid. This demographic category has the potential to generate a significant demographic dividend, driving socio-economic growth if effectively integrated into the labour market. However, the current structure of the pyramid indicates

that larger cohorts from previous generations are progressively ageing. As these cohorts move into older age brackets, the pace and intensity of demographic ageing will accelerate, posing additional challenges in the coming decades.

This demographic configuration raises critical concerns about the sustainability of social systems, particularly pension and healthcare systems. The growing proportion of old individuals relative to the active population threatens to destabilise the balance between contributors and dependents, with profound economic and social implications. Without proactive interventions, these trends could exacerbate the strain on public finances and reduce economic productivity.

To mitigate these challenges, tailored policies are essential. Investments in health and education, coupled with measures to encourage higher fertility, are crucial for balancing the demographic structure and ensuring a sustainable future. These measures should focus on creating supportive environments for families, enhancing access to childcare and early education, and fostering economic conditions that reduce uncertainty and encourage young people to remain in the country. By addressing these issues holistically, Moldova can better manage the effects of demographic ageing and preserve the long-term viability of its socio-economic systems.

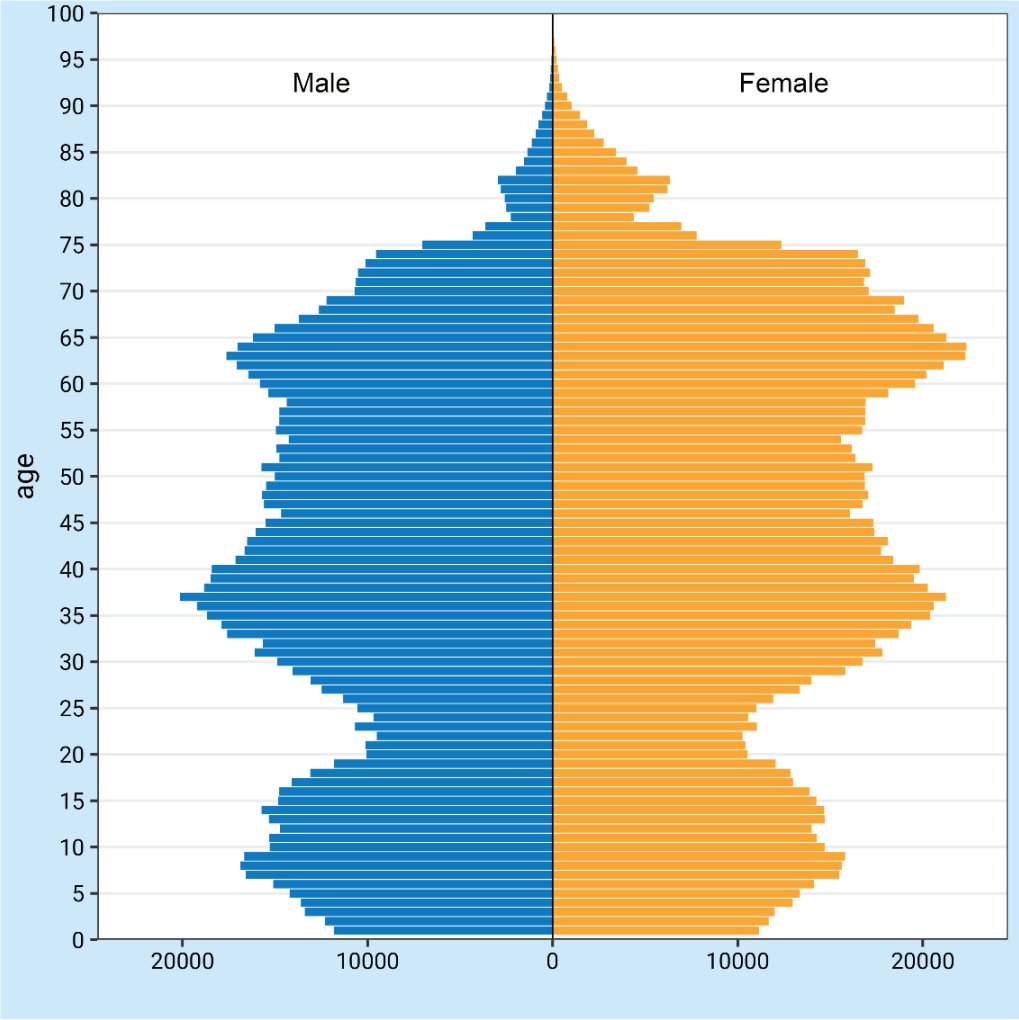


Fig. 1. Population pyramid by age and sex 2023
Source: developed based on NBS data

With the declining number of births and a relatively high number of deaths, particularly among working-age individuals and the old people, Moldova's natural population dynamics reveal a troubling trend. The accelerated process of demographic ageing reduces the population's capacity for self-regeneration, limiting the ability of younger generations to compensate for natural losses through sufficient births. This imbalance between births and deaths undermines the stability of the country's demographic structure and poses long-term socio-economic challenges.

In this context, policies aimed at boosting fertility through measures to encourage higher birth rates face significant limitations. The ongoing decline in the number of young people, many of whom are heavily involved in international migration, further exacerbates this issue. The continuous outflow of young individuals seeking better living conditions abroad diminishes the potential for natural growth and erodes the demographic base necessary to support future fertility increases.

Fig. 2 illustrates the annual dynamics of births and the total fertility rate (TFR) between 2014 and 2023, revealing a pronounced decline in births. This trend reflects the combined effects of structural demographic changes and external challenges such as the COVID-19 pandemic and the war in Ukraine. During periods of uncertainty and instability, demographic patterns show that individuals tend to postpone reproductive plans, resulting in further declines in number of births and fertility.

The persistent decrease in births and TFR has profound implications for Moldova's demographic future. It is expected to lead to significant fluctuations in the size of upcoming cohorts, affecting school enrolments, university admissions, and the availability of young professionals entering the labour market in the years ahead. These shifts highlight the urgency of addressing demographic decline and underscore the need for comprehensive policies that consider the broader socio-economic factors influencing reproductive decisions and migration trends.

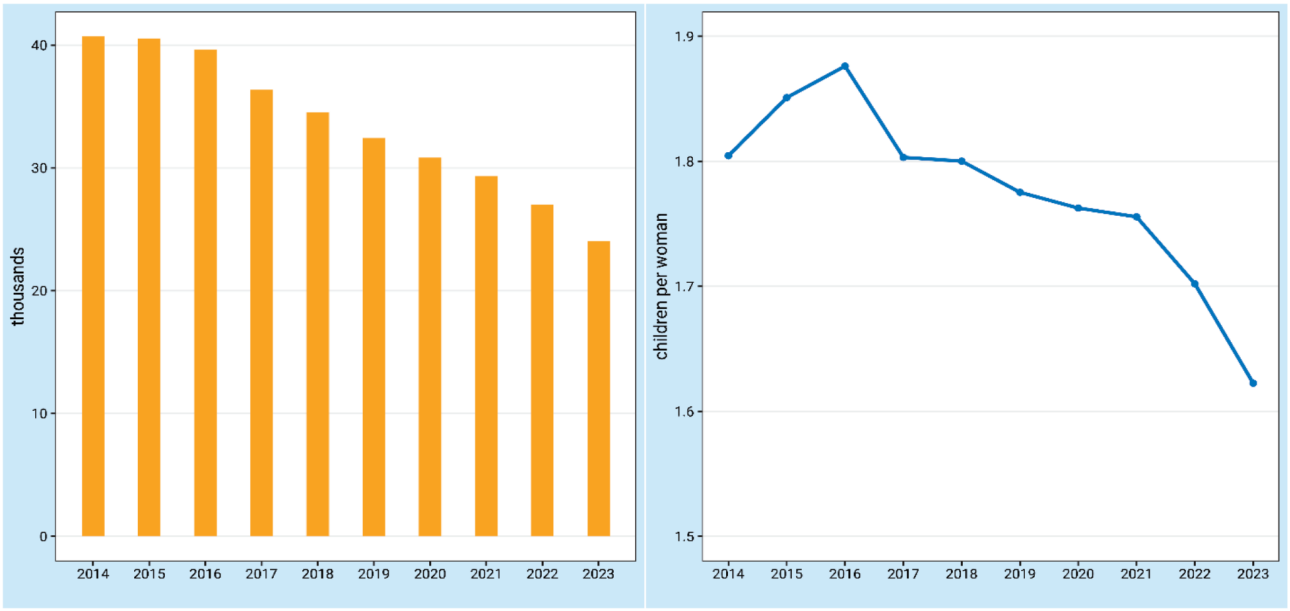


Fig. 2. Births and total fertility rate dynamics, 2014–2023

Source: developed based on NBS data

The cohort fertility indicator — completed fertility rate — is used to comprehensively assess fertility levels across the reproductive lifespan. This measure represents the average number of live births per woman by the end of her reproductive period or upon reaching a specific age, offering valuable insights into the reproductive behaviour of different generations. The data presented in Fig. 3 reveal that females born between 1970 and 1975 had, on average, between 1.9 and 2 children per woman. These cohorts experienced their peak reproductive years during the economic crises of the late 1990s, demonstrating notable resilience in fertility levels despite significant economic challenges. This stability underscores the enduring importance of social and cultural factors in shaping reproductive behaviour during periods of economic uncertainty. In contrast, subsequent cohorts, including women born up to 1983, exhibited a slight decline, with an average of 1.9 children per woman by the end of their reproductive period. This marginal decrease suggests that fertility changes at the cohort level have been relatively modest, with overall levels remaining stable at around 1.9 children per woman.

An encouraging trend is emerging among younger cohorts still in their active reproductive years. For example, the cohort born in 1990, which reached 33 years of age in 2023, shows an average of 1.5 live births per woman—a relatively high figure in the current demographic and socio-economic context. This finding offers a degree of optimism, suggesting the potential for fertility stabilisation or even a slight increase among younger generations, provided they benefit from favourable socio-economic conditions and supportive family policies. Despite persistent economic challenges, the fertility rate exhibits a degree of resilience. This underscores the importance of enhancing family support systems and implementing targeted policies to encourage higher fertility. Such measures could play a crucial role in maintaining fertility levels closer to replacement levels in the long term, contributing to the stabilisation of the population number and reducing the risks associated with demographic decline.

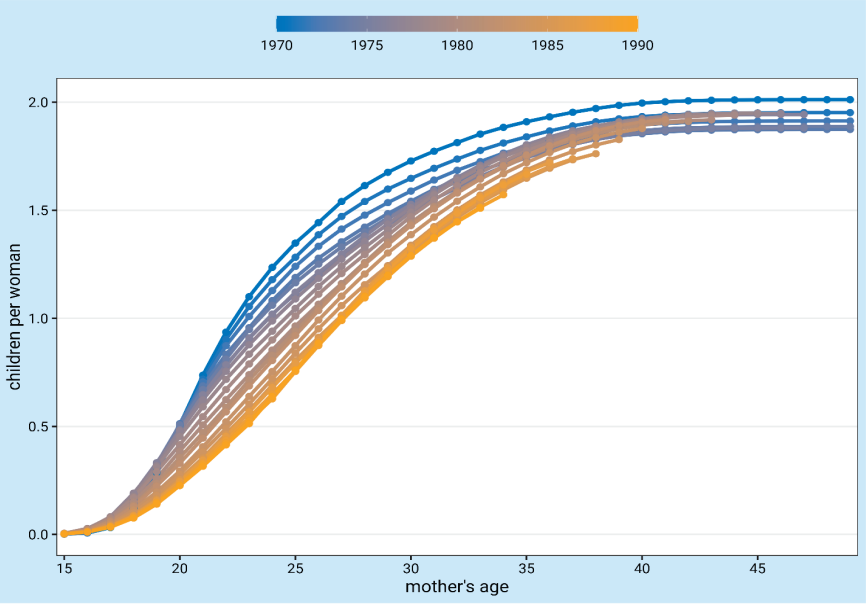


Fig. 3. Complete cohort fertility rate of the female cohorts born in the years 1970-1990
Source: developed based on NBS data

Life expectancy at birth in Moldova reflects moderate levels, comparable to other countries in the region, yet significantly lower than the averages observed in Central and Western European nations. Between 2014 and 2023, this indicator increased from 65.3 to 67.5 years for males and from 73.7 to 76.4 years for females, representing gains of 2.2 and 2.7 years respectively.

This improvement highlights efforts to enhance healthcare services and living conditions, contributing to a gradual rise in life expectancy. However, despite this progress, life expectancy in Moldova remains substantially below the European average, indicating the need for further investments in public health infrastructure, preventive care, and broader socio-economic development to close the gap with more developed countries (Table 2).

Table 2. Life expectancy at birth, by sex and residence area, 2014-2023

	Total		Urban		Rural	
	Male	Female	Male	Female	Male	Female
2014	65.3	73.7	66.8	75.3	64.4	72.8
2015	65.3	73.7	66.6	75.2	64.4	72.8
2016	65.7	74.2	67.4	75.7	64.7	73.2
2017	66.7	74.9	68.2	76.4	65.9	73.9
2018	66.3	75.0	68.3	76.4	65.2	74.1
2019	66.8	75.2	68.7	76.6	65.7	74.1
2020	66.0	73.9	66.9	74.8	65.3	73.3
2021	65.1	72.9	65.7	73.5	64.7	72.5
2022	67.1	75.7	68.2	76.7	66.2	75.0
2023	67.5	76.4	69.0	77.6	66.4	75.4

Source: calculated based on NBS data

In urban areas, life expectancy for males increased by 2.2 years during the analysed period, while in rural areas, the increase was slightly lower at 2.0 years. For females, the progress was 2.3 years in urban areas and 2.6 years in rural areas, indicating a modest improvement in living conditions and access to healthcare, even in more isolated regions. However, these figures reveal significant disparities between urban and rural areas, where access to quality medical care, economic resources, and overall living conditions varies considerably. Furthermore, the rate of improvement in life expectancy differs across regions and districts within Moldova.

Major urban areas benefit from better-developed medical infrastructure, more frequent preventive healthcare programmes, and easier access to specialists, contributing to the more pronounced increases in life expectancy observed in these locations. In contrast, rural and isolated districts often face resource shortages and barriers to accessing healthcare services, which constrain the impact of national health investments (Penina, 2022).

The slower progress in life expectancy growth in Moldova compared to Central and Western European countries is driven mainly by systemic differences in public health capa-

city, quality of life, and population health behaviours. Developed countries with well-funded healthcare systems and extensive access to preventive and specialised care consistently outperformed Moldova in extending life expectancy. Conversely, Moldova contends with limited medical resources, reduced access to preventive services, and unequal distribution of healthcare between urban and rural areas. These deficiencies result in high mortality levels, particularly among working-age individuals and the recently retired, highlighting the vulnerability of key segments of the population.

The primary contribution to the mortality gap include circulatory system diseases, malignant tumours, digestive system diseases, external factors (e.g., accidents, violence), and respiratory diseases (Penina et al., 2022). These health challenges are often compounded by factors such as limited access to treatment and early diagnosis, unhealthy behaviours (e.g., smoking, excessive alcohol consumption, and poor dietary habits), and adverse socio-economic conditions that detrimentally affect quality of life.

A significant obstacle to improving life expectancy in Moldova is high population mobility, exacerbated by the "healthy migrant" phenomenon, which reflects the tendency of physically healthy and resilient individuals to emigrate in search of better opportunities abroad. As a result, healthier individuals are removed from Moldova's population and become part of other countries' populations. Conversely, those who remain are more likely to include a higher proportion of chronically ill, older, or less mobile individuals, skewing health statistics and complicating efforts to improve life expectancy nationally.

As previously mentioned, international migration is the primary driver of demographic dynamics in Moldova, significantly influencing the population's numerical and structural aspects. Fig. 4 illustrates the scale of this phenomenon, highlighting its extensive impact across all demographic segments, including entire families migrating together. This underscores the considerable share of family migration, with many young children accompanying their parents abroad. Such trends have profound implications for the country's young population and long-term demographic prospects.

The exodus of young adults, particularly those in the 20–24 and 30–34 age groups, reflects a strong trend of migration motivated by the pursuit of employment or educational opportunities abroad. This pattern is typical in countries with limited domestic economic prospects and contributes to population ageing and a growing shortage of skilled labour, further exacerbating Moldova's socio-economic challenges.

Interestingly, a slight increase or relative stability is observed in the 40–44, 55–59, and 70–74 age groups, suggesting a degree of return migration after extended periods of work abroad, particularly among individuals reaching retirement age. While the reintegration of these returnees can bring social and economic benefits, such as the transfer of accumulated skills, experiences, and financial resources, it also places additional strain on social assistance and healthcare systems. Older generations of emigrants often require increased support upon reintegration, adding to the challenges faced by local communities already grappling with resource limitations.

These migration patterns underscore the dual impacts of emigration: the brain drain and labour force depletion among younger, economically active individuals and the increased burden on social services with the return of older emigrants. Addressing these challenges requires targeted policies aimed at creating domestic opportunities for young people, encouraging their retention, and better managing the reintegration of returning migrants to optimise their contributions to Moldova's socio-economic development.

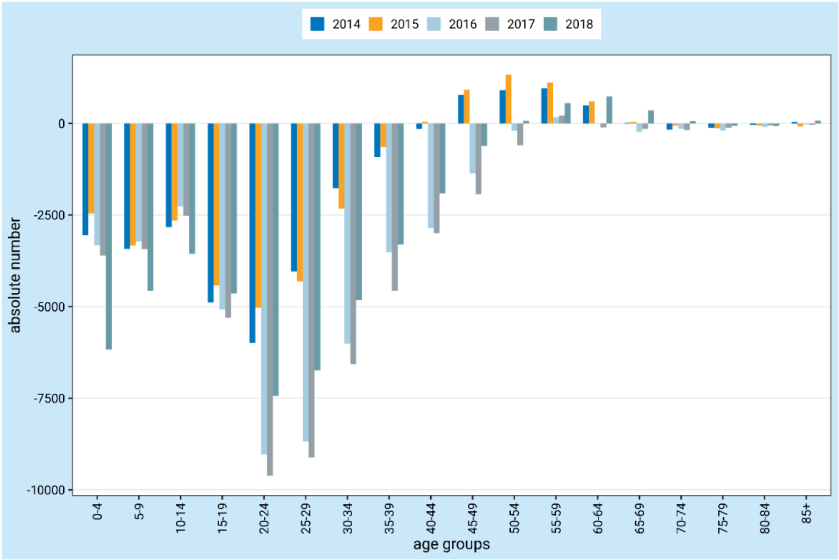


Fig. 4. International net migration by age groups
Source: elaborated based on NBS data

1.2. Population dynamics in the territorial aspect

Table 3 presents the dynamics of population distribution across the administrative-territorial units of Moldova between 2014 and 2023, revealing significant population declines in most regions. These trends underscore the persistent demographic challenges facing the country. The most significant decreases were recorded in the North and Central regions, where the population declined by 134.8 thousand and 167.2 thousand people, respectively. In the South development region, the population contracted by 85.3 thousand inhabitants.

The population of the Chisinau municipality experienced a modest decline of approximately 7.0 thousand people during the same period, representing a reduction of about 1% of the municipality's total population. Despite this slight decrease, Chisinau municipality continues to exhibit a relatively young demographic structure, mainly due to internal migration from other regions. Young individuals and families seeking economic opportunities and professional growth are increasingly relocating to the capital, where better employment prospects and access to services are available.

This internal demographic flow partially offsets Chisinau's overall population decline and contributes to diversifying the city's working-age population. However, the dependence on internal migration highlights regional disparities in economic development and quality of life, underscoring the need for balanced territorial development to mitigate further demographic decline across the country.

Table 3. Population dynamics by territorial-administrative units, 2014-2023

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Decline, thousands	%
Chisinau	674.7	671	665.9	660.7	657.7	659.5	665.8	670.7	670.9	667.8	-7	1.0
North	793.4	791	785.2	773.7	761.1	746.6	734.1	716.6	688	658.5	**-134.8**	17.0
Balti	100.7	100.6	100.5	99.8	99.3	98.7	98.5	97.4	94.6	91.1	-9.6	9.5
Briceni	65.8	64.5	62.8	61	59.3	57.5	56.1	54.7	52.2	49.3	-16.5	25.1
Donduseni	36.7	36.5	36.4	35.9	35.3	34.7	34	33.1	31.7	30.3	-6.4	17.4
Drochia	70.9	70.6	69.9	68.9	67.8	66.7	65.5	63.8	61.1	58.2	-12.8	17.9
Edinet	69.2	68.7	67.7	65.9	63.9	62.2	61	59.4	56.7	54	-15.1	22.0
Falesti	75.6	75.9	75.9	75.2	74.1	72.6	71.2	69.1	66.1	63.3	-12.2	16.3
Floresti	73.3	72.9	72.4	71.4	70.1	68.7	67.3	65.6	63.2	61.1	-12.1	16.6
Glodeni	49.2	49.2	48.9	48.2	47.5	46.6	45.7	44.5	42.8	41.3	-8	16.1
Ocnita	45	45	44.7	44.2	43.7	42.8	42	40.9	39.2	37.8	-7.2	16.0
Riscani	56.7	56.7	56.3	55.6	54.9	54.1	53.3	52	50	47.9	-8.8	15.5
Singerei	76.3	76.2	75.7	74.5	73.1	71.5	70.3	68.5	65.8	62.9	-13.3	17.6
Soroca	74	74.2	74	73.1	72	70.4	69.2	67.5	64.5	61.2	-12.8	17.3
Center	852.6	844.2	829.8	808.4	785.9	765	749.9	733.4	709.5	685.4	**-167.2**	19.6
Anenii Noi	72.2	71.5	70.3	68.8	67.2	65.4	64	62.6	60.7	58.7	-13.5	18.7
Calarasi	58.8	57.7	56.2	54.4	52.6	50.9	49.7	48.3	46.9	45.7	-13.1	22.3
Criuleni	66.7	66.1	65.1	63.5	61.9	60.5	59.5	58.5	56.6	54.4	-12.3	18.4
Dubasari	28	28	27.9	27.3	26.6	26	25.7	25.5	24.7	23.8	-4.2	15.0
Hincesti	92.2	90.5	88	85.2	82.4	79.6	77.7	76.1	73.7	71.5	-20.7	22.5
Ialoveni	85.9	85	83.4	80.9	78.5	76.9	76.1	75.2	73.3	70.9	-15	17.5
Nisporeni	48	47.3	46.3	45	43.4	42.1	41.2	40.1	38.8	37.7	-10.3	21.5
Orhei	95.9	94.7	93.3	91	88.6	86.5	84.7	82.5	79.6	76.7	-19.2	20.0
Rezina	41.1	41	40.6	39.7	38.7	37.6	36.8	35.9	34.5	33.1	-8	19.5
Straseni	75.8	75.2	74	72.2	70.3	68.6	67.4	66.2	64.3	62.6	-13.2	17.4
Soldanesti	35.1	35	34.6	33.9	33.1	32.3	31.5	30.5	29.3	28	-7.1	20.2
Telenesti	56.8	56.1	54.7	52.8	50.9	49.2	47.8	46.2	44.2	42.4	-14.3	25.4
Ungheni	96.3	96	95.3	93.7	91.6	89.4	87.8	85.8	82.8	80	-16.3	16.9
South	415.1	409.5	402.3	392.1	381.1	370.6	362.8	354.2	341.9	329.8	**-85.3**	20.5
Basarabeasca	20	19.6	19.2	18.6	18.1	17.6	17.1	16.7	16.4	16.3	-3.7	18.5
Cahul	97.1	95.5	93.4	90.6	87.8	85.5	84.2	82.3	79.3	76.1	-21	21.6
Cantemir	46.6	45.6	44.6	43.1	41.3	39.7	38.7	37.7	36.2	35	-11.6	24.9
Causeni	75.1	74.5	73.9	72.8	71.5	70	68.5	66.9	64.6	62.1	-13	17.3
Cimislia	42.7	41.8	40.5	38.8	37.2	35.9	34.9	34	33	32.2	-10.6	24.6
Leova	41	40.8	40.2	38.9	37.6	36.5	35.6	34.7	33.5	32.1	-8.9	21.7
Stefan Voda	58.3	57.6	56.7	55.4	53.8	52.2	50.9	49.4	47.5	45.9	-12.4	21.3
Taraclia	34.4	34	33.8	33.8	33.7	33.4	32.9	32.4	31.4	30.2	-4.2	12.2
TAU Gagauzia	122	120.4	120	120.3	121.5	122.5	122.4	121	118.4	116.2	-5.7	4.8

Source: developed based on NBS data

Chisinau stands out as one of the few administrative-territorial units in the Moldova with a positive natural growth rate, where the number of births exceeds the number of deaths. This is primarily due to its younger age and sex structure compared to other regions. Positive natural growth helps maintain the structural stability of the municipality's population. It mitigates the negative impact of international migration, which profoundly affects rural areas and smaller cities.

In the northern region of Moldova, population dynamics showed a significant decline of approximately 17% between 2014 and 2023. These depopulation trends are primarily driven by internal migration to major cities, particularly Chisinau, and external migration. In Balti, the largest urban centre in the north and a key destination for internal migrants, the population decreased by nearly 10% during this period. This reduction is attributed to negative natural growth and a negative balance of international migration, which increasingly affects even larger urban centres. Rural districts in the north, such as Briceni, Edinet, and Drochia, were hit even harder, with population reductions exceeding 15%, highlighting an accelerated process of depopulation. The main drivers of this decline are external migration, predominantly affecting the working-age population, and population ageing, exacerbated by the declining number of births. Young people from these districts often migrate to larger cities within the country or abroad, leaving behind an increasingly aged demographic structure.

Districts in the Central Development Region experienced a pronounced population decline between 2014 and 2023, revealing significant demographic challenges. The most concerning reductions were observed in the Hincesti and Orhei districts, where populations fell by up to 20% despite their geographical proximity to the capital of the country. Internal migration to Chisinau and external migration abroad primarily drive this decline.

In the Southern Development Region, a substantial population decrease was recorded in districts such as Cahul and Cantemir, where the number of residents dropped by over 20%. Neighbouring districts in the South exhibit similar trends, with negative natural growth and high rates of external migration contributing to the overall decline. However, an exception in this region is the Autonomous Territorial Unit (UTA) of Gagauzia, where population decline is the least pronounced among all regions in the country. This can be attributed to the Gagauz population's unique reproductive and migratory behaviour, characterised by a lower tendency to emigrate and a relatively higher natural growth rate compared to other regions.

At the national level, the data reflect a sharp depopulation in rural areas, particularly in districts in the North and South. External migration remains the primary factor driving population decline, especially in rural communities experiencing a significant reduction in young and economically active populations. In contrast, large cities such as Chisinau maintain relatively stable population numbers, benefiting from internal migration, slightly positive natural growth, and a lower participation rate in international migration. These urban centers serve as hubs that attract rural populations by offering better employment opportunities and living conditions, helping to stabilise their demographic structures.

Internal migration plays a pivotal role in shaping the demographic profile of Moldova's administrative-territorial units, influencing the population's size and structure. Like international migration, internal migration is a selective process that predominantly involves young individuals. Migration often begins during the pre-university years, as young people leave

their home localities to pursue educational and economic opportunities in larger cities. The volume of these migratory flows is influenced by the population size of the originating localities and the distance to preferred destinations. Key drivers of relocation include socio-economic factors, such as access to employment opportunities and improved services, which contribute to the redistribution of the population from less developed areas to those with better infrastructure and stronger economies.

Internal migration flows are largely rural-to-urban but also encompass movements from smaller towns to larger urban centres. Cities such as Chisinau and Balti serve as the primary destinations (Fig. 7, Fig. 6), especially for young people seeking higher education or better-paid employment opportunities. These cities benefit from a steady influx of young, skilled individuals, stimulating local economic growth and sustaining a young and dynamic demographic structure.

The localities attracting internal migrants gain significant advantages from the inflow of labour, boost economic development and help maintain a younger population. Conversely, the places of origin for these migrants experience pronounced population decline and accelerated ageing, leading to potential challenges in maintaining essential public services due to a shrinking tax base and reduced economic activity.

Fig. 5 highlights net internal migration trends in the northern districts of Moldova, showing a clear negative balance that indicates the region loses more residents than it attracts. As a regional hub, the municipality of Balti records relatively low positive migration, primarily drawing individuals aged 19 to 40. However, a substantial portion of the region's youth continues to migrate further to Chisinau, driven by the prospect of better economic and educational opportunities.

These patterns underscore the dual impact of internal migration. While cities benefit from the influx of young, well-educated individuals, rural areas and smaller towns bear the costs of depopulation and ageing, which pose significant challenges to their long-term viability. Addressing these imbalances requires targeted policies to improve economic opportunities, infrastructure, and service accessibility in less developed regions, aiming to retain a larger share of their populations.

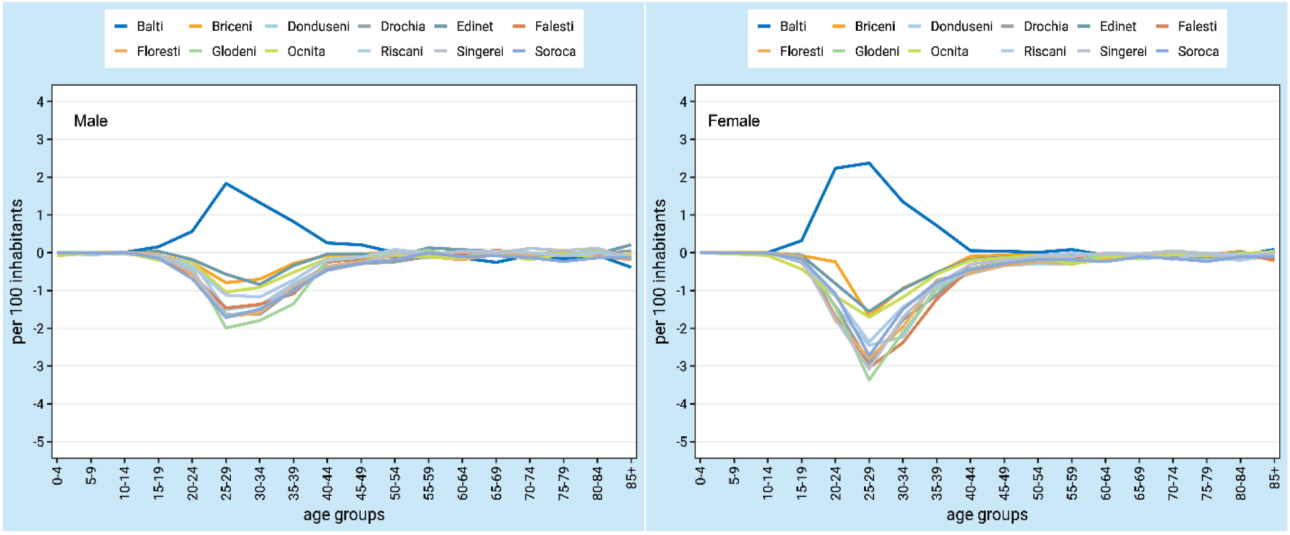


Fig. 5. Internal net migration, North region

Source: developed based on NBS data

The Central Region (Fig. 6) exhibits the highest levels of internal migration, particularly among young people, with most of these flows directed towards Chisinau municipality. This trend underscores the capital's attractiveness, driven by its diverse educational opportunities and accessible employment prospects, which make it a primary destination for those seeking economic and professional advancement.

An exception to the broader regional trend is the Ialoveni district, suburb of Chisinau, which records low levels of internal migration. This migratory stability contributes to a more balanced demographic structure, supporting sustained population stability in the district. Its proximity to the capital allows residents to benefit from quick access to Chisinau's opportunities, such as jobs and services, while enabling the district to maintain a constant and stable population flow. This dynamic highlights the potential for neighbouring districts to leverage their proximity to urban centres to achieve demographic and socio-economic resilience.

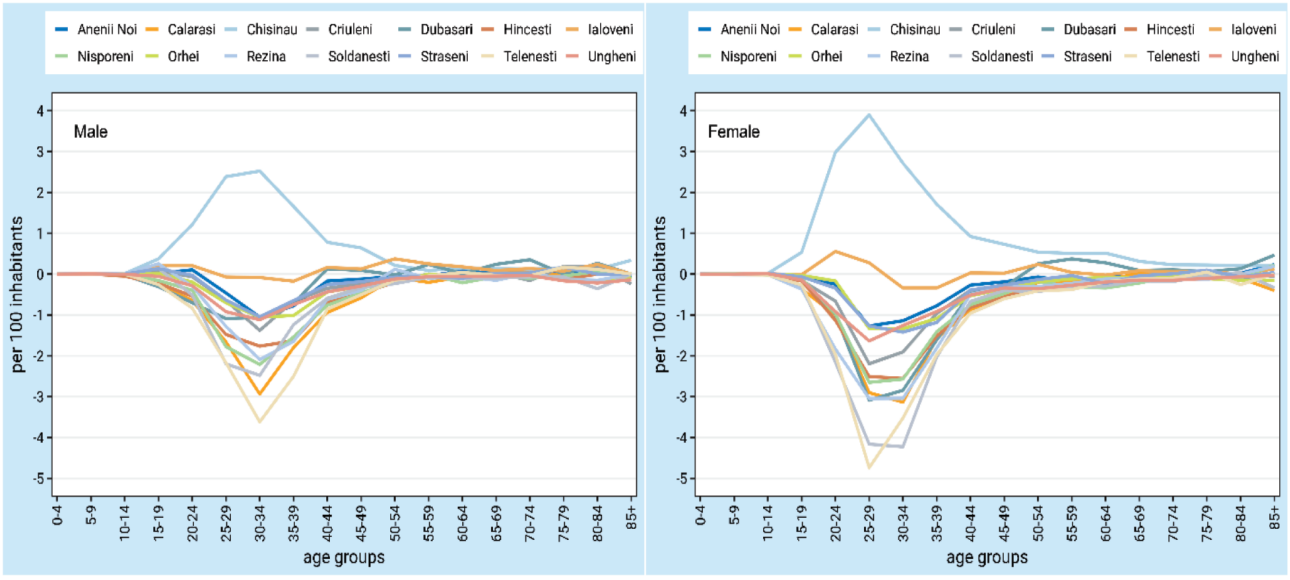


Fig. 6. Internal net migration, Central region

Source: developed based on NBS data

The Southern Region (Fig. 7) is marked by net negative internal migration, indicating that more people leave the area than relocate to settle there. Cahul municipality, despite being a key urban centre in the region, struggles to attract a sufficient population from surrounding areas and continues to experience an outflow of young people, though at a lower rate than other localities.

In contrast, TAU Gagauzia demonstrates low levels of migratory outflow, reflecting a degree of population stability in the region. However, districts such as Stefan Voda, Cimislia, and Leova face the highest levels of negative migration, indicating a significant loss of residents, particularly among the economically active population. This trend exacerbates the challenges of depopulation and ageing in these districts, highlighting the need for targeted interventions to enhance local opportunities and retain residents.

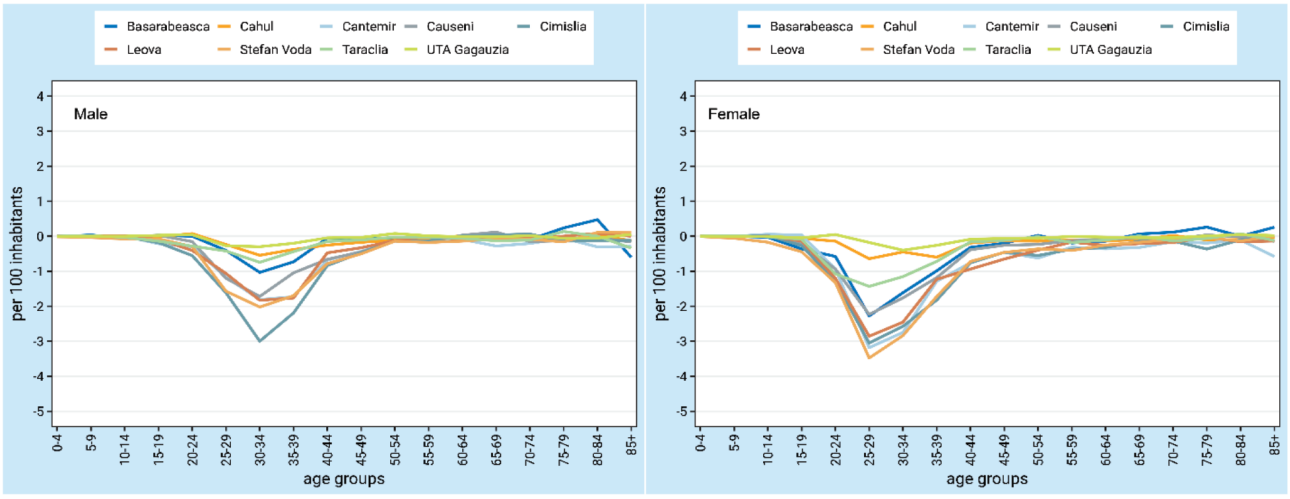


Fig. 7. Internal net migration, South region

Source: developed based on NBS data

Data on international migration at the district level reveals distinct structural patterns highlighting demographic disparities. Firstly, men are more likely to engage in international migration than women. Secondly, migration is unevenly distributed across age groups, with peaks in emigration occurring in the 15–24 age group. Among these peaks, the highest net emigration rates are observed in Cimislia and Cantemir districts, exceeding 8% for men aged 20–24 (Fig. 10). In contrast, the lowest rates are recorded in the Donduseni district, where only 2% of men in the same age group emigrate (Fig. 8). As age increases, the net migration rate decreases for both sexes, eventually becoming positive in the 50–54 age group. The highest positive net rates are observed in the 55–64 age group, particularly among females aged 40–54, with rates exceeding 1.5% in the TAU Gagauzia and Taraclia districts. These trends suggest a notable return migration among older age groups, potentially driven by retirement or the completion of economic goals abroad.

These migration patterns underscore the selective nature of international migration. Young, economically active individuals form the majority of emigrants, while older age groups tend to return, impacting their home districts' demographic and socio-economic landscape.

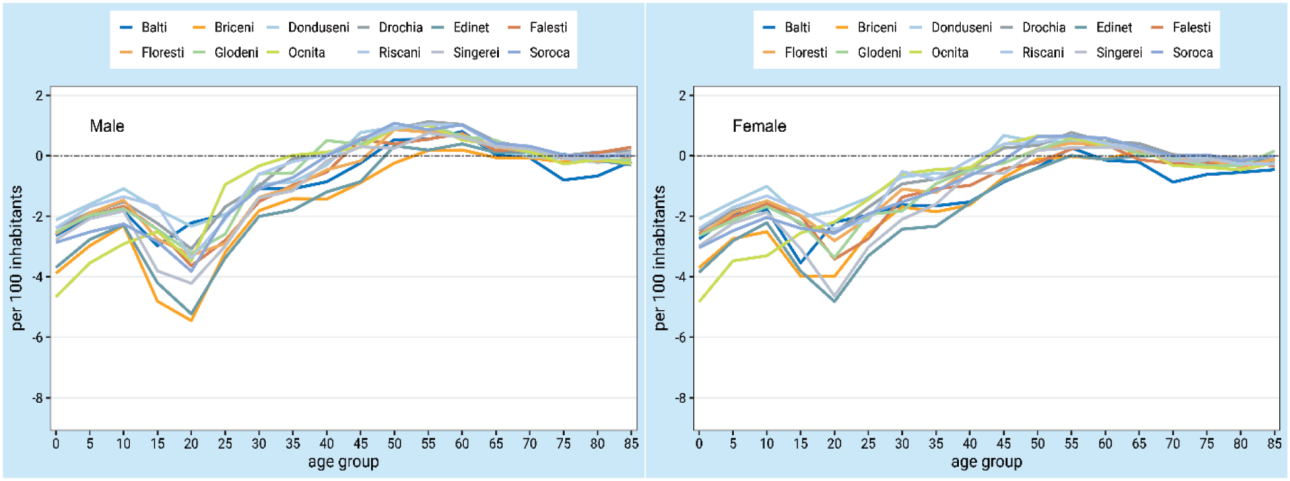


Fig. 8. International net migration rates by age, North region, 2017-2021

Source: developed based on NBS data

Districts in the Centeral region, compared to other regions, show a higher degree of similarity in the context of migration patterns (Fig. 9). However, there is not as much variation between districts as can be observed in the districts of the South region (Fig. 10).

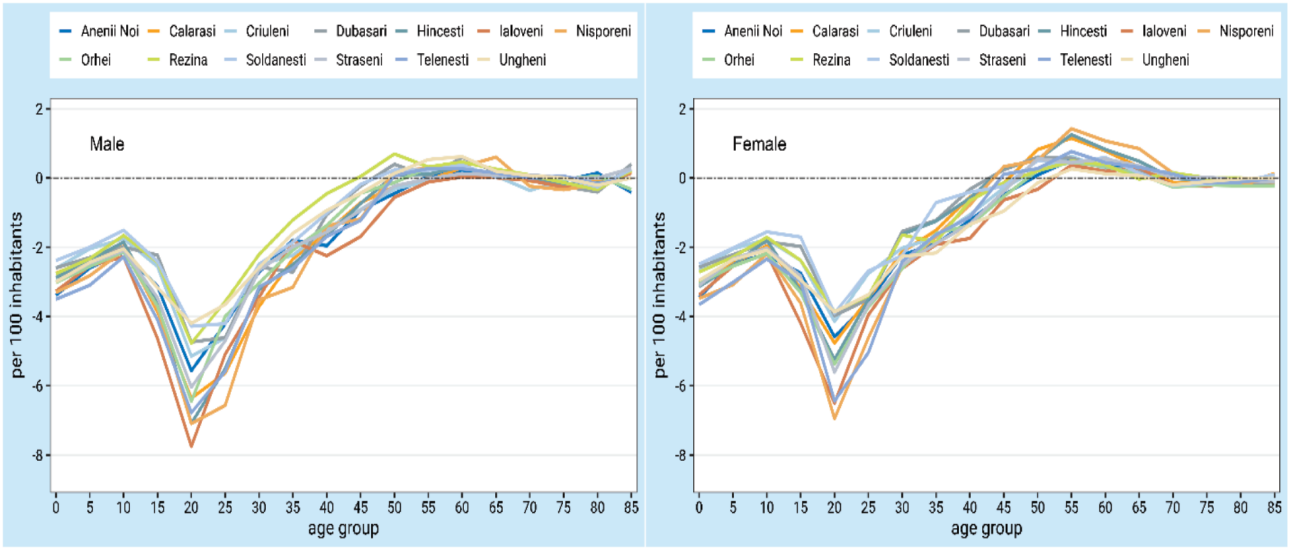


Fig. 9. International net migration rates by age, Central region, 2017-2021
Source: developed based on NBS data

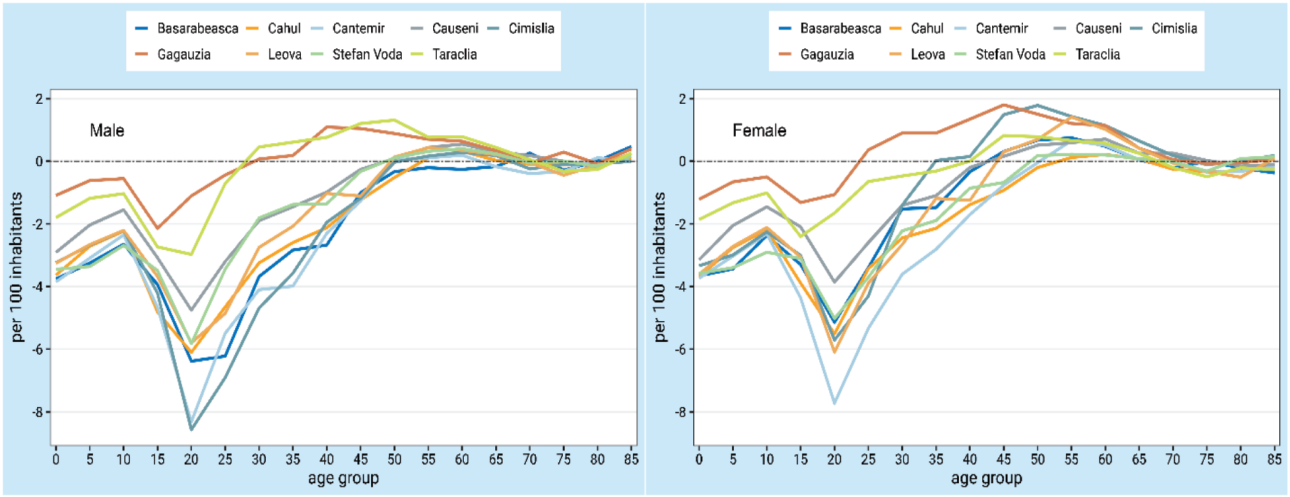


Fig. 10. International net migration rates by age, South region, 2017-2021
Source: developed based on NBS data

The lowest intensity of international migration is in Chisinau municipality (Fig. 11). Notably, over the years, a clear trend of reduced migration outflow has emerged, accompanied by maintaining a relatively stable age structure for both males and females. This stability suggests that Chisinau's socio-economic opportunities and infrastructure may contribute to retaining a larger population share than other regions.

However, 2020 and 2021 exhibit an atypical deviation from this trend, directly influenced by the COVID-19 pandemic. The crisis disrupted migration patterns globally, contributing to reduced international mobility and altering the typical dynamics of migration flows. This period highlights the sensitivity of migration trends to external factors, particularly global crises, which can temporarily override established demographic patterns.

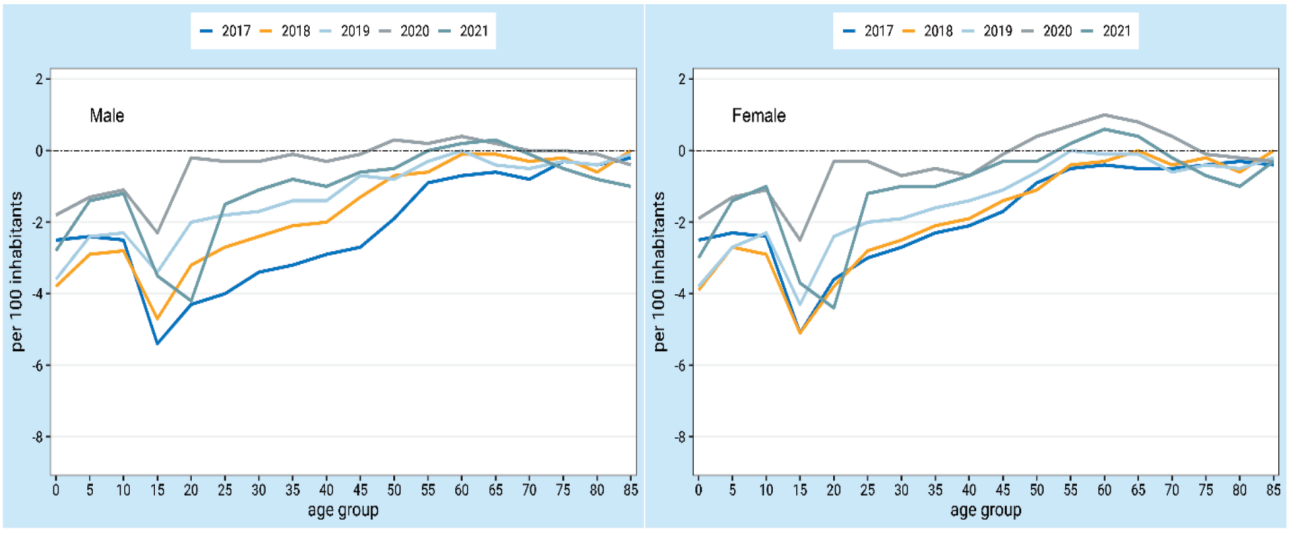


Fig. 11. International net migration rates by age, Chisinau municipality, 2017-2021

Source: elaborated based on NBS data

TAU Gagauzia is the only region with positive international migration, 0.11% (Fig. 12). However, combined with negative internal migration, its net migration is negative. It is followed by Taraclia, with a net emigration rate of 0.3%. The highest level of emigration is recorded in the Cantemir district (-2.4%).

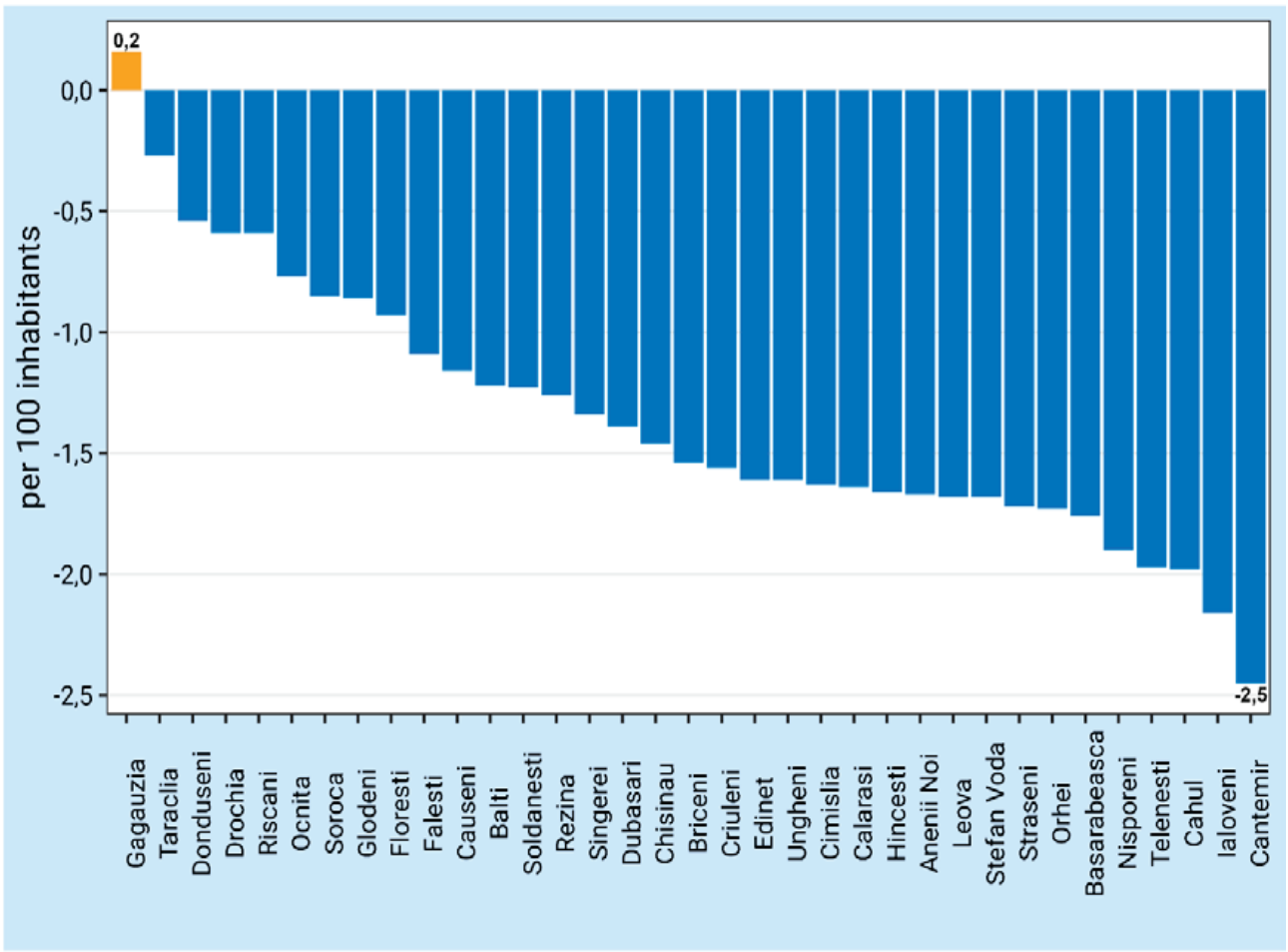


Fig. 12. Average rate of international migration for the 2017-2021 years, by districts, %

Source: developed based on NBS data

2. NATIONAL DEMOGRAPHIC PROJECTION

2.1. Applied methodology

The cohort-component method, a widely recommended approach for preparing population projections by age and sex, was used. This method begins with the population's age and sex structure at a specific point in time. It incorporates assumptions about the future trends of: mortality, fertility, and migration.

The first step in constructing the projection involved forecasting changes in mortality, fertility, and migration dynamics and modelling their profiles by age and sex. The population size and structure for the 2040 horizon were estimated under three deterministic scenarios, each reflecting different assumptions about the dynamics of the key demographic processes.

These scenarios were developed based on recent demographic trends and projection for fertility, mortality, and migration. The reference year for the projections was 2023, with a population of 2,423.3 thousand at the end of the year. Each scenario represents a distinct set of parameters to account for potential variations in demographic behaviour, providing a robust basis for understanding Moldova's potential future trajectory.

Developing scenarios for life expectancy at birth. The positive trend in life expectancy growth observed in recent years offers a promising outlook for narrowing the mortality gap between Moldova and economically advanced countries. This progress is supported by policymakers' increasing focus on public health initiatives, highlighting the importance of health as a national priority.

Over the past decade, health policies combined with investments in medical infrastructure have laid a strong foundation for improving population longevity. Furthermore, targeted disease prevention programmes, particularly those addressing chronic conditions such as circulatory system diseases, cancer, digestive system disorders, and trauma, have played a pivotal role. These initiatives promote healthier lifestyle choices, including reduced alcohol and tobacco consumption, significantly improving overall health outcomes and extending life expectancy. This progress highlights the vital importance of continued investment in health infrastructure and prevention strategies to achieve further advancements in population health.

In the context of projections for Moldova's population size and structure for 2024–2040, the models project an increase in life expectancy at birth for males and females as follows:

- High scenario: a rise of 7.3 years for males and 5.1 years for females.
- Medium scenario: an increase of 6.4 years for males and 4.2 years for females.
- Low scenario: a rise of 3.2 years for both males and females (Fig. 13).

In detail:

- The high scenario anticipates an annual increase in life expectancy of 0.4 years for males and 0.3 years for females.

- The medium scenario forecasts an increase of 0.35 years for males and 0.25 years for females.
- The low scenario predicts an annual increase of 0.2 years for both sexes.

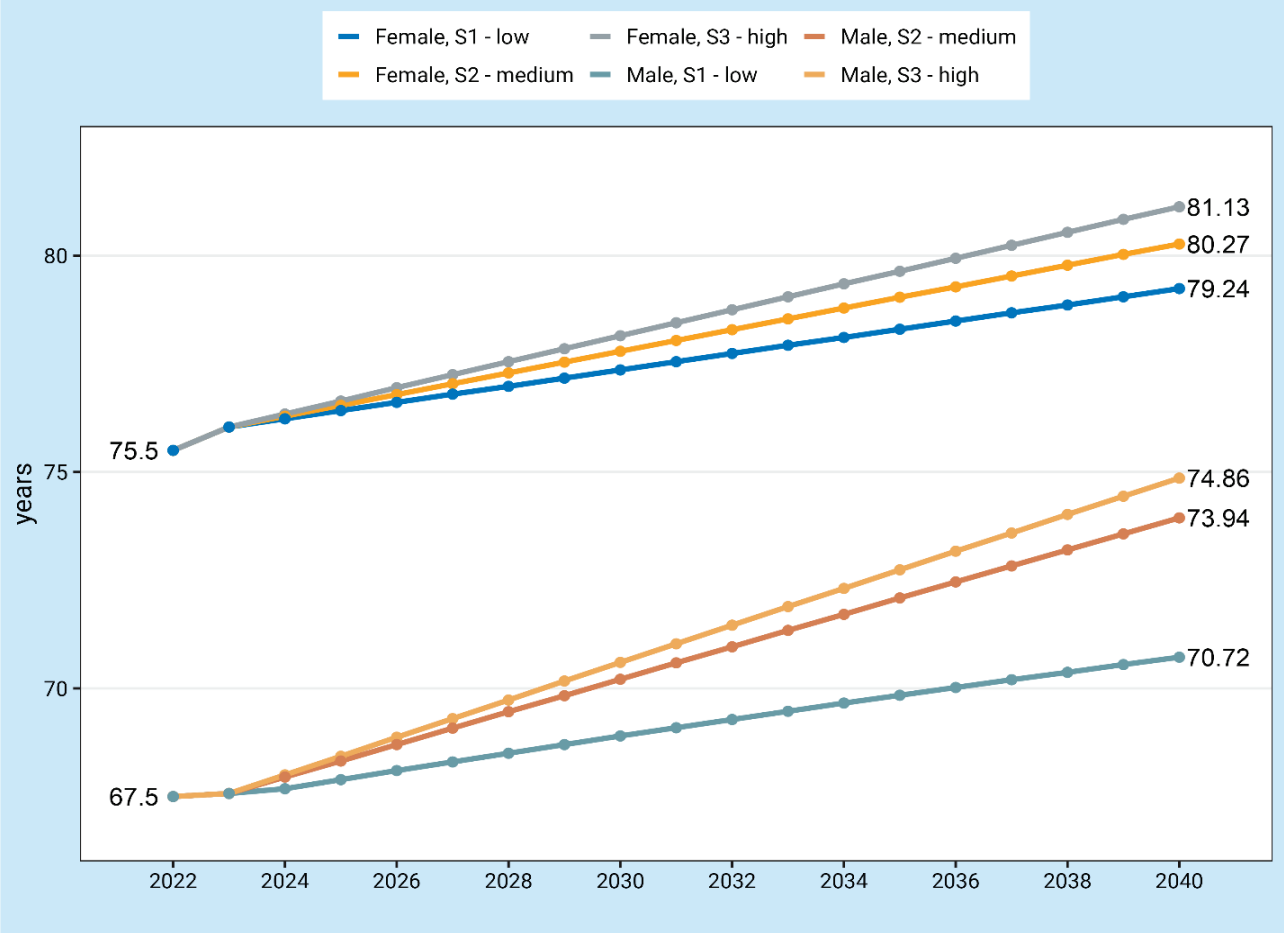


Fig. 13. Life expectancy at birth for 2024 - 2040
Source: demographic projections, 2024-2040

The contribution of age groups to the difference in life expectancy between the base year of the projection and the forecast horizon was determined using the life expectancy decomposition method (Andreev et al., 2002). The analysis indicates that reducing infant mortality from the current rate of 9–10‰ to levels comparable with those in Central European and Baltic countries (3–5‰) could increase life expectancy at birth (age 0) by 0.2–0.3 years for both men and women, depending on the projection scenario (Fig. 14).

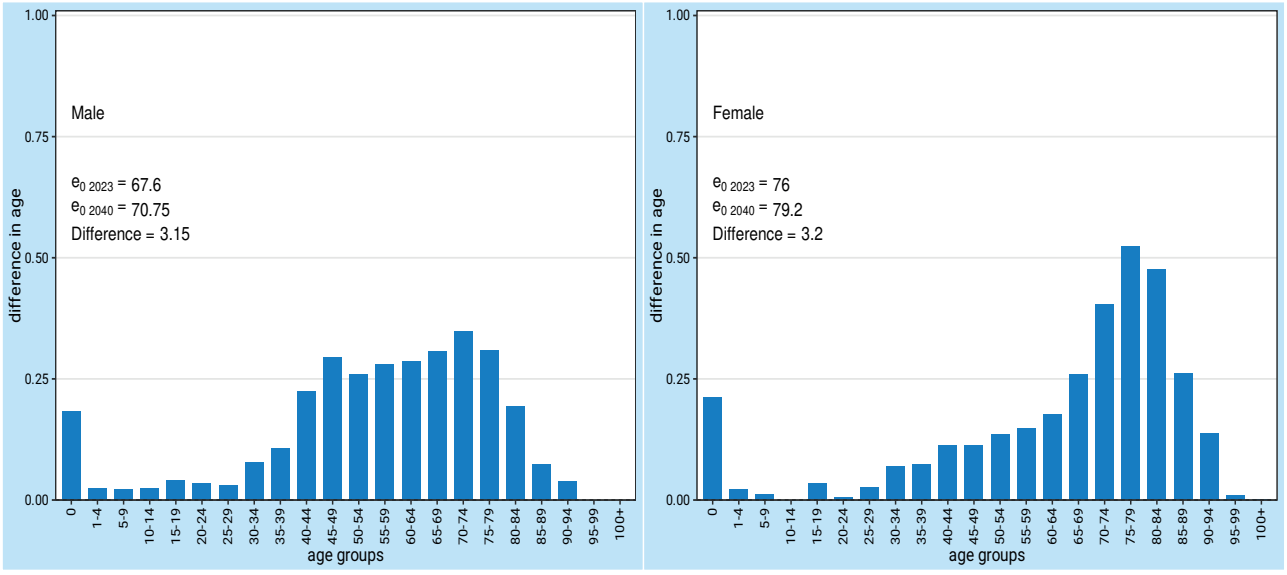
Given the already low mortality rates among children under 14, this age group's contribution to increases in life expectancy at birth is expected to be modest. For men, reductions in infant and child mortality are projected to add approximately 0.1 years to life expectancy over the forecast period, while the impact for women is anticipated to be negligible.

By 2040, life expectancy among young males aged 15–39 is expected to increase by 0.3–0.7 years, depending on the scenario. The projected increase ranges from 0.2 to 0.3 years for females in the same age group.

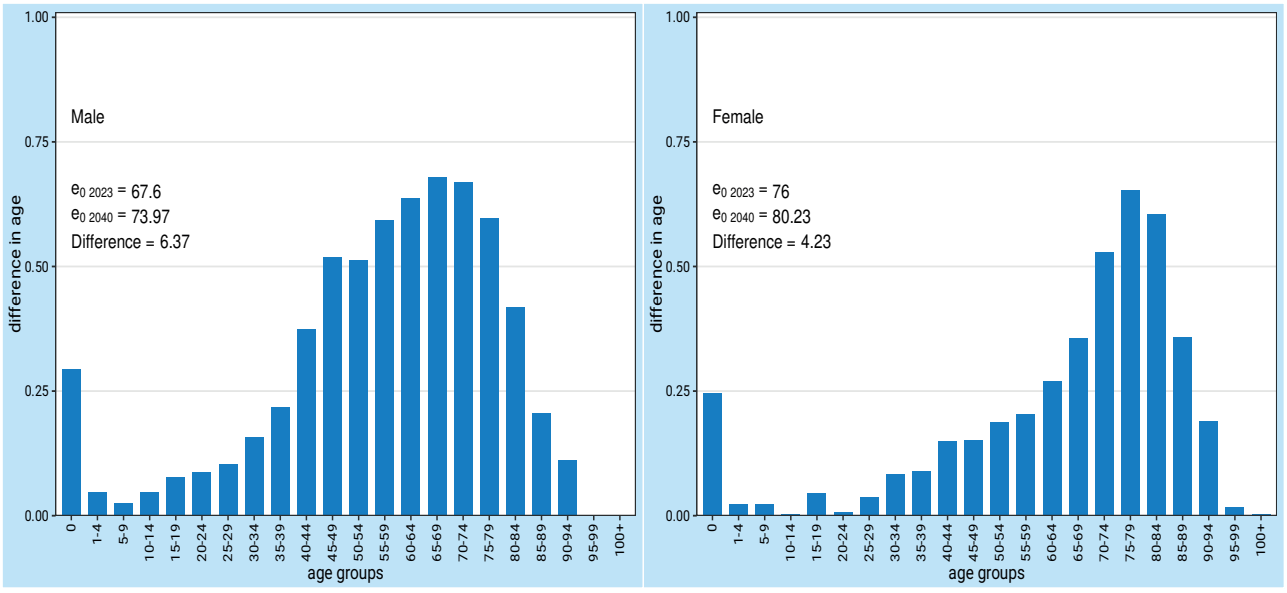
The primary driver of life expectancy growth is anticipated to be the reduction in excess mortality among men of working age (40–64 years). Under the high scenario, this group is projected to contribute up to 3.0 years to overall life expectancy gains, with contributions of 2.6 years in the medium scenario and 1.5 years in the low scenario. For women, life expectancy growth among the economically active population is primarily concentrated in the 50–64 age group, with projected contributions of 0.8 years under the high scenario, 0.7 years under the medium scenario, and 0.5 years under the low scenario.

Reducing mortality among those aged 65 and older is expected to increase life expectancy significantly. For men, life expectancy in this group is projected to grow by 3.1 years under the high scenario, 2.7 years under the medium scenario, and 1.3 years under the low scenario. For women, the corresponding increases are 3.2 years, 2.7 years, and 2.1 years, respectively.

Low scenario



Medium scenario



High scenario

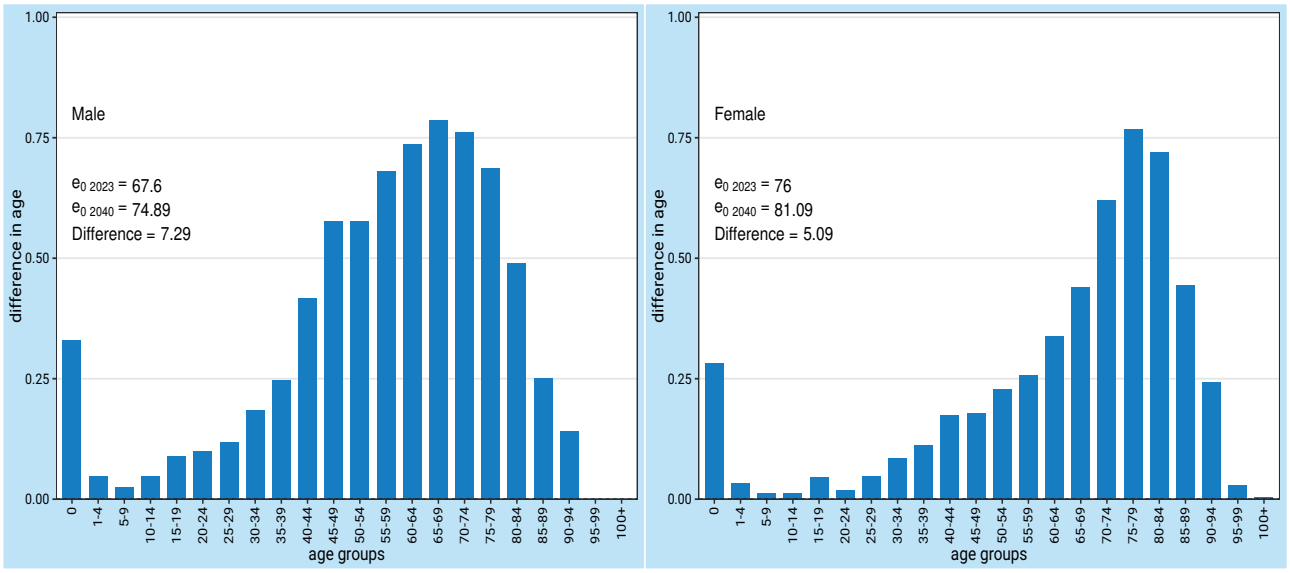


Fig. 14. Projection of life expectancy at birth by decomposition method, 2023-2040
Source: demographic projections, 2024-2040

Scenarios on fertility dynamics. Fertility is a critical factor shaping the size and structure of a population. Declining fertility levels play a pivotal role in the ageing of Moldova's population, and projections of fertility trends have far-reaching implications for the future age composition of the population, including the rate of demographic ageing. The total fertility rate (TFR) serves as a core component of demographic projections, reflecting the average number of children a woman is expected to have over her lifetime, assuming she survives through her reproductive years and that age-specific fertility rates remain constant throughout her life.

Global experiences offer diverse approaches to fertility forecasting (Gleditsch & Syse, 2020). Demographers highlight the importance of shifts in age-specific fertility profiles and the complex dynamics of birth postponement and recovery processes marked by significant unpredictability (Sobotka et al., 2011). Assumptions about fertility trends in Moldova are based on projections of future TFR levels, which are strongly influenced by changes in age-specific fertility patterns. Notably, the average age at first birth in Moldova has been steadily rising, reflecting a transition from an early fertility model to a late fertility model, a shift with significant implications for the annual dynamics of the TFR (Grigoraș & Gagauz, 2022).

According to NBS data, the TFR declined to 1.62 children per woman in 2023. This decline appears to be circumstantial, influenced by the instability and insecurity stemming from the war in Ukraine. To prevent underestimating fertility levels in the projection model, an initial TFR estimate of 1.7 children per woman was adopted for 2024. This value reflects recent fertility trends and aligns with levels observed in 2021–2022.

The fertility projection incorporates scenario-based variations in TFR trajectories alongside structural changes in age-specific fertility rates. Significant differences emerge between the low, medium, and high scenarios (Fig. 15). The low scenario, deemed the most

likely, predicts a gradual decline in fertility, consistent with ongoing trends and the shift towards later childbearing. Conversely, the medium and high scenarios project a moderate rise in fertility, underpinned by the assumption of adequate family support policies and the fulfilment of reproductive intentions. These projections illustrate the hypothetical nature of the scenarios, providing insight into "what could happen" if fertility levels increase under favourable conditions.

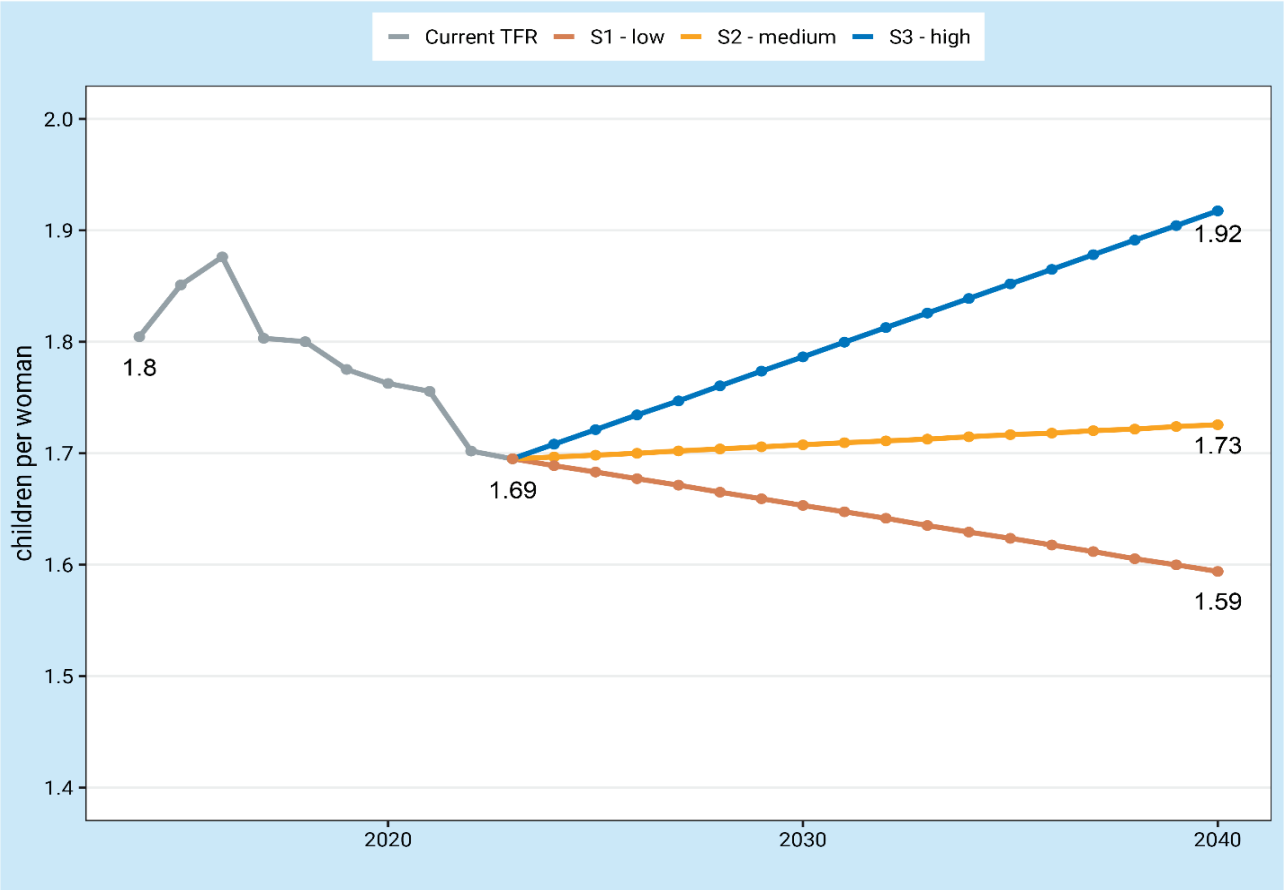


Fig. 15. Projected Total Fertility Rate, by scenarios

Source: demographic projections, 2024-2040

Regardless of the projected TFR values, all demographic forecasting scenarios anticipate substantial changes in the age structure of fertility. These changes include a shift in the peak age-specific fertility rates towards older age groups and a decline in fertility rates among women under 25 years of age (Fig. 16). This rightward shift in the fertility curve, characterised by peak fertility occurring at older ages, is particularly evident in the medium and high scenarios. These scenarios suggest a gradual adaptation of reproductive behaviour to evolving social and economic realities, with a steady progression of peak fertility values towards later ages. In the long term, these patterns indicate that the age structure of fertility will continue to evolve under the influence of various socio-economic, cultural, and political factors. These include policies aimed at supporting families with children, which may further shape reproductive behaviours. These trends collectively reflect a broader transformation in fertility dynamics, driven by structural and behavioural shifts in response to changing societal conditions.

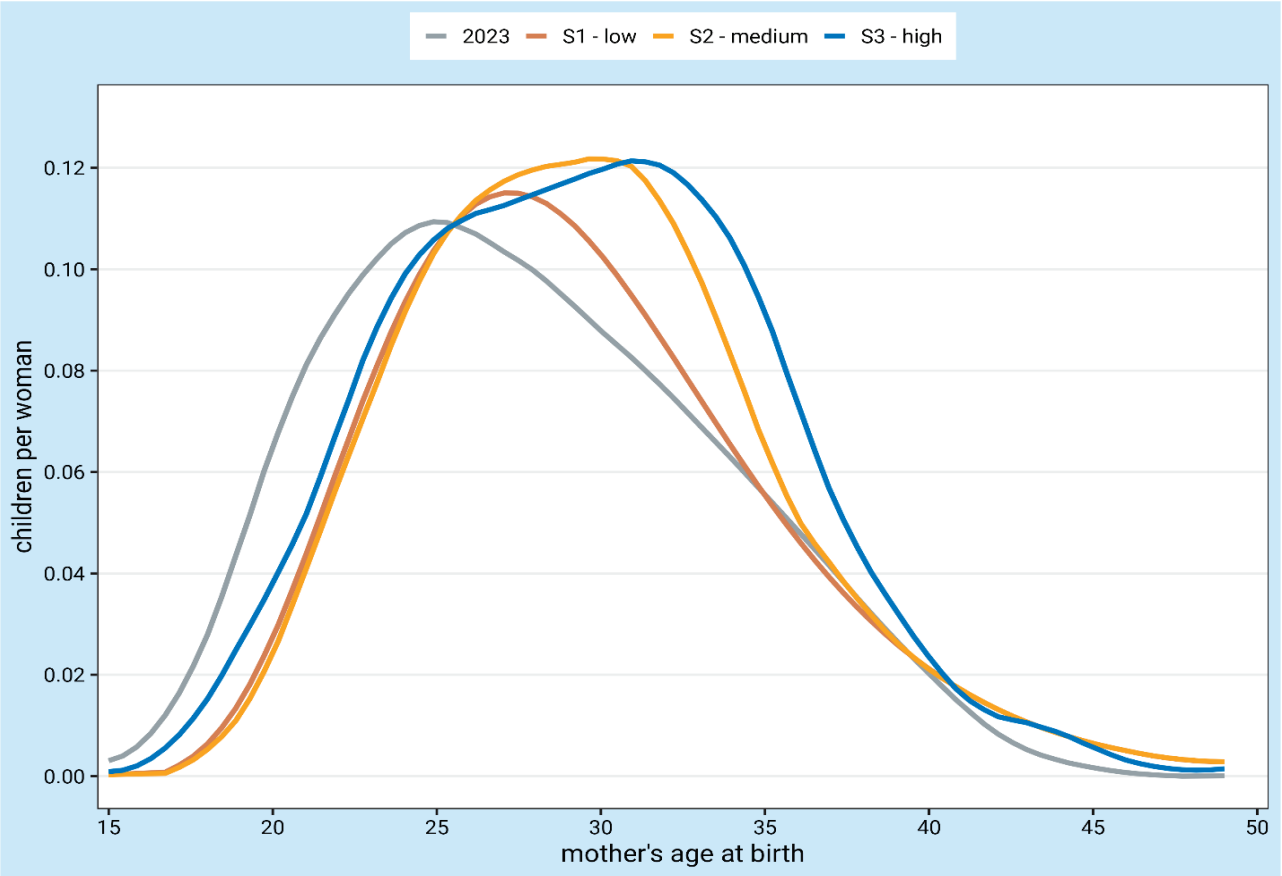


Fig. 16. The age-specific fertility rate for the years 2023 and 2040, presented by scenarios
Source: demographic projections, 2024-2040

Scenarios on international migration dynamics. Migration is one of the most complex phenomena addressed in forecasting the size and age-sex structure of the population, and it remains the most challenging component of demographic projections (de Valk, et al., 2022).

To project migration, two datasets from the NBS were used: data on documented migration, encompassing the number of emigrants, immigrants, and repatriates, and data on international migration. The migration profile by age and sex was constructed based on data spanning 2014–2021. Since the analysis revealed minimal differences in migration patterns between sexes, the same age-specific migration model was applied for both men and women.

All scenarios assume a reduction in net migration (Fig. 17), with the extent of reduction varying by scenario. The high scenario predicts the most significant decrease, while the low scenario projects the slightest reduction. In the low and medium scenarios, a linear decrease in net migration is assumed for 2023–2040, amounting to decreases of 30% and 70%, respectively. For the high scenario, specific benchmarks were set for 2024 and 2030 to guide the anticipated reduction trajectory.

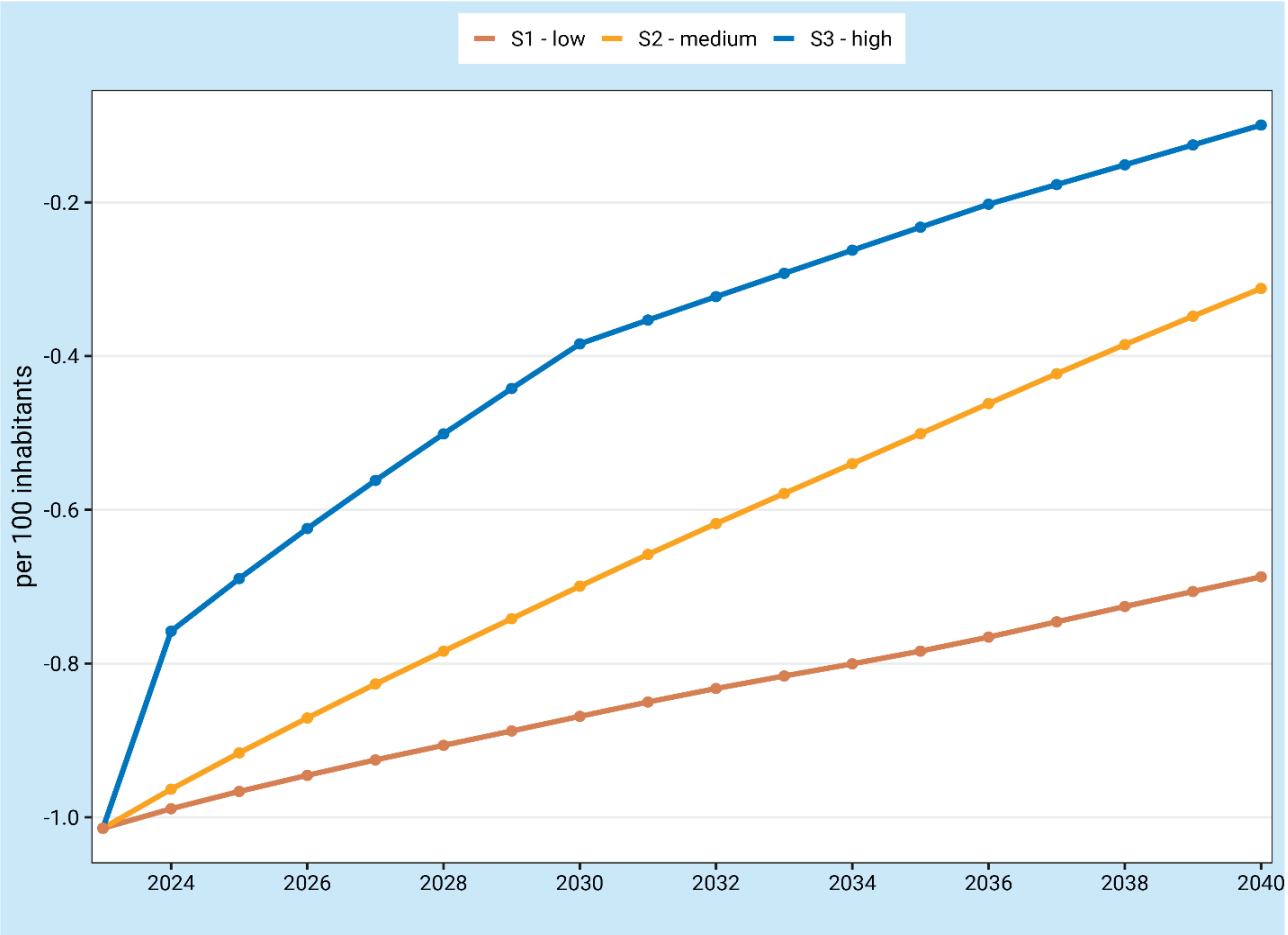


Fig. 17. Projected international net migration rate, % from all population
Source: demographic projections, 2024-2040

In the low scenario, only a reduction in the overall intensity of migration is projected, with the age profile remaining consistent with patterns observed in recent years (Fig. 18). In contrast, the medium and high scenarios anticipate a substantial reduction in migration among the young and adult population. To achieve this, the intensity of the reduction has been tailored by age group, with more significant reductions applied to some groups and more moderate adjustments for others. The most significant decreases were applied to children and the younger population.

The modifications made to the age profile of net migration under the medium and high scenarios were specifically designed to assess the impact of reduced external migration, particularly among younger cohorts, on the population's size and age structure. These scenarios aim to illustrate the potential for mitigating the current demographic challenges caused by the erosion of the population's age structure and to provide insight into how underlying demographic processes might evolve in response to such changes.

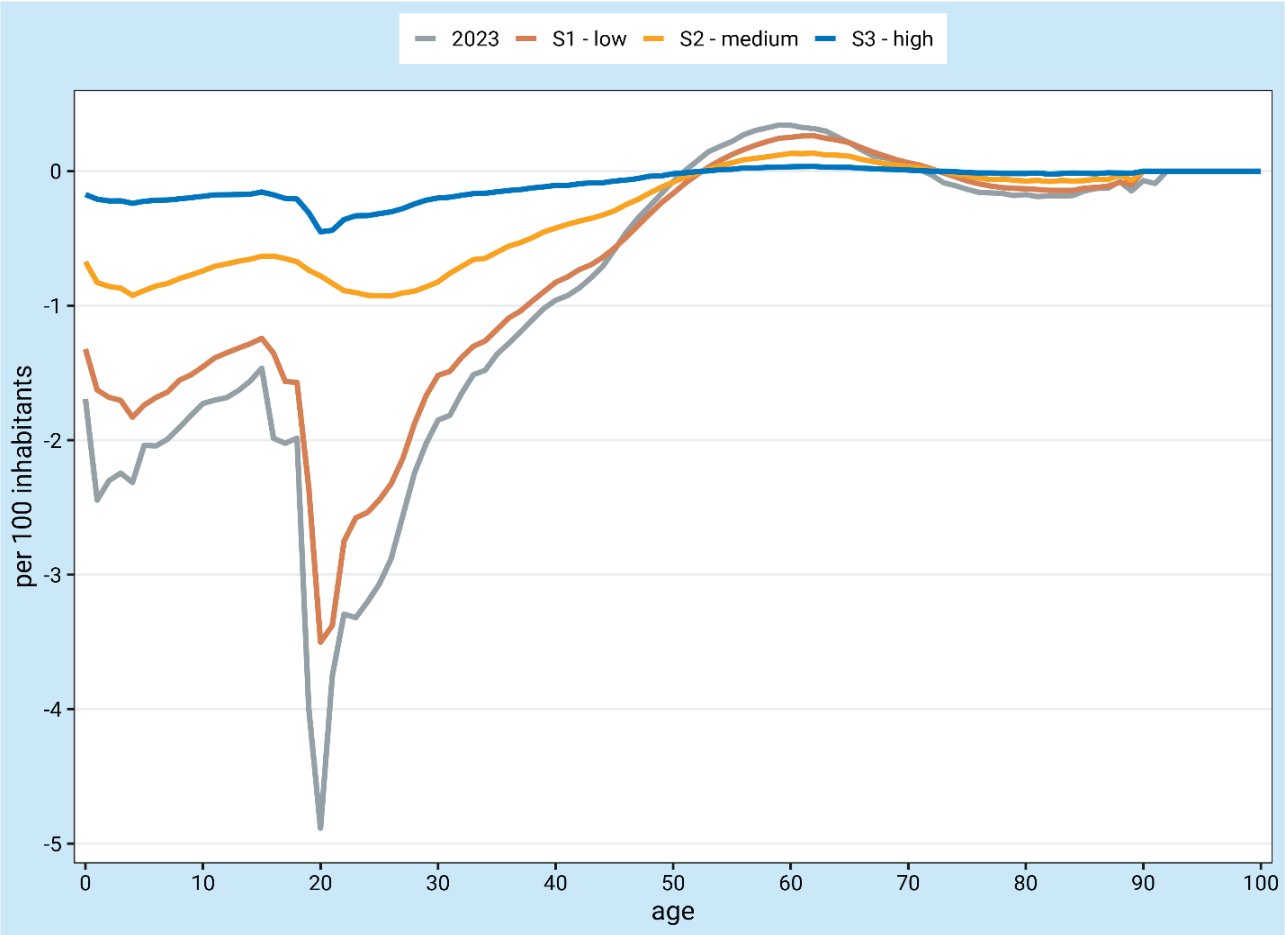


Fig. 18. The projected age profile of net migration by scenarios
Source: demographic projections, 2024-2040

Based on the developed scenarios of mortality, fertility and migration, three scenarios for the demographic projection of the number and age-sex structure of the population of Moldova for the years 2024-2040 were developed (Table 4).

Scenario 1 – low. This scenario assumes that demographic dynamics will follow existing trends driven by inertia. It assumes that the total fertility rate (TFR) will decrease slightly from 1.7 children per woman of childbearing age in 2024 to 1.6 by 2040. Life expectancy at birth is expected to increase modestly, from 67.5 years to 70.72 years for men and from 76.04 years to 79.24 years for women. The net migration rate is projected to improve slightly, decreasing from -1.01% to -0.69%.

Scenario I represents the most pessimistic outlook, yet it is also the most realistic, as it reflects population dynamics based on current trends and rates of change.

Scenario 2 – medium. It assumes stabilisation of the TFR, with minor fluctuations, rising slightly from 1.7 in 2024 to 1.74 children per woman by 2040. Mortality is expected to decline more substantially, increasing life expectancy at birth for men, from 67.5 to 73.9 years, and for women, from 76.04 to 80.02 years. The net migration rate is projected to decrease from -1.01% to -0.31%.

Scenario 3 – high. The optimistic scenario anticipates a significant improvement in demographic indicators. The TFR is projected to increase to 1.93 children per woman of

childbearing age by 2040. Mortality rates are expected to decline considerably, resulting in increased life expectancy at birth for both sexes. Men's life expectancy is projected to reach 74.86 years, and women's life expectancy 81.13 years by 2040. The net migration rate is forecast to improve markedly, decreasing to -0.1% by the end of the projection period.

Table 4. Demographic projections scenarious

Years	TFR	Life expectancy, females	Life expectancy, males	The net rate of migration, %
Scenario 1 – low				
2023	1.62	76.04	67.5	-1.01
2040	1.6	79.24	70.72	-0.69
Scenario 2 – medium				
2023	1.62	76.04	67.5	-1.01
2040	1.74	80.27	73.9	-0.31
Scenario 3 – high				
2023	1.62	76.04	67.5	-1.01
2040	1.93	81.13	74.86	-0.10

Note: data for 2023 are retrieved from NBS

The demographic projection calculation for the population's number and age-sex structure was carried out using the demographic analysis program DAPPS. To obtain results that best meet technical requirements, mortality data were adjusted using the mortality analysis program DeRaS, which allows for the elimination of fluctuations in death probabilities at old age. The DAPPS program calculates the population size based on the following formula (U.S. Census Bureau, 2013), applied to age cohorts—in this case, from 2 to 99 years—by solving a system of equations in which the average population size at age x in year t, Px(t), is calculated using the formula:

$$P_x^t = \frac{P_{x-1}^{t-1} - 0{,}5 \times D_{x-1}^{t-1} + 0{,}5 \times N_{x-1}^{t-1}}{1 + m_x^t - n_x^t}$$

Where,
P_x^t – population at age x for year t;
D_{x-1}^{t-1} – number of deaths in age cohort x-1 for year t-1;
N_{x-1}^{t-1} – net migration in age cohort x-1 for year t-1;
m_x^t – age-specific mortality rate for age x in year t;
n_x^t – coefficient of net migration for age x in year t.

The equation for the younger age cohorts also includes the number of births and an adjustment for infant mortality under one year.

2.2. Projected results for population size and structure

The demographic projection results indicate a continued decline in the country's population over the coming decades. Under Scenario 1 – low, the population is projected to decrease from 2,423.3 thousand in 2023 to 1,835.9 thousand in 2040, representing a reduction of approximately 24% over the forecast period. This significant decline is attributed to factors such as high emigration rates, relatively low fertility, and comparatively high mortality (Fig. 19).

Under Scenario 2 – medium, the population is expected to decline to 1,955.6 thousand by 2040, a decrease of 19.3%. Although this reduction is less severe than in the low scenario, it reflects substantial demographic challenges. This scenario assumes a potential stabilisation of the fertility rate and a moderate decrease in emigration, which could somewhat mitigate population losses.

Scenario 3 – high, the most optimistic scenario, predicts the smallest population decline. By 2040, the population is projected to fall to 2,101.7 thousand, representing a decrease of 13.3%. This scenario assumes significant emigration reductions, substantial fertility improvements, and increased life expectancy. Consequently, the negative impact on the population's age structure would be less pronounced than in the other scenarios.

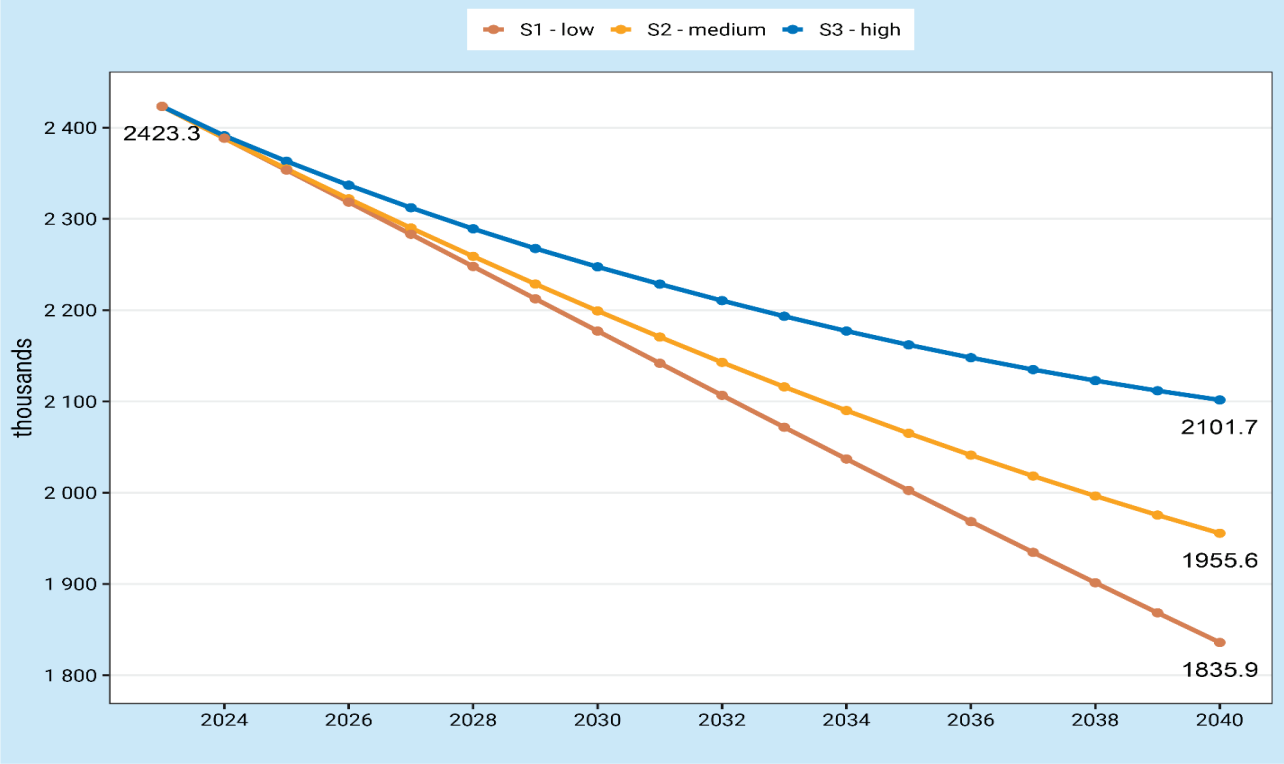


Fig. 19. Population dynamics until 2040 year
Source: demographic projections, 2024-2040

Emigration significantly affects the population's age structure, disrupting the balance between age groups. The departure of a substantial number of young people reduces the proportion of working-age individuals. In contrast, the share of old individuals increases within the remaining population, accelerating the process of demographic ageing. This

imbalance is evident in the age-sex pyramid (Fig. 20), which assumes a distorted shape characterised by a concentration of population at the upper levels, an underrepresentation of the 25–35 age group, and a narrow base reflecting a low number of births, partly due to the smaller size of parent generations.

The large cohorts born in the 1960s and 1970s will transition into older age groups in the coming years. As a result, over half of the population will be 50 or older, with the median age projected to rise from 40.4 years in 2023 to between 46.02 and 49.2 years by 2040, depending on the scenario.

Although life expectancy at birth gradually increases, its influence on demographic ageing in Moldova remains limited compared to economically developed European countries. The ageing process in Moldova is primarily driven by two dynamics: "ageing from below" due to declining births number and a shrinking proportion of young people, and "ageing from above", characterised by an increase in older individuals driven by rising life expectancy and the return migration of people aged 50 and older.

Among the three population scenarios, the low scenario has the most unbalanced age structure, even with an assumed 30% reduction in emigration by the end of the forecast period. However, the medium and high scenarios offer a more optimistic outlook for Moldova's demographic potential. Although the age-sex pyramids in these scenarios also exhibit a sandglass shape, their bases are relatively broader, indicating higher fertility rates and reduced emigration. These factors suggest a more favourable trajectory toward demographic stabilisation than the low scenario.

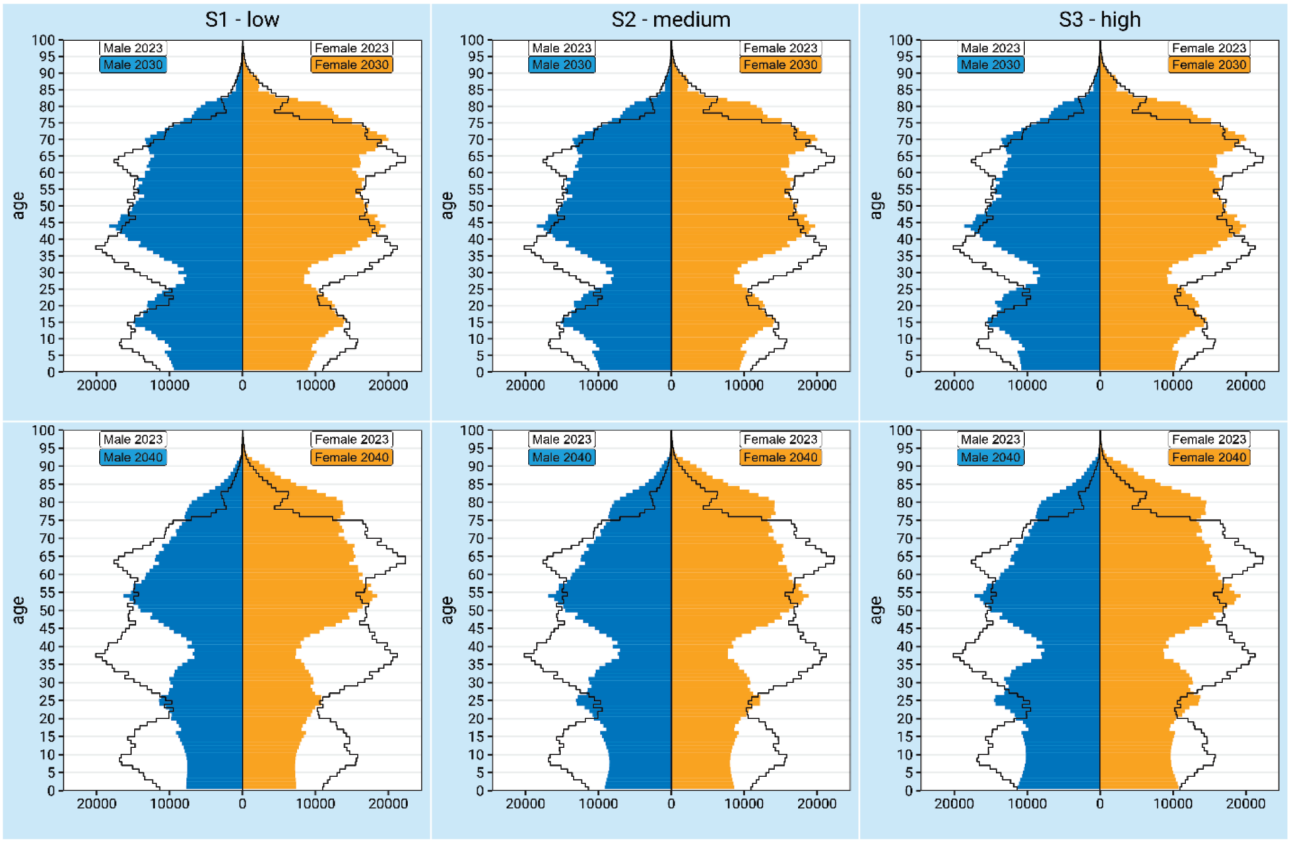


Fig. 20. Age-sex pyramids for 2023, 2030 and 2040 years

Source: demographic projections, 2024-2040

Population ageing is a prominent trend, with a substantial increase in the proportion of individuals aged 65 and older (Fig. 21). While the percentage growth in this age group varies slightly across the three scenarios, the overall pattern remains consistent. In 2023, individuals aged 65 and over accounted for 17.4% of the total population. By 2040, this share is projected to rise to 26.3% under the low scenario, 25.9% under the medium scenario, and 24.6% under the high scenario.

Although the working-age population (20–64 years) will continue to constitute the majority, its proportion is expected to decline slightly, from 59.6% in 2023 to 56.2% by 2040. This demographic group will remain critical to the economy, forming the backbone of the labour force. Their productivity and economic contributions will be essential to support the increasing number of elderly individuals. The decline in the working-age population is driven by a combination of factors, including migration, declining fertility, and population ageing.

The proportion of the young population (0–19 years) is projected to decrease significantly. In 2023, this age group comprised 23% of the total population. By 2040, it is expected to drop to 17.9% under the medium scenario. This decline is attributed to two primary factors: high rates of family emigration, which include the outmigration of children, and decreasing birth rates, exacerbated by the emigration of individuals of reproductive age.

These age structure shifts underscore the country's demographic challenges, including sustaining the economy amidst a shrinking labour force and managing an ageing population's social and economic implications.

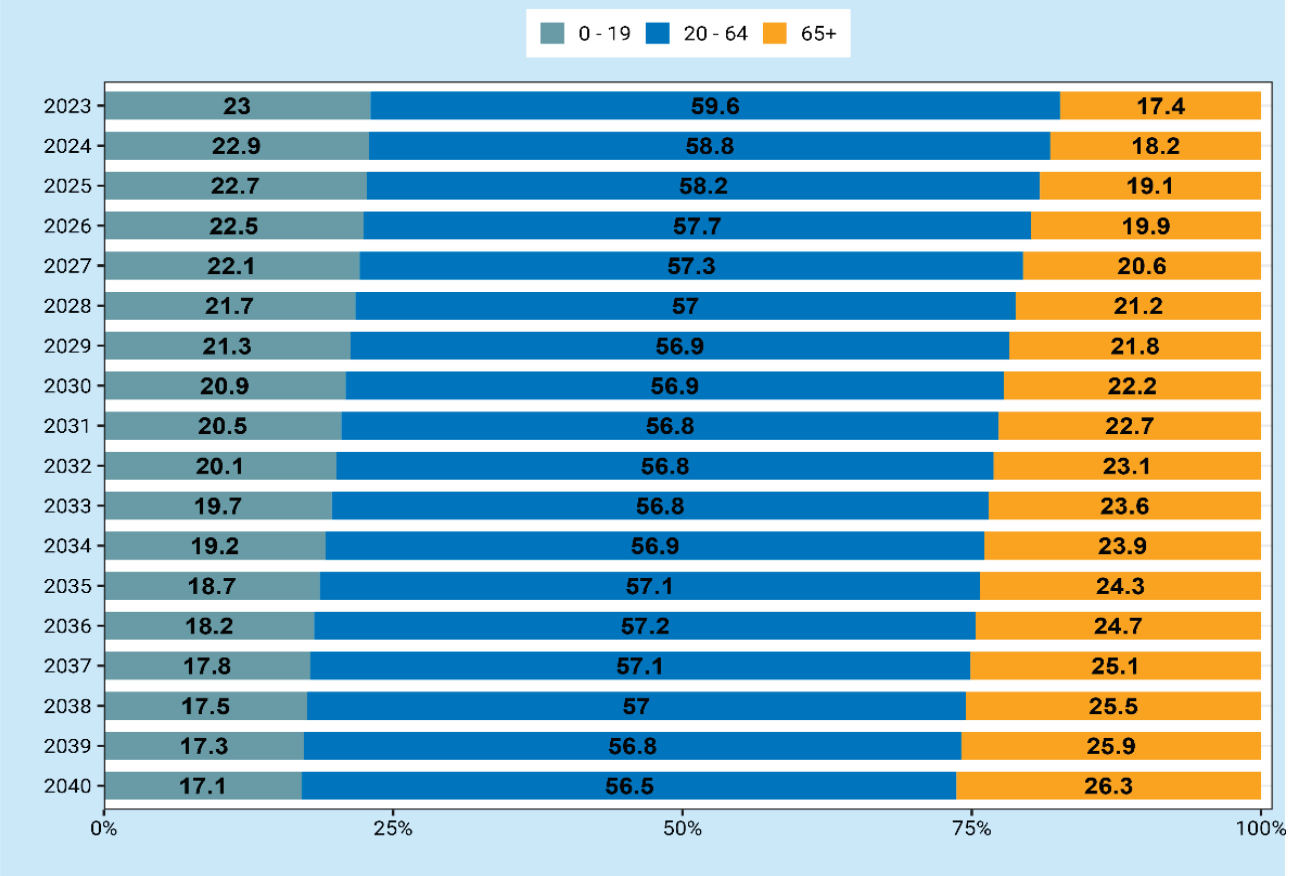


Fig. 21. Population structure by three broad age groups, 2023-2040, Scenario 2 - medium
Source: demographic projections, 2024-2040

As the proportion of the young population decreases and the older population increases, the benefits of the demographic dividend diminish. While the working-age population will still comprise over 55% of the total population—a level typically associated with the demographic dividend—the shrinking share of this group could impede sustainable economic growth. Companies may face difficulties recruiting an adequate workforce, which could undermine economic competitiveness.

The number of individuals exceeding the retirement age is projected to rise significantly, from 22.3% of the total population in 2023 to 29% under the low scenario and 27.2% under the high scenario by 2040. In absolute terms, this equates to between 533,1 and 570,9 thousand depending on the scenario. The dependency ratio, an important demographic indicator, measures the ratio of dependents (those under 20 and over 65) to the economically active population (ages 20–64). A high dependency ratio reflects a more significant burden on the working population to support dependents, placing strain on social welfare systems, healthcare services, and the overall economy. With an ageing population and declining birth rates, the dependency ratio is expected to rise, posing challenges for economic and social systems. Projections indicate an increase in the demographic dependency ratio by approximately 10 percentage points, from 67.9 in 2023 to 76.8–79.2 by 2040 (Fig. 22). This upward trend highlights the growing pressure on the working-age population to sustain the needs of both the elderly and children.

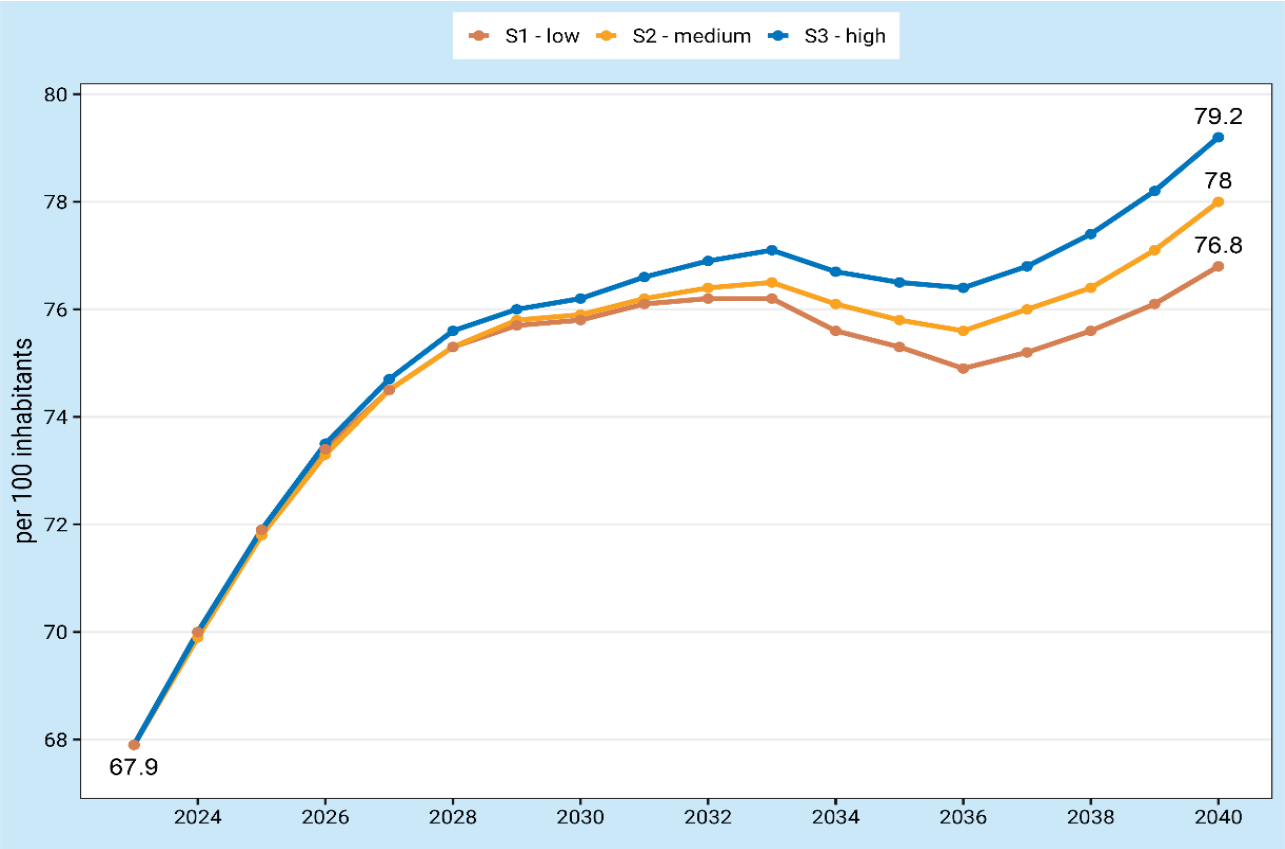


Fig. 22. Demographic dependency ratio

Source: demographic projections, 2024-2040

[1] The demographic dividend is the potential economic benefits that arise when the proportion of the working-age population (20-64 years) is significantly higher than the proportion of the dependent population (0-19 and 65+ years).

2.3. Emigration reduction could boost number of births

The decline in population inevitably leads to a reduction in the number of births, with migration emerging as a key driver of this trend. International migration disproportionately involves young, reproductive-age individuals, significantly shrinking the pool of potential parents. The annual number of births is influenced by two critical factors: the total fertility rate (TFR), which represents the average number of children born per woman of reproductive age, and the size of the female population aged 15–49.

Over the next two decades, the smaller cohorts born in the late 1990s and early 2000s will constitute the primary reproductive group. As a result, the number of children born to these generations will be substantially lower than those born to the larger cohorts of the mid-1980s. This demographic shift highlights the structural challenges posed by the declining number of women in their reproductive years. For instance:

- Low scenario: the number of births in 2040 is projected to drop sharply to 15.2 thousand new-borns (Fig. 23).
- Medium scenario: the decline in birth rates would be less pronounced, with births decreasing to 18.1 thousand.
- High scenario: the downward trend would be mitigated further, showing potential signs of recovery in birth rates.

The projection underscore the critical role of reducing emigration in stabilising the demographic situation. A substantial reduction in emigration—by 70% in the medium scenario and 90% in the high scenario—is the most significant factor in halting the decline in births number and contributing to long-term population resilience.

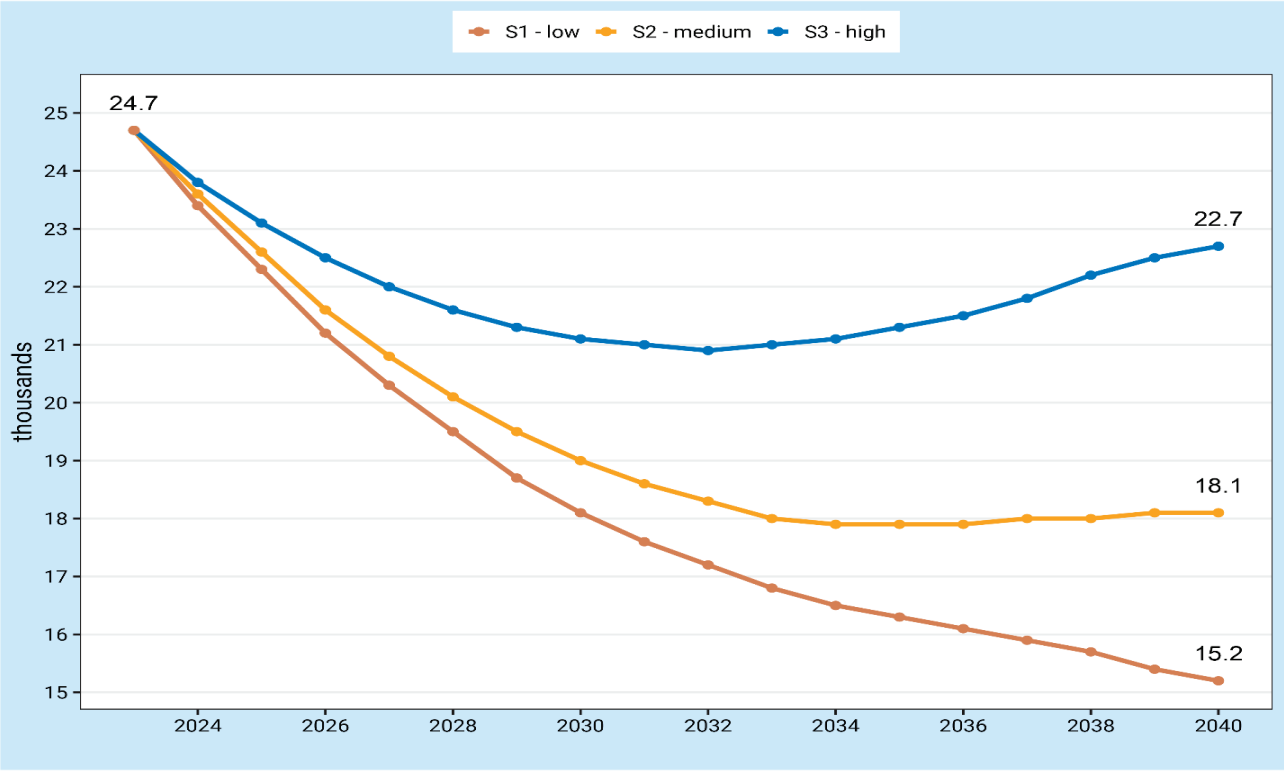


Fig. 23. Births number dynamics for 2024-2040

Source: demographic projections, 2024-2040

2.4. Population ageing through the lens of prospective age inspires optimism

Over the coming years, the population will shift progressively into older age groups. The large cohorts currently aged 60–70 in 2023 will transition into advanced ages, leading to a substantial increase in the share of individuals aged 75–79 and 80+ within the total elderly population (65+) (Fig. 24). In 2023, people aged 80 and older comprised 14.2% of the old population; by 2040, this share is projected to rise to 27.5%. In absolute terms, the number of individuals aged 80+ will grow from 59.8 thousand in 2023 to between 130.8 thousand and 154.1 thousand by 2040, depending on the scenario.

Simultaneously, the proportion of those in the 65–69 age group will decline markedly, from 40.1% in 2023 to 27.1% by 2040, reflecting the demographic transition from larger to smaller generational cohorts. This shift indicates that a growing number of individuals will move into the oldest age brackets, with significant economic and social implications.

The increasing number of older individuals, particularly those aged 80 and older, will drive heightened demand for health and long-term care services, placing additional pressure on the public health system. This demographic shift underscores the urgent need for public policies and infrastructure to adapt to the challenges of an ageing population. Investments in healthcare, eldercare, and social support systems, alongside measures to enhance workforce productivity and sustainability, will be critical in addressing the needs of this rapidly growing population segment.

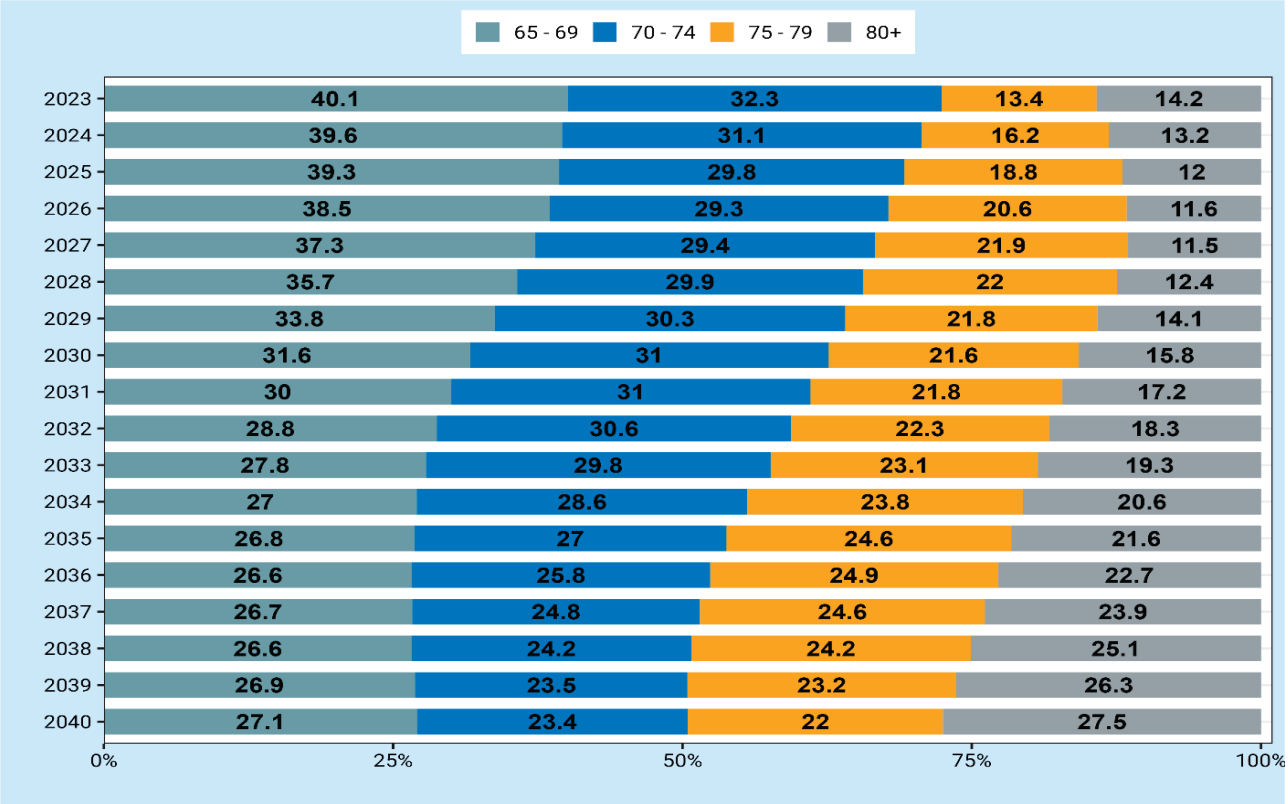


Fig. 24. Older population structure, Scenario 1 - low

Source: demographic projections, 2024-2040

The increasing proportion of the population aged 70 and over presents significant challenges but also offers opportunities for societal adaptation and progress. Effectively managing these demographic changes requires comprehensive planning and policies aimed at ensuring long-term economic and social sustainability. One critical consideration is the dependency level of the elderly population, which is traditionally defined based on chronological age thresholds. However, future generations are expected to have improved health and functional capacities compared to previous cohorts, highlighting the limitations of using fixed age thresholds.

Focusing solely on chronological age thresholds—such as 60 or 70 years—risks oversimplifying or overestimating the effects of ageing. Not all individuals aged 60 and above are dependent. To address this limitation, alternative measures that integrate both chronological age and the concept of prospective age have been proposed (Sanderson & Scherbov, 2005, 2007).

A widely accepted criterion for prospective age is a remaining life expectancy of 15 years. Under this approach, the onset of old age is defined by the age at which an individual's remaining life expectancy is 15 years. This dynamic threshold reflects the evolving nature of ageing, where individuals exceeding this age are considered "elderly" for social assistance and planning purposes. By aligning policies with prospective age, governments can create more adaptable and realistic frameworks that account for improvements in health and longevity, thus alleviating pressure on social and pension systems.

Demographic projection indicates that increasing life expectancy at birth will lead to a gradual rise in the age at which remaining life expectancy reaches 15 years, effectively delaying the onset of advanced age (Fig. 25). This trend is evident across all scenarios, with the most significant advancements observed in the medium and high scenarios, which anticipate substantial gains in life expectancy.

For females, the prospective age threshold exhibits less variation across scenarios due to consistent proportional increases in life expectancy. For males, however, the medium and high scenarios predict a more pronounced upward shift than the low scenario, helping narrow the gender gap in longevity.

For example, in 2023, the age at which remaining life expectancy was 15 years stood at 60.3 years for males and 66.6 years for females. Under the low scenario, this threshold will rise to 63.5 years for males and 69.3 years for females by 2040. The medium and high scenarios project even more significant increases, reflecting improvements in health and lifestyle and highlighting the potential impact of effective public health policies and increased awareness of healthy living practices among the population.

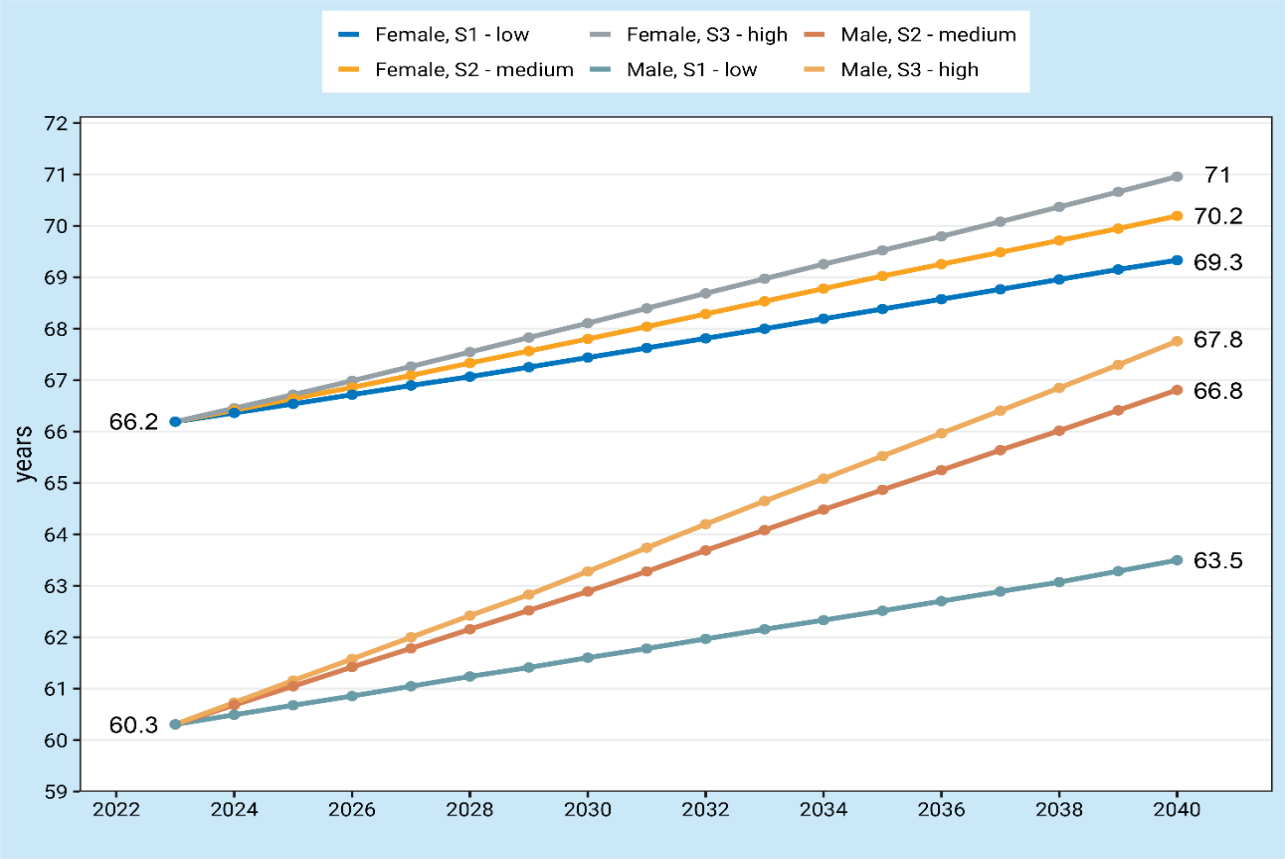


Fig. 25. Prospective age for which the remaining life expectancy is 15 years
Source: demographic projections, 2024-2040

Thus, the degree of demographic ageing based on prospective age is lower than that calculated using chronological age (Fig. 26). The proportion of elderly individuals defined by prospective age grows slower than the accelerated increase observed in those aged 65 and older. Across all scenarios—low, medium, and high—the share of elderly individuals based on chronological age (65+ years) rises steadily. The largest increase is observed under the low scenario; however, the differences between scenarios are relatively modest, as the overall trend is consistent. This consistency is largely attributable to the fact that the cohorts reaching older ages tend to consist of individuals who remained in the country with limited involvement in migration. Furthermore, the phenomenon of return migration among individuals aged 50–65 contributes to the acceleration of demographic ageing.

A different trend emerges when using prospective age (defined as a remaining life expectancy of 15 years) to estimate the degree of ageing. The proportion of elderly individuals is consistently lower, particularly in the medium and high scenarios, which project substantial gains in life expectancy. For example:

- Low scenario: The proportion of elderly individuals is 26.3% based on chronological age but decreases to 23.6% when assessed using prospective age.
- Medium scenario: The share is 25.9% based on chronological age, compared to 20.8% using prospective age.
- High scenario: The results are even more favourable, with 24.6% based on chronological age and only 18.7% based on prospective age.

These findings illustrate that as life expectancy increases, the boundaries of old age shift outward, meaning individuals aged 65 are, from the perspective of prospective age, effectively "younger" than their counterparts in earlier generations.

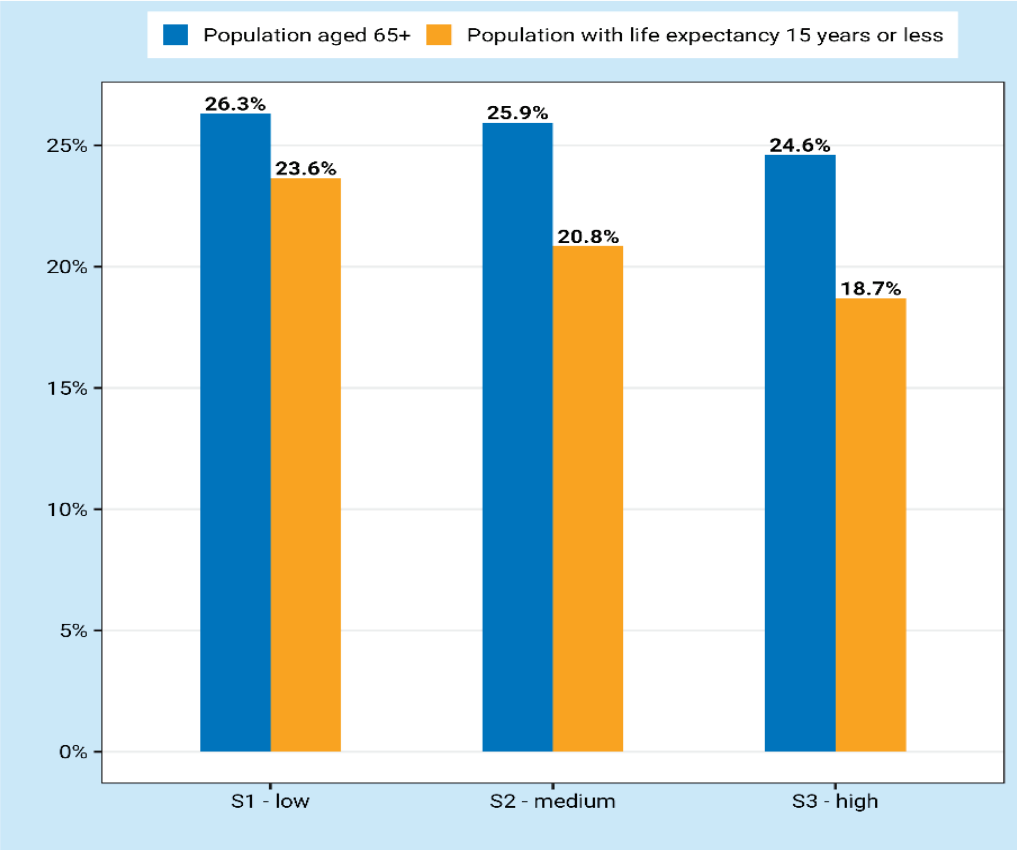


Fig. 26. Share of elderly persons by chronological (65 years) and prospective (age at which the remaining life expectancy is 15 years) age thresholds
Source: demographic projections, 2024-2040

This approach to assessing ageing has profound implications for public policy and the pension system. It suggests that certain segments of the population may remain active in the labour force longer than their chronological age might imply. By incorporating prospective age, policymakers can better tailor healthcare and social care programmes to the actual needs of the ageing population, avoiding broad generalisations based on chronological age alone. This method also highlights the potential of older individuals to contribute meaningfully to society and actively participate in economic and social activities, fostering a more inclusive and sustainable approach to demographic challenges.

2.5. Components of population decline

The ongoing deterioration of the population's age structure will increasingly amplify the impact of natural population growth or decline on the overall population size. Negative migration trends, predominantly affecting young people, exacerbate the already adverse effects of natural population decline. While all three scenarios assume a significant reduction in migration, and the medium and high scenarios project a decrease in youth migration, the pronounced demographic ageing will intensify the natural decline rate, increasing from

-3.9‰ in 2023 to -10‰ under the low scenario.

Between 2024 and 2040, cumulative population losses due to natural decline (deaths outnumbering births) are projected as follows:

- 279 thousand residents under the low scenario,
- 225 thousand residents under the medium scenario, and
- 170 thousand residents under the high scenario.

Reducing migration among young people could yield long-term benefits for the population structure and help mitigate the effects of natural decline. Retaining a larger number of young people within the country could slow the ageing process and reduce the rate of population loss due to negative natural growth.

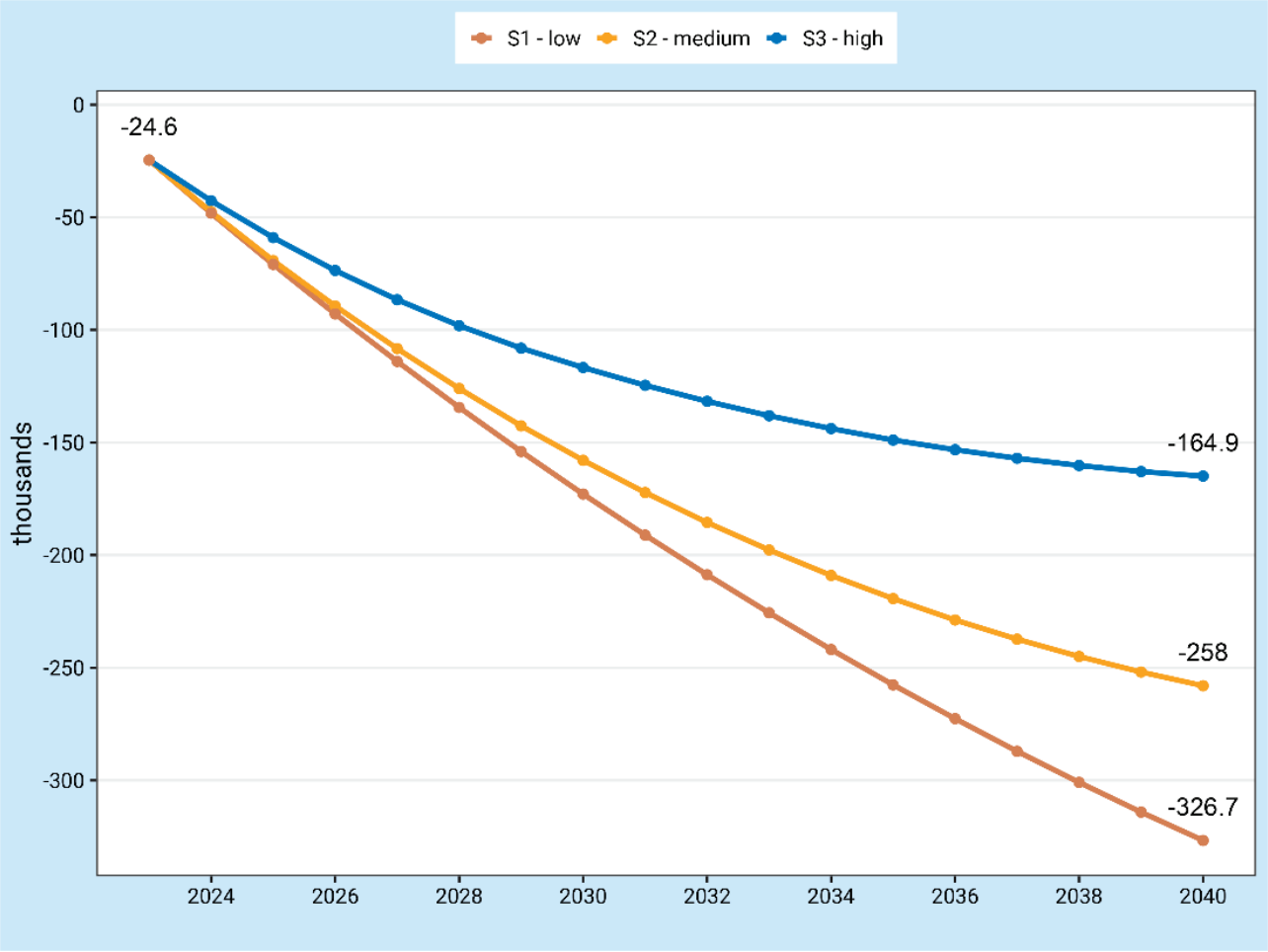


Fig. 27. Cumulative population decline due to emigration
Source: demographic projections, 2024-2040

The cumulative population reduction due to emigration by 2040 will be, in absolute terms, 326.7 thousand – according to the low scenario, 258.0 thousand – according to the medium scenario, and 164.9 thousand based on the high scenario (Fig. 27). In relative terms, these losses compared to the base year, 2023, would represent 6.8% of the total population in the base year according to the high scenario, 10.6% according to the medium scenario, and 13.5% according to the low scenario.

The components and dimensions of the population decline of the Republic of Moldova reveal the complexity of the demographic challenges facing the country. The complex nature of the changes demonstrates that in order to stabilize the demographic situation and create sustainable premises to stop the decline, it will be necessary to promote well-structured and consistent demographic policies and strategies in a long-term perspective.

3. HUMAN CAPITAL PROJECTION

3.1. Used methodology

To comprehensively describe a future population requires asking: what defines it? Which characteristics matter most? Part of that answer is human capital – often a decisive factor in determining the success of a nation. It reflects the ability of people to organise, stay competitive, and overcome hardships.

Building on Moldova's official projections of the population by age and sex structure, this chapter adds dimensions of human capital that open the door to a new layer of analysis. Specifically, the results cover educational attainment and labour force participation between 2023 and 2040.

Scenarios

This chapter explores five 'what-if' scenarios for Moldova, primarily focused on the outcomes in terms of human capital. All scenarios account for key variations in educational attainment and labor force participation rates by age, sex, and level of education.

Below is a short summary of each scenario, with more extensive explanations and the general methods available in the Sub-paragraph 3.5 of this Chapter.

Human capital activation scenarios

1. Labor Force – Gradual Improvement (Baseline)

- Labor force participation continues to increase at half the speed observed in recent years. A maximum of 10 percentage points improvement is allowed between 2023-2040 for any given age-, sex-, and education-specific participation rate.

2. Labor Force – Rapid Improvement

- Labor force participation improves at a rate that keeps pace with gains in life expectancy from 2023-2040. For the years 2024-2028, an accelerated pace of improvement is implemented for women, meant to reflect Moldova's legislation for an upward revision of the retirement age to 63.

3. Labor Force – Constant Participation (No Improvement)

- Labor force participation rates (by age, sex, and education) are held constant throughout the projection period.

Alternative demographic scenarios

4. Desired fertility

- Same assumptions as Labor Force (Baseline) scenario, but fertility is made to reach the levels reportedly desired in Moldova (2.68) by 2030.

5. Reduced outflows

- Same assumptions as "Labor Force – Baseline", but net migration reduces to 25% of the baseline levels by 2030, held constant from 2030-2040. Still, this change leaves emigration rates notably above the averages observed in upper-middle income countries.

In all scenarios, education is split into the following categories: Masters+, Bachelor, Post-Secondary Vocational Education (VET), Upper Secondary, and Lower Secondary and below. At the same time, labor force participation is defined according to the standard practice: individuals who currently work or search for work are considered 'active', whereas those not working or looking for work are 'inactive'.

3.2. Human capital dynamics

Broadly speaking, human capital is on the rise in Moldova. This reality gives essential context for interpreting what ongoing trends (demographic and otherwise) mean for the economy, and society at large. It also suggests a more positive outlook, and a chance to counterbalance some of the feared consequences of population aging and decline. Even during the short time horizon considered (2023-2040), important variations can emerge given the sheer speed of the trends in motion.

Educational attainment

As in most nations, Moldova is seeing higher educational attainment among the younger generations. Over the course of the projection, the population aged 15+ with some form of post-secondary education (VET, Bachelor, or Master+) is projected to increase from 52.6% in 2023 to 57.2% in 2040, maintaining relatively constant absolute levels (from 1.05m to 965,000). Considering only the Master+ category, the share of the population jumps from 25.7% to 30.5%, and even the absolute numbers increase (from 416,000 to 513,000) despite the general population decline. Such changes reflect the increased likelihood of younger cohorts to continue in the education system.

The same trends also reveal an ongoing shrinking of the population with lower levels of education. In turn, the proportion of the population aged 15+ with lower secondary or below is projected to fall from 32.7% (2023) to 28.6% (2040). Fig. 28 displays the population pyramids for Moldova overlayed with educational attainment. A clear shift towards higher education levels is visible as the pyramid becomes bluer, less orange and red. The number of Moldovans in each educational category in the baseline scenario is displayed in the sub-paragraph 3.5 of this Chapter for the years 2023, 2030, and 2040.

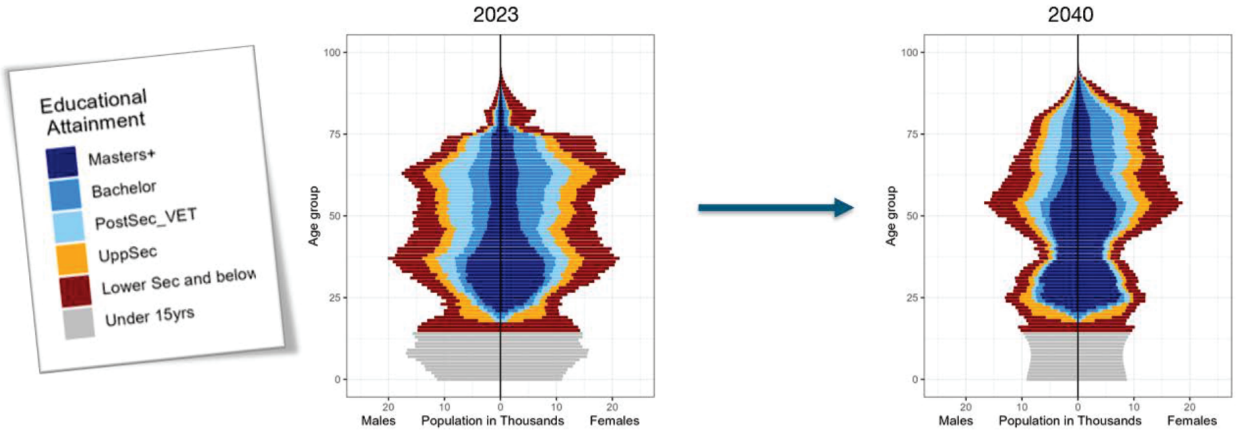


Fig. 28. Population Pyramid by age, sex, and education, 2023, 2040

Labour force size and composition

Similar to the overall population, Moldova's labor force is projected to become smaller and better educated. However, the pace of change does not strictly mirror the general population.

The labor force is likely to see a quicker transformation in its educational composition for various reasons, including the fact that individuals with higher education tend to be more economically active. In 2023, workers with Master+ level of education made up 30.5% of the labor force. By 2040, that percentage is projected to jump to 45.5%.

In terms of labor force size, the outcomes range from a mild to significant decline, depending on the scenario (as shown in Fig. 29). If current participation rates freeze with no further progress, Moldova's labor force would decline to 738,000 workers by 2040, down from 949,000 in 2023. In scenarios where labor force either continues to gradually improve by half of recent rates, or faster in accordance with life expectancy gains, the projected decline would be somewhat milder. In these two scenarios, the labor force size reaches 787,000 and 819,000 by 2040 respectively.

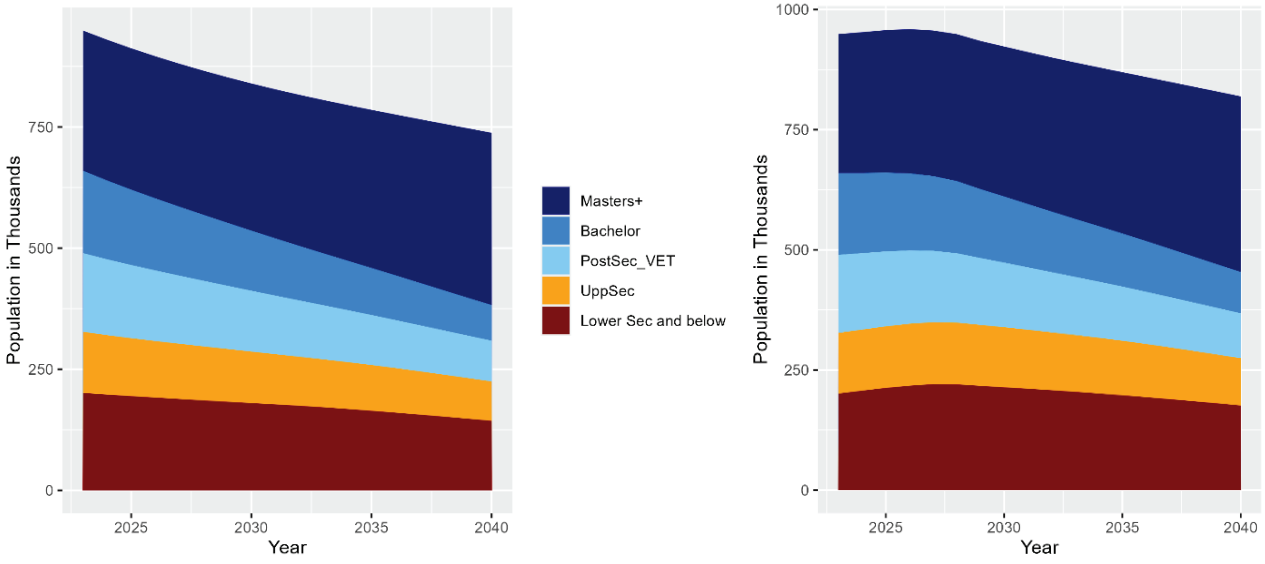


Fig. 29. Labor Force Size, Constant Participation – No Improvement (Left), Rapid Improvement (Right), 2023-2040

Regardless of the potential for mobilizing a larger share of Moldova's human capital, the large scale of demographic change (if it continues) will essentially guarantee a smaller labor force. Still, the size and composition of the future labor force depends on how many Moldovans can be economically activated – prominently via retirement policy, but also tax incentives, reduced skill mismatches, and other factors.

Labour force & dependency burdens

Even more consequential than labor force size is the share of producers relative to consumers. The breakdown of Moldova's population aged 15+ by labor force status can be seen in Fig. 30, which includes those who are active (employed or unemployed) and inactive (out of the labor force).

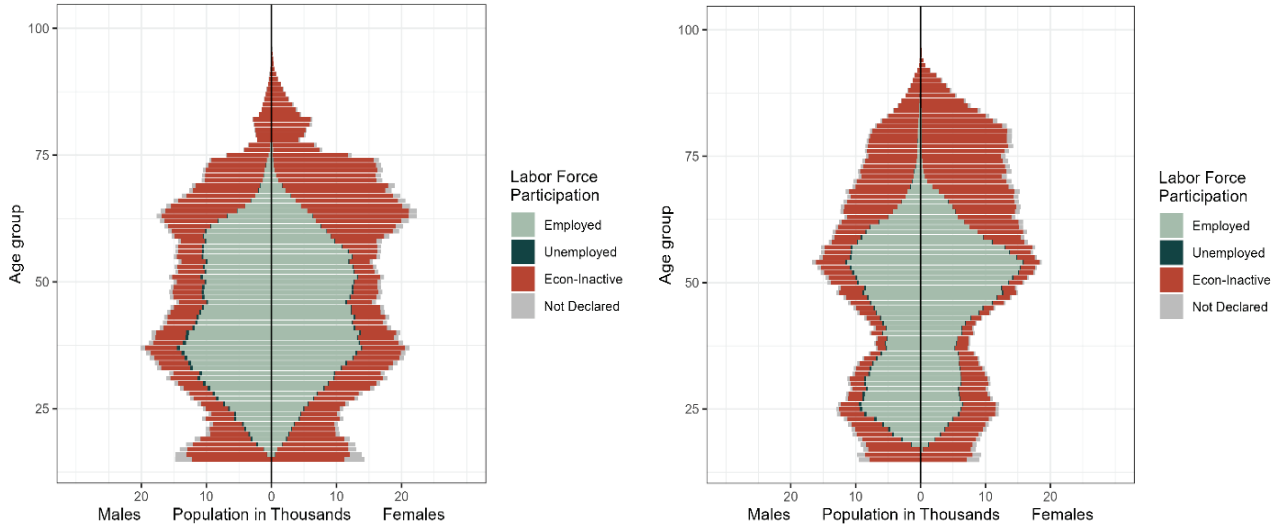


Fig. 30. Population Pyramids by Age, Sex, and Labor Force Status, Ages 15+, 2023 vs. 2040

An important way to measure the impact of these patterns on the dependency burdens is the Labor Force Dependency Ratio (LFDR). The LFDR shows the average number of dependents that each worker is responsible for supporting financially. In Moldova that value stood at 1.55 in 2023, a higher burden than neighboring countries and the EU average (estimated around 1.05) . However, unlike many other countries, Moldova's LFDR appears to be in a relatively stable position.

The results show a slight decrease in the burden (-5.6%) by 2040, in the baseline scenario. Even when assuming no improvement in labor force participation, the dependency burden only increases by 4.9%. Fig. 31 illustrates the dependency trajectories between the three labor force scenarios.

The best labor force scenario considered is where participation follows life expectancy, as the growing population of seniors represents a critical potential source of labor to keep activated. Such a scenario results in an 11.9% reduction in dependency from 2023-2040. It is clear that labor force participation is key factor in the current and future dependency burdens in Moldova.

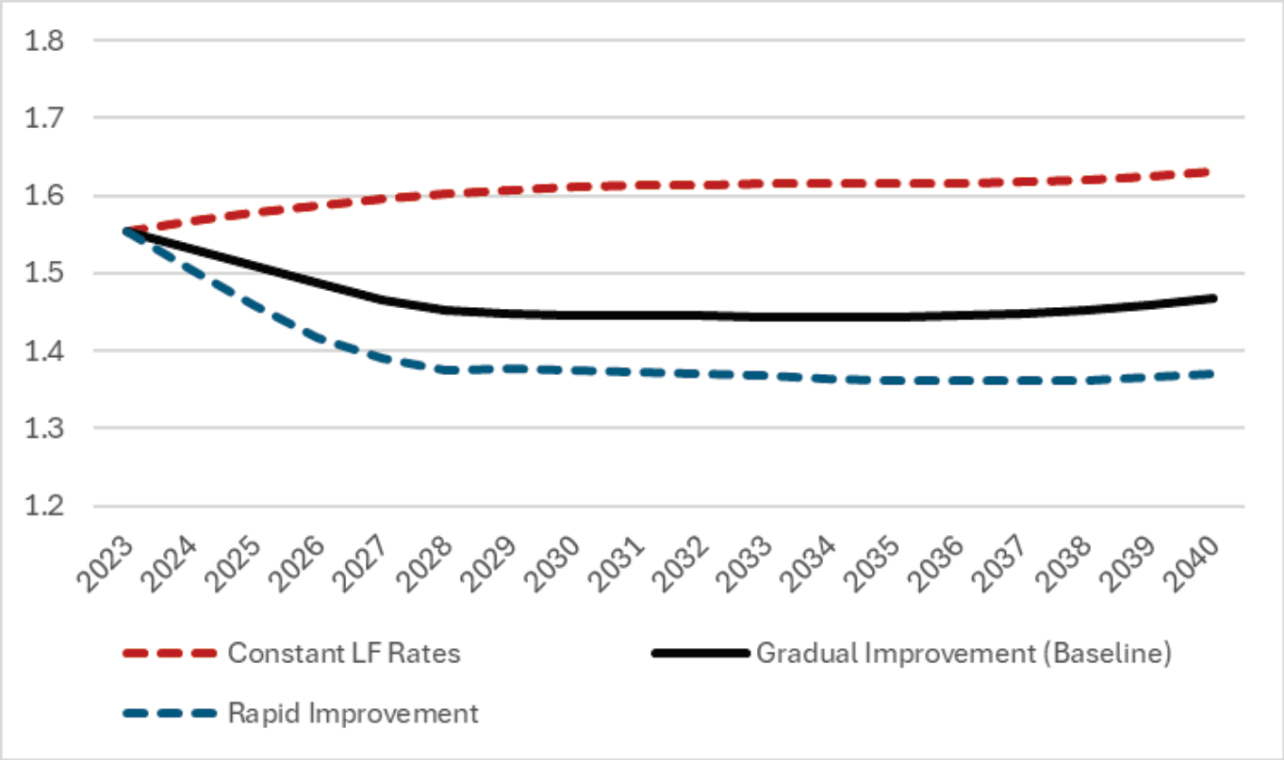


Fig. 31. Labor Force Dependency Ratios, Various Scenarios, 2023-2040

3.3. Human capital in alternative demographic scenarios

The range of possible human capital futures in Moldova depends not only on labor force participation rates, but the underlying demographic trends. The following covers two 'what-if' scenarios, aspirational targets for fertility and migration, to illustrate the influence of demographic trends on dependency.

The most dramatic change in age structures comes from the scenario where Moldovans achieve their desired fertility. While it has a relatively minor impact on human capital in the short run (the period under consideration), the grey foundation of the left pyramid (Fig. 32) indicates a major demographic reversal in motion.

The expanding young cohorts would begin to complete their education and enter working life in the years shortly after 2040, with the full (economic) benefits of a fertility recovery apparent further into the future. This what-if scenario demonstrates how even a dramatic jump in fertility is a longer-term investment, taking time before returns manifest.

[2] https://www.pnas.org/doi/full/10.1073/pnas.1918988117#sec-1

[3] As it stands, Moldova has higher potential than many countries for increased fertility given notable desires for children (2.68 on average), well above what is wanted in EU countries

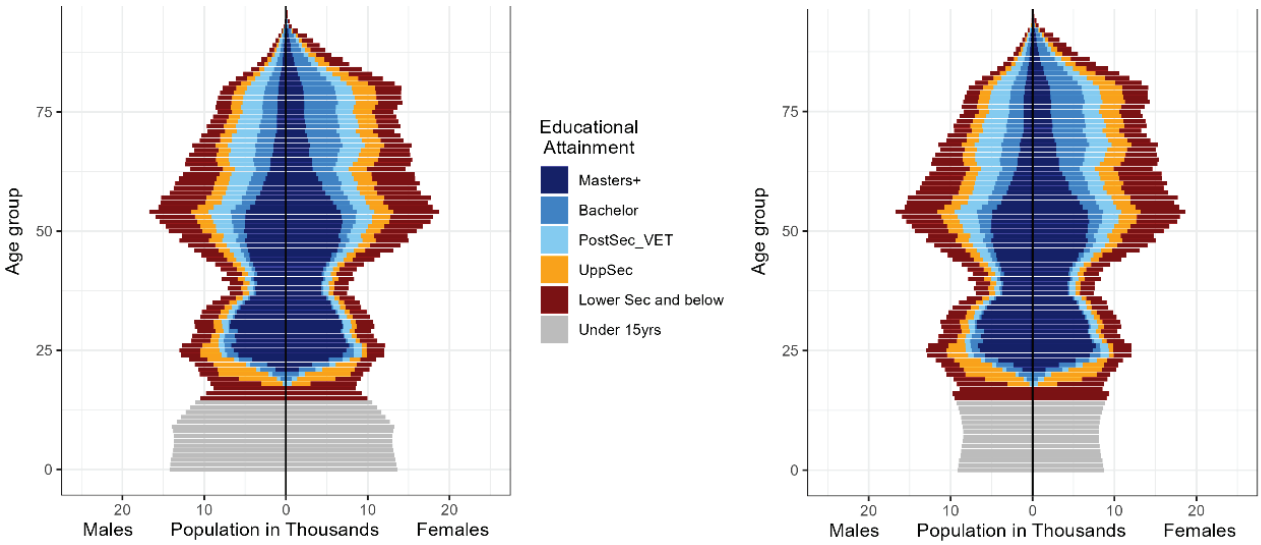


Fig. 32. Population pyramid, Desired fertility (left) vs. Baseline (right), 2040

While less impactful on the age structure, how the outflow of Moldovans changes in the coming years will remain highly consequential for the quantity of workers. Naturally, it is in the state's interest to ensure the youth can integrate into the economy. However, precedent in Romania and others in the region shows persistent challenges in the pursuit of such aims amid the draw of western European economies.

Fig. 33 compares how dependency levels unfold in the various scenarios. Unsurprisingly, achieving desired fertility would lead to a (short-term) worsening of dependency burdens as there are more children that require care. On the other hand, reduced outflows of Moldovans would slightly benefit the dependency balance, although most of the impact is in terms of the quantity of workers, rather than affecting the share workers in the population.

Still, among the scenarios tested, rapid improvement in labor force participation remains the scenario that makes the biggest difference. In general, the approximate 15% gap between the red line (constant participation rates) and the blue and black lines by 2040 highlights that multiple aspirational policy pathways exist for bringing down dependency burdens.

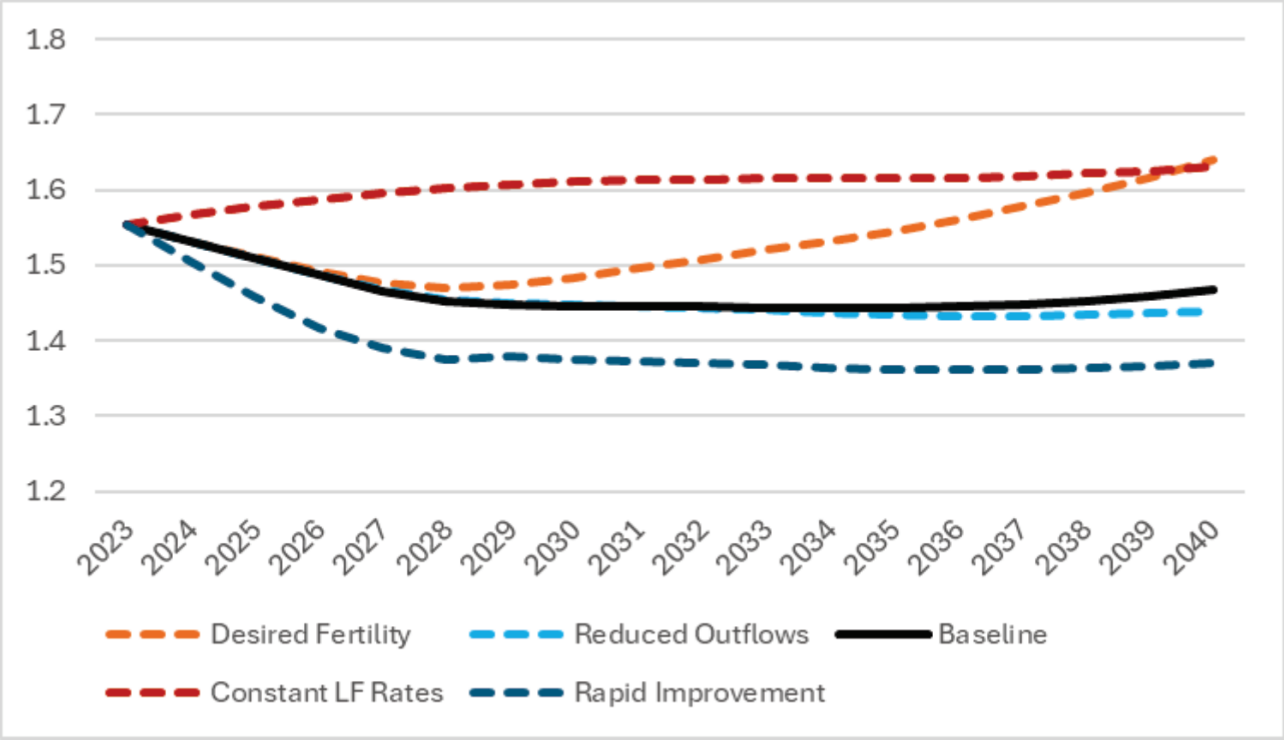


Fig. 33. Dependency ratio, Various labour force & demographic scenarios, 2023-2040

Key findings

Moldova's population (and labor force) is on track to continue its relatively dramatic shifts in terms of size and composition. While population decline and aging garner much policy attention, the improving human capital often goes under-appreciated – even though it can help overcome many of the anxieties about the future.

As it stands, even if labor force participation rates do not improve, Moldova is projected to see near-stability in its levels of dependency. While the situation is projected not to worsen over the coming years unlike many other countries, the absolute levels today remain high. The solution is to help people to cultivate their abilities and lead productive lives.

Ideally, Moldova will achieve a combination of the featured scenarios – rapidly improving participation rates, reducing outflows of youth, and empowering more Moldovans to achieve their desired fertility. Together, these trends would have a cumulative effect of strengthening human capital and bringing down dependency burdens to favourable levels for 2040 and beyond.

3.4. Methodological notes for references in Chapter 3

Establishing the labour force trend

Recent trends were set using the years 2019 and 2023 from Moldova's LFS. Longer-term trends could not be established due to a change in definition of agricultural workers, resulting in a break in the time series.

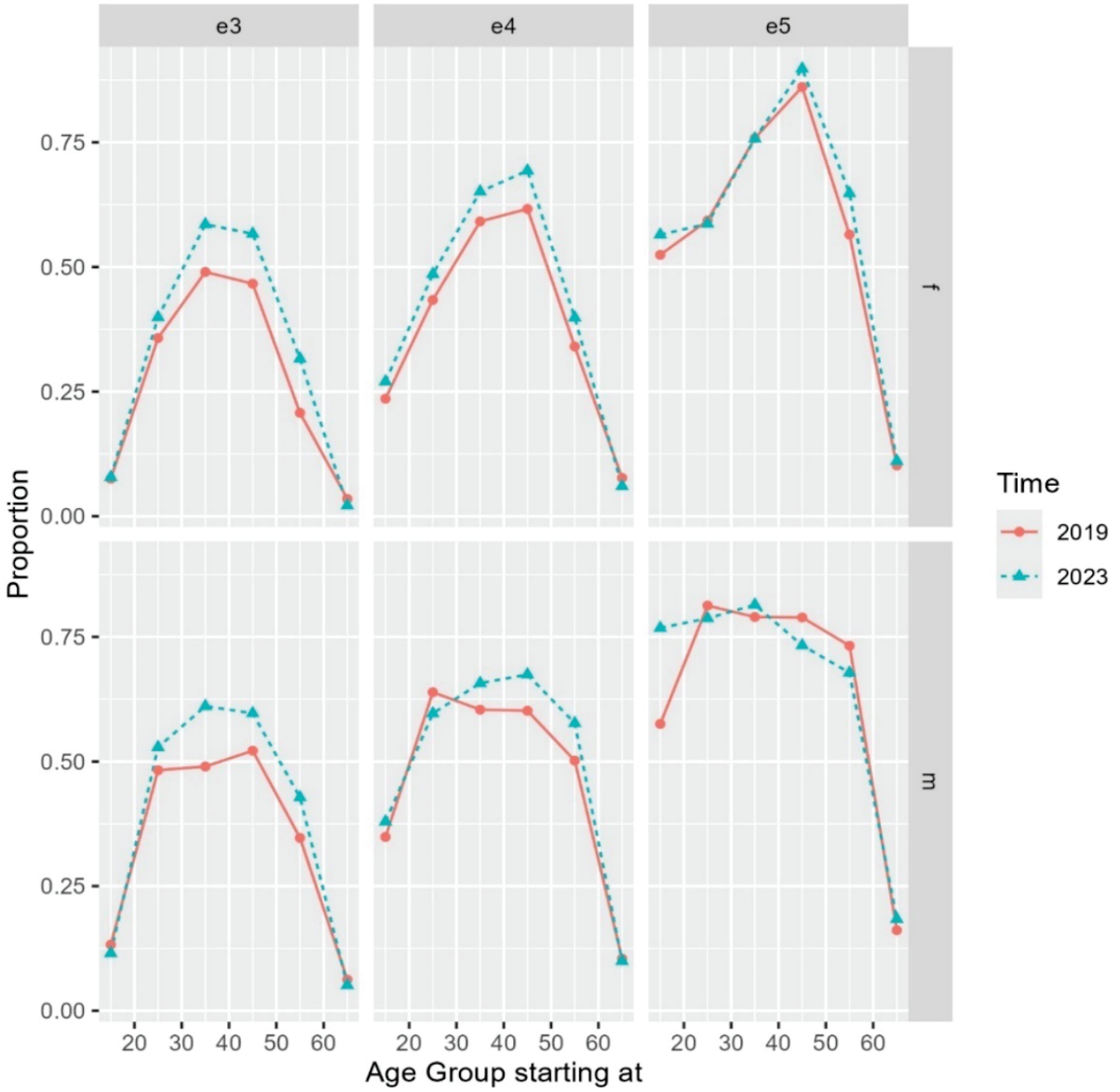


Fig. 34. Labor force participation rates by age, sex, and education, female (top row), male (bottom row)

Additional notes on the labour force scenarios

1. Labor Force – Gradual Improvement (Baseline)

For a few ages, the observed trends from 2019-2023 were slightly negative. For those cases when the age was above 60, the 2023 rates were held constant. Additionally, a general ceiling was implemented so that no single age-, sex-, and education-specific rate could overcome 95%.

Table 5. Additional results: Population by level of education (thousands), Baseline scenario

	Lower Secondary & Below	Upper Sec.	Post-Sec VET	Bachelors	Masters+
2023	654	294	309	327	416
2030	584	282	276	286	438
2040	481	240	228	222	513

2. Labor Force – Rapid Improvement

Labor force participation is extended from 2024-2028 in keeping with the planned upward adjustment of the retirement age to 63 for women; in the following years (2028-2040), but participation follows the change in life expectancy after 2028.

3.5. General methodological notes

Projections for Education and Labor Force Participation

I. Broad approach

- A multi-dimensional population projection model by age, sex, and educational attainment.
- The model consists of ages in five yearly age groups (0-4, 5-9, …, 100+), two sexes, and the seven educational attainment (names?) categories. The model starts in a given year (coinciding with the 2014 Census), updates with data from Census 2023, and moves forward in five-yearly timesteps until 2040.
- The model employs an extended cohort component model. The first step is to prepare a state space consisting of the population's initial distribution in different states or groups (education, age, and sex) and the transitions between them. In total, there are 294 states:

    1. Children under 15 years of age: There are three age groups, two sexes, and seven 'mother's education' groups (42 states)—for cohorts under 15 years old in 2020, data might not be available by mother's education.

    2. Adults 15 years and above: 17 five-yearly and a 100+ age group, two sexes, and seven education groups) (252 states).

Regarding transitions, there are four components of population change: fertility, mortality, migration, and educational attainment:

1) With time, people age and move deterministically to the next age group. Some leave their current state (being alive with a specific education) due to mortality. [Cohort component]

2) The state size could change with educational attainment due to education-related transitions for specific ages. We assume that all the education transitions cease once the cohort reaches 30-34 years old. Specifically, we assume that the transitions to primary will be completed by age 15-19, lower secondary by 20-24, upper secondary by 25-29, and post-secondary by 30-34.

3) Finally, emigration will reduce the state's size, while immigration will increase it. By the end of each projected 5-yearly timestep, the 0-4, 5-9, …, 100+ population will become 5-9, 10-14, …, 105+. The survivors in the last age group, 105+, are grouped with survivors aged 100-104 to form a new 100+ group.

4) Women reproduce, and newborns refill the population in the youngest age group, 0-4

years old. We employ fertility rates as the last of the components, meaning the contribution of migration to fertility is taken care of. Some of the newborns will die, and those surviving during the projection period are grouped by their mother's education, which is kept until age 15, and experience mortality differently.

*In this model, all the transitions are required by level of educational attainment.

II. Summary of the specific sources used + adjustments made in our case

Population structure

- The starting education composition by age, sex, and labor force participation comes from the 2014 Census.
- For 2023, the age and sex structure comes from the Census. Detailed data has yet to be made available.
- Education

Trends of education transitions by sex were generated from the 2014 data. These trends were then extrapolated to the base year 2023 using logits of the educational attainment progression ratios (EAPRs) as explained below.

Let age = 15, 16, …, 100+, educ = 0, 1, 2, …, 6 represent educational attainment levels, namely, no education, primary, lower secondary, upper secondary, post-secondary non-tertiary, bachelors and masters+ and let y(age,educ,t,sex) represent proportions of people in age group age with education level educ in a given year, t, separately for males and females.

By definition,

$$educy(age,educ,t,sex) = 1$$

Let educ' be a specific level of education. The proportion of people of a given age and gender in the year 2014 who have at least that level of education can be written as:

$$Y(age, educ', 2014, sex) = educ=educ'6y(age,educ,2014,sex) \quad (1)$$

The educational attainment progression ratio, EAPR(age,educ',2014, sex), is the proportion of people of a given gender in 2014 who have education levels higher than educ' among those with education level educ' and higher. We write:

$$EAPR(age, educ', 2014, sex) = Y(age, educ'+1, 2014, sex) Y(age, educ', 2014, sex) \quad (2)$$

Note that EAPR(age,6,t,sex)=0 for all years.

The value of EAPR (age,educ',2014, sex) cannot be less than zero or greater than 1, as both numerator and denominator are non-negative and Y(age,educ',t, sex) ≥ Y(age,educ' +1,t, sex). To ensure that the EAPRs were always in this range, we worked with the logit of EAPRs in analysis. Assuming that the logit has two advantages, first, it will ensure that the EAPR always remains between 0 and 1. Secondly, when plotted on the graphs, logits of EAPRs show a higher degree of linearity in most cases. The property of the logistic curve is asymptotic to the boundaries (ex. EAPR to primary = 1) representing well the behaviour of EAPR's, with a slow increase at the beginning, followed by a faster increase and then slowing down again towards the end. The upper limit of each EAPR can also be controlled by transforming the EAPRs as,

$$EAPR^* = EAPR/(\text{upper limit}), \quad (3)$$

and then taking the logits for further calculations. Define the upper limits if needed. E.g. assuming the upper limit for EAPR to Masters+ from bachelor is 0.6, then EAPR*(age, bachelor, 2014, sex) = EAPR(age, bachelor, 2014, sex)/0.6.

For each education and gender group, define the ultimate age (A) after which EAPR = 0. Assume A= 15, 20, 22, 25, 27, and 30 for the consecutive six education transitions. For estimating the trend in EAPR, use the EAPRs(age>= A to A+m), where m = 10 or 11 to consider the latest trend only, and run the following linear regression:

$$\text{logit}[EAPR(age,educ',2014, sex)] = a(educ', sex) + b(educ', sex).\ coh + \varepsilon\ , \quad (3)$$

where coh = 2014-age-1, for age in (A, A+1, …. A+m).

Use the estimated coefficients to extrapolate for the future cohorts (coh). In other words, this procedure extrapolates the proportions in the age groups based on the trend of changes - mostly improvements - that is observed for up to 11 older cohorts.

While linear regression logits of EAPRs are used in this method, other methods can be used for fitting the trend.

During the projection, transform the extrapolated EAPRs to proportions and apply only to ages between 15 to the ultimate education specific age A after applying the survival ratio. Alternative education scenarios can be implemented in many ways, such as setting targets for future EAPRs by changing the b coefficients or setting the ultimate EAPRs for cohorts.

Labour force

- Labor force participation (LFP) values come from Census 2014; Updated with Labor Force Survey 2023 (Broader 10-year Age Group Categories)
- Define scenarios for the future. There are different ways to introduce labor force participation scenarios. One way is to assume the age, sex, and education-specific LFP rates of the youngest cohort (e.g., 30-34, out of education) or the highest among the cohorts and assume it to continue until the retirement age (or slowly tapering by the end age). Another optimistic scenario is to assume a convergence of the LFP rates of advanced countries. Once the scenario is defined, at the end of the projection step, apply the assumed LFP rates to the population structure by age, sex, and educational attainment.

4. DEMOGRAPHIC PROJECTION IN TERRITORIAL PROFILE

4.1. Demographic projection methodology in territorial profile

The population number and structure projection at the district level is derived from the national projection, applying the same reference assumptions. However, a single scenario—the low scenario, considered the most likely—was utilised due to limitations in baseline data at the sub-national level. This approach reflects existing demographic trends and minimises the risk of amplifying errors within the projections.

Given the relatively small populations of many administrative-territorial units, the demographic forecast at the territorial level was conducted using five-year age intervals with a five-year step over 10 years. With 2023 as the base year, projections were made for 2028 and 2033, enabling the monitoring of medium-term demographic trends and providing a robust foundation for regional planning and policy adjustments tailored to the specific needs of each administrative-territorial unit.

The primary source of potential error in regional-level data stems from its structure. District-level projections rely on available data grouped into five-year age cohorts, as opposed to single-year age structures that allow for more detailed analysis. Within five-year age groups, intra-group uniformity is applied, assuming that demographic phenomena occur with similar intensity throughout the group. However, in reality, these intensities can vary significantly between individual ages. While these variations introduce minor discrepancies, they are not substantial enough to compromise the overall reliability of the projections.

Another critical factor influencing district-level projections is the estimation of internal migration, which can lead to population number and structure differences between national and regional levels. This population balance equation component can affect territorial projections' accuracy and highlights the importance of improving data collection and monitoring systems for migration patterns. Addressing this aspect is essential to enhance the precision of regional demographic projections and ensure they effectively support evidence-based policymaking and regional planning.

Life expectancy at birth projection in a territorial profile

The projection of life expectancy dynamics for the 2024–2033 period at the district level is based on national trends, assuming an annual linear increase of 0.26 years for men and 0.24 years for women, consistent with the low national scenario. Considering regional disparities in mortality structures and life expectancy across different territorial profiles (Penina, 2022; 2021), baseline year mortality tables were developed for Chisinau municipality and the Northern, Central, and Southern development regions. These calculations utilise data on age-specific death distributions and place of death provided by the National Public Health Agency, along with average population figures by age and territorial profile for 2022–2023, sourced from the NBS database.

Creating typical mortality tables for development regions addresses two key challenges: the annual fluctuations in mortality rates in districts with small populations and the limitations of available data on population structure by age and sex at the territorial level. These tables serve as a foundation for forecasting mortality across administrative-territorial units.

In Chisinau municipality, for the 2024–2033 period, life expectancy is projected to rise from 70.5 years to 73.1 years for males and from 78.7 years to 80.7 years for females. In the Northern districts, life expectancy is expected to increase for males from 67.0 years to 69.4 years, while for females, it is projected to rise from 76.1 years to 78.2 years. In the Central districts, life expectancy is projected to increase from 65.9 years for males and 74.9 years for females to 68.4 years and 77.2 years, respectively. Similarly, in the Southern districts, the demographic projection indicates an increase in life expectancy for males from 67.2 years to 69.6 years, while for females, the expected rise is from 75.7 years to 77.9 years (Table 6).

Table 6. Life expectancy at birth for Chisinau municipality North, Central and South regions projection

	2022-2023		2028		2033	
	Male	Female	Male	Female	Male	Female
Chisinau mun.	70.5	78.7	71.8	79.9	73.1	80.7
North	67.0	76.1	68.2	77.2	69.4	78.2
Centre	65.9	74.9	67.2	76.1	68.4	77.2
South	67.2	75.7	68.4	76.8	69.6	77.9

Source: population projection in territorial profile, 2023-2033

Fertility projection in territorial profile

The small population size in certain districts—such as Basarabeasca, where the NBS reported only 16,000 inhabitants at the beginning of 2024—results in a limited number of demographic events, complicating the development of accurate projections. For instance, only 140 births were recorded in Basarabeasca in 2023. Relying on such small populations for demographic assumptions increases the risk of errors due to random fluctuations. To mitigate this, a regional level of analysis was chosen for fertility trends based on the premise that reproductive behaviour is more coherent within the same region. Accordingly, fertility models were developed for the North, Central, and South regions, with Chisinau analysed separately due to its larger population and distinct reproductive patterns.

For the regional projections, Scenario 1 – low, considered the most likely, was applied as it reflects existing demographic trends. At the national level, this scenario predicts a gradual decline in the TFR from 1.7 children per woman in 2024 to 1.6 by 2040. For the projection horizon (2028 and 2033), fertility is projected to decrease moderately to 1.67 and 1.64 children per woman, respectively. The same rate of TFR decline was applied regionally, as the average observed TFR in the regions aligns closely with the national level. However, regional variations in TFR trends were observed, reflecting distinct socio-demographic characteristics (Table 7). For Chisinau, TFR is projected to remain nearly unchanged

during the 10-year forecast period due to its already low baseline level. The most pronounced TFR decline is expected for the North region, continuing a trend observed in recent years. This decline is attributed to the region's ethnic composition, particularly the presence of the Ukrainian population, which exhibits fertility rates below the national average. A slower decline in TFR is forecast for the South region, reflecting the region's historical stability in fertility levels. Starting with a TFR of 1.98 in 2023, the Centre region is projected to experience a moderate decrease, reaching 1.9 children per woman by the end of the forecast period.

Table 7. TFR by region for the base year and forecast horizon

Region	2023	2028	2033	Decline 2033/2023, %
Chisinau	1.29	1.29	1.28	0.01%
North	1.72	1.65	1.62	5.5%
Centre	1.98	1.93	1.90	4.2%
South	1.77	1.73	1.72	2.9%

Source: population projection in territorial profile, 2023-2033

Internal and international migration projection in territorial profile

The estimation of the number of internal migrants was based on retrospective data from 2017–2023, capturing migratory balance by territorial profile as recorded by the Public Services Agency through changes in population domicile and residence. However, certain methodological aspects of domicile registration impact the accuracy of these data. For instance, domicile registration occurs upon the first request for an internal use document, and undeclared changes of domicile lead to an underestimation of the actual number of internal migrants entering or leaving a locality.

To assess changes in the age-sex structure of the population at the administrative-te rritorial unit level resulting from internal migration, the demographic projection methodology applies the average migratory balance rate recorded between 2017 and 2023. Internal migration within an administrative-territorial unit is estimated using the age profile of migration derived from the population structure of the originating localities. The model maintains an average internal migratory balance for the entire projection horizon, ensuring consistency in the projections.

International migration patterns show significant regional variation, with differing levels among districts (Annex 1). Projections for international migration were developed individually for each administrative-territorial unit using BNS data, calculating the average migration rate for 2017–2021. Due to the heightened intensity of international migration in 2022, which included notable fluctuations in some regions, data from 2022 were excluded from district-level projections to avoid incorporating temporary irregularities.

Territorial migration projections were aligned with the low scenario of the national population projection, which assumes a linear decrease in net migration rates from -1.01 to -0.69% of the total population. Calculations were conducted in two steps, using the DAPPS

algorithm, which required three data series for accurate mid-period population calculations. These series included the original migration values, adjusted values at 85% of the original, and further adjusted values at 70% (Fig. 35). This method was also applied to TAU Gagauzia, the only region reporting positive international migration rates.

The demographic projection incorporates the age-sex profile of migration observed during the 2017–2021 period, which ensures that projections reflect realistic migration dynamics and their impact on population structure. By addressing both internal and international migration trends, the methodology provides a robust framework for assessing demographic changes at the administrative-territorial level while accounting for the specificities of each region.

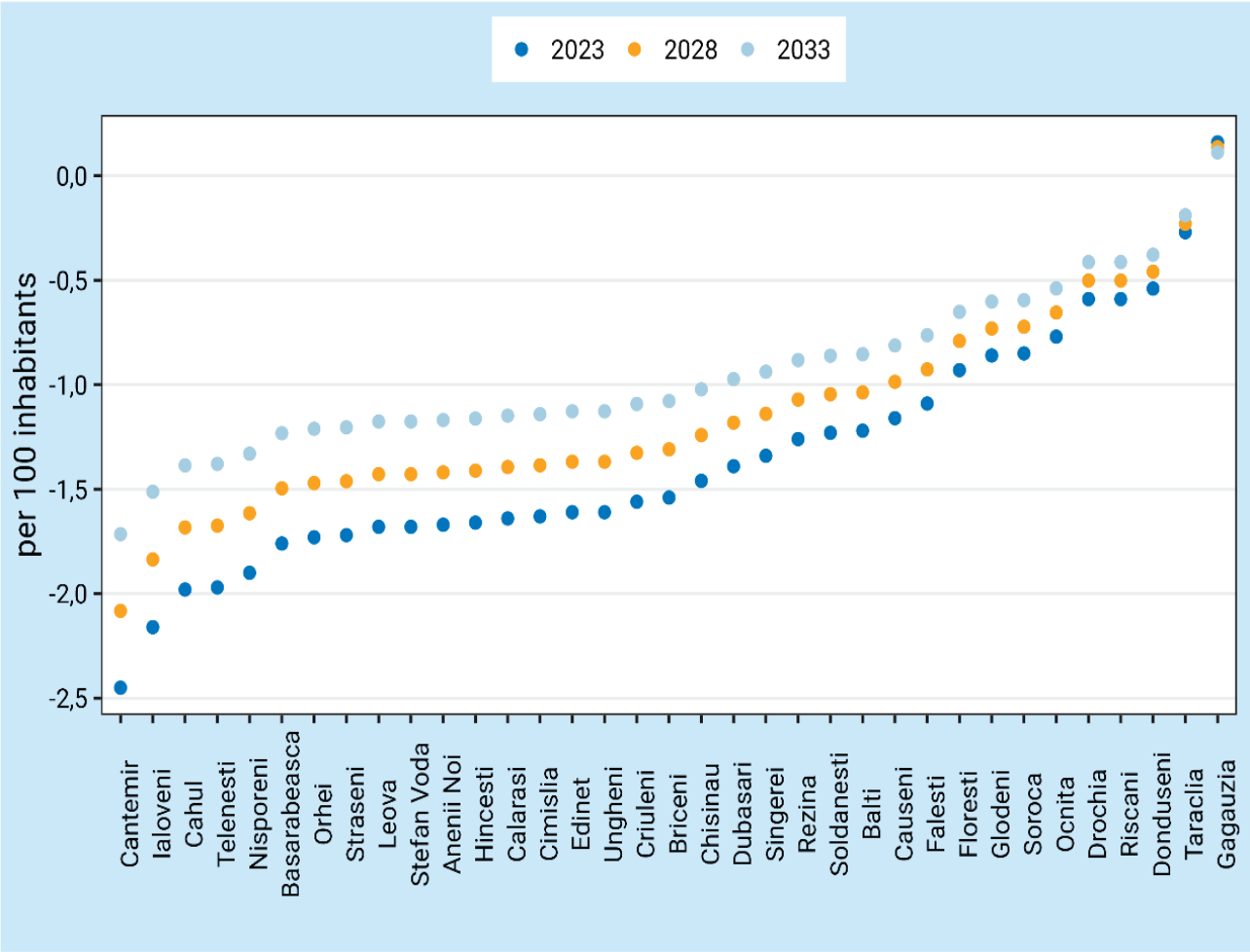


Fig. 35. Average net international migration rate by districts
Source: demographic projection in territorial profile, 2023-2033

4.2. Projected population by territorial-administrative units

The projection results for territorial-administrative units for 2033 (Table 8) reveal a significant population decline across most regions of the Republic of Moldova, confirming the ongoing trend of widespread depopulation. Many districts in the North, Centre, and South regions are expected to see population decreases exceeding 17%, driven by the combined effects of migration, negative natural growth, and population ageing.

Chisinau municipality is projected to experience one of the lowest rates of population decline, at 5.4%, with the population decreasing from 665.5 thousand in 2023 to 629.5 thousand in 2033. Positive internal migration, particularly among young and working-age individuals, is a key factor in maintaining a more stable demographic balance in the capital. Chisinau continues to attract migrants from across the country due to its relatively better economic and social opportunities.

The North region, strongly affected by population ageing, is projected to face a population decline of 17.1%, from 644.6 thousand in 2023 to 534.2 thousand in 2033. Negative natural growth and high emigration rates, particularly among young people, are the primary drivers of this decline. The districts most impacted include Edinet and Briceni, each with a 22% decline, and Drochia with a 17.5% decline. In Balti, the region's largest urban centre, the population is expected to decline by 9%, reflecting a more moderate urban trend compared to rural areas.

The Central region is projected to experience the most substantial population decline, at approximately 20%, from 674.2 thousand in 2023 to 540.0 thousand in 2033. High international migration rates, especially among young people, are the main contributors to this reduction. The most affected districts include Telenesti (-25.2%), Nisporeni (-23.2%), Hincesti (-21.4%), and Calarasi (-21.7%). These trends reflect limited economic opportunities in the region, making it less attractive to young peeople.

The South region's population is expected to decline by 16.3%, from 439.1 thousand in 2023 to 367.6 thousand in 2033. The districts of Cantemir (-26.8%), Stefan-Voda (-23.5%), and Cimislia (-23.1%) will be the most affected. These declines are driven by significant migration among young and working-age individuals and the rapid ageing of the population.

In contrast, TAU Gagauzia is projected to experience the smallest population decline, at only 3.9%, with the population decreasing from 115.2 thousand in 2023 to 110.7 thousand in 2033. This relative stability is attributed to lower internal migration rates and a circular pattern of international migration, which does not drastically affect the population size. Additionally, Gagauzia's higher fertility rate compared to the national average contributes to its demographic resilience.

The projections reveal a stark contrast between the pronounced depopulation of rural and peripheral areas and the relative demographic stability in urban centres and autonomous regions such as Chisinau and Gagauzia. Across all regions, the population structure is shifting, with significant declines in the proportion of young people (0–19 years) and the working-age population (20–64 years), alongside a substantial increase in the elderly population (65+ years). This demographic transformation underscores the urgent need for targeted policies to address the challenges of population ageing, labour force shrinkage, and rural depopulation. Strategic interventions to support demographic regeneration, improve regional economic opportunities, and promote balanced development are essential to mitigate the long-term consequences of these trends for Moldova

Table 8. Projected population by territorial-administrative units

	2023	2028	2033	Reduction, %
Total Republic of Moldova	**2423294**	**2236942**	**2071362**	**-14.5**
Chisinau	665462	646811	629465	-5.4
North	644576	586350	534210	-17.1
Balti	89357	85131	81331	-9.0
Briceni	47962	42203	37402	-22.0
Donduseni	29675	26999	24599	-17.1
Drochia	56746	51587	46831	-17.5
Edinet	52752	46264	40804	-22.6
Falesti	61987	56056	50744	-18.1
Floresti	60119	54506	49450	-17.7
Glodeni	40528	36881	33530	-17.3
Ocnita	37257	33802	30633	-17.8
Riscani	46869	43097	39574	-15.6
Singerei	61628	55467	49902	-19.0
Soroca	59696	54357	49410	-17.2
Center	674195	602297	540051	-19.9
Anenii Noi	57718	51724	46517	-19.4
Calarasi	45214	39916	35399	-21.7
Criuleni	53338	48358	43957	-17.6
Dubasari	23404	21302	19416	-17.0
Hincesti	70431	62311	55353	-21.4
Ialoveni	69771	62892	57025	-18.3
Nisporeni	37126	32464	28509	-23.2
Orhei	75228	67265	60326	-19.8
Rezina	32523	29214	26234	-19.3
Straseni	61754	55303	49768	-19.4
Soldanesti	27405	24520	21953	-19.9
Telenesti	41615	35927	31144	-25.2
Ungheni	78668	71101	64450	-18.1
South	439061	401484	367636	-16.3
Basarabeasca	16200	14318	12689	-21.7
Cahul	74468	66137	59020	-20.7
Cantemir	34327	29264	25144	-26.8
Causeni	60926	55345	50258	-17.5
Cimislia	31781	27846	24432	-23.1
Leova	31404	27758	24557	-21.8
Stefan-Voda	45135	39455	34522	-23.5
Taraclia	29624	27999	26303	-11.2
TAU Gagauzia	115196	113362	110711	-3.9

Source: demographic projection in territorial profile, 2023-2033

By 2033, the proportion of young people in the total population is projected to stabilise at approximately 20% in many territorial-administrative units, including the municipalities of Chisinau, Balti, and Cahul (Table 9). However, some districts will experience a significantly lower share of young people. For instance, Briceni and Edinet are expected to have around 16% and 16.5% young people, respectively, while Ocnita will record the lowest percentage, at just 13%. These disparities highlight regional imbalances in the distribution of young populations, driven by factors such as migration patterns and the economic attractiveness of specific areas.

The working-age population is expected to experience a more moderate decline compared to younger age groups. The country's northern districts are projected to maintain a relatively higher labour force potential due to a more balanced age structure. By 2033, the working-age population will represent an average of 55% of the total population in the North region, with Ocnita reaching 58.2% and Balti at 60.5%. This suggests a relatively resilient labour market in the North despite ongoing challenges from external and internal migration.

In the Central region, the ratio between young people, the working-age population, and the old people will remain relatively balanced. Still, the share of adults aged 20–64 will be slightly lower than in the North, ranging between 49% and 54%. This decline is attributed mainly to internal migration towards Chisinau and international emigration, which have reduced the active population in this region.

In the South Region and TAU Gagauzia, declines in both the young and working-age populations are anticipated, but these decreases will be less pronounced than in other regions. The old population is also expected to grow at a slower rate, indicating a relatively stable demographic potential that is less affected by migration, at least in the medium term.

Significant ageing trends are evident across Moldova's regions. By 2033, the proportion of the population aged 65 and older is projected to exceed 25% in many districts. In some areas, such as Telenesti, Basarabeasca, and Cimislia, they could constitute up to one-third of the total population. These changes reflect a clear pattern of demographic ageing, particularly in rural and peripheral districts, where young and working-age populations are declining rapidly.

The projected demographic shifts will have far-reaching consequences for the labour market, healthcare systems, and social assistance infrastructure. A growing old population, coupled with a declining working-age demographic, underscores the urgency of strategic planning to address these challenges. Tailored, region-specific interventions will be essential to managing Moldova’s demographic transformation and ensuring sustainable socio-economic development.

Table 9. Changes in population structure by territorial-administrative units

	2023			2028			2033		
	0-19	20-64	65+	0-19	20-64	65+	0-19	20-64	65+
Total Republic of Moldova	23	59.6	17.4	21.5	57.2	21.3	19.4	56.9	23.8
Chisinau	23.3	62.9	13.8	20.6	62.9	16.5	17.2	64.4	18.5
North	20.9	59.5	19.5	19.8	56.6	23.6	18.3	55.3	26.3
Balti	23.9	60.8	15.3	22.6	59.5	17.9	20.4	60.5	19.1
Briceni	18	59.4	22.6	16.8	56.2	27	16	54.7	29.4
Donduseni	19.8	58.3	21.9	19.2	55.9	24.9	18.5	54.4	27.2
Drochia	19.7	58.2	22	18.8	55.3	25.9	17.9	53.3	28.7
Edinet	19.5	58.3	22.2	18.1	55.1	26.7	16.5	53.9	29.5
Falesti	22.7	59.1	18.2	21.5	55.9	22.6	20.1	54	26
Floresti	21.9	59.2	18.9	20.8	55.9	23.3	19.2	54.2	26.7
Glodeni	22	58.9	19.1	21.1	55.5	23.5	19.3	54.2	26.5
Ocnita	15.3	62.7	22	14.1	60	25.9	13	58.2	28.7
Riscani	19.7	59.7	20.6	18.7	56.9	24.4	17.4	55.7	26.9
Singerei	23.5	58.6	17.9	21.8	55.3	22.9	19.5	54.1	26.4
Soroca	20.1	60.6	19.3	19.2	56.3	24.6	18.2	53.4	28.5
Center	24.6	57.6	17.8	23.7	53.6	22.7	22.3	51.9	25.8
Anenii Noi	22.2	58.5	19.3	21.3	54.6	24.1	19.9	53.5	26.5
Calarasi	25.1	55.8	19.1	24.8	51	24.2	23.5	49	27.5
Criuleni	24.8	59	16.2	24	55.2	20.8	22.4	54.1	23.5
Dubasari	23.3	59.2	17.5	22.8	54.7	22.6	21.6	52.8	25.6
Hincesti	25	55.1	19.9	24.2	51.4	24.4	23.2	49.9	26.8
Ialoveni	26.2	57.7	16.2	24.7	54.5	20.8	22.3	54.3	23.5
Nisporeni	25.7	55.1	19.2	24.3	51.2	24.6	23	49	28
Orhei	24.6	58	17.4	23.8	53.6	22.7	22.5	51.4	26.1
Rezina	22.6	59.9	17.4	21.8	56	22.2	21.1	52.9	26
Straseni	25.3	56.4	18.3	24.4	52.6	23.1	22.6	52	25.5
Soldanesti	24	59.6	16.4	23.5	54.5	22	22.7	51	26.3
Telenesti	23.8	57.2	19.1	22.9	51.4	25.7	22	47.4	30.6
Ungheni	25	59.2	15.7	24.3	55.6	20	22.9	53.9	23.1
South	23.4	57.6	19	22.1	54.2	23.7	20.3	53.6	26.1
Basarabeasca	22	56	22	20.7	51.3	27.9	19.7	49.4	30.9
Cahul	22.5	58.7	18.8	21.2	54.8	24	19.4	53.5	27.1
Cantemir	26.1	56.2	17.7	24	52	24.1	21.6	50.1	28.3
Causeni	22.8	58.2	19	21.1	55.2	23.7	19.3	53.9	26.8
Cimislia	23	54.2	22.7	22.5	48.7	28.8	21.1	46.7	32.2
Leova	24	57.4	18.6	22.3	53.2	24.4	20.3	51.7	27.9
Stefan-Voda	22.9	57.8	19.4	21.5	53.2	25.3	20.2	50.8	29.1
Taraclia	20.4	60.1	19.5	19.3	57.8	22.9	18.1	57.5	24.5
TAU Gagauzia	24.6	57.6	17.8	23.6	55.2	21.2	21.4	56.6	22

Source: demographic projection in territorial profile 2023-2033

CONCLUSIONS AND RECOMMENDATIONS

The demographic projection for Moldova indicates a continuous decline in population in the coming decades, driven by massive emigration, low number of births, and accelerated ageing. All scenarios show an increase in the share of older people alongside a decrease in the proportion of young people. This trend creates a generational imbalance and a higher dependency ratio, meaning that the economically active population will have to support an increasingly larger proportion of dependents, including children and the elderly.

Migration, particularly the emigration of individuals of reproductive and working age, remains a major driver of demographic decline. This phenomenon reduces the pool of potential parents, leading to fewer births and a negative natural growth rate. Additionally, migration significantly alters the age structure of the remaining population, further exacerbating demographic imbalances. Without proactive measures to curb emigration and attract young people back to the country, the population decline will intensify, with increasingly detrimental effects on economic and social development. The population decrease in all regions of Moldova underscores the cumulative impact of migration, low birth rates, and ageing, putting pressure on local structures and regional economies.

In the long term, population decline and rapid ageing pose significant risks to stability and sustainable development. The shrinking active population reduces the available labour force, leading to lower productivity and constraining the economy's capacity for sustained growth. As the number of working-age individuals declines, key economic sectors will likely face challenges in recruiting and retaining sufficient personnel, potentially eroding the country's international competitiveness.

Population ageing, combined with a decreasing number of taxpayers, places considerable strain on the pension system and social assistance services. As the proportion of older individuals rises, so does the demand for financial resources to support pensions and medical care, exacerbating budget deficits and threatening overall economic and financial stability.

This demographic shift also underscores the urgency of adapting infrastructure and services to cater to the needs of an ageing population. The growing share of old people will necessitate the expansion of healthcare, long-term care, and social assistance services. While increased life expectancy is a positive development, it brings with it complex challenges that require strategic investments and systemic reforms to ensure the sustainability of social support systems.

Addressing these issues will involve creating inclusive policies, promoting active ageing, and leveraging technological and structural innovations to mitigate an ageing population's economic and social impacts, ensuring a balanced and sustainable path forward.

The rising dependency ratio, the proportion of economically inactive individuals to those active, places increasing pressure on the working population to support a growing share of dependents, including the old people and children. This demographic imbalance can divert

resources from critical investments in education, healthcare, and infrastructure, undermining the country's capacity to achieve sustainable development goals.

A shrinking population, compounded by the emigration of young and highly educated individuals, significantly reduces the nation's ability to foster innovation and technological advancement. Young people tend to be more receptive to adopting new technologies and initiating entrepreneurial ventures. Their departure limits the potential for private sector growth and hampers digital transformation—crucial drivers of a modern and sustainable economy. This outflow of human capital weakens the labour market and deprives the country of the creativity and dynamism needed to adapt to global economic challenges.

The projected demographic changes highlight the need for proactive policies and support strategies to stabilise the population. Reducing emigration, supporting younger generations, and encouraging birth rates could help adapt to new demographic realities and ensure balanced and sustainable economic and social development. At the same time, promoting an attractive and stable economic environment that provides opportunities for young people is essential to sustaining a dynamic economy adapted to long-term demographic changes.

Addressing the issue of emigration and its negative effects requires a comprehensive and integrated approach. The government and relevant institutions must prioritise policies that enhance the country's economic and social attractiveness, motivating citizens to remain and actively contribute to national development. These policies could include economic incentives, investments in infrastructure and high-quality public services, and reintegration programmes for those who wish to return. Only through a coordinated and holistic approach can Moldova mitigate the adverse impacts of emigration and lay the foundation for a more prosperous and sustainable future for its citizens.

To address the challenges associated with population ageing, a reevaluation of economic and social strategies is necessary to ensure long-term sustainability. Strategies to encourage labour market participation across all age groups must be implemented, ensuring workforce competitiveness throughout the entire economic lifecycle through continuous training and retraining programmes and creating flexible and adapted working conditions to encourage older individuals to remain in the workforce longer. Technology can be crucial in mitigating the negative effects of a shrinking active population, as automation and technological innovation can compensate for labour shortages and increase economic productivity. Supporting healthy lifestyles and extending workforce participation to maintain a robust and capable labour force, reducing pressure on pension and healthcare systems.

Investments in assistive technologies, the development of policies promoting active and healthy ageing, and adapting urban and rural infrastructure to be more age-friendly are measures that would help social institutions adapt to a society with a high proportion of older people. As demographic projection illustrate, transitioning to an older age structure is inevitable, necessitating a comprehensive and coordinated approach involving government, the private sector, and civil society. This collaboration is essential to manage these shifts'

economic and social impacts effectively. Tailored interventions, aligned with technological advancements and robust social policies, will maintain economic resilience and societal well-being.

Implementing tailored public policies to encourage young people to start families and support work-life balance is another important direction for public policy. Authorities must invest in financial support programmes for families, high-quality accessible healthcare and education services, particularly for vulnerable social groups. Creating a stable economic environment with supportive policies will foster confidence among young people, encouraging them to make positive decisions about childbearing and family formation.

In the context of declining mortality, increasing life expectancy, and efforts to reduce regional disparities, prioritising investments in prevention and education programmes to promote healthy lifestyles is crucial. Ensuring equitable access to healthcare for rural populations, reducing health risk factors, supporting mental health, and promoting a balanced work environment can reduce premature mortality and increase life expectancy in the long term. This would lead to more balanced demographic and social development in Moldova. Investments in medical transportation systems to serve isolated regions are also vital. Providig mobility for healthcare providers and patients can significantly reduce regional disparities by ensuring equal access to essential services. These improvements would enable all citizens to benefit from quality healthcare, ultimately leading to longer, healthier lives and fostering more balanced demographic and social development in Moldova.

Regional development policies are essential for addressing imbalances caused by internal migration and fostering equitable growth across Moldova. Investments in rural development, educational and economic facilities, and incentives for young people could help reduce the exodus of the active population and stabilise the demographic structure in the long term. These measures can stabilise the active population, reduce the exodus of workers, and support long-term demographic balance. By fostering regional resilience and ensuring equitable development, such policies can mitigate the pressures of urbanisation while enhancing opportunities and living standards across Moldova's regions.

Depopulation affects all districts in Moldova, underscoring the need for a comprehensive and well-defined strategy to address these challenges. Sustainable economic growth is strongly linked to urbanisation, as cities provide greater opportunities for economic diversification, modern infrastructure, and an improved quality of life. As the country's primary economic and social hub, Chisinau municipality plays a pivotal role in attracting young people from across Moldova. To improve the demographic balance of the municipality, implementing policies to support young families, facilitate access to housing, and create new employment opportunities are essential. By implementing these policies, Chisinau can enhance its capacity to retain and attract talent, reduce regional disparities, and catalyse Moldova's broader economic and social development.

A key policy objective should be the strengthening of small towns and district centres as regional development poles. Strategic investments in infrastructure, public services, and

job creation can transform these centres into vibrant hubs, attracting residents from neighbouring rural areas and providing access to high-quality education, healthcare, and social services. This approach promotes regional balance and helps stabilise the population. This could include supporting SMEs, promoting agricultural cooperatives, eco-tourism, or economic activities specific to each region, such as agriculture, food processing, and local crafts. This strategy can stimulate sustainable local economies, reduce migration to larger cities, and provide stable job opportunities. Better connectivity between regional centres, nearby villages, and large cities could facilitate access to resources and opportunities without forcing people to relocate. Developing regional public transportation and quality road infrastructure would support rural populations in accessing services and jobs more easily and equitably.

Strengthening regional development poles requires ensuring access to high-quality education, healthcare, and essential services, which are fundamental to creating sustainable and attractive communities. Targeted investments in modern infrastructure—including hospitals, schools, vocational training centres, and local health facilities—are vital to meeting population needs and attracting new residents to these areas. Additionally, modern services, such as digitisation of public administration and widespread access to high-speed internet, can significantly improve the quality of life in these regions, facilitating access to information, remote work opportunities, and online educational services. These initiatives not only increase the attractiveness of the regions but also support their integration into a digital economy, offering development prospects and reducing disparities between urban and rural areas.

Policies to support young people and families in regional centres can significantly contribute to strengthening and increasing the attractiveness of these communities. Subsidies for affordable housing and support programmes for purchasing or renovating homes can encourage young people to settle in these areas. Moreover, access to quality education and childcare services, such as modern nurseries and kindergartens, is essential for providing families with a friendly and safe environment for raising and educating children. Fiscal incentives, such as tax reductions for young entrepreneurs or families with children, can also make these regions more attractive by offering a positive and stable economic outlook. This way, regional centres become more competitive and vibrant, helping maintain demographic balance and stimulate sustainable economic development.

Developing policies to attract diaspora members and limit external migration is essential for retaining and rebuilding human capital. These policies could include financial and professional incentives for the return of diaspora members, such as grants for set up businesses, tax exemptions for a determined period, and facilitated access to loans for entrepreneurial projects. Offering counselling, skills development, and labour market reintegration programmes to ensure returnees are efficiently integrated into local communities. Programmes for developing professional skills adapted to the local market could ensure young people and workers have access to continuous training and vocational education in

demanding fields. Additionally, encouraging partnerships between the public sector, private sector, and educational institutions to offer attractive and well-paid jobs could help retain young workers in the country.

Additionally, information campaigns targeting the diaspora and mentorship programmes and business incubators can showcase Moldova's economic opportunities and facilitate re-integration. Investments in basic infrastructure and modern services, including digitisation and access to remote public services, could make regional centres more attractive both to young people considering migration and those thinking about returning from the diaspora. These measures could help retain human capital in the country and develop sustainable communities to ensure balanced economic growth in the long term.

Projections of human capital dynamics in Moldova indicate improvements in education levels among young people. This trend, combined with higher labour force participation, is a vital factor in reducing dependency burdens and strengthening economic resilience. Although the size of the labour force is expected to decline, its educational composition will improve, with a significant increase in the proportion of workers with higher education. This can enhance workforce competitiveness but will require tailored policies to integrate this category effectively. In this context, policies aimed at increasing labour force participation represent a strategic direction for mitigating the negative effects of demographic decline and population ageing.

Educational transitions suggested by human capital projections underline the importance of interventions to achieve higher education levels by certain ages. Prioritising post-secondary and university education would allow for a better-qualified workforce aligned with market demands.

A sustainable demographic future for Moldova can only be achieved through an integrated and coordinated approach that combines policies to support young people, attract the diaspora, strengthen regional development hubs, and reduce emigration. Such an approach must be underpinned by long-term commitment and strategic planning to create an environment conducive to stabilising and growing the population, reducing regional disparities, and improving the overall quality of life. Investments in infrastructure, education, healthcare, and local economic opportunities are key for transforming regions into attractive destinations for personal and professional development. Moldova can ensure a balanced demographic landscape by alleviating pressures on large urban areas and fostering vibrant regional centres. Moldova can build a solid demographic and economic foundation through a coherent, well-grounded strategy. This approach will support sustainable growth, improve living conditions, and secure a prosperous future for generations to come. Long-term investments and integrated policies are crucial for addressing current challenges and sharping a thriving and resilient Moldova.

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APPENDIX 1

DEMOGRAPHIC PROJECTION FOR TERRITORIAL-ADMINISTRATIVE UNITS FOR THE YEARS 2028, 2033

Chisinau

Table 1. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	665462	646811	629465	-5.4
0-4	33505	26020	22578	-32.6
5-9	41957	29716	23488	-44.0
10-14	44131	38237	27448	-37.8
15-19	35507	39130	34583	-2.6
20-24	19486	31921	36091	85.2
25-29	36029	19715	32909	-8.7
30-34	64565	38043	21051	-67.4
35-39	73344	66397	39484	-46.2
40-44	61916	72482	66297	7.1
45-49	46560	59841	70830	52.1
50-54	39811	44956	58259	46.3
55-59	36994	38305	43525	17.7
60-64	39720	35249	36621	-7.8
65-69	36746	36770	32785	-10.8
70-74	28880	32131	32670	13.1
75-79	12780	23650	27132	112.3
80-84	8696	9107	17755	104.2
85+	4835	5141	5959	23.2

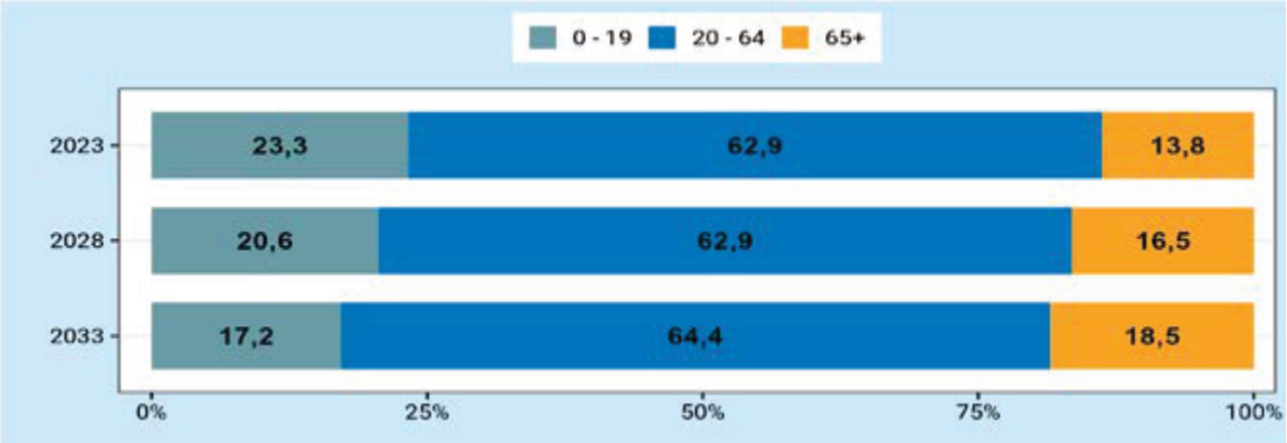

Fig. 1. Population structure by three large age groups in Chisinau.

Balti

Table 2. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	89357	85131	81331	-9.0
0-4	4506	4407	3827	-15.1
5-9	6028	4030	4007	-33.5
10-14	5921	5512	3733	-37.0
15-19	4914	5307	5027	2.3
20-24	3304	4471	4935	49.4
25-29	5907	3260	4482	-24.1
30-34	7243	5917	3307	-54.3
35-39	8248	7081	5857	-29.0
40-44	7144	7813	6801	-4.8
45-49	5755	6706	7415	28.8
50-54	5223	5481	6429	23.1
55-59	5208	5005	5265	1.1
60-64	6292	4893	4709	-25.2
65-69	5503	5605	4393	-20.2
70-74	4483	4558	4733	5.6
75-79	1780	3364	3544	99.1
80-84	1219	1101	2237	83.5
85+	679	620	630	-7.2

Fig. 2. Population structure by three large age groups in Balti.

Briceni

Table 3. Population dynamics by age groups

Vârsta	2023	2028	2033	SChange, 2033-2022, %
Total	47962	42203	37402	-22.0
0-4	1727	1845	1458	-15.6
5-9	2035	1471	1610	-20.9
10-14	2313	1793	1323	-42.8
15-19	2580	1979	1576	-38.9
20-24	2032	2062	1638	-19.4
25-29	2364	1625	1697	-28.2
30-34	2871	1991	1410	-50.9
35-39	3484	2542	1800	-48.3
40-44	3329	3140	2330	-30.0
45-49	3164	3049	2910	-8.0
50-54	3380	2966	2877	-14.9
55-59	3422	3192	2818	-17.7
60-64	4428	3162	2964	-33.1
65-69	3801	3928	2831	-25.5
70-74	3170	3189	3352	5.7
75-79	1872	2428	2504	33.8
80-84	1278	1183	1627	27.3
85+	712	658	677	-4.9

Fig. 3. Population structure by three large age groups in Briceni.

Donduseni

Table 4. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	29675	26999	24599	-17.1
0-4	1255	1163	981	-21.8
5-9	1581	1148	1078	-31.8
10-14	1487	1483	1088	-26.8
15-19	1540	1385	1397	-9.3
20-24	1419	1368	1249	-12.0
25-29	1682	1208	1182	-29.7
30-34	1640	1429	1034	-37.0
35-39	1807	1462	1279	-29.2
40-44	1844	1670	1360	-26.2
45-49	2009	1766	1604	-20.2
50-54	2205	1975	1734	-21.4
55-59	2197	2136	1912	-13.0
60-64	2512	2076	2018	-19.7
65-69	2187	2266	1882	-13.9
70-74	1968	1842	1930	-1.9
75-79	1134	1506	1449	27.8
80-84	775	716	1011	30.5
85+	433	400	411	-5.1

Fig. 4. Population structure by three large age groups in Donduseni.

Drochia

Table 5. Population dynamics by age groups

Vârsta	2023	2028	2033	SChange, 2033-2022, %
Total	56746	51587	46831	-17.5
0-4	2324	2155	1772	-23.8
5-9	3153	2097	1975	-37.4
10-14	2812	2909	1961	-30.3
15-19	2914	2563	2687	-7.8
20-24	2658	2513	2252	-15.3
25-29	2865	2192	2111	-26.3
30-34	3145	2411	1862	-40.8
35-39	3767	2803	2163	-42.6
40-44	3610	3517	2630	-27.1
45-49	3689	3470	3388	-8.2
50-54	4010	3587	3376	-15.8
55-59	4318	3897	3483	-19.3
60-64	4992	4118	3714	-25.6
65-69	4666	4535	3750	-19.6
70-74	3819	3956	3896	2.0
75-79	1941	2938	3122	60.8
80-84	1325	1236	1977	49.2
85+	738	690	712	-3.5

Fig. 5. Population structure by three large age groups in Drochia.

Edinet

Table 6. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	52752	46264	40804	-22.6
0-4	2047	1850	1477	-27.8
5-9	2649	1749	1618	-38.9
10-14	2814	2350	1578	-43.9
15-19	2770	2441	2079	-24.9
20-24	2264	2217	2016	-11.0
25-29	2546	1769	1788	-29.8
30-34	2965	2106	1501	-49.4
35-39	3566	2564	1844	-48.3
40-44	3376	3183	2322	-31.2
45-49	3814	3099	2956	-22.5
50-54	3689	3568	2923	-20.8
55-59	3777	3491	3395	-10.1
60-64	4753	3512	3258	-31.5
65-69	4055	4237	3152	-22.3
70-74	3622	3408	3625	0.1
75-79	1962	2784	2689	37.1
80-84	1338	1243	1870	39.8
85+	745	693	713	-4.3

Fig. 6. Population structure by three large age groups in Edinet.

Falesti

Table 7. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	61987	56056	50744	-18.1
0-4	3131	2437	1995	-36.3
5-9	3962	2807	2221	-43.9
10-14	3496	3634	2610	-25.3
15-19	3457	3186	3357	-2.9
20-24	3214	2940	2764	-14.0
25-29	3114	2530	2377	-23.7
30-34	3747	2516	2088	-44.3
35-39	4188	3234	2177	-48.0
40-44	3877	3796	2956	-23.8
45-49	4140	3652	3594	-13.2
50-54	4611	3961	3506	-24.0
55-59	4596	4393	3788	-17.6
60-64	5152	4317	4134	-19.8
65-69	4390	4628	3899	-11.2
70-74	3618	3683	3947	9.1
75-79	1600	2772	2898	81.1
80-84	1089	1011	1858	70.6
85+	605	559	575	-5.0

Fig. 7. Population structure by three large age groups in Falesti.

Floresti

Table 8. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	60119	54506	49450	-17.7
0-4	2812	2348	1948	-30.7
5-9	3563	2524	2141	-39.9
10-14	3460	3288	2357	-31.9
15-19	3314	3162	3044	-8.1
20-24	2859	2833	2758	-3.5
25-29	3278	2294	2320	-29.2
30-34	3493	2682	1910	-45.3
35-39	4049	3059	2362	-41.7
40-44	3687	3709	2825	-23.4
45-49	4030	3465	3513	-12.8
50-54	4463	3854	3329	-25.4
55-59	4569	4301	3719	-18.6
60-64	5175	4292	4043	-21.9
65-69	4318	4657	3877	-10.2
70-74	3545	3647	3990	12.6
75-79	1701	2723	2879	69.3
80-84	1159	1074	1824	57.4
85+	644	594	611	-5.1

Fig. 8. Population structure by three large age groups in Floresti.

Glodeni

Table 9. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	40528	36881	33530	-17.3
0-4	1895	1600	1291	-31.9
5-9	2569	1697	1455	-43.4
10-14	2341	2347	1571	-32.9
15-19	2118	2124	2159	1.9
20-24	1997	1813	1853	-7.2
25-29	2109	1592	1478	-29.9
30-34	2497	1711	1316	-47.3
35-39	2592	2175	1497	-42.2
40-44	2464	2407	2033	-17.5
45-49	2759	2368	2323	-15.8
50-54	3006	2668	2296	-23.6
55-59	2950	2920	2592	-12.1
60-64	3483	2800	2770	-20.5
65-69	2892	3150	2540	-12.2
70-74	2535	2451	2707	6.8
75-79	1124	1947	1934	72.1
80-84	769	711	1305	69.7
85+	428	400	410	-4.2

Fig. 9. Population structure by three large age groups in Glodeni.

Ocnita

Table 10. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	37257	33802	30633	-17.8
0-4	1207	1305	1014	-16.0
5-9	1354	987	1099	-18.8
10-14	1523	1156	864	-43.3
15-19	1607	1320	1017	-36.7
20-24	1537	1379	1150	-25.2
25-29	1779	1316	1201	-32.5
30-34	2270	1595	1188	-47.7
35-39	2856	2121	1497	-47.6
40-44	2839	2732	2037	-28.2
45-49	2890	2749	2654	-8.2
50-54	2879	2836	2696	-6.4
55-59	2906	2810	2763	-4.9
60-64	3398	2745	2654	-21.9
65-69	3051	3062	2486	-18.5
70-74	2354	2569	2620	11.3
75-79	1361	1790	2012	47.8
80-84	929	854	1193	28.4
85+	517	476	488	-5.6

Fig. 10. Population structure by three large age groups in Ocnita.

Riscani

Table 11. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	46869	43097	39574	-15.6
0-4	1912	1804	1506	-21.2
5-9	2418	1733	1659	-31.4
10-14	2440	2248	1630	-33.2
15-19	2473	2261	2107	-14.8
20-24	2283	2173	2021	-11.5
25-29	2419	1897	1835	-24.1
30-34	2856	2079	1644	-42.4
35-39	3273	2613	1909	-41.7
40-44	3041	3085	2468	-18.8
45-49	3250	2943	2988	-8.1
50-54	3357	3189	2889	-13.9
55-59	3396	3290	3125	-8.0
60-64	4112	3251	3146	-23.5
65-69	3660	3739	2964	-19.0
70-74	2878	3100	3208	11.5
75-79	1504	2209	2451	63.0
80-84	1026	955	1478	44.1
85+	571	528	546	-4.4

Fig. 11. Population structure by three large age groups in Riscani.

Singerei

Table 12. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	61628	55467	49902	-19.0
0-4	2970	2404	1918	-35.4
5-9	3939	2632	2169	-44.9
10-14	3932	3582	2423	-38.4
15-19	3622	3476	3220	-11.1
20-24	3146	2928	2881	-8.4
25-29	3391	2401	2297	-32.3
30-34	4047	2711	1949	-51.8
35-39	4084	3493	2351	-42.4
40-44	3749	3726	3200	-14.6
45-49	4011	3547	3543	-11.7
50-54	4075	3830	3401	-16.5
55-59	4373	3908	3684	-15.8
60-64	5264	4124	3691	-29.9
65-69	4493	4747	3743	-16.7
70-74	3522	3803	4072	15.6
75-79	1461	2712	3008	105.9
80-84	995	927	1820	82.9
85+	571	528	546	-4,4

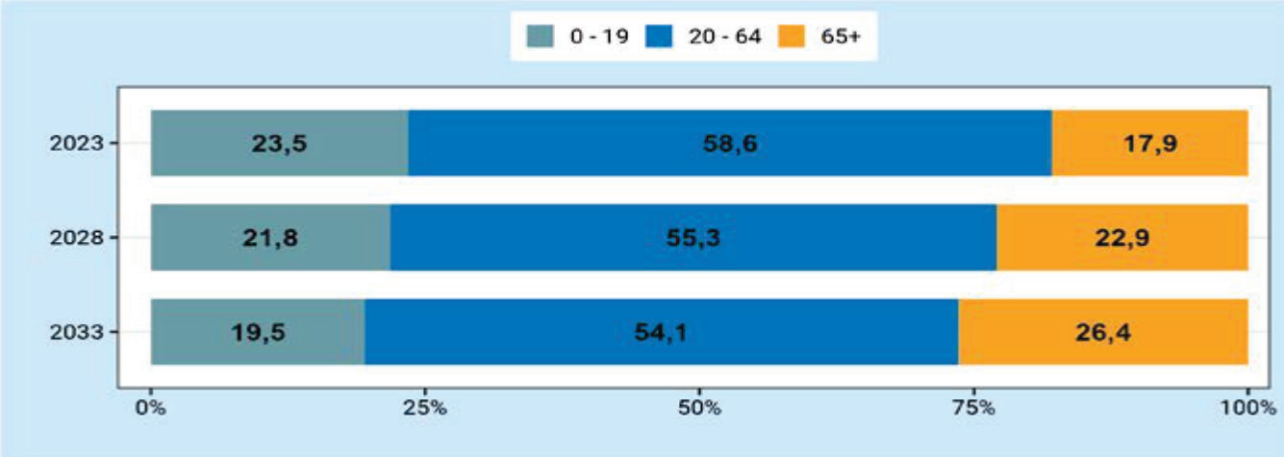

Fig. 12. Population structure by three large age groups in Singerei.

Soroca

Table 13. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	59696	54357	49410	-17.2
0-4	2750	2346	1873	-31.9
5-9	3457	2416	2101	-39.2
10-14	2874	3094	2195	-23.6
15-19	2904	2561	2802	-3.5
20-24	2740	2470	2223	-18.9
25-29	3302	2232	2056	-37.7
30-34	3278	2753	1900	-42.0
35-39	3894	2892	2465	-36.7
40-44	3849	3586	2688	-30.2
45-49	4095	3658	3423	-16.4
50-54	4487	3981	3559	-20.7
55-59	4860	4382	3883	-20.1
60-64	5694	4622	4165	-26.9
65-69	4502	5167	4204	-6.6
70-74	3574	3803	4430	24.0
75-79	1665	2749	2991	79.6
80-84	1137	1055	1845	62.3
85+	634	590	607	-4.3

Fig. 13. Population structure by three large age groups in Soroca.

Anenii Noi

Table 14. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	57718	51724	46517	-19.4
0-4	2635	2614	2146	-18.6
5-9	3378	2284	2315	-31.5
10-14	3483	3021	2075	-40.4
15-19	3309	3092	2730	-17.5
20-24	2583	2751	2653	2.7
25-29	2835	2025	2229	-21.4
30-34	3611	2290	1685	-53.3
35-39	4459	3065	1986	-55.5
40-44	4095	3931	2745	-33.0
45-49	3795	3713	3616	-4.7
50-54	3670	3526	3482	-5.1
55-59	3798	3438	3320	-12.6
60-64	4940	3513	3191	-35.4
65-69	4644	4399	3150	-32.2
70-74	3660	3878	3726	1.8
75-79	1374	2762	3033	120.7
80-84	932	876	1861	99.7
85+	517	546	574	11.0

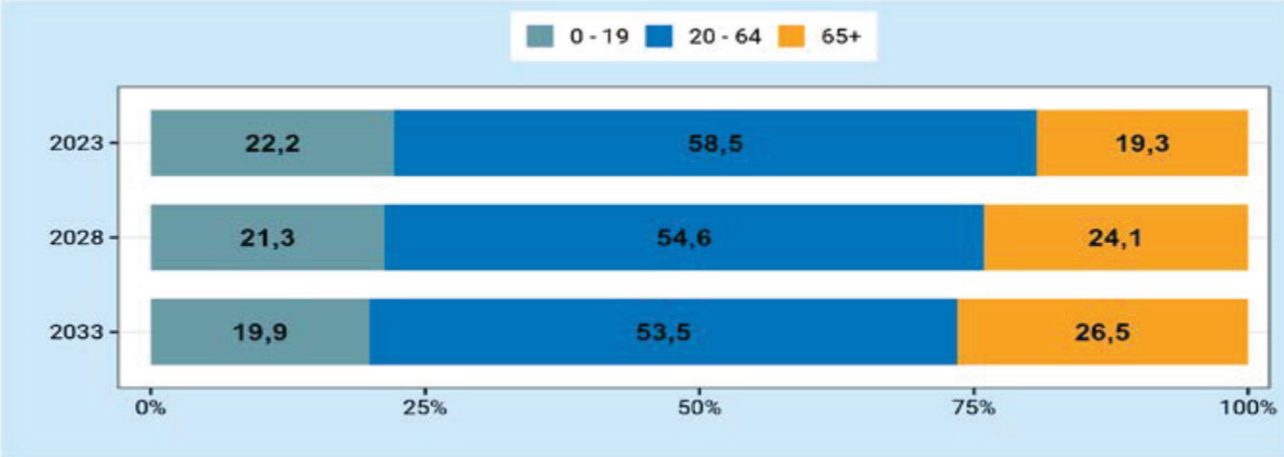

Fig. 14. Population structure by three large age groups in Anenii Noi.

Calarasi

Table 15. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	45214	39916	35399	-21.7
0-4	2598	2045	1609	-38.1
5-9	3439	2292	1838	-46.6
10-14	2810	3097	2096	-25.4
15-19	2482	2462	2761	11.2
20-24	2128	1963	2002	-5.9
25-29	2315	1543	1481	-36.0
30-34	2382	1679	1166	-51.0
35-39	2805	1849	1374	-51.0
40-44	2604	2401	1614	-38.0
45-49	2830	2353	2199	-22.3
50-54	3106	2645	2226	-28.3
55-59	3211	2954	2522	-21.5
60-64	3861	2990	2760	-28.5
65-69	3412	3459	2691	-21.1
70-74	2888	2851	2931	1.5
75-79	1140	2168	2216	94.4
80-84	773	718	1448	87.3
85+	430	447	465	8.1

Fig. 15. Population structure by three large age groups in Calarasi.

Criuleni

Table 16. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	53338	48358	43957	-17.6
0-4	2850	2579	2113	-25.9
5-9	3608	2549	2345	-35.0
10-14	3507	3294	2358	-32.8
15-19	3239	3176	3028	-6.5
20-24	2607	2731	2742	5.2
25-29	2762	2035	2194	-20.6
30-34	3411	2191	1656	-51.5
35-39	4183	2859	1877	-55.1
40-44	3597	3682	2565	-28.7
45-49	3622	3278	3395	-6.3
50-54	3534	3371	3075	-13.0
55-59	3510	3322	3185	-9.3
60-64	4244	3239	3077	-27.5
65-69	3641	3756	2889	-20.7
70-74	2911	3032	3178	9.2
75-79	1026	2206	2366	130.6
80-84	698	653	1489	113.3
85+	388	405	425	9.5

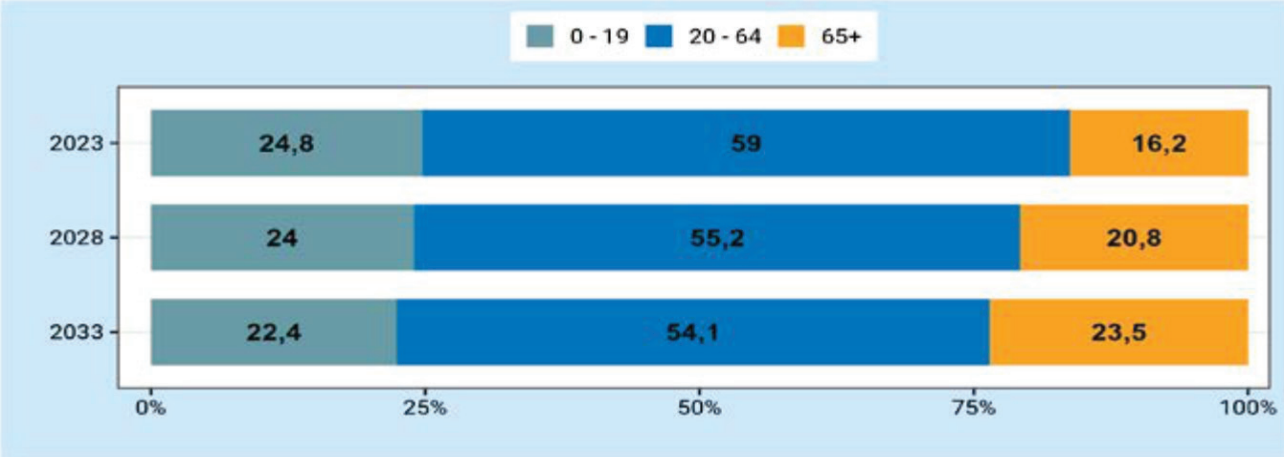

Fig. 16. Population structure by three large age groups in Criuleni.

Dubasari

Table 17. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	23404	21302	19416	-17.0
0-4	1322	1047	850	-35.7
5-9	1587	1179	950	-40.1
10-14	1312	1437	1083	-17.5
15-19	1224	1187	1320	7.8
20-24	1091	1033	1025	-6.0
25-29	1134	829	821	-27.6
30-34	1417	870	651	-54.1
35-39	1775	1174	736	-58.5
40-44	1627	1573	1050	-35.5
45-49	1614	1536	1495	-7.4
50-54	1609	1559	1486	-7.6
55-59	1599	1560	1512	-5.4
60-64	1993	1509	1474	-26.0
65-69	1753	1798	1368	-22.0
70-74	1422	1473	1534	7.9
75-79	451	1073	1153	155.7
80-84	305	286	721	136.4
85+	169	179	187	10.7

Fig. 17. Population structure by three large age groups in Dubasari.

Hincesti

Table 18. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	70431	62311	55353	-21.4
0-4	4148	3308	2630	-36.6
5-9	4860	3644	2962	-39.1
10-14	4239	4384	3331	-21.4
15-19	4348	3740	3935	-9.5
20-24	3620	3418	3031	-16.3
25-29	3509	2598	2552	-27.3
30-34	4112	2637	2044	-50.3
35-39	4549	3332	2199	-51.7
40-44	4324	3924	2923	-32.4
45-49	4174	3927	3621	-13.2
50-54	4289	3918	3710	-13.5
55-59	4486	4078	3740	-16.6
60-64	5774	4199	3816	-33.9
65-69	5586	5151	3770	-32.5
70-74	4759	4648	4352	-8.6
75-79	1778	3581	3606	102.8
80-84	1207	1122	2398	98.7
85+	669	702	733	9.6

Fig. 18. Population structure by three large age groups in Hincesti.

Ialoveni

Table 19. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	69771	62892	57025	-18.3
0-4	3832	3353	2773	-27.6
5-9	4977	3331	2975	-40.2
10-14	5089	4444	3018	-40.7
15-19	4365	4394	3926	-10.1
20-24	2926	3399	3556	21.5
25-29	3213	2221	2702	-15.9
30-34	4440	2654	1915	-56.9
35-39	5846	3853	2370	-59.5
40-44	5176	5219	3521	-32.0
45-49	4678	4668	4799	2.6
50-54	4113	4335	4383	6.6
55-59	4384	3872	4111	-6.2
60-64	5451	4054	3598	-34.0
65-69	4883	4848	3634	-25.6
70-74	3826	4074	4115	7.6
75-79	1253	2884	3169	152.9
80-84	849	793	1941	128.6
85+	470	496	519	10.4

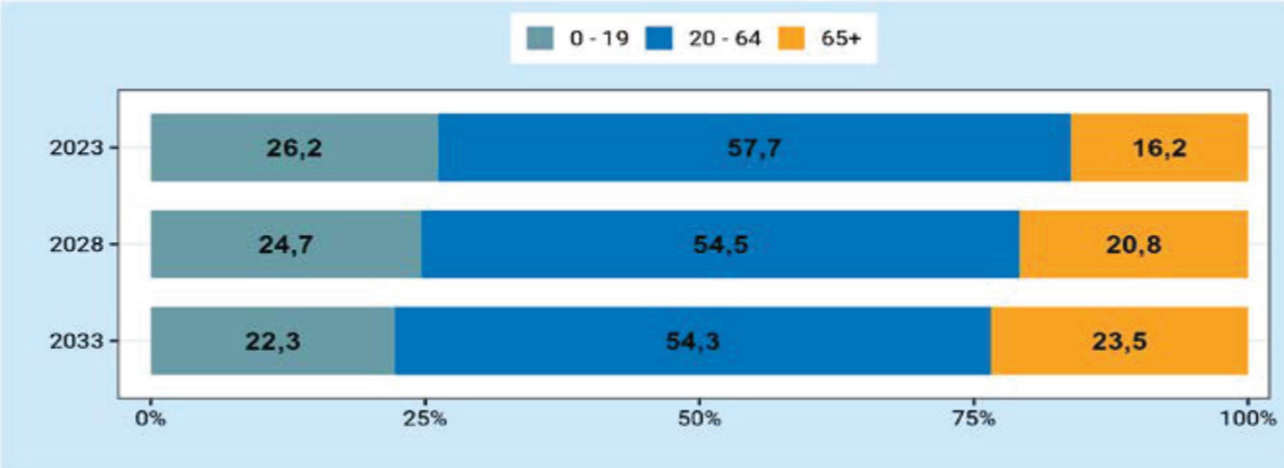

Fig. 19. Population structure by three large age groups in Ialoveni.

Nisporeni

Table 20. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	37126	32464	28509	-23.2
0-4	2207	1608	1268	-42.5
5-9	2766	1899	1415	-48.8
10-14	2203	2447	1709	-22.4
15-19	2364	1922	2176	-8.0
20-24	2075	1827	1531	-26.2
25-29	1810	1418	1308	-27.7
30-34	1887	1284	1052	-44.3
35-39	2128	1477	1035	-51.4
40-44	2007	1810	1275	-36.5
45-49	2355	1822	1663	-29.4
50-54	2511	2208	1723	-31.4
55-59	2533	2402	2117	-16.4
60-64	3143	2368	2254	-28.3
65-69	2770	2826	2130	-23.1
70-74	2502	2327	2408	-3.8
75-79	906	1883	1805	99.2
80-84	616	574	1261	104.7
85+	343	362	379	10.5

Fig. 20. Population structure by three large age groups in Nisporeni.

Orhei

Table 21. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	75228	67265	60326	-19.8
0-4	4192	3361	2722	-35.1
5-9	5624	3673	3003	-46.6
10-14	4456	5030	3340	-25.0
15-19	4202	3916	4508	7.3
20-24	3676	3379	3255	-11.5
25-29	3671	2797	2663	-27.5
30-34	4419	2930	2304	-47.9
35-39	5468	3682	2492	-54.4
40-44	4778	4776	3265	-31.7
45-49	4813	4326	4381	-9.0
50-54	4957	4489	4062	-18.1
55-59	5372	4667	4249	-20.9
60-64	6491	4980	4335	-33.2
65-69	5611	5759	4445	-20.8
70-74	4422	4654	4859	9.9
75-79	1493	3318	3614	142.1
80-84	1017	942	2218	118.1
85+	566	586	611	8.0

Fig. 21. Population structure by three large age groups in Orhei.

Rezina

Table 22. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	32523	29214	26234	-19.3
0-4	1723	1431	1146	-33.5
5-9	2006	1528	1292	-35.6
10-14	1737	1823	1408	-18.9
15-19	1893	1577	1680	-11.3
20-24	1734	1584	1351	-22.1
25-29	1637	1323	1239	-24.3
30-34	1953	1260	1039	-46.8
35-39	1968	1592	1039	-47.2
40-44	2132	1727	1395	-34.6
45-49	2346	1985	1616	-31.1
50-54	2479	2230	1893	-23.6
55-59	2508	2357	2125	-15.3
60-64	2732	2316	2187	-19.9
65-69	2315	2422	2061	-11.0
70-74	1784	1922	2045	14.6
75-79	767	1348	1498	95.3
80-84	520	484	903	73.7
85+	289	305	317	9.7

Fig. 22. Population structure by three large age groups in Rezina.

Straseni

Table 23. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	61754	55303	49768	-19.4
0-4	3314	2857	2384	-28.1
5-9	4462	2910	2557	-42.7
10-14	4152	4014	2653	-36.1
15-19	3697	3689	3630	-1.8
20-24	3106	3012	3109	0.1
25-29	2898	2358	2376	-18.0
30-34	3585	2304	1939	-45.9
35-39	4719	3006	1972	-58.2
40-44	4068	4134	2687	-33.9
45-49	3727	3689	3799	1.9
50-54	3657	3488	3472	-5.1
55-59	3932	3453	3311	-15.8
60-64	5118	3626	3196	-37.6
65-69	4688	4551	3244	-30.8
70-74	3755	3915	3867	3.0
75-79	1400	2849	3068	119.1
80-84	949	894	1920	102.3
85+	527	554	584	10.8

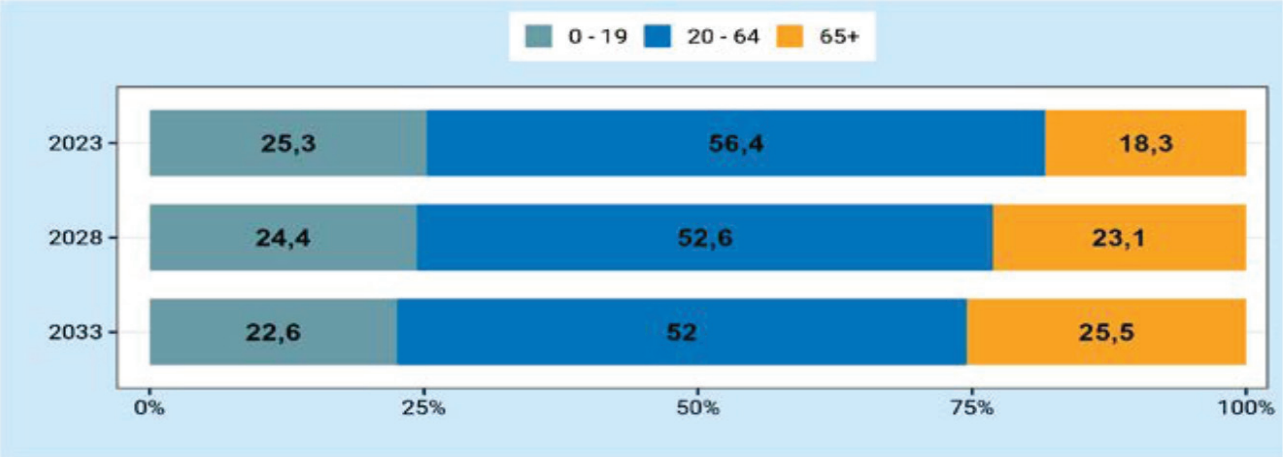

Fig. 23. Population structure by three large age groups in Straseni.

Soldanesti

Table 24. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	27405	24520	21953	-19.9
0-4	1528	1233	1001	-34.5
5-9	1841	1375	1127	-38.8
10-14	1601	1691	1281	-20.0
15-19	1595	1469	1571	-1.5
20-24	1612	1344	1265	-21.5
25-29	1419	1202	1028	-27.6
30-34	1489	1035	898	-39.7
35-39	1477	1179	828	-43.9
40-44	1622	1300	1041	-35.8
45-49	1819	1498	1207	-33.6
50-54	2168	1711	1417	-34.6
55-59	2217	2041	1618	-27.0
60-64	2521	2045	1887	-25.1
65-69	1764	2226	1822	3.3
70-74	1411	1450	1862	32.0
75-79	640	1058	1121	75.2
80-84	437	408	711	62.7
85+	244	255	268	9.8

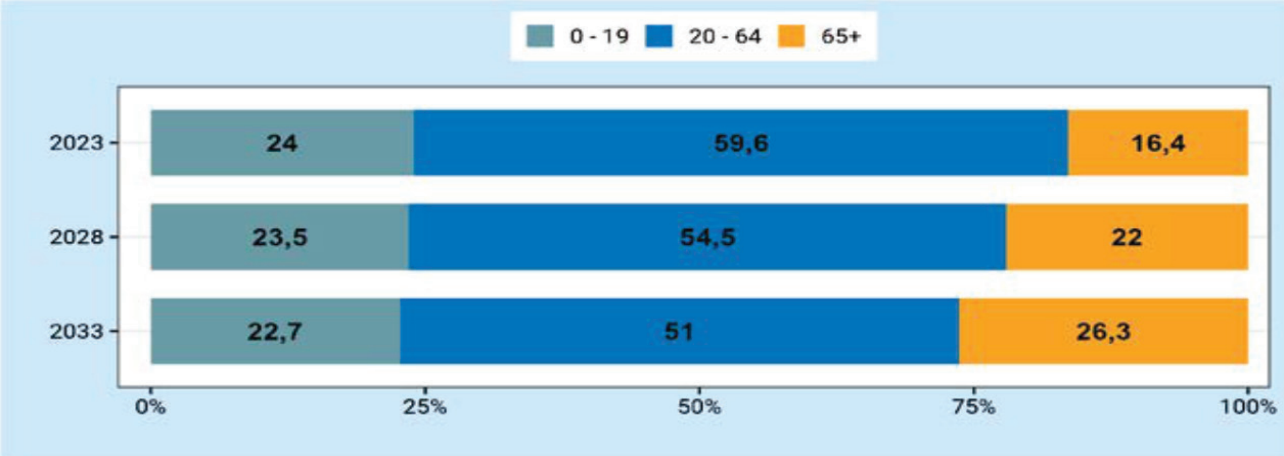

Fig. 24. Population structure by three large age groups in Soldanesti.

Telenesti

Table 25. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	41615	35927	31144	-25.2
0-4	2295	1779	1334	-41.9
5-9	2852	1960	1556	-45.4
10-14	2282	2506	1750	-23.3
15-19	2456	1983	2220	-9.6
20-24	2293	1884	1578	-31.2
25-29	2224	1520	1313	-41.0
30-34	2352	1498	1060	-54.9
35-39	2302	1769	1142	-50.4
40-44	2182	1912	1487	-31.9
45-49	2531	1948	1729	-31.7
50-54	2754	2345	1825	-33.7
55-59	3256	2595	2219	-31.8
60-64	3897	3012	2413	-38.1
65-69	3289	3465	2691	-18.2
70-74	2671	2738	2933	9.8
75-79	963	2022	2137	121.9
80-84	653	611	1359	108.1
85+	363	380	398	9.6

Fig. 25. Population structure by three large age groups in Telenesti.

Ungheni

Table 26. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	78668	71101	64450	-18.1
0-4	4454	3890	3143	-29.4
5-9	5619	3919	3489	-37.9
10-14	5013	5054	3579	-28.6
15-19	4611	4446	4569	-0.9
20-24	3761	3846	3808	1.2
25-29	4526	2987	3132	-30.8
30-34	5353	3650	2480	-53.7
35-39	5946	4529	3162	-46.8
40-44	5093	5242	4046	-20.6
45-49	5152	4621	4808	-6.7
50-54	5258	4761	4300	-18.2
55-59	5425	4921	4477	-17.5
60-64	6069	5005	4554	-25.0
65-69	5107	5371	4454	-12.8
70-74	3973	4223	4516	13.7
75-79	1606	2979	3272	103.7
80-84	1094	1018	1994	82.3
85+	608	639	667	9.7

Fig. 26. Population structure by three large age groups in Ungheni.

Basarabeasca

Table 27. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	16200	14318	12689	-21.7
0-4	861	648	512	-40.5
5-9	1008	730	563	-44.1
10-14	828	876	647	-21.9
15-19	871	716	774	-11.1
20-24	788	706	602	-23.6
25-29	770	597	555	-27.9
30-34	837	596	479	-42.8
35-39	1134	702	515	-54.6
40-44	919	997	636	-30.8
45-49	924	855	936	1.3
50-54	986	886	825	-16.3
55-59	1161	939	849	-26.9
60-64	1547	1072	871	-43.7
65-69	1496	1373	959	-35.9
70-74	1254	1258	1170	-6.7
75-79	397	957	990	149.4
80-84	269	251	638	137.2
85+	150	159	168	12.0

Fig. 27. Population structure by three large age groups in Basarabeasca.

Cahul

Table 28. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	74468	66137	59020	-20.7
0-4	3382	3174	2568	-24.1
5-9	4459	2903	2787	-37.5
10-14	4639	3964	2628	-43.3
15-19	4306	4000	3496	-18.8
20-24	3317	3401	3267	-1.5
25-29	4012	2572	2748	-31.5
30-34	4753	3302	2189	-53.9
35-39	5375	4054	2896	-46.1
40-44	5042	4707	3633	-27.9
45-49	4750	4547	4317	-9.1
50-54	4817	4379	4239	-12.0
55-59	5159	4494	4113	-20.3
60-64	6490	4770	4174	-35.7
65-69	5876	5793	4284	-27.1
70-74	4552	4915	4927	8.2
75-79	1718	3410	3807	121.6
80-84	1170	1063	2236	91.1
85+	651	689	711	9.2

Fig. 28. Population structure by three large age groups in Cahul.

Cantemir

Table 29. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	34327	29264	25144	-26.8
0-4	1900	1272	1006	-47.1
5-9	2434	1614	1107	-54.5
10-14	2317	2140	1448	-37.5
15-19	2307	1984	1881	-18.5
20-24	1793	1716	1542	-14.0
25-29	1646	1197	1208	-26.6
30-34	1940	1165	878	-54.7
35-39	2336	1460	889	-61.9
40-44	1919	1899	1195	-37.7
45-49	1987	1686	1700	-14.4
50-54	2201	1821	1561	-29.1
55-59	2385	2062	1713	-28.2
60-64	3094	2204	1912	-38.2
65-69	2610	2725	1958	-25.0
70-74	1921	2141	2278	18.6
75-79	746	1424	1637	119.4
80-84	508	460	928	82.7
85+	283	294	303	7.1

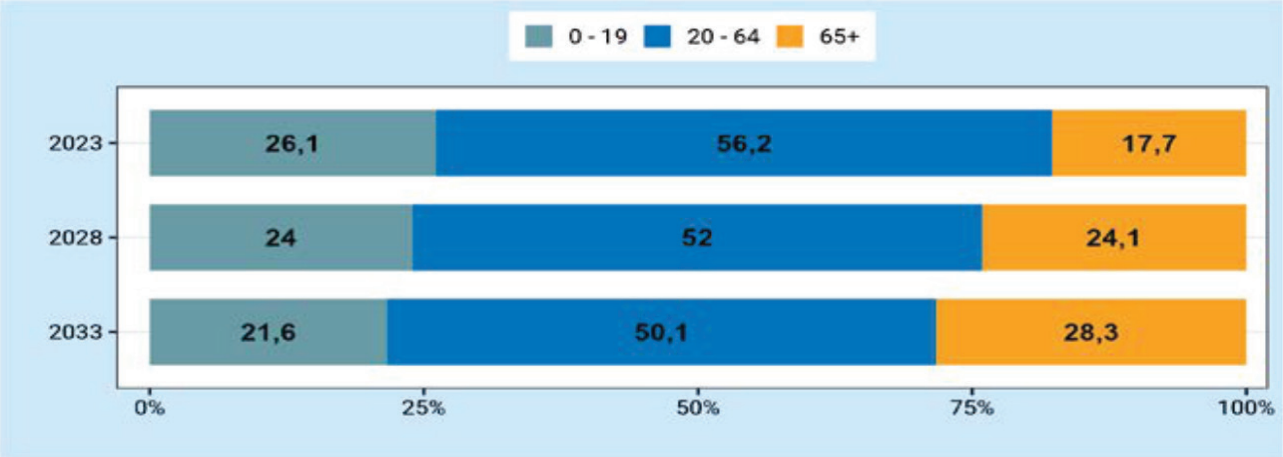

Fig. 29. Population structure by three large age groups in Cantemir.

Causeni

Table 30. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	60926	55345	50258	-17.5
0-4	2791	2574	2205	-21.0
5-9	3399	2470	2319	-31.8
10-14	3843	3121	2299	-40.2
15-19	3870	3490	2876	-25.7
20-24	3035	3257	3005	-1.0
25-29	3165	2403	2661	-15.9
30-34	3558	2576	2002	-43.7
35-39	4203	3048	2237	-46.8
40-44	3927	3791	2764	-29.6
45-49	4035	3688	3584	-11.2
50-54	4021	3853	3535	-12.1
55-59	4377	3837	3690	-15.7
60-64	5140	4119	3615	-29.7
65-69	4717	4662	3752	-20.5
70-74	3971	4001	4000	0.7
75-79	1399	3023	3133	123.9
80-84	949	874	2000	110.7
85+	526	558	581	10.5

Fig. 30. Population structure by three large age groups in Causeni.

Cimislia

Table 31. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	31781	27846	24432	-23.1
0-4	1709	1256	948	-44.5
5-9	2244	1479	1111	-50.5
10-14	1777	1988	1334	-24.9
15-19	1586	1546	1766	11.3
20-24	1459	1216	1222	-16.2
25-29	1499	990	864	-42.4
30-34	1668	1062	746	-55.3
35-39	1864	1315	876	-53.0
40-44	1613	1631	1174	-27.2
45-49	1733	1514	1556	-10.2
50-54	2034	1687	1474	-27.5
55-59	2279	1976	1638	-28.1
60-64	3087	2159	1868	-39.5
65-69	2855	2799	1970	-31.0
70-74	2484	2418	2397	-3.5
75-79	920	1871	1873	103.6
80-84	624	569	1233	97.6
85+	346	370	382	10.4

Fig. 31. Population structure by three large age groups in Cimislia.

Leova

Table 32. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	31404	27758	24557	-21.8
0-4	1579	1233	976	-38.2
5-9	2135	1365	1088	-49.0
10-14	1936	1902	1234	-36.3
15-19	1879	1702	1699	-9.6
20-24	1547	1492	1394	-9.9
25-29	1617	1120	1124	-30.5
30-34	1804	1215	868	-51.9
35-39	2074	1461	1004	-51.6
40-44	1962	1801	1287	-34.4
45-49	2109	1785	1651	-21.7
50-54	1947	1983	1689	-13.3
55-59	2148	1876	1912	-11.0
60-64	2814	2037	1778	-36.8
65-69	2510	2531	1843	-26.6
70-74	1966	2109	2148	9.3
75-79	669	1465	1634	144.2
80-84	455	413	952	109.2
85+	253	268	276	9.1

Fig. 32. Population structure by three large age groups in Leova.

Stefan-Voda

Table 33. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	45135	39455	34522	-23.5
0-4	2579	1725	1328	-48.5
5-9	2928	2191	1501	-48.7
10-14	2386	2517	1922	-19.4
15-19	2433	2051	2207	-9.3
20-24	2282	1947	1687	-26.1
25-29	2414	1684	1489	-38.3
30-34	2518	1839	1313	-47.9
35-39	2862	2055	1518	-47.0
40-44	2747	2472	1780	-35.2
45-49	2818	2495	2264	-19.7
50-54	3032	2633	2350	-22.5
55-59	3267	2850	2486	-23.9
60-64	4126	3007	2633	-36.2
65-69	3611	3667	2693	-25.4
70-74	2951	3020	3111	5.4
75-79	1062	2214	2340	120.3
80-84	720	659	1456	102.2
85+	399	429	444	11.3

Fig. 33. Population structure by three large age groups in Stefan-Voda.

Taraclia

Table 34. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	29624	27999	26303	-11.2
0-4	1230	1254	1075	-12.6
5-9	1596	1143	1178	-26.2
10-14	1639	1511	1090	-33.5
15-19	1568	1506	1406	-10.3
20-24	1275	1368	1335	4.7
25-29	1451	1132	1228	-15.4
30-34	1904	1348	1057	-44.5
35-39	2207	1816	1288	-41.6
40-44	2349	2158	1775	-24.4
45-49	2137	2343	2149	0.6
50-54	1993	2145	2345	17.7
55-59	2028	1953	2099	3.5
60-64	2473	1917	1844	-25.4
65-69	2351	2240	1743	-25.9
70-74	1959	1977	1910	-2.5
75-79	708	1462	1528	115.8
80-84	485	440	958	97.5
85+	271	286	295	8.9

Fig. 34. Population structure by three large age groups in Taraclia.

TAU Gagauzia

Table 35. Population dynamics by age groups

Vârsta	2023	2028	2033	Change, 2033-2022, %
Total	115196	113362	110711	-3.9
0-4	6073	5618	5263	-13.3
5-9	7946	5814	5412	-31.9
10-14	7979	7723	5675	-28.9
15-19	6298	7576	7395	17.4
20-24	5230	5876	7141	36.5
25-29	6261	5039	5686	-9.2
30-34	8177	6186	4976	-39.1
35-39	8576	8159	6156	-28.2
40-44	7766	8710	8249	6.2
45-49	6939	8023	8928	28.7
50-54	6635	7091	8138	22.7
55-59	7191	6604	7018	-2.4
60-64	9598	6917	6335	-34.0
65-69	9100	8788	6341	-30.3
70-74	6938	7710	7543	8.7
75-79	2178	5265	6031	176.9
80-84	1485	1373	3496	135.4
85+	826	890	928	12.3

Fig. 35. Population structure by three large age groups in TAU Gagauzia.

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