

Brussels, 14 July 2026
(OR. en)

11934/26

SOC 496
EMPL 278
SAN 595
EDUC 333
ECOFIN 1022
JAI 993
COH 135

COVER NOTE

From:	Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director
To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union
No. Cion doc.:	SWD(2026) 193 final
Subject:	COMMISSION STAFF WORKING DOCUMENT Demographic transformation in the EU: understanding change and adapting to its consequences

Delegations will find attached document SWD(2026) 193 final.

Encl.: SWD(2026) 193 final



EUROPEAN
COMMISSION

Brussels, 14.7.2026
SWD(2026) 193 final

COMMISSION STAFF WORKING DOCUMENT

**Demographic transformation in the EU: understanding change and adapting to its
consequences**

CONTENTS

1.	INTRODUCTION.....	2
2.	DEMOGRAPHIC TRENDS, PROJECTIONS AND DRIVERS IN THE EU	5
2.1.	A changing EU population	5
2.2.	Longer life expectancy	8
2.3.	Fertility trends	11
2.4.	Migration trends	15
2.5.	Global population trends	18
3.	THE IMPACTS OF DEMOGRAPHIC CHANGE AND POLICY RESPONSE.....	20
3.1.	The intergenerational impact of demographic change	20
3.2.	People, employment and education	23
3.3.	Sustainability of public budgets and pensions.....	29
3.4.	Demographic divergence across EU territories	31
3.5.	Healthcare and long-term care.....	37
3.6.	Demographic change and evolving housing needs	41
4.	CONCLUSIONS	44
5.	GLOSSARY.....	46
6.	ACRONYMS USED IN THIS DOCUMENT	48
7.	REFERENCES.....	49

1. INTRODUCTION

Demographic change is reshaping Europe. The EU population has grown at a modest but steady pace over the past decades, reaching 450.6 million people at the start of 2025. However, behind this gradual growth lies a profound structural transformation: Europeans are living longer, the European population is getting older and the number of births is falling across the EU. The EU population is projected to gradually decline over the coming decades. This structural shift touches every dimension of European life, from labour markets and pensions to healthcare, housing and regional cohesion.

Increased longevity is a major achievement. It represents longer and healthier lives with greater opportunities for personal fulfilment, social and economic participation across generations. The expanding longevity economy opens new markets for products, services and innovations tailored to older citizens, potentially spurring growth and job creation in healthcare, technology and financial services.

While demographic trends manifest at different speeds and intensities across the Union, their impacts create common challenges for EU Member States. Labour shortages, pressure on public expenditure, pension adequacy and depopulation of certain regions are concerns shared across the EU. In an interconnected EU Single Market with significant labour mobility, unaddressed demographic challenges may affect fiscal sustainability, competitiveness and the opportunities and life outcomes of future generations. As a result, demographic change is gaining increasing attention, with growing interest in addressing its implications for people, society and territories.

Europe is not alone in this transformation. Population ageing is a global trend. Many regions of the world are converging on similar trajectories towards lower birth rates and an older population profile, even if their starting points and the speed of transition differ considerably. Over recent decades, the number of older people has grown rapidly across all world regions, a trend set to continue in the coming decades. Ageing is accelerating particularly fast in Asia and Latin America, driven by rapid declines in fertility rates in recent years. These shifts are not new, but their impacts are becoming increasingly tangible for people and societies everywhere.

The EU is helping to address the consequences of demographic change through a range of policy initiatives. Early efforts included the European Innovation Partnership on Active and Healthy Ageing (launched in 2011), which aimed to extend healthy life years, promote independent living and enable older people to remain active participants in society. The Green Paper on Ageing (2021) raised awareness of the social and economic implications of population ageing, while the EU's Long-Term Vision for Rural Areas (published in 2021) addresses challenges arising from population decline, ageing and outmigration in rural regions. In responding to demographic change, the EU looks to the European Pillar of Social Rights as its compass for advancing social rights for all. In addition, the EU is addressing demographic challenges through cohesion policies targeting depopulation, and initiatives promoting social inclusion, work-life balance, gender equality, labour market participation and the integration of legal migrants. Together, these initiatives reflect a growing recognition of demographic shifts across health, labour, social and regional policies.

The Demography Toolbox ⁽¹⁾ provides Member States with a comprehensive set of EU policy tools to address demographic change. In June 2023, the European Council called on the European Commission to put forward a toolbox to address demographic challenges and their impact on Europe's competitive edge. In response to this request, the Commission adopted the Demography Toolbox on 11 October 2023, presenting a set of EU policy tools available to support Member States in managing demographic shifts in line with local realities. The Toolbox consolidates previous efforts, offering a more structured framework for mainstreaming demographic considerations across EU policies. The Demography Toolbox was welcomed by the General Affairs Council in 2023, with all Member States endorsing it.

A number of Member States have adopted comprehensive demographic strategies bringing together actions across areas such as family policy, housing, education, labour markets, ageing and territorial development. For example, Poland's Demographic Strategy 2040, Spain's National Strategy against the Demographic Challenge and Croatia's Strategy of Demographic Revitalisation address demographic issues. While not all Member States have adopted a specific demographic strategy, many pursue demographic objectives through coordinated policy frameworks, which provide support for parents and family formation, empower younger generations, promote active ageing and address labour and skills shortages, in line with the four pillars of the Demography Toolbox.

More recently, the Commission has pursued targeted initiatives addressing housing affordability, intergenerational fairness and poverty prevention in a life cycle perspective. The European Affordable Housing Plan, adopted in December 2025, proposes to address the housing crisis by speeding up construction, renovating existing buildings, and supporting public and private investment. The Intergenerational Fairness Strategy (March 2026) sets out how the EU can reinforce long-term thinking in policymaking, amplify the voices of young people, strengthen communication between generations and ensure that the interests of present and future generations are respected in policy and law-making. The EU's Anti-Poverty Strategy (May 2026) sets out a comprehensive approach to prevent and protect against poverty across different age groups, recognising that addressing poverty in one generation can help combat poverty in other generations. It underlines that all policies need to be designed to prevent the accumulation of disadvantages over the life course. As part of the strategy, the Commission also adopted a Communication on breaking the cycle of child poverty, which strengthens the European Child Guarantee (May 2026).

Demographic change is not a distant prospect: it is here now and unfolding across every Member State. Understanding its depth and breadth is the first step towards policies that turn its challenges into opportunities and ensure that the EU thrives as its population continues to evolve. This Commission report is part of a series examining the impact of demographic change on EU economies and societies. Building on earlier statistical reports, the 2020 edition mapped the main trends, the 2023 edition deepened the analysis and expanded the scope to consider the impact of crises such as the COVID-19 pandemic. This

⁽¹⁾ For further information, see European Commission Communication "Demographic change in Europe: a toolbox for action", COM(2023) 577 final

report provides up-to-date evidence based on current demographic trends and projections, explores their implications across key policy areas, and highlights the initiatives already taken by the EU to address their consequences. It contributes to raising awareness of demographic change and seeks to support informed policy actions. Finally, it shows progress made and highlights the EU's commitment and continued efforts to support Member States in managing demographic challenges and strengthening policy coordination at the appropriate levels.

2. DEMOGRAPHIC TRENDS, PROJECTIONS AND DRIVERS IN THE EU

This section presents the statistical evidence based on European official statistics produced by Eurostat together with the European Statistical System, which form the backbone of the EU's demographic analysis. It examines how Europe's population is changing in size, structure, and geographic distribution, and explores the underlying drivers that explain these movements. The data presented here draws on the latest available statistics and projections, providing a factual foundation upon which the subsequent analysis of impacts and policy responses rests ⁽ⁱⁱ⁾.

2.1. A changing EU population

The EU has experienced substantial population growth over the past half-century. The EU population ⁽ⁱⁱⁱ⁾ increased from 354.5 million in 1960 to 450.6 million in 2025. More recently, the pace of this growth has slowed considerably. On average, the EU population increased by about 0.89 million people per year between 2005 and 2024, compared with around 3.03 million people per year during the 1960s. Natural population change (the difference between births and deaths) remained positive but declining until 2011, and has been negative since 2012. This means that since 2012, more people have died each year than have been born. As a result, overall population growth has been driven by positive net migration ^(iv).

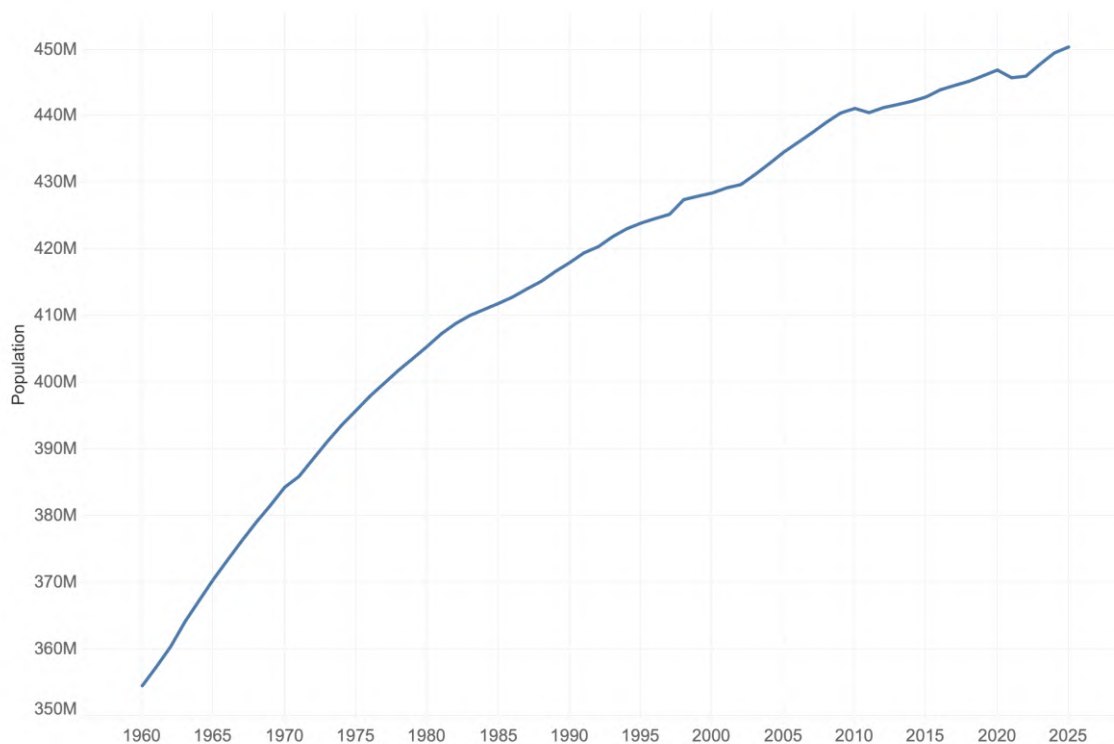
During the COVID-19 pandemic, net migration was no longer sufficient to offset negative natural change, leading to an overall population decline in 2020. Following this temporary dip, the EU population resumed growing. The EU population rose from 449.5 million on 1 January 2024 to 450.6 million on 1 January 2025, as stronger migration flows more than offset the continuing gap between births and deaths.

⁽ⁱⁱ⁾ For further information, see [Statistics Explained by Eurostat](#).

⁽ⁱⁱⁱ⁾ 'EU population' refers to the population of the 27 European countries that are currently members of the European Union. These figures do not include refugees under temporary protection for Slovakia and Poland.

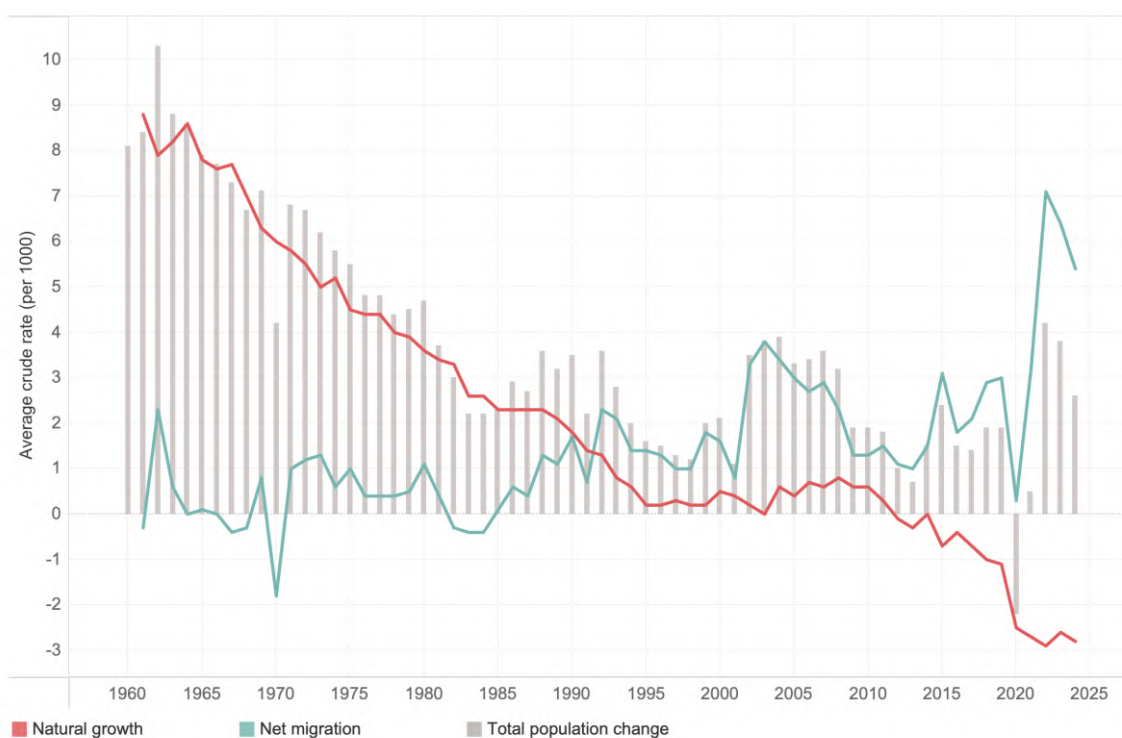
^(iv) Net migration represents the balance between the number of people moving into a country (immigrants) and those moving out (emigrants) over a given period. For more information, see the Eurostat glossary on migration.

Figure 1: Total EU Population (1961-2025)



Source: Eurostat (demo_gind).

Figure 2: Components of total population change

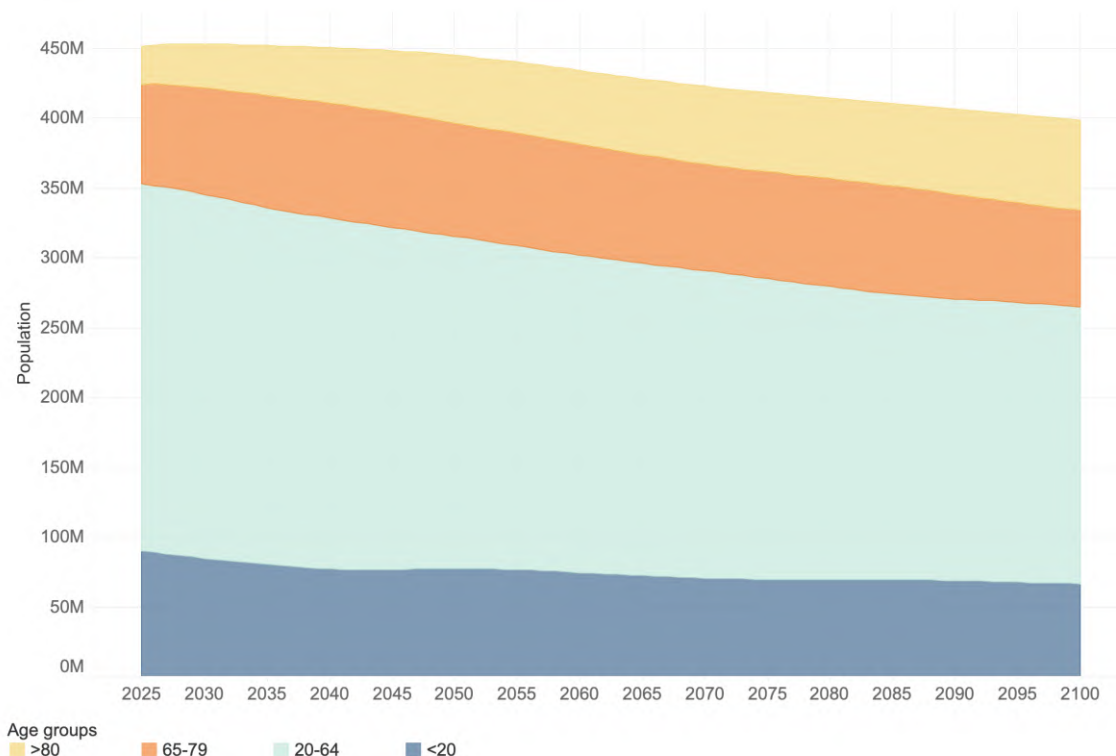


Note: The indicators are population weighted averages across EU27 Member States. Natural growth rates measure the frequency of births minus deaths for one year. Net migration is the difference between immigration and emigration and includes statistical adjustments. These rates are expressed as the number of events per 1,000 inhabitants.

Source: Eurostat (demo_gind)

The EU population is projected to start declining from 2029 onwards. The latest long-term population projections for the EU (EUROPOP2025) ^(v) indicate that the EU is heading towards a smaller population by the end of this century. The EU population is projected to peak at 453.3 million in 2029, after which a slow long-term decline begins. By 2050, the EU population is projected to be around 445.0 million. By 2100, it is expected to fall to 398.8 million – a decrease of about 11.7%, compared with today, corresponding to the size of the EU population in the second half of the 1970s.

Figure 3: EU Population projections (2025-2100)

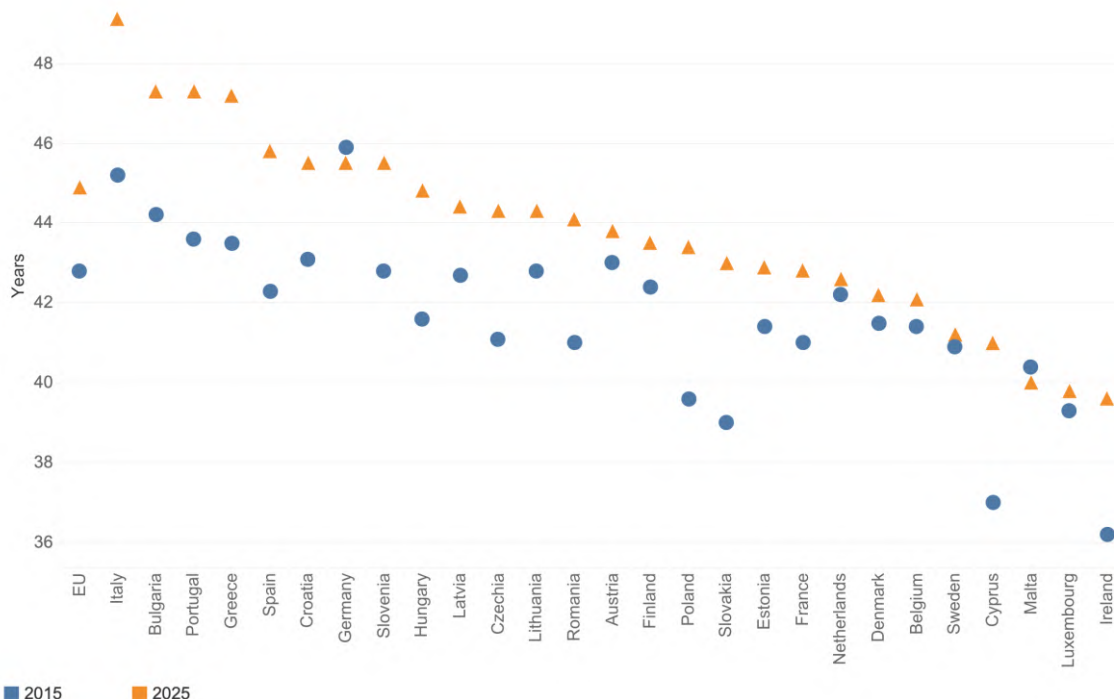


Source: Eurostat (proj_25np)

The median age of the EU population has continued to increase. The median age – the age that divides the population in two equal halves, younger and older – was 44.9 years on 1 January 2025. Across EU countries, the median age ranged from 39.6 years in Ireland to 49.1 years in Italy, highlighting the relatively young and relatively old population structures in these two countries.

^(v) Eurostat’s EUROPOP2025 are the latest long-term population projections for all 27 EU Member States and three European Free Trade Association (EFTA) countries – Iceland, Norway and Switzerland. Published on 16 April 2026, they cover the period from 2025 to 2100 and replace previous projection rounds. These projections are not forecasts; they are structured ‘what-if’ scenarios that show how the EU population would change if trends in births, deaths and migration continue as assumed. See Population projections in the EU - methodology for details on the methodology. See the Eurostat database for all data.

Figure 4: Median age of population (2015 and 2025)



Notes: Provisional estimates for Romania, Poland, Estonia and France. Countries sorted by median age in 2025.

Source: Eurostat (demo_pjanind).

Population ageing is projected to intensify across the EU in the coming decades. The median age is projected to increase by around 6.6 years between 2025 and 2100, reaching 51.5 years. The share of the population aged 65 or above is projected to more than double, growing from around one-fifth today to nearly one-third by mid-century. People aged 80 and above, who currently represent about 6% of the EU population, are projected to account for over 15% by 2100. This ‘ageing at the top’ of the population pyramid reflects declining mortality and increasing life expectancy.

Across the EU, the balance between older people and the working age population expressed by the old-age dependency ratio (OADR) ^(vi) is projected to shift markedly towards older age groups. In 2025, there were about 34 older people for every 100 working-age people in the EU. This ratio is projected to exceed 50 in 13 Member States by 2050. By 2100, the EU-wide OADR is projected to be above 60, with 10 Member States exceeding 65.

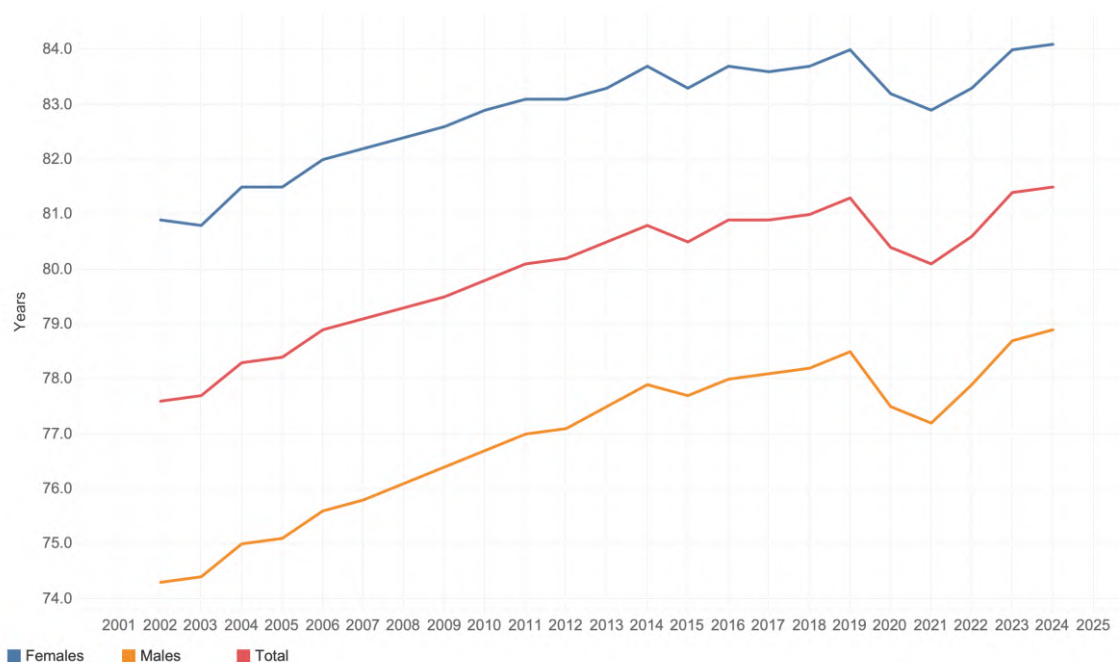
2.2. Longer life expectancy

Life expectancy at birth has risen rapidly over the past century due to several factors. These include lower infant mortality, higher living standards, healthier lifestyles and better education, as well as advances in healthcare and medicine. Official European statistics show that life expectancy has risen on average by more than two years per decade since the 1960s.

^(vi) Old-age dependency ratio is the number of individuals aged 65 or older per 100 people of working age, defined as those aged between 15 to 64 years old.

In the EU, life expectancy at birth was estimated at 81.5 years in 2024, reaching 84.1 years for women (0.2 years higher than in 2023) and 78.9 years for men (0.3 years higher than in 2023). Between 2002 (the first year for which life expectancy data are available for all EU countries) and 2019, life expectancy at birth in the EU rose by 3.5 years, from 77.6 to 81.1 years, with an increase of 2.9 years for women and 4.0 years for men. With the outbreak of the COVID-19 pandemic in 2020, life expectancy at birth in the EU fell by 0.8 years to 80.0 and declined further in 2021 to 80.1. It started to increase again in 2022, reaching 80.6 years, and surpassed the pre-pandemic level in 2023 at 81.2 years.

Figure 5: Life expectancy at birth



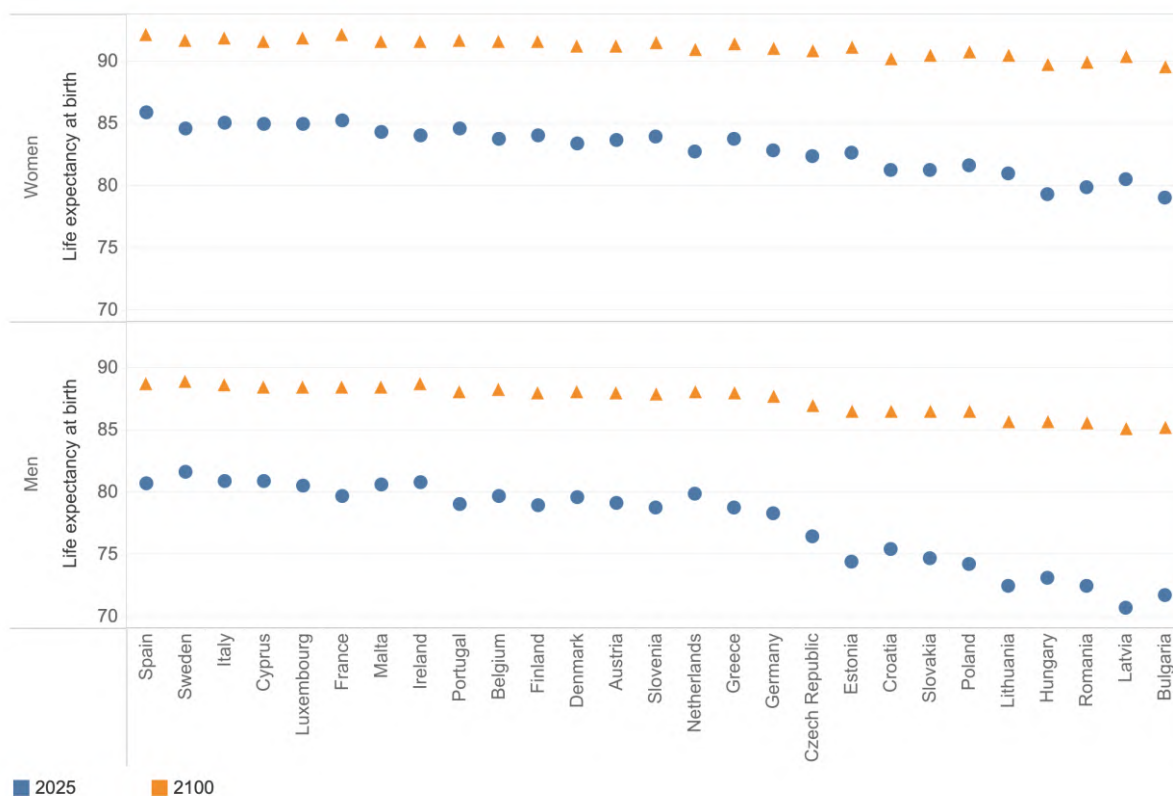
Notes: The data contains breaks in time series in years between 2010 and 2024.

Source: Eurostat (*demo_find*).

Life expectancy is projected to continue to rise in the EU. By 2100, life expectancy at birth is projected to exceed 90 years for women in all countries, and to reach at least 86 years for men ^(vii).

^(vii) Mortality assumptions in EUROPOP2025 are based on age- and sex-specific death rates that are projected to partially converge across countries over time. This reflects the expectation that the diffusion of medical knowledge, improved public health standards and living conditions will narrow existing mortality gaps between Member States. A notable methodological innovation in EUROPOP2025 is the inclusion of recent evidence showing a slowdown in mortality improvements among neonates and young people (under 20) in the common mortality profile, while improvements at older ages are assumed to continue without interruption. See [Population projections in the EU - methodology](#) for details on the methodology.

Figure 6: Mortality assumptions – Life expectancy at birth by sex



Notes: Countries sorted by average life expectancy in 2025 both sexes.

Source: Eurostat (proj_25nalexp).

Population ageing is one of the most significant long-term demographic transformations affecting the EU. The EU is transitioning towards a ‘longevity society’ - one in which people live longer, healthier lives and where older people make up a growing share of the population. Increased life expectancy has transformed ‘old age’ from a relatively short final life stage into a longer and more diverse phase of life. Most of the projected population ageing is expected to occur until about 2045. Life expectancy is converging across the EU. In the 1990s, there was a wider gap in life expectancy between countries. This gap is now narrowing, reflecting the expansion of health coverage to a broader range of territories and population groups. This shift towards a longevity society matters not only for today's older generations, but also for younger people and those not yet born.

This transition is slow-moving by nature. Demographic change is shaped by the inertia of existing population structures: patterns change gradually because the current demographic composition strongly influences future populations for decades. A country with high numbers of young adults may continue growing, even if fertility rates are falling, as many are entering reproductive age. Conversely, rising fertility rates would take decades to significantly alter the age structure of countries where fertility has been low for many years and the youth population is small. This means the current age distribution of EU populations largely dictates their future evolution.

Longevity is not just about living longer – it is about living healthier, more active lives. Rising life expectancy is a major achievement reflecting advances in healthcare, living standards and social conditions. However, longevity is not merely about living longer. It is about living healthier, more active lives with greater opportunities, participation and wellbeing across generations.

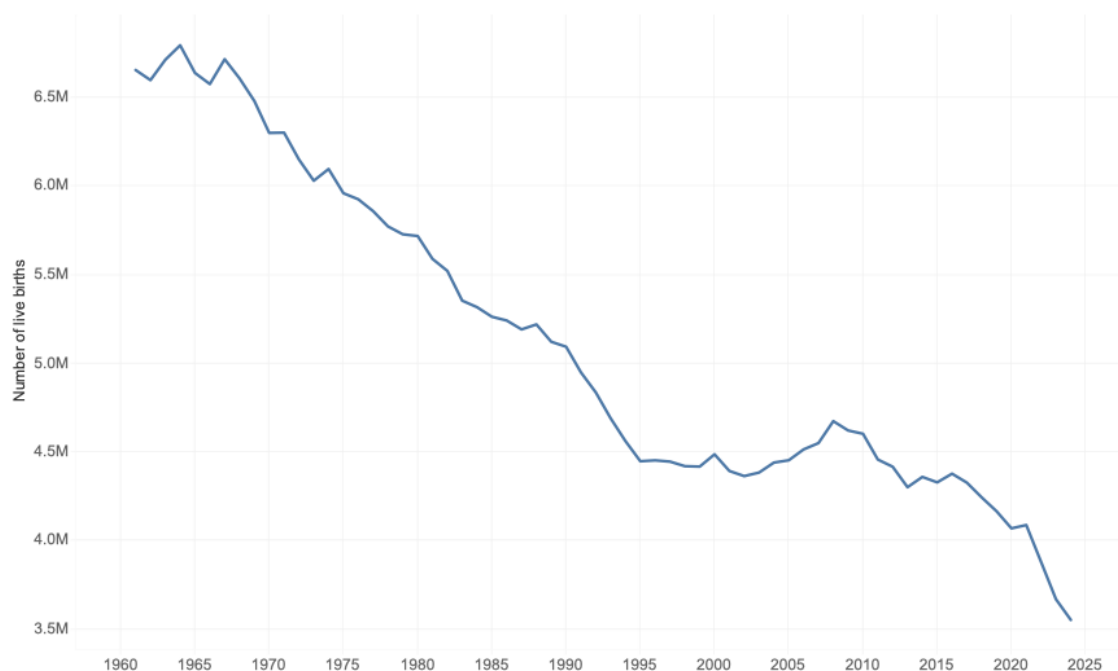
In 2023, a child born in the EU could expect to live 81.4 years on average. With a healthy life expectancy of 75.3 years, it could also expect to live most of its life in good perceived health ^(viii). EU citizens, on average, enjoy better health than people in most other parts of the world. The ‘health-equivalent old age’ – the age at which people in a given country have the same overall health problems as a typical 65-year-old person worldwide – is about 70 years in the EU, whereas in the world’s least healthy regions it is below 55 years [1]. Although Europe has a health advantage, the ongoing demographic shift means societies must reconsider how they support individuals across longer life courses, while also safeguarding the sustainability of territorial and social systems. It also necessitates adapting policies, institutions and social attitudes to new realities of work, retirement, learning, care and intergenerational solidarity. The transition towards a longevity society also unlocks substantial opportunities. Longer, healthier lives expand the potential for personal fulfilment, civic engagement and continued contribution to society well beyond traditional retirement ages, giving rise to the silver economy – a rapidly growing market for products and services tailored to the needs and aspirations of older citizens.

2.3. Fertility trends

The number of live births and the crude birth rate ^(ix) have been decreasing in the EU. In 2024, 3.55 million children were born in the EU. Between 1961 and 2024, the highest annual number of live births in the EU was recorded in 1964, when 6.8 million children were born. From this comparatively high level, the number of live births in the EU declined at a steady pace, reaching 4.36 million in 2002. This was followed by a modest recovery, peaking at 4.68 million live births in 2008, after which a general downward trend was resumed, with small increases in 2014 and 2016. Live births in the EU fell to 4.07 million in 2020, rose slightly to 4.09 million in 2021 and have been declining since 2022. The crude birth rate was 7.9 in 2024. In comparison, the EU crude birth rate was 10.5 in 2000, 12.8 in 1985 and 16.4 in 1970.

^(viii) Source: Eurostat - [Healthy life expectancy based on self-perceived health \(hlth_silc_17\)](#)
^(ix) The crude birth rate is the annual number of live births per 1000 population.

Figure 7: Number of live births (1961-2024)

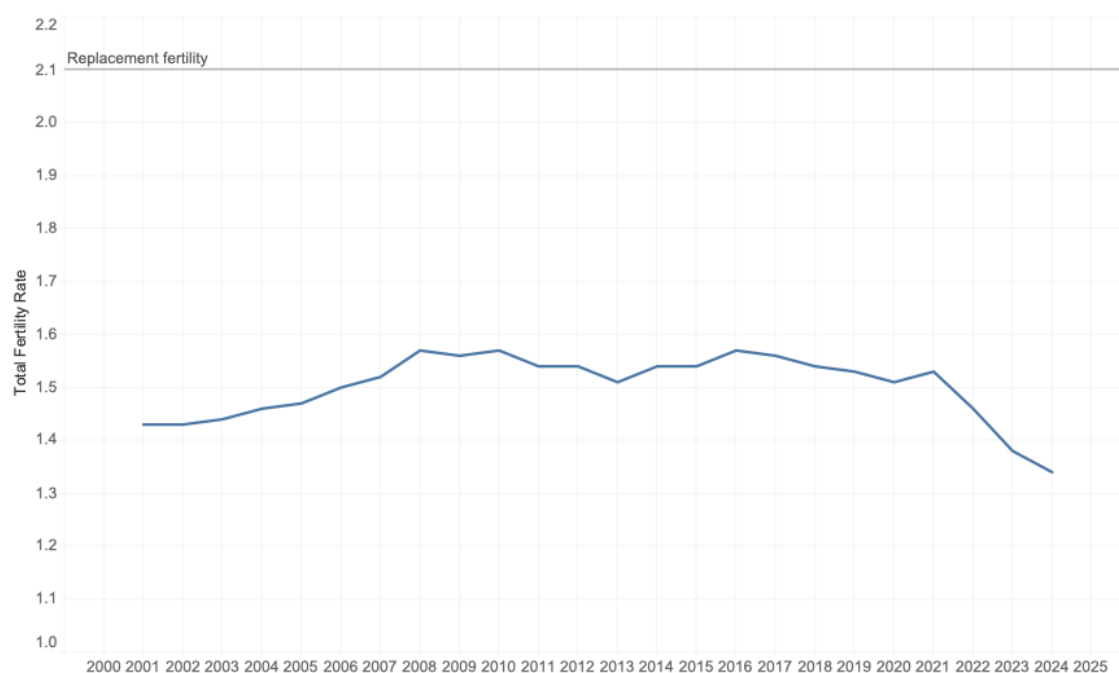


Source: Eurostat (demo_fagec).

Fertility rates in EU countries have declined steadily from the mid-1960s to the turn of the century. Fertility is the primary driver of a population's natural growth or decline. It is measured by the Total Fertility Rate (TFR): the average number of children a woman would have during her lifetime if current age-specific birth rates remained unchanged. A TFR of approximately 2.1 is needed (referred to as 'replacement level') to keep a population stable in the absence of migration ^(x). The EU's average TFR has remained well below this level for decades. Very few Member States are close to 2.1, and none has reached it in recent years. At the beginning of the 2000s, the TFR in the EU increased from 1.43 in 2001 to 1.57 in 2010. It then decreased to 1.51 in 2013, followed by modest rebounds up to 2016, after which it started to decline again, reaching 1.46 in 2022 and 1.34 in 2024.

^(x) Replacement level fertility (2.1) is the average number of children per woman required for a population to exactly replace itself across generations without immigration.

Figure 8: EU Total Fertility Rate (TFR) (2001-2024)



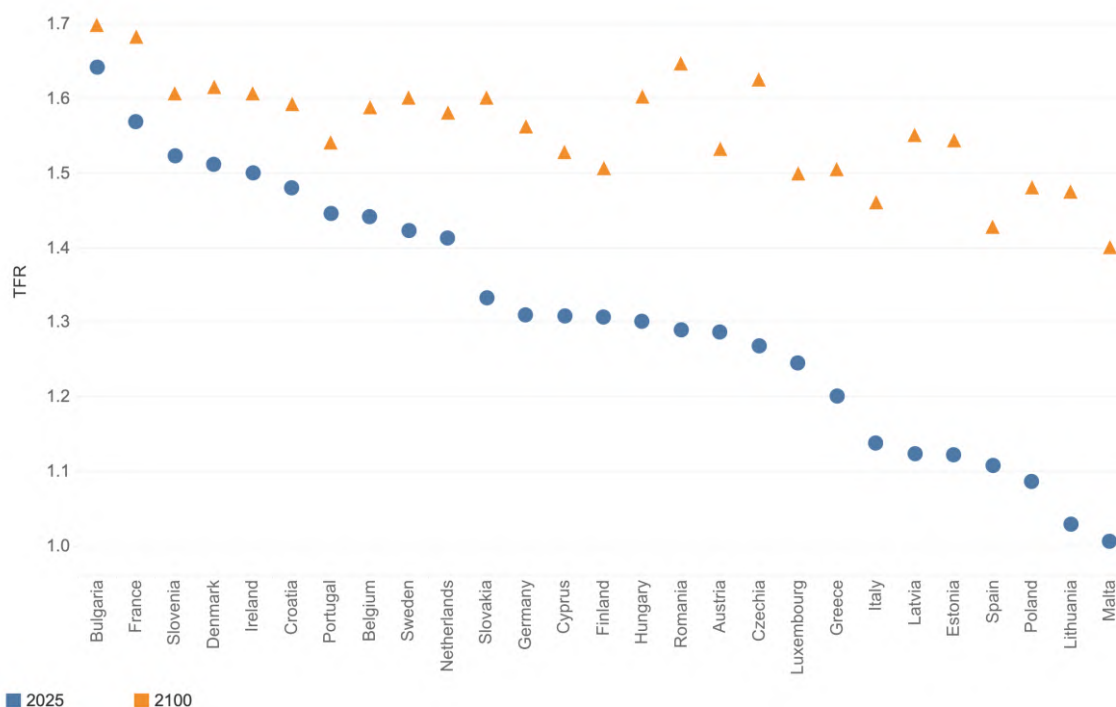
Notes: breaks in time series in years between 2010 and 2024.

Source: Eurostat (demo_find).

The fertility rates in the EU are projected to recover slightly by the end of the century, but remain below the replacement level. Fertility rates are projected to gradually rise and partially converge across Europe, reflecting a modest upward trend for most countries. These projections account for the fact that part of the current low fertility rates reflect a decision to postpone but not forgo having children. Despite these temporary rebounds fertility is expected to remain relatively low, with only small average increases. Even under this moderately optimistic recovery scenario, EU fertility remains well below replacement level throughout the projection horizon. For the EU as a whole, about 253 million births are projected between 2025 and 2100 ^(xi).

^(xi) Eurostat's fertility assumptions for EUROPOP2025 rest on two main premises. First, part of the current very low fertility rates reflects delaying having children rather than a decision not to have children at all: some of the births not occurring in recent years are assumed to occur later. Second, this catch-up is only partial, because evidence shows that delaying having children tends to reduce the total number of children in a family.

Figure 9: Fertility assumptions – Total Fertility Rate (TFR) in EU Member States in 2025 and 2100



Notes: Countries sorted by TFR in 2025.

Source: Eurostat (proj_25naasfr)

A wide range of explanations has been proposed for the persistently low fertility levels observed, not only in the EU but also in other developed countries facing similar trends. Analysis of the link between family policies and fertility outcomes shows considerable variation across countries, periods and policy measures. Some studies question the effectiveness of measures expressly aimed at boosting births, noting mixed impacts on fertility and possible unintended effects on sexual and reproductive health, human rights and gender equality [2]. Others suggest that well-designed family-support initiatives such as parental leave, childcare provision and financial assistance can influence fertility levels and timing, although the effects are typically modest and unlikely to return fertility to replacement rates. Fertility may also be supported indirectly by policies that promote work-family balance, gender equality, job stability and affordable housing [3].

Another set of explanations focuses on the gap between the number of children people would like to have and the number they actually have. Structural and economic factors such as perceived economic uncertainty, infertility-related struggles, longer and more complex education and career pathways and high housing costs may prevent individuals from achieving their ideal family size. In addition, evolving social norms related to values and attitudes around having children, partnership, work-life balance and gender roles are also influential [4]. For example, the fact that Nordic countries, despite having advanced welfare states, high gender equality and strong support for families, are also experiencing declining fertility rates, suggests that deeper societal transformations may be underway [3]. Declining fertility in different world regions with diverse socioeconomic, cultural and

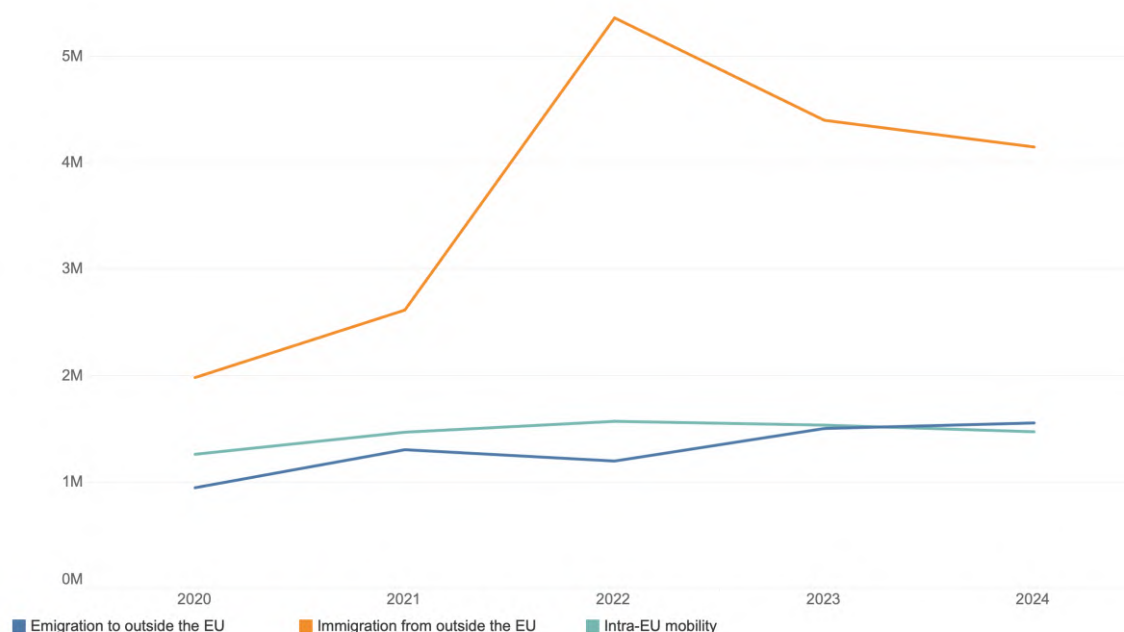
religious contexts is a process still poorly understood and analysed, affecting the global population.

2.4. Migration trends

The number of international migrants worldwide is increasing. According to the latest global estimates by the United Nations, the number of international migrants rose from 154 million in 1990 to 304 million in 2024, corresponding to 3.70% of the total global population ^(xii). In line with this global trend, migration to the EU has been on the rise, influenced by a variety of factors, including conflicts, political instability, and economic disparities. The overall number of foreign nationals residing in the EU has increased in recent years. However, irregular migration to the EU has been declining. In 2025, irregular border crossings fell by 26%. According to preliminary data from the European Border and Coast Guard Agency, irregular border crossings fell by 40% during the first four months of 2026 compared with the same period in 2025 ^(xiii).

In 2024, 4.2 million immigrants moved to the EU from non-EU countries and 1.5 million people already living in one EU country moved to another EU country ^(xiv). Over the same period, 1.6 million people left an EU country to settle in a non-EU country. In comparison, in 2023, an estimated 4.4 million immigrants moved to the EU from non-EU countries, 1.5 million people moved from one EU country to another EU country and about 1.5 million people emigrated from the EU to a country outside the EU.

Figure 10: Number of emigrants and immigrants in the EU (2020-2024)



Notes: Poland and Slovakia did not include refugees from Ukraine who benefit from temporary protection in their migration statistics. Immigration data for Portugal for 2024 is not available. The EU aggregate for 2024 was estimated using 2023 immigration data for Portugal.

Source: Eurostat (*migr_imm12prv*, *migr_emi5nxt*)

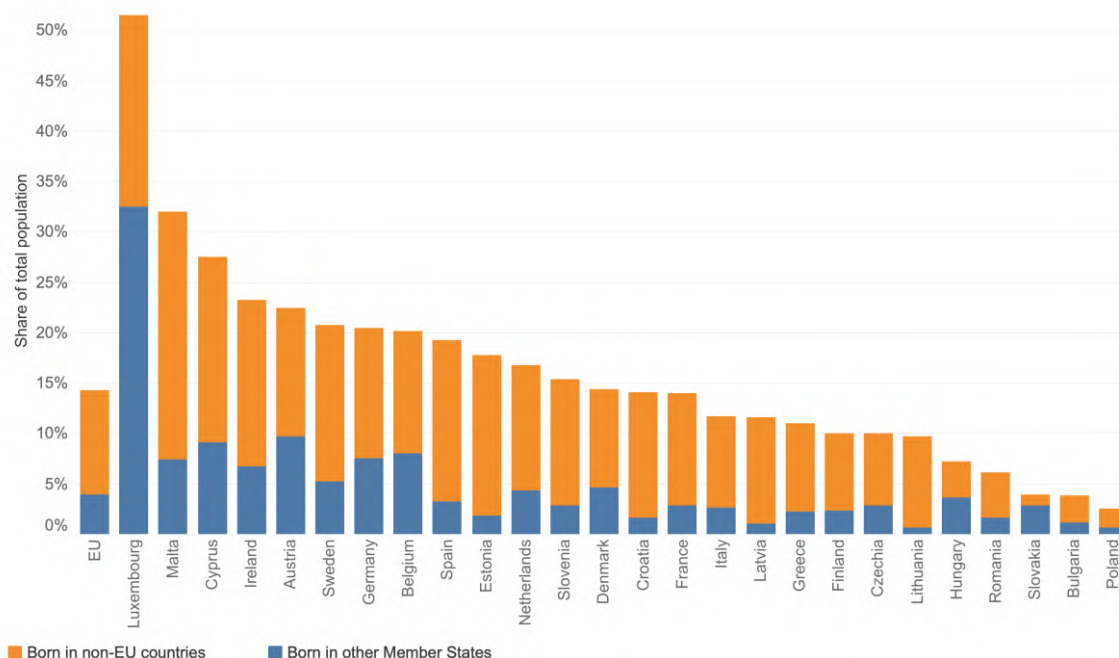
^(xii) For further information, see: <https://www.un.org/en/global-issues/migration>

^(xiii) For further information, see [key highlights from Frontex](#)

^(xiv) These figures exclude, for some countries, refugees from Ukraine under temporary protection.

On 1 January 2025, an estimated 46.7 million people born outside the EU were residing in an EU country, accounting for 10.4% of the EU population. Additionally, an estimated 18.0 million people born in an EU country were resident in another EU country, accounting for 4.0% of the EU population.

Figure 11: Share of foreign-born people in the resident population, 1 January 2025



Notes: Poland and Slovakia did not include refugees from Ukraine who benefit from temporary protection in their population statistics. Provisional/estimated: EU, France, Poland, Romania. Data for Portugal is not available. The EU aggregate was estimated using 2024 data for Portugal.

Source: Eurostat (migr_pop3ctb)

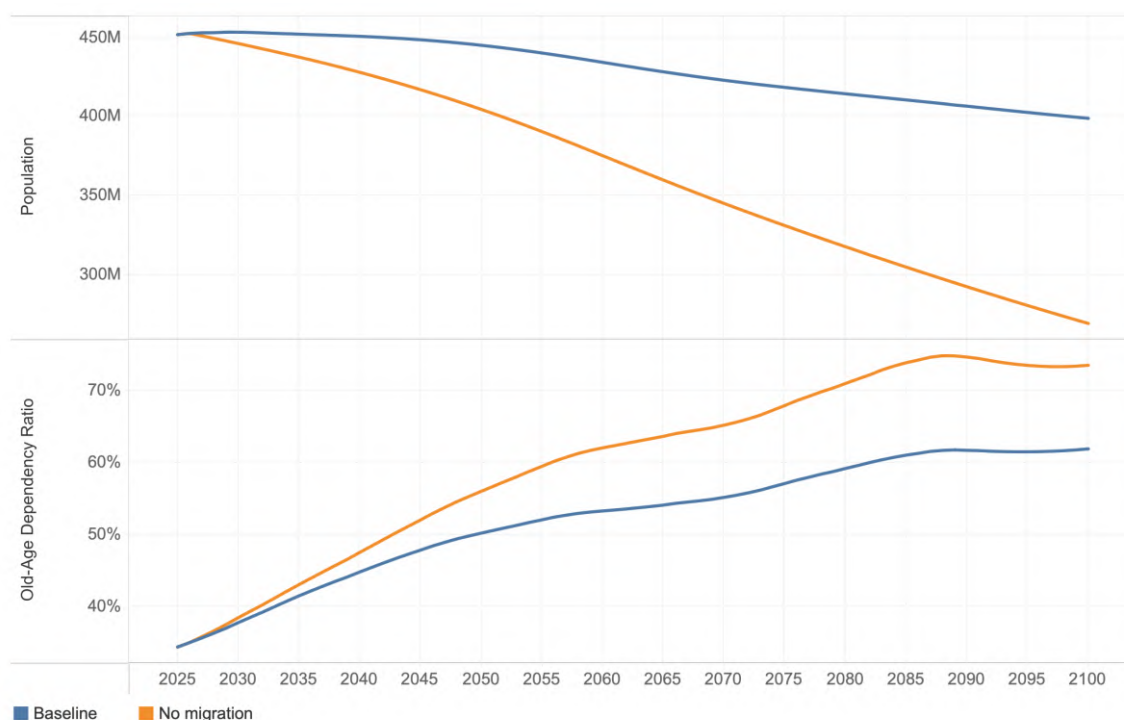
According to the latest projections until 2100, the EU will continue to attract migrants. The projections suggest that net migration into the EU will be positive for every year from 2025 to 2100 ^(xv). However, even sustained immigration is expected to prove insufficient to fully offset natural population decrease stemming from low fertility. Alternative scenarios modelled by Eurostat illustrate the significance of migration for demographic trends. In the baseline scenario ^(xvi), the EU population is projected to decline

^(xv) Migration is the most volatile and least predictable component of population change. The EUROPOP2025 model breaks migration down into four main flows: immigration and emigration to and from other EU countries, and immigration and emigration to and from non-EU countries. Each flow is projected by age and sex. For the short term (2025–2031), the model uses recent country-specific trends. From 2032 to 2100, assumptions gradually converge towards common EU-wide emigration hazard rates and per capita immigration levels, in line with the partial convergence hypothesis. A working-age 'feedback mechanism' is also included: in each year in which the working-age population (15–64) shrinks, an additional modest pull factor for non-EU immigration is assumed, reflecting the likely labour-market response to labour shortages. This additional inflow is set at 10 per cent of the annual decline in the working-age population.

^(xvi) In Eurostat's population projections, the 'baseline' scenario is the central 'what-if' scenario used as a reference case. It is not a prediction of what will happen, but rather shows how the population would evolve if Eurostat's assumptions about fertility, mortality and net migration hold over projection period. In the most recent projections, the baseline scenario assumes continued net migration and gradual changes in fertility and mortality patterns.

moderately over the long run. Under a zero-net-migration scenario, the EU population would be 32% smaller - equivalent to approximately 130 million fewer persons - by 2100 compared with the baseline. Furthermore, in the absence of migration, the Old-Age Dependency Ratio (OADR) would be 12 percentage points higher than under the baseline, reflecting accelerated population ageing.

Figure 12: Population and Old-Age Dependency Ratio (OADR) projections according to the 'Baseline' and 'No migration' scenario



Source: Eurostat demographic projections (proj_25np, proj25ndbi).

Migration can ease the pace of population ageing but not alter its trajectory. Migration has emerged as an increasingly important factor in EU population dynamics. As fertility rates decline, migration has become an important driver of population change, counterbalancing the negative effects of population ageing and labour force contraction. Non-EU nationals residing in the EU tend to be younger than nationals, meaning positive net migration brings younger age groups into the population. Consequently, positive net migration can contribute to offsetting some effects of demographic change in Europe. Nevertheless, its capacity to fully address the challenges posed by population ageing is inherently limited. While migration affects the size of the population, it cannot alter the fundamental shift towards older age structures. Settled migrants also grow older and eventually form a part of the older generations. Over time, the fertility levels of migrants also tend to converge with those of the host country, especially if they integrate and settle in the host society. Thus, over generations, immigrants contribute to the same demographic patterns as the host society.

Taken together, low fertility, rising life expectancy and migration interact in complex ways to shape Europe's demographic trajectory. These forces strengthen one another in a dynamic process that will play out over generations. This is not a temporary disruption, but a permanent transformation in the conditions under which European societies evolve.

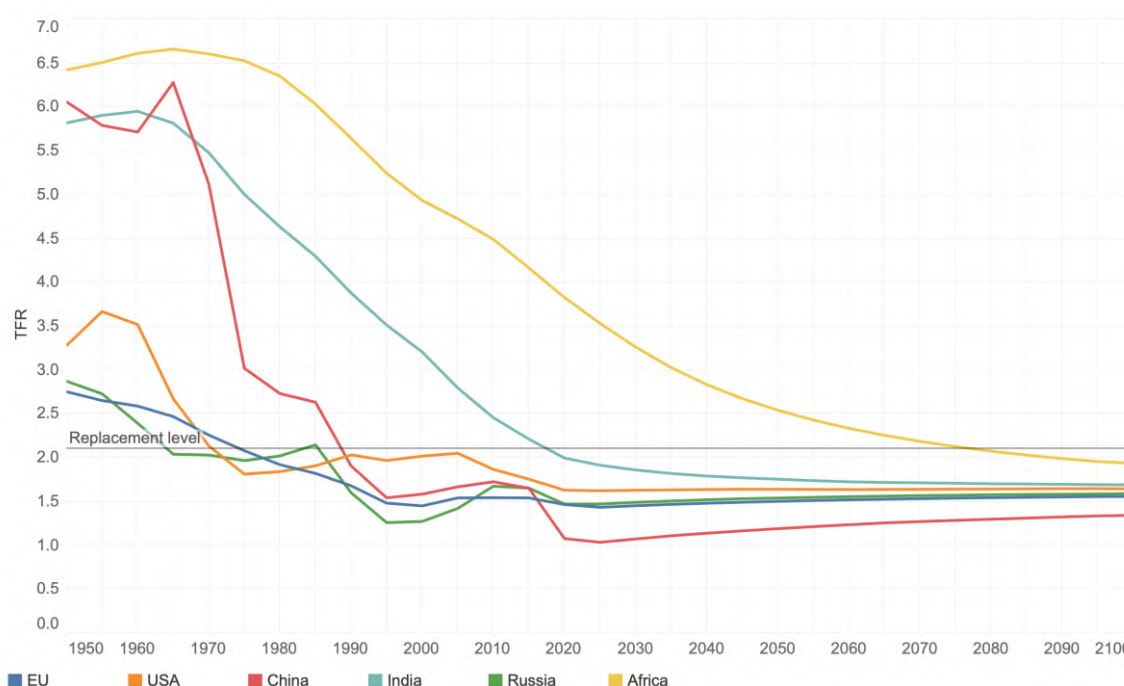
This reality underscores the need for policies to adapt to - rather than seek to reverse - these fundamental changes.

2.5. Global population trends

The world population surpassed 8 billion people in 2022. Globally, fertility rates are declining in most regions of the world, population growth is slowing, but the global population is not yet declining. Population growth is increasingly concentrated in parts of Sub-Saharan Africa, South Asia and some Middle Eastern countries, while many advanced economies face stagnation or population decline. This creates a split dynamic: youthful, fast-growing populations in developing regions versus ageing, stable or shrinking populations in wealthier ones.

Global population growth is slowing, because fertility rates are declining almost everywhere. The shift towards ageing and low-fertility societies is a global phenomenon that follows a pattern known as the demographic transition. This long-term shift in population patterns occurs as countries develop economically and socially, moving from high birth and death rates to low ones, with corresponding changes in population growth over time. The average fertility of the world's population now stands at 2.3 births per woman over a lifetime, compared to 5 births per woman in 1950. It is projected to decline below the replacement rate of 2.1 births per woman before 2050 ^(xvii).

Figure 13: Total Fertility Rate for major world regions and countries (observed 1950-2023, projected 2024-2100)



Note: 5-years simple average across countries in region.

Source: UNDESA WPP2024.

^(xvii) Recent global population projections by the United Nations Department of Economic and Social Affairs, the International Institute for Applied Systems Analysis, and the Institute for Health Metrics and Evaluation converge in indicating that global fertility is declining faster than previously anticipated. Outside of Sub-Saharan Africa, sustained below-replacement fertility is now the standard baseline across most world regions, with little evidence of a post-decline rebound despite variations in institutional modelling methodologies.

Ageing is becoming a defining global trend. Many world regions are converging on similar trajectories towards an older population profile, even as their starting points and speeds of transition differ considerably. In recent decades, the number of older people has increased rapidly in all regions of the world, a trend that is likely to continue over the next three decades. Europe and Northern America currently have the highest share of older persons. However, the population aged 65 or above in Asia is projected to grow by more than 487 million by 2050, accounting for more than 60% of the total population aged 65 or over [5]. East Asian countries like Japan and South Korea are experiencing fertility levels below the EU average, with projections indicating future declines in population and the labour force. Japan is currently the world's oldest country, with a total fertility rate (TFR) that reached a historic low of 1.15 in 2024 and projections indicating a potential population decline of about 40% by the end of the century [5].

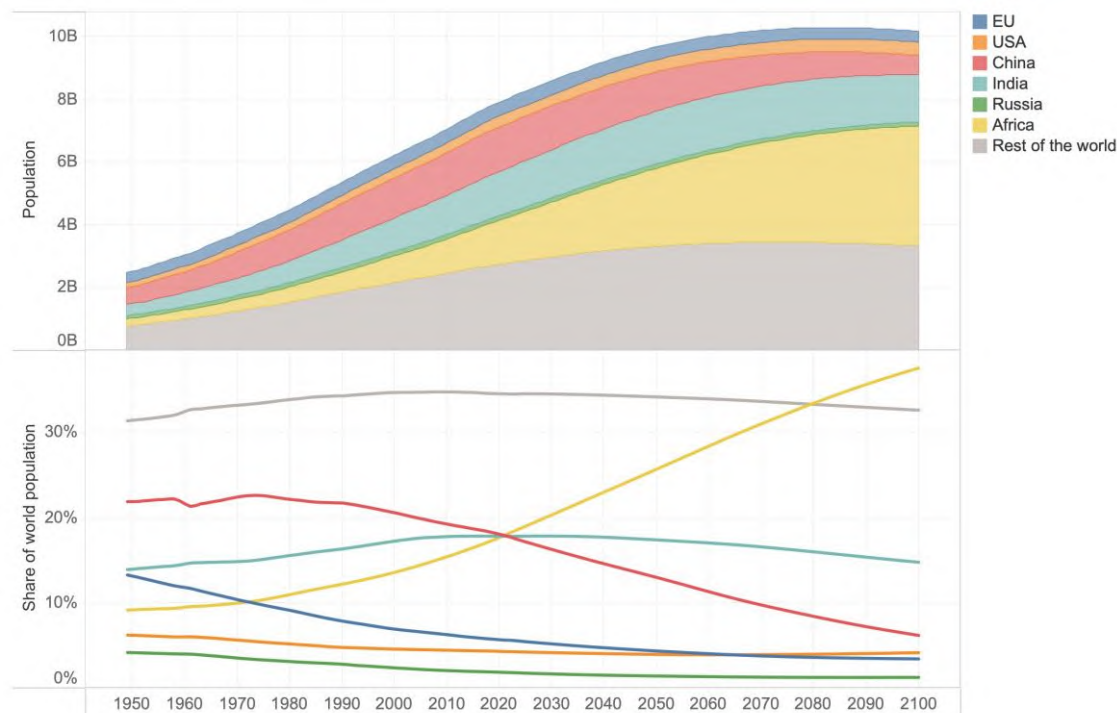
The total dependency ratio is projected to increase in all world regions, although the magnitude of the change will differ markedly. The total dependency ratio measures the number of children (under 15) and older people (above 65) relative to the working-age population (15-64). A low total dependency ratio usually indicates that a relatively large share of the labour force is available to support both children and the older population - a prerequisite for economic development.

In the EU, the total dependency ratio reached its lowest level of 48% in 2003 and is projected to rise to over 85% by 2100, with annual increases above 1% concentrated before 2045. Around 2009, China reached a minimum dependency ratio of 37% and experienced one of the most dramatic reversals of trends observed worldwide, undergoing a rapid transition from a population dominated by children to an ageing society. India is likely to enjoy favourable conditions for a 'demographic dividend' ^(xviii) until around 2034 when the dependency ratio will reach the lowest value of 48% before starting to increase. In Africa the ratio will continue to decline, offering demographic opportunities up to about 2073. However, how dependency ratios translate into actual opportunities and challenges depends on various contextual factors, including technological and medical developments, job creation, and structural reforms. The Global Gateway is the European Union's external investment strategy, designed to ensure that long-term investments contribute to public policy objectives in partner countries and are anchored in intergenerational fairness. It does so by promoting local skills, youth engagement, vocational education and training, and decent jobs, while fostering greener and healthier societies and reducing multidimensional inequalities.

The EU's share of the global population is expected to decline over the coming decades. According to the United Nations Department of Economic and Social Affairs (UNDESA), the world's population is projected to level off at roughly 10.2 billion in 2084. The EU's share of the global population is expected to fall from about 5.4% in 2025 to 3.4% by 2100. This decline is part of a broader trend affecting many developed economies. China's share will decline from 17.2% in 2025 to 6.2% in 2100, India's from 17.8% to 14.8%, the United States' from 4.2% to 4.1%, and Russia's from 1.7% to 1.2%. In contrast, the proportion of Africa's population will more than double, rising from 19.0% in 2025 to 37.6% in 2100.

^(xviii) The 'demographic dividend' refers to the period of accelerated economic growth that a country can experience when the proportion of its working-age population (typically ages 15–64) is substantially larger than the dependent population (children and older people).

Figure 14: Global population trends and projections



Source: UNDESA WPP2024.

Independently of its population size, the EU is set to remain a stable, highly developed global actor with significant influence. It remains one of the world's largest economic blocs, with a large single market. It is a leading player in global trade, climate policy and multilateral institutions. The EU can also leverage considerable advantages in its human capital, with its population enjoying higher average levels of education and health. These human capital advantages can partially offset the challenges implied by demographic change. The EU's weight on the global stage will ultimately depend less on population size and more on productivity, innovation and its ability to act cohesively on the world stage.

3. THE IMPACTS OF DEMOGRAPHIC CHANGE AND POLICY RESPONSE

This section examines the wide-ranging implications of the demographic transformations outlined in the preceding analysis. Building on the statistical evidence of how Europe's population is evolving, it explores the consequential effects across key policy domains - from economic growth and labour markets to healthcare and long-term care, pensions, housing, societal and territorial cohesion. The analysis draws on the latest research and policy assessments to map out where pressures are intensifying, where risks are emerging, and where opportunities exist for constructive adaptation. This section also describes the EU's policy response, illustrating the range of tools and initiatives available to address demographic challenges.

3.1. The intergenerational impact of demographic change

Intergenerational fairness concerns the equitable distribution of resources, opportunities and responsibilities across generations - both among different age groups living at the same point in time and among individuals at comparable life stages across different historical periods [6]. The concept is directly relevant to demographic change, which alters the balance of resources between generations.

People experience the effects of demographic change differently based on their life stage, generational cohort and socio-economic situation. By 2038, individuals aged 20–40 in the EU are expected to be outnumbered by those above 65. This structural shift intensifies intergenerational pressures across multiple areas: pension systems face a growing strain, demand for healthcare and long-term care is rising and housing affordability is declining in many EU regions. Younger generations may experience these pressures as challenges linked to labour market entry, housing affordability and family formation. Working-age populations bear the fiscal burden of supporting both younger and older cohorts through taxation and social contributions. Older generations are more directly affected by pension adequacy, healthcare access and care provision. In the future, demographic imbalances could lead to lower pension adequacy, a shorter time to enjoy pensions ^(xix) and difficulties in accessing long-term care and healthcare for future generations [7]. On the other hand, active ageing, intergenerational knowledge transfer and extended economic and social participation can support longer and healthier lives. Against this background, demographic change can also be framed as an opportunity, provided that investments are made in lifelong learning, flexible work and age-friendly communities.

Demographic change affects the economic situation of younger generations and may reinforce inequalities over time. In the EU, young people are more frequently exposed to non-standard forms of work than other age cohorts. In 2024, 31.1% of employees aged 15-29 held temporary jobs, versus 7.4% of those aged 30-54 and 4.6% of those aged 55-64. This may reflect a preference for flexible arrangements that accommodate further education or other commitments, but it also suggests that young workers are more likely to be in precarious positions with limited social protection, uncertain career prospects and difficulty securing stable employment. Some analyses highlight that, in less flexible labour markets, delayed retirement underscores the need for policies that facilitate smooth career transitions for workers of all ages, helping to maintain a balanced job market and support younger people's access to stable employment.

Poverty rates among young adults (25-29) have almost doubled across generations in the EU, rising from 11.2 % for those born in the 1960s to 22.3 % for those born in the 1990s [8]. Such trends can entrench intergenerational inequalities, making it harder for young people to achieve financial stability and accumulate wealth. The ongoing housing affordability crisis further compounds these challenges, limiting the ability of young adults to establish independent households [9].

Recent analyses, based on data for EU15 countries ^(xx), show trends of stagnant income growth and rising poverty rates among young people. The 1960s and 1970s cohorts earned on average more than their predecessors. At ages 30-34, the 1960s generation earned 8.3% more disposable income than the 1950s cohort, while the 1970s cohort earned an additional 11.2%. In contrast, the 1980s cohort saw their disposable income plateau at the same age, and the 1990s cohort experienced a decline in income at ages 25-29 [8]. Still 41.3% of

^(xix) Extending careers to accrue additional pension rights, and in response to pension reforms increasing the statutory retirement age, will be a necessary requirement for younger generations. These increases in working life may not be matched by increases in life expectancy and, as a result, could produce a shortening of the years spent in retirement, which in 2022 in the EU was estimated to last about 21 years.

^(xx) EU15 (The composition of the EU in 1995): Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the UK. The figure for the sample of new EU Member States, Czech Republic and Slovenia, reflects the stronger growth performance over the last decades, with more recent generations having higher income levels, but also here the income situation of the 1980s and 1990s generation has improved only marginally.

employed individuals aged 25–29 from the 1990s generation held low-paying jobs compared to 30.0% and 20.9% for the 1970s and 1950s generation respectively.

European welfare systems, designed during a period of population growth, are facing structural pressure due to demographic change. Welfare systems play a vital role in redistributing resources between low- and high-income groups and between generations [10]. They enable working-age people to share their income to meet the costs of educating children and providing pensions, healthcare and long-term care services. A pay-as-you-go pension system illustrates this mechanism: workers contribute to paying the pensions of current retirees, with the state guaranteeing reciprocal support when they themselves retire. Many European welfare systems, pension schemes and healthcare frameworks were designed during a period of sustained population growth, when an expanding and relatively young population would continue to support them. However, demographic change is altering the conditions under which these arrangements were founded. As the number of older people grows relative to younger people, the balance of intergenerational redistribution shifts, putting pressure on existing mechanisms. Adjusting policies to reflect this new demographic landscape is essential to maintaining their effectiveness and ensuring they remain sustainable over the long term.

Beyond economic transfers, important intergenerational transfers occur through non-monetary channels. These include the time spent on caring for children and older parents within families and communities. As life expectancy increases and family structures evolve, the way care is provided across generations is changing. On average, older people today receive more informal care than younger generations are likely to receive in the future. On average, a person born in 1928–1945 (Silent Generation) who is 85 years old and in need of long-term care may rely on more than twice as many informal caregivers as a person born between 1965 and 1980 (Generation X) or between 1981 and 1996 (Millennials), when they reach the age of 85 [11]. At the same time, younger generations are expected to retire in a context where the ratio of younger adults to older adults will be much lower than today. This means that, at population level, there will be fewer potential informal caregivers available per person in need of care.

EU action aims to prevent demographic challenges from creating lasting disadvantages for younger and future generations, while simultaneously sustaining welfare for older citizens. The Youth Guarantee ^(xxi), adopted in 2013 and reinforced in 2020, recommends that all young people below the age of 30 receive an offer of employment, education, apprenticeship, or traineeship within four months of becoming unemployed or leaving education. All EU countries have committed to implementing the reinforced Youth Guarantee through a Council Recommendation of October 2020. This initiative has already shown significant results, with more than 63 million young people benefiting from it.

The 2023 Commission Communication on ‘*Demographic change in Europe: a toolbox for action*’ called on Member States to develop and implement integrated policies to tackle demographic change and to mainstream demographic concerns into all policy areas. The Demography Toolbox aims to help younger generations to thrive, develop their skills, and facilitate their access to the labour market and to affordable housing, while empowering older generations and sustaining their welfare.

(xxi) For further information, see Council Recommendation of 30 October 2020 on A Bridge to Jobs - Reinforcing the Youth Guarantee and replacing Council Recommendation of 22 April 2013 on establishing a Youth Guarantee 2020/C 372/01

The EU's Strategy on Intergenerational Fairness, published in March 2026, ^(xxii) aims to ensure that today's policy decisions contribute positively to tomorrow's opportunities, with both benefits and responsibilities shared fairly across age groups. The strategy seeks to promote policy approaches that combine economic prosperity and wellbeing, environmental responsibility, social and territorial cohesion, fiscal sustainability and democratic participation. It aims to amplify young people's voices as the EU's future while strengthening solidarity between generations. Its goal is to mainstream intergenerational fairness across all EU policies, ensuring that current choices do not undermine but rather enhance wellbeing for both present and future generations. The strategy raises awareness on the potential impacts of increasing demographic imbalances. It frames the disparities and shifts in population distribution as one of 14 megatrends, which are defined as long-term driving forces that are observable now and likely to have a global impact ^(xxiii). Erasmus+ already supports skills development, active citizenship and lifelong learning, and enhancing intergenerational fairness and solidarity figures as one of the priorities of the 2026 European Solidarity Corps call. The Intergenerational Fairness Strategy foresees the development of an Intergenerational Fairness Index to identify opportunities and gaps across multiple domains (e.g. housing, long-term care). The Commission will develop a Longevity Roadmap and organise a Demography Forum as a place for exchange and mutual learning as part of the strategy.

3.2. People, employment and education

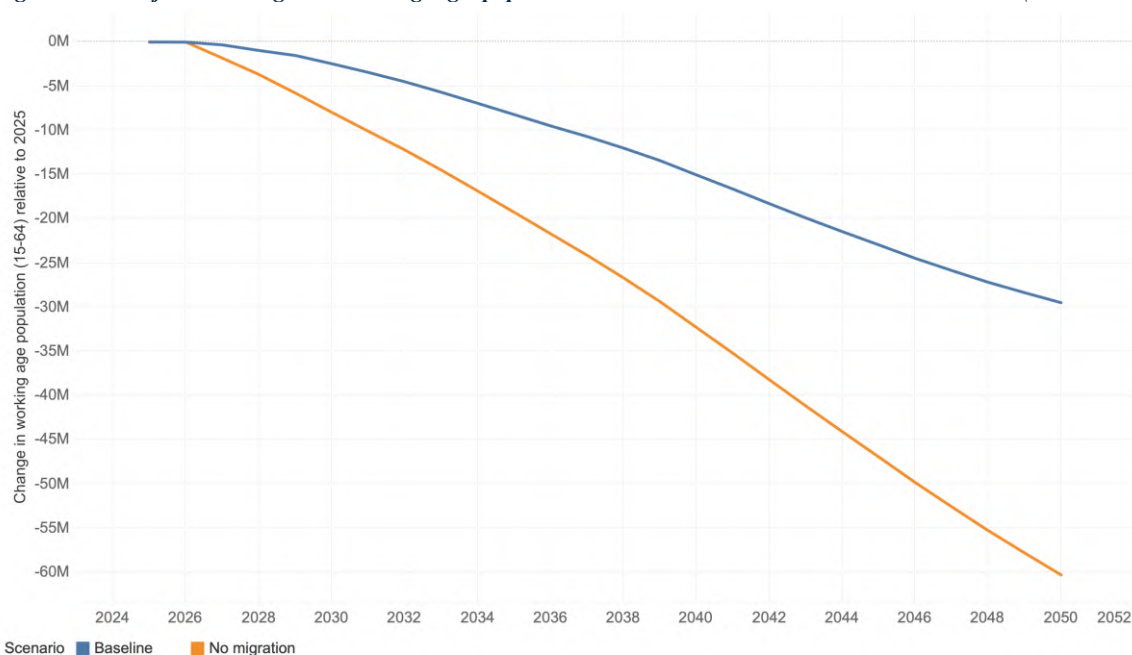
Demographic change is reshaping the European labour market and, consequently, affects the foundations of economic growth in the EU. With fertility below replacement level in every Member State and life expectancy continuing to rise, the balance between the working-age population and retirees is projected to shift in the coming decades.

For the first time in recent history, the EU is facing a period where economic growth will no longer be supported by a rising population. This demographic challenge, affecting Europe as much as other major world economies, was highlighted in Mario Draghi's report '*The future of European competitiveness*', which emphasises the need for growth in a context of demographic decline [12]. Historically, the growth of the working-age population – and by extension the labour force – has been a significant driver of economic growth. Demographic change is reshaping this reality. The latest population projections by Eurostat indicate that the EU is expected to lose on average 1.2 million people of working age (15–64) each year between 2025 and 2050. In the no-migration scenario, the annual decrease would be 2.4 million people. The 2024 Ageing Report estimates that real GDP will rise by roughly 1.3% each year from 2022 to 2070, while the total number of working hours is expected to fall by about 0.2% annually. Consequently, growth will have to come mainly from making workers more productive. Existing research suggests that although a smaller population does not necessarily mean lower living standards, increasing labour force participation and productivity can help societies maintain high levels of prosperity. Investments in education, training and adult learning can boost productivity and innovation, potentially offsetting the impact of lower birth rates on the workforce [2, 13].

^(xxii) For further information, see Commission Communication on Strategy on Intergenerational Fairness COM(2026) 110 final

^(xxiii) For further information, see the [Megatrends Hub](#)

Figure 15: Projected change in working age population in the EU under alternative scenarios (2025-2050)



Source: Eurostat (proj_25np)

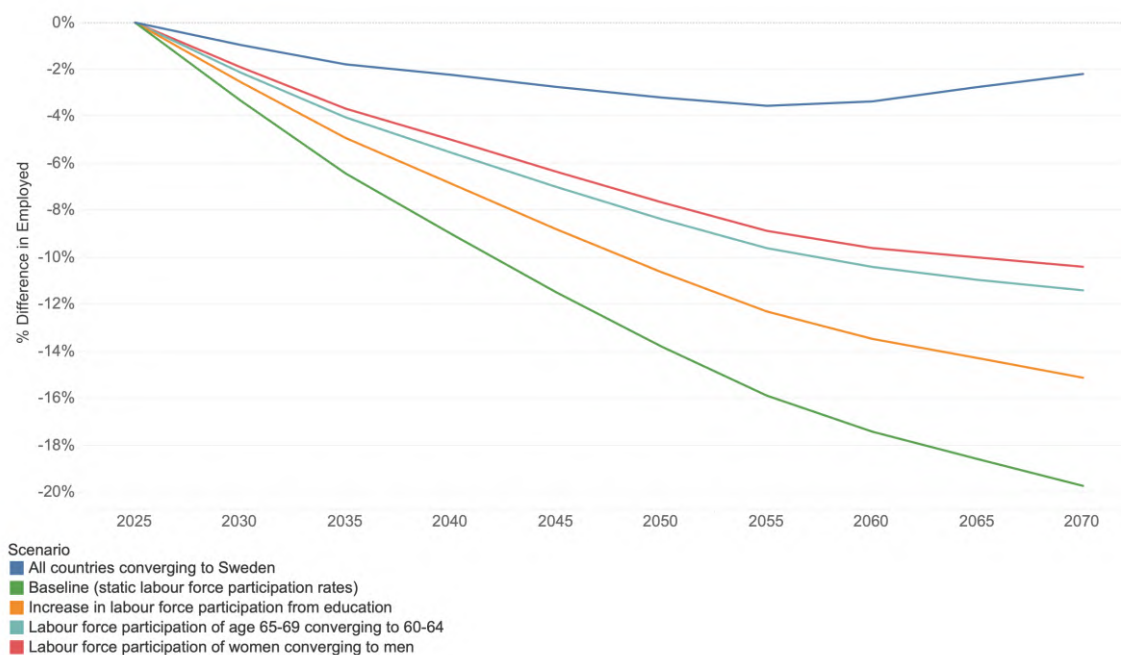
Improving labour force participation offers substantial potential for mitigating the economic impact of demographic change. As Europe's population ages and the working-age population shrinks, activating people currently outside the labour market becomes essential for sustaining economic growth, pension systems and social protection. Currently, around 20% of the EU's working-age population (aged 20-64) remains outside the labour force [14], with significant variations across demographic groups. Additionally, over 4 million people are long-term unemployed. Population subgroups with particular potential for labour market activation include women, individuals with lower levels of education, migrants, the long-term unemployed, persons with disabilities and younger and older individuals at the ends of the working-age spectrum.

A JRC study suggests that if labour force participation rates in all Member States were to reach those of Sweden - the country with the highest labour force participation rates in the EU - the adverse effects of population ageing on the size of the working age population could be almost entirely neutralised [15]. In this optimistic scenario, the projected decline in the labour force between 2025 and 2070 would be only 2.8%, equivalent to 5.9 million people, whereas a scenario based on current labour force participation rates projects a decrease of 15.6%, i.e. 33.2 million people over the same period^(xxiv). However, activating those currently not working – in particular people who are long-term unemployed - often requires comprehensive labour market support measures, including relevant social services and substantial upskilling and reskilling^(xxv). Furthermore, the average productivity of those currently outside the labour market may be lower than that of the active workforce, which underscores the importance of investing in their skills.

^(xxiv) Note that these labour force projections incorporate the effect of education on both population and labour force participation dynamics and are therefore slightly different from the latest EUROPOP25 demographic projections.

^(xxv) For further information, see Council Recommendation on the integration of the long - term unemployed into the labour market (2016/C 67/01). In addition, the Commission will hold social partners consultation on a labour activation initiative (with a focus on women activation) announced in the EU Anti-Poverty Strategy.

Figure 16: Projected change in number of people employed in the EU considering different scenarios of labour force participation



Source: JRC calculation based on IIASA demographic projections with education

Unlocking women's full participation in the labour market holds significant potential to reinforce the European labour force ^(xxvi). Although the gender employment gap has narrowed over time, it remained at around 10.1 percentage points in 2024, with 70.8% of women and 80.8% of men in employment ^(xxvii) [15]. Roughly 37.9 million women of working age (20-64) were outside the labour force in 2024. A convergence of female labour force participation rates to those of men would nearly halve the effects of population ageing on labour force participation by 2070. Multiple factors influence women's participation in the labour market, including education and care responsibilities, which, if computed in economic statistics, could also help to measure the non-monetary contribution of such tasks to society and perhaps suggest targeted policy measures. In this context, becoming a parent continues to affect women's employment trajectories significantly. The employment rate for women drops in conjunction with childbirth, although the magnitude of this reduction and the subsequent recovery vary substantially by country. Access to high-quality and affordable early childhood education and care and work-life balance policies may reduce the difficulty of balancing professional and private lives that hampers women's labour market participation.

^(xxvi) The sub-target to at least halve the gender employment gap compared to 2019 is a key component of the first headline target under the European Pillar of Social Rights Action Plan.

^(xxvii) For further information, see [Eurostat Gender statistics](#)

Young people face significant barriers to labour market integration. Despite the continuing positive trend since 2013, the youth unemployment rate in the EU remains at least twice as high as the general unemployment rate. About 8 million young people in the EU are not in employment, education or training (NEETs). The reasons for this situation vary. Care responsibilities, illness or skills mismatch are common examples [16]. Young people from disadvantaged socio-economic backgrounds often face additional obstacles, including limited access to information, professional networks and financial resources that could facilitate their entry into the labour market. The consequences of labour market detachment extend beyond immediate financial hardship. Periods of unemployment or inactivity during youth can have lasting effects on future earnings, skills development and mental health ^(xxviii).

Groups at risk of discrimination also face structural barriers in the labour market, resulting in lower employment rates and reduced labour market participation. Discrimination in recruitment, promotion and working conditions, combined with unequal access to education, training, professional networks and support services, can limit employment opportunities and career progression. Addressing these barriers through inclusive labour market policies, equal opportunities measures and targeted support is important both for social cohesion and for expanding the EU's labour supply in the context of demographic ageing and labour shortages.

Enabling older people to remain active beyond the pensionable age, if they wish to, could alleviate labour shortages in the context of a longevity society. The employment rate for those aged 55–64 years has been on an upward trajectory for the past decade. Between 2016 and 2025, the employment rate for women aged 55–64 increased by 13.5 percentage points, reaching 60.8%, while that of men in the same age group increased by 12.2 percentage points, reaching 72.3% ^(xxix). Despite considerable disparities between Member States, this positive trend at EU level reflects the progress made in enabling longer working lives.

Europe can benefit from a still rising level of secondary and tertiary education among its population, which can improve both labour force participation and productivity. The EU already benefits from a highly educated population. However, as the Union of Skills and its Action Plan for Basic Skills highlighted, there is long and continuous decline in the basic skills levels across the EU. Reducing and eliminating disparities between different groups regarding their basic skill levels and competencies will be key to sustaining EU competitiveness. In addition, boosting higher-education participation in fields that are in high demand can markedly soften demographic pressures and strengthen the EU's economic future. While tertiary education as such postpones labour market participation, higher educated people have higher labour productivity, which is key for competitiveness and GDP growth in a situation of demographic ageing. Simulations in the 2025 Employment and Social Developments in Europe (ESDE) report indicate that, with current education levels, the EU workforce could shrink by 18.8 million by 2050 [14]. However, higher-educated individuals are more likely to remain longer in the labour market. Therefore, if the proportion of university graduates rose by 10 percentage points over the 25-year period, the decline could be limited to about 13.5 million workers, cutting the projected GDP impact from 9% to just 1.1% by 2050 ^(xxx).

^(xxviii) For further information, see Commission Communication on the European Union's Anti-Poverty Strategy: addressing and preventing poverty from childhood to old age, COM/2026/538 final

^(xxix) European Commission: Eurostat, Employment - annual statistics, 2025

^(xxx) This is the result of a simulation based on general equilibrium modelling including dynamic effects. There are alternative projections which estimate a decrease of working-age population by roughly a million per year up to 2050 (see Employment and Social developments in Europe 2023).

Ensuring a better match between skills supply and demand, with frequent up- and reskilling, will be key ^(xxxi). Jobs that depend on vocational education and training (VET) account for many EU skill shortages. In 2024, approximately two in three widespread shortage occupations in the EU Member States were linked to VET. This means that VET skills shortages are driven by structural mismatches and, in some cases, low job attractiveness ^(xxxii). In a rapidly evolving labour market, strengthening skills matching and investing in upskilling and reskilling are essential to align supply with demand.

Integrating artificial intelligence (AI) technologies into European industry will be important to unlock higher productivity. The Draghi report stressed that the slower adoption of digital technologies is one of the main drivers of the productivity gap between the EU and its global competitors. Existing evidence suggests that, as of now, AI is transforming jobs rather than replacing them, and changing the skills required to perform them [18]. It remains undetermined whether AI and automation will offset the loss in economic growth caused by the projected decline in the labour force. What is less disputed is that AI technologies could significantly impact labour markets, adding uncertainty. The impact of AI varies across sectors and among different socio-demographic groups, such as younger, female or less-skilled workers. Preliminary research suggests that entry-level, AI-exposed jobs are disproportionately affected by AI adoption [19]. This may result in an uneven distribution of potential gains from AI and societal challenges.

Migration can help address labour shortages and support economic growth. In the context of demographic change, legal migration from non-EU countries offers a valuable opportunity to fill vacancies and boost innovation and entrepreneurship. However, demographic change is reshaping labour markets across the globe, and international competition for talent is intensifying. Countries of the EU and the European Free Trade Association (EFTA) are the most popular destinations for international students among OECD countries, with the number of international students rising from around 238 000 in 2013 to over 435 000 in 2024 [20]. However, highly qualified migrants represented only about 20% of the total migrant population in the EU in 2016, compared with 56% in Canada, 41% in Australia and 39% in the United Kingdom. In addition, skills mismatches persist: around 40% of tertiary-educated non-EU nationals work in jobs below their qualification level, with little improvement in recent years [14]. Furthermore, some sectors are expected to face large skill shortages, e.g. ICT, agriculture, or care.

Studies show that employment-based migration is beneficial for public finances, but positive economic outcomes depend on successful labour market and societal integration [20–22]. Migrants often face significant obstacles to participation, including language difficulties, challenges in having qualifications recognised and discrimination. Addressing these barriers is essential to maximise the economic contribution of migration and maintain social cohesion.

The EU is addressing the implications of demographic change through measures to boost participation among under-represented groups, improve skills levels and matches, promote labour mobility, attract talent from abroad, and create better working conditions. Among the many initiatives, the Union of Skills ^(xxxiii) is the EU's comprehensive strategy supporting the development of the EU's human capital to

^(xxxi) The training target under the European Pillar of Social Rights Action Plan mandates that at least 60% of all adults should participate in training every year by 2030.

^(xxxii) For further information, see [Cedefop: Vocational education and training \(VET\) occupations in shortage](#)

^(xxxiii) For further information, see Commission Communication on The Union of Skills (COM/2025/90 final)

strengthen competitiveness. It seeks to boost adult and lifelong learning, upskilling and reskilling, vocational education and training, and the recognition of qualifications and skills. The Council Recommendation on Human Capital ^(xxxiv) further develops this objective by providing a framework to address labour and skills shortages across the EU. It focuses on addressing skills shortages in strategic sectors, strengthening basic skills, reinforcing vocational education and training, and improving tertiary education outcomes in science, technology, engineering and mathematics, in addition to promoting efficient investment in education, training and skills and robust skills intelligence. The Pact for Skills supports skills-related partnerships that address Europe's skills needs and advance the green and digital transitions. Over 10 million people, including 3.9 million in 2025 alone, have benefited from upskilling initiatives under the Pact for Skills since its launch in 2020 ^(xxxv). Other relevant initiatives include the Action Plan on Basic Skills ^(xxxvi) and Science Technology Engineering and Mathematics (STEM) Education Strategic Plan ^(xxxvii) of 2025.

The Quality Jobs Roadmap ^(xxxviii) is a renewed commitment to fostering quality jobs in a competitive economy. It outlines initiatives to align employment policy with the needs of a fast-evolving economy while remaining grounded in the principles of the European social market economy, social progress and full employment. It strives to support resilient productivity increase by fostering quality jobs that attract and retain talent of all generations, including in the context of climate, technological and demographic transitions.

Furthermore, the 2021 European Pillar of Social Rights Action Plan ^(xxxix) aims to raise the employment rate of the population aged 20 to 64 to at least 78% and halve the gender employment gap compared to 2019 by 2030. The Action Plan also aims to decrease the rate of young people neither in employment, nor in education or training (NEETs) aged 15-29 from 12.6% (2019) to 9%, namely by improving their employment prospects. The EU Council Recommendation on the integration of the long-term unemployed into the labour market guides Member States in supporting individuals out of work for at least a year. The Commission is also preparing a new European Strategy for Vocational Education and Training (VET), aiming to turn vocational training into a strategic lever for economic resilience.

The EU Talent Partnerships aim at creating targeted legal migration pathways that connect skilled workers from partner countries with sectors facing persistent workforce gaps. The EU Talent Pool will be a new EU-wide digital platform, expected to be operational by the end of 2027, designed to connect employers in participating EU countries with qualified jobseekers from outside the EU, especially in occupations where Europe faces persistent labour shortages (e.g. healthcare, ICT, construction, transport and logistics).

^(xxxiv) For further information, see Council Recommendation of 9 March 2026 on human capital in the European Union

^(xxxv) For further information, see European Commission, Pact for Skills Annual Report 2025 - Progress on upskilling and reskilling the European workforce.

^(xxxvi) For further information, see Commission Communication on the Action Plan on Basic Skills (COM(2025) 88 final).

^(xxxvii) For further information, see Commission Communication on the STEM Education Strategic Plan (COM(2025) 89 final).

^(xxxviii) For further information, see Commission Communication on Quality Jobs Roadmap (COM/2025/944 final)

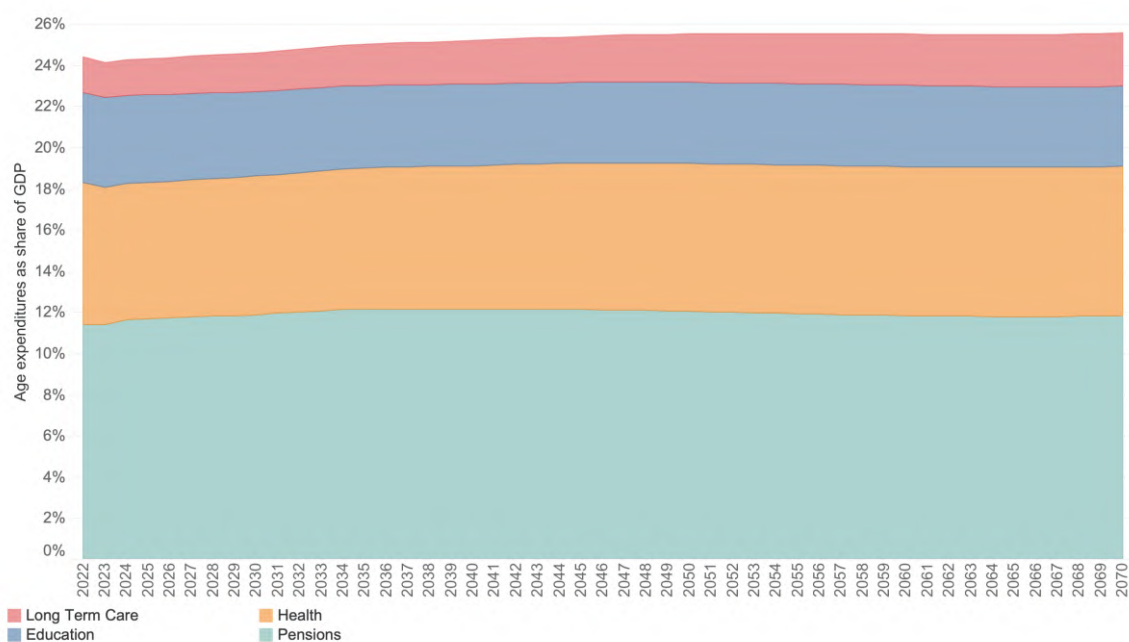
^(xxxix) For further information, see European Commission, The European pillar of social rights action plan, 2021, ISBN 978-92-76-30755-6

3.3. Sustainability of public budgets and pensions

The proportion of older people in the EU population is growing steadily. This shift places pressure on public finances, particularly in areas such as pensions, healthcare and long-term care. At the same time, a shrinking labour force means fewer workers contributing to tax revenues that fund these services.

Budgetary pressures from ageing are expected to increase. Age-related public spending is already substantial across the EU. In 2022, public expenditure on ageing-related items amounted to 24.4% of the EU's gross domestic product (GDP), and to 49.4% of total general government spending. This included 11.4% of the EU's GDP for pensions, 6.9% for all health expenditure, 4.4% for education, and 1.7% for long-term care^(xl). The overall cost of ageing is expected to rise in most EU Member States. Age-related expenditure is projected to increase by an average of 1.2 percentage points between 2022 and 2070, reaching a total of 25.6% of GDP by 2070^(xli). The bulk of the increase linked to ageing will occur over the next two decades, when the pace of population ageing is expected to accelerate as large cohorts of baby boomers^(xlii) reach retirement age. Approximately 0.8 percentage points of this 1.2 percentage point increase is attributed to rising expenditures on long-term care [23].

Figure 17: Projections of age-related expenditures as a share of GDP for the EU and percentage change over time



Source: 2024 Ageing Report based on 2023 Eurostat demographic projections (proj_23np)

The shrinking labour force poses a significant challenge to tax revenues in many Member States, particularly those that rely heavily on labour taxation. As the working-age population declines, the tax base narrows, while demand for age-related spending continues to grow [24]. This situation raises concerns about the long-term sustainability of current tax-benefit systems. Member States with high tax burdens and

^(xl) EU Ageing Report tracks public expenditures linked to ageing and not just to old people.

^(xli) The real annual GDP growth of the EU typically ranges between 1 and 3 percentage points during stable economic periods but changed by up to 5 to 6 percentage points annually during major global crises such as the COVID-19 pandemic and the 2021 rebound.

^(xlii) Baby boomers is often defined as the generation of people born from 1946 to 1964.

significant projected pension expenditures have limited room to increase labour taxation to finance pension obligations. To maintain necessary tax revenues while preserving competitiveness, alternative approaches may need to be considered or new financing mechanisms for basic public services may need to be explored [25].

Pensions represent the largest component of age-related public expenditure in the EU. Demographic factors, primarily the increase in the number of retirees relative to workers, drive much of the projected rise in pension costs. However, several other factors help offset this pressure. These include changes in productivity and income, improvements in pension systems that increase the number of contributors, changes in labour market participation, and reforms to pension benefits and indexation rules. Taking these factors together, the overall increase in pension expenditure is expected to be moderate. For the EU as a whole, pension spending is projected to rise by 0.7 percentage points of GDP between 2022 and 2035. After 2035, costs are expected to begin declining slightly, falling by around 0.3 percentage points by 2065 [23] ^(xliii). This pattern reflects the temporary effect of the baby-boom generation retiring, followed by a stabilisation as subsequent generations move through the age structure. The EU average hides strong differences across Member States. The decline for Member States where pensions are tied directly to an individual's lifetime contributions and adjusted automatically for life expectancy compensates for the 11 Member States with a projected strong increase of at least 2 percentage points of GDP by 2070. Moreover, some of the Member States with a decline by 2070 would nevertheless still see costs increase over the coming decades.

The increase in life expectancy and the need to ensure the sustainability of public pension systems have important implications for the average life spent in retirement and the adequacy of pensions after retirement. In most Member States, the statutory retirement age is set to rise under current legislation. This reflects either planned discretionary increases or steady increases due to the fact that legal retirement ages are linked to gains in life expectancy, as is the case in ten Member States. The average statutory retirement age for men and women is set to rise from around 65 years today to around 66 in 2050 and 67 years in 2070 [23]. Even accounting for projected career length gains and legislated increases in the pensionable age, replacement rates (the percentage of last work income received at retirement) are set to fall for both women and men in most countries. A key factor in ensuring the adequacy of future pension benefits will be working beyond pensionable age, which generally brings substantial replacement rate gains [7]. This raises distributional considerations for those that will not be able to afford longer working lives and the need to rethink the type of work in old age.

Changes in the educational attainment of the population and life expectancy can interact with the distributional impact of pension reforms. While future pension costs appear manageable at the aggregate level, changes to pension systems will affect individuals differently depending on their education, sex, social background and age group. Healthy ageing is enabling people to work longer, which offers opportunities to accrue additional pension entitlements [7]. Ensuring the sustainability of pension systems is important to allow future generations to enjoy a similar duration of retirement and adequate retirement incomes to those of their parents. Furthermore, differences in life expectancy by education, social status and region may contribute to intra-generational inequalities in pension outcomes. Lower-educated workers tend to have shorter life expectancies, which can result in fewer years of retirement. In contributory pension

(xliii) Underlying assumptions and projection methodologies are agreed with the Member States. See European Commission. Directorate General for Economic and Financial Affairs. The 2024 ageing report: underlying assumptions and projection methodologies. LU: Publications Office; 2023. doi:10.2765/960576 for details.

systems, this pattern may affect the relative distribution of pension benefits across educational groups [7].

Combining pension reforms with labour market support for women can reduce the pension gender gap. Almost one in five people aged 65 or above was at risk of poverty or social exclusion in the EU in 2025 (18.8%). This rate is higher for women (21.2%) than for men (15.8%). Several factors expose women to a higher risk of poverty in old age: longer life expectancy, lower lifetime earnings and an unequal distribution of care responsibilities. Women more frequently take career breaks to care for children or older relatives. These interruptions affect their lifetime earnings, reduce their pension contributions and result in lower pension entitlements. The resulting gender pension gap remains substantial, although it is gradually narrowing in most Member States. In 2025, women aged 65 and above in the EU received an average of 24.5% less pension income than men. Pension systems can help reduce the gender pension gap by ensuring that career breaks have a smaller direct impact on pension rights [7]. Closing the gender pension gap requires also action earlier in women's working lives, including improving employment opportunities, addressing wage disparities and ensuring access to affordable childcare and long-term care services [26].

While pension policies and legislation are decided and implemented at national level, the EU supports Member States by promoting adequate retirement savings, protecting cross-border pension rights, funding and guiding national pension reforms, and prohibiting discrimination on pension rights on the grounds of sex. The Savings and Investments Union strategy promotes supplementary pension savings and improved pension transparency to enhance retirement income, including measures to address information gaps and coverage shortfalls affecting younger generations in non-standard employment and other vulnerable groups. Furthermore, the EU supports national efforts to ensure a high level of social protection, including pension adequacy, by facilitating mutual learning and exchange of best practices. The triennial Pension Adequacy Report of the Commission and the Social Protection Committee ^(xliv) provides an overview of pension policies, focusing on the adequacy of old-age incomes today and in the future. The Ageing Report ^(xlv) of the Commission and the Economic Policy Committee (EPC) presents long-term projections on the economic and budgetary impact of an ageing population. The EU also provides country analysis and guidance, including on pension policies, within the European Semester economic and employment policy coordination cycle. Support to national pension reform measures is available from the Recovery and Resilience Facility and the Technical Support Instrument.

3.4. Demographic divergence across EU territories

All Europeans are affected by demographic change, but the impact varies depending on whether they live in small villages or cities. Ensuring that all regions can offer a good quality of life, regardless of location, is at the heart of territorial cohesion. This goal is challenged by demographic change, which risks deepening territorial imbalances and weakening competitiveness.

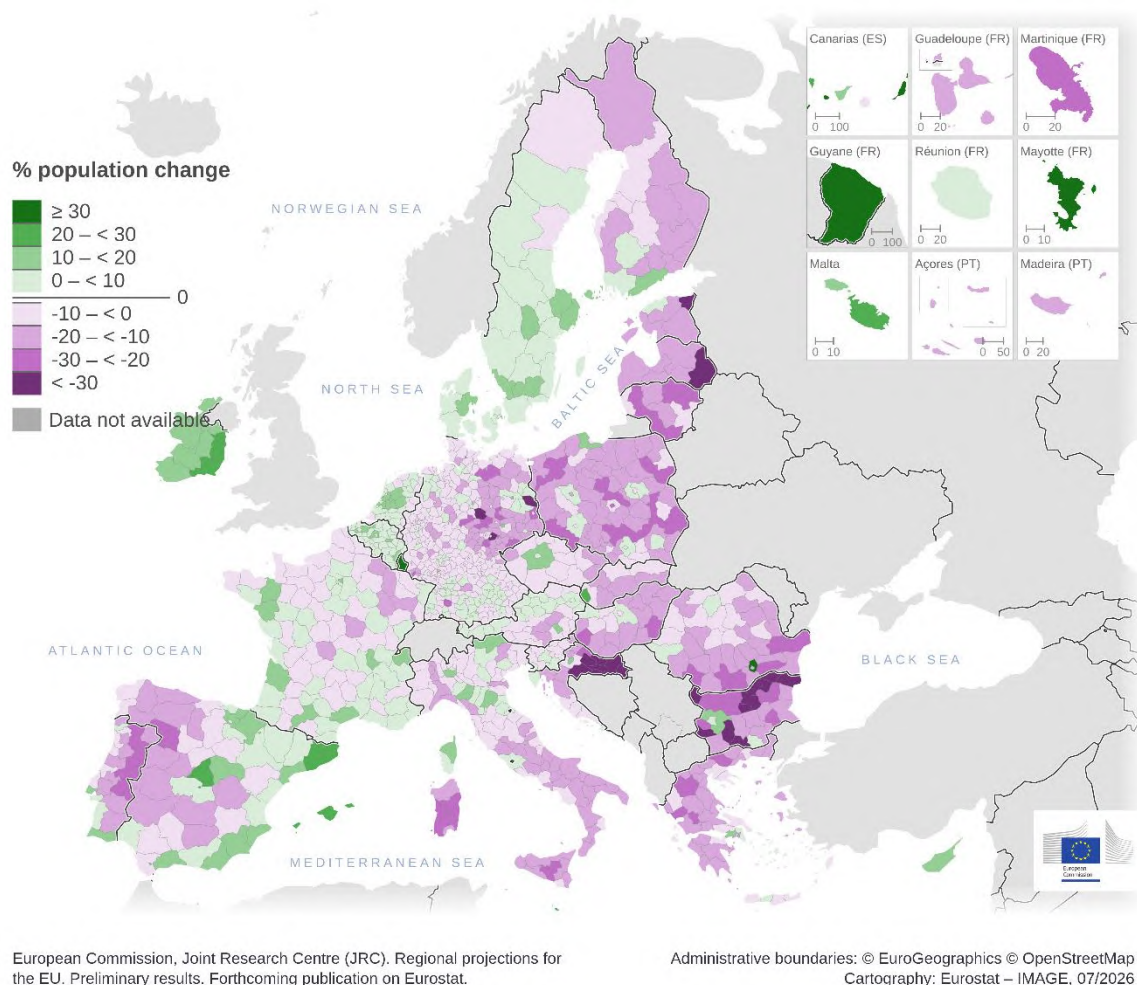
Population decline is projected across most EU regions, while growth remains concentrated in specific areas. Projections indicate that the EU population will remain relatively stable until 2050. However, there are pronounced differences across territory

^(xliv) Latest edition: The 2024 pension adequacy report - Current and future income adequacy in old age in the EU. Volumes I and II

^(xlv) Latest edition: 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070)

types: urban regions continue to grow (+3.6%), whereas intermediate regions decline modestly (-3.3%) and rural regions contract more sharply (-7.9%). Almost three quarters of all regions (837 of 1,165 NUTS3 regions, or 72%) are projected to lose population between 2025 and 2050. These shrinking regions are home to around 258 million people, around 57% of the EU population in 2025, underlining that decline is not a marginal phenomenon affecting only sparsely populated areas. The scale of decline varies considerably, both between and within Member States. Sustained decline is concentrated in the Baltic States, eastern Germany, eastern Poland, Bulgaria, Romania, Greece, southern Italy and the rural interior of the Iberian Peninsula. Growth, by contrast, is projected to be confined to a smaller set of regions, typically capital and other large-city regions, the Spanish and French Mediterranean coasts and islands, parts of southern Germany, southern Sweden and Ireland and certain outermost regions. Decline is not confined to the countryside: while it is most pervasive in predominantly rural regions (83% of which shrink), more than half of urban regions (57%) are likewise projected to lose population. Even in Member States where the national population is broadly stable, rural and peripheral regions often continue to decline, offset by growth in a few dynamic urban centres.

Figure 18: Projected population change on the regional level between 2025 and 2050

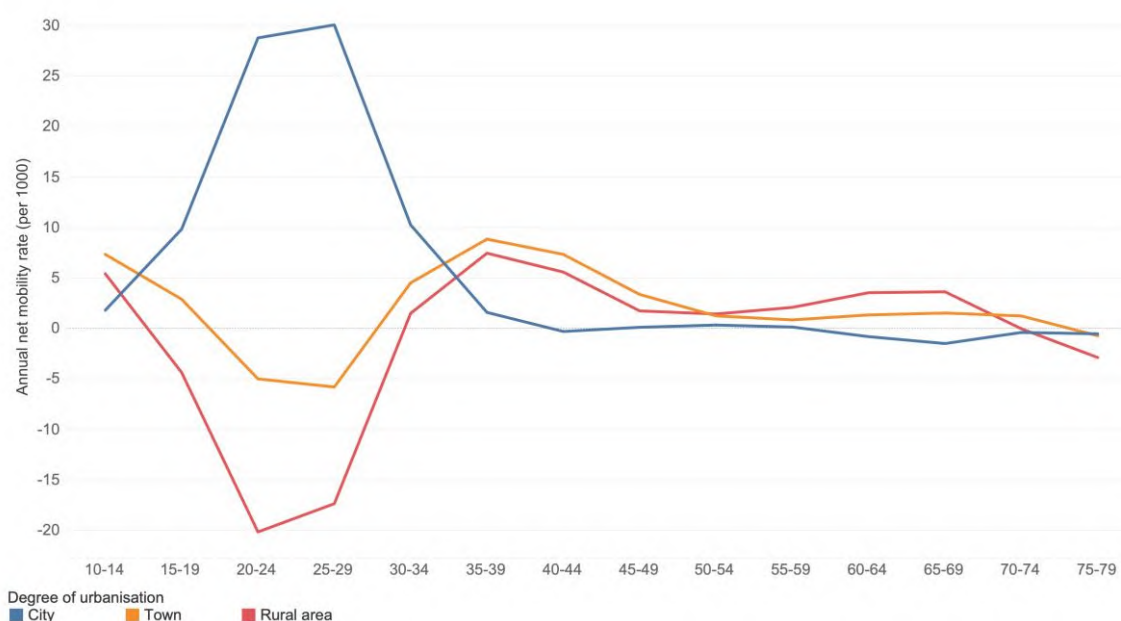


Source: JRC/Eurostat (proj_25rp5).

Internal mobility is the primary driver of regional demographic divergence. With fertility below replacement level in every Member State, the natural balance of births and deaths can no longer sustain population growth. Capital regions, large urban areas and economically dynamic regions are projected to keep attracting working-age population, while regions that have long experienced net outflows are likely to see their populations both contract and age more rapidly. At the aggregate level, regional and local mobility patterns within countries follow predictable life stages. Young people aged 20-24 tend to gravitate toward cities, drawn by educational opportunities, career prospects and lifestyle choices. As individuals progress through life, their movement patterns often reverse. Many middle-aged adults - those aged 35 to 39 - settle in towns and suburbs, while people in their mid-forties tend to move toward rural areas, likely influenced by family formation decisions and changing housing preferences [27]. In the past, population losses occurred alongside overall population growth and the steady replacement of younger generations, but today regions and local communities experiencing high population losses risk falling below a critical population threshold needed to sustain community livelihoods. In the EU,

82 regions in 16 Member States are in, or at risk of falling into, a talent development trap ^(xlvii), characterised by a rapidly shrinking working-age population combined with either below-average and stagnant levels of tertiary education or strong outflows of people aged 15–39 [28].

Figure 19: Average annual net mobility rates by age across EU local administrative units (LAU), grouped by degree of urbanisation (2011–2021)



Source: JRC elaboration based on Eurostat 2001, 2011 and 2021 Census data

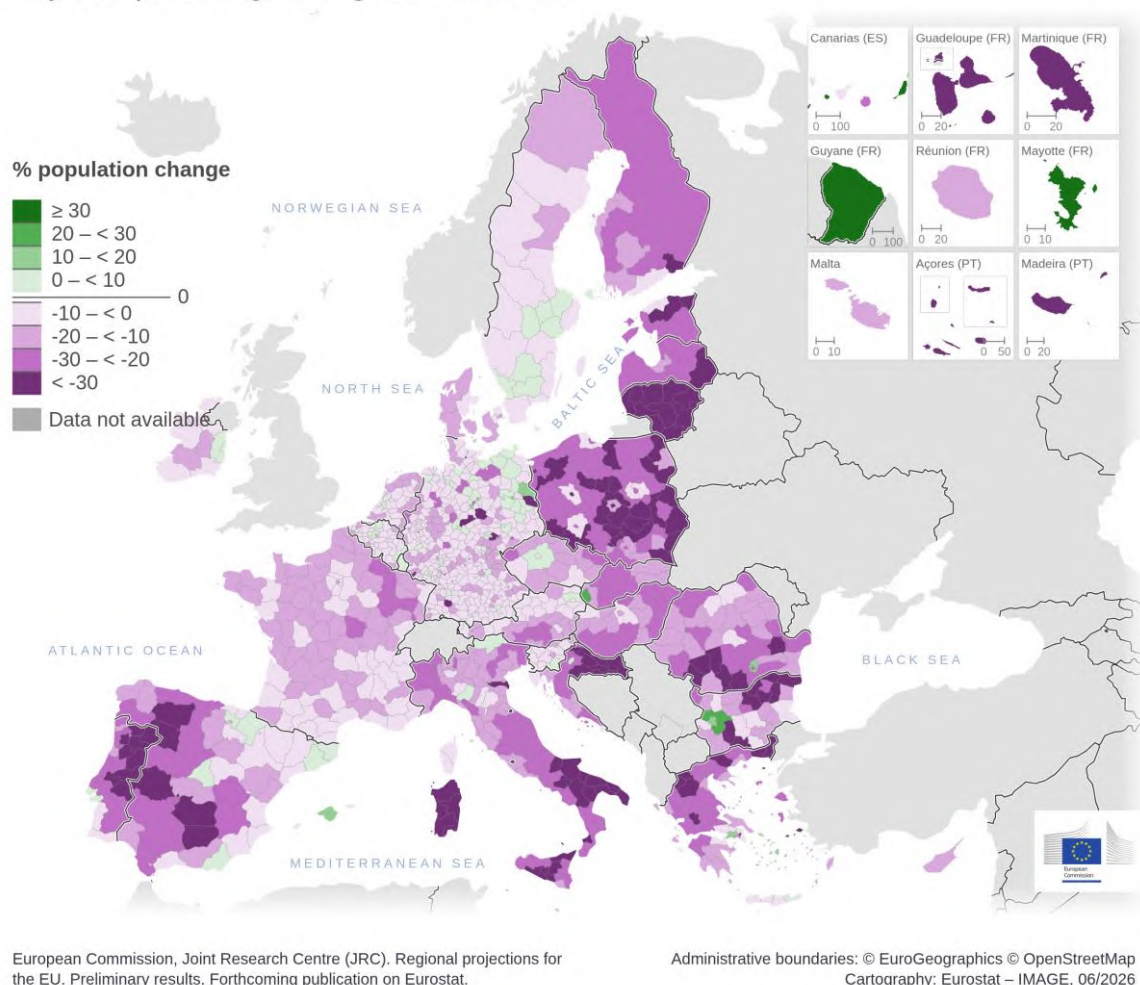
While regional population trends diverge, the ageing of the population is projected to be a universal phenomenon. Although the size of the increase varies, the old-age dependency ratio (OADR) is projected to rise in every region, including those whose total population is still growing. The challenge of population ageing is therefore not confined to declining regions: it will reshape the age structure of every part of the EU over the coming decades, even if its intensity is felt unequally across the territories. The increase is largest across the inner Iberian Peninsula, southern Italy and parts of Greece, Romania and Bulgaria, where the ratio is projected to climb by 30 percentage points or more. These are regions characterised by very low fertility and limited working-age in-migration. Increases are more moderate in parts of the Nordic countries, Ireland, France, Belgium and the Netherlands, where younger age structures and continued migration partly cushion the shift. The smallest changes appear in a few regions with markedly young populations, in particular the French outermost regions of Mayotte and Guyane.

^(xlvii) For further information, see *Harnessing talent in Europe's regions* (COM(2023) 32 final) and Ninth report on economic, social and territorial cohesion [23]

Figure 20: Change between 2025 and 2050 in the population of age 15-34

Population change (age 15-34) in Europe 2025-2050

Projected percentage change at NUTS3 level



Notes: Cyprus and Luxembourg are not shown at regional level, as each consists of a single NUTS 3 region; their regional projections are identical to the corresponding national projections.

Source: JRC/Eurostat (proj_25rp5).

Acknowledging these challenges, the report *Much More Than a Market* by Enrico Letta [29] proposed measures to address the demographic and economic imbalances affecting EU competitiveness and sustainability. The report notes that regional youth emigration is a driver of demographic and economic divergence. The departure of young talent from regions and countries facing demographic challenges undermines their economic capacity, and risks setting in motion a self-reinforcing cycle of economic and demographic decline, which contributes to a lack of trust in EU institutions [30].

This is amplified by difficulties in service provision: fewer residents translate into higher per-capita cost of maintaining services in health-care, education or transport, while the tax base shrinks because of a smaller population and a lower share of the working age population. At the same time, an ageing population increases demand for health-care and related infrastructure, and the outmigration of youth and working-age adults reduces the labour pool for those services.

The result is a ‘self-reinforcing cycle’ where demographic decline leads to inadequate service provision, which in turn results in further outmigration and demographic decline. This phenomenon is observed in moderately and strongly depopulating regions experiencing an annual population decline of more than 0.5% [31]. Conversely, regions that attract domestic and international migrants can face pressure to deliver an adequate quantity and quality of local public services.

In this context, the Letta report introduced the ‘freedom to stay’ concept, which emphasises the importance of supporting regions and countries lagging behind and highlights the need to address the root causes of youth emigration and enable young people to remain in their communities. The objective is to empower people in the EU to reside in a location of their free choice.

Building on this vision, the European Commission is addressing regional and social disparities to ensure that all citizens have an effective right to stay in the place they call home. Among these initiatives, the EU Cohesion policy is crucial to breaking the cycle of demographic and economic decline. Cohesion policy is delivered through specific funds: the Cohesion Fund ^(xlvii), the European Regional Development Fund (ERDF) ^(xlviii), the European Social Fund Plus (ESF+) ^(xlix) and the Just Transition Fund (JTF) ^(l). The Recovery and Resilience Facility also supports these policies ^(li).

The Commission Communication on Harnessing Talent ^(lii) focuses on regions that are facing a set of challenges: a sharp decline in the working age population in combination with a low share of people with a tertiary education and a significant departure of young people. Part of the broader efforts of the Commission on harnessing talent and tackling demographic change, the Talent Booster Mechanism supports regions in training, retaining and attracting people with the necessary skills and competences to mitigate the impact of demographic change. It emphasises tailor-made solutions for various regions, utilising existing EU funds and initiatives. The experience gained from this initiative highlights the necessity of incorporating demographic realities more fully into policy-making and of helping regions develop more detailed analyses of evolving mobility dynamics, including through integrated territorial strategies.

(xlvii) The Cohesion Fund provides support to Member States with a gross national income (GNI) per capita below 90% EU-27 average to strengthen the economic, social and territorial cohesion of the EU. For the 2021-2027 period, the Cohesion Fund concerns Bulgaria, Czechia, Estonia, Greece, Croatia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

(xlviii) The European Regional Development Fund (ERDF) provides funding to public and private bodies in all EU regions to reduce economic, social and territorial disparities. The Fund supports investments through dedicated national or regional programmes.

(xlix) The European Social Fund Plus (ESF+) is the EU’s main instrument for investing in people. With a budget of €142.7 billion for the period 2021-2027, the ESF+ will continue to provide an important contribution to the EU’s employment, social, education and skills policies, including structural reforms in these areas.

(l) The Just Transition Fund (JTF) supports the territories most affected by the transition towards climate neutrality to avoid regional inequalities growing, in line with EU cohesion policy’s aim to reduce regional disparities and to address structural changes in the EU.

(li) The Recovery and Resilience Facility (RRF) is a temporary instrument that is the centrepiece of NextGenerationEU -the EU’s plan to emerge stronger and more resilient from the COVID 19 crisis. It finances reforms and investments in EU Member States made from the start of the pandemic in February 2020 until 31 December 2026.

(lii) For further information, see Commission Communication on Harnessing talent in Europe’s regions, COM(2023) 32 final

The EU's Long-Term Vision for Rural Areas ^(liii) provides a strategic framework for revitalising rural areas. In 2021, the Commission launched the Rural Pact, which provides a framework for cooperation between public authorities, civil society, businesses, academia and citizens, at the European, national, regional and local levels.

The future Right to Stay Strategy aims to help regions and territories in delivering what communities need to thrive: public services and private activities, education and skills, transport and digital connectivity and tailored solutions for regions to catch-up. The strategy will help ensure that territories experiencing challenges remain attractive places to live and work, especially for the younger generation.

3.5. Healthcare and long-term care

Demographic change is reshaping the landscape of health and long-term care across the EU. Population ageing and shifts in disease patterns are creating new challenges for healthcare systems and care provision.

3.5.1 Healthcare needs of an ageing population

The demographic shift is expected to increase the overall demand for healthcare services in the EU. Between 2025 and 2070, the share of people aged 80 and above is projected to double, from 6.2% to approximately 13.3% of the total population, reaching around 55.8 million people. As the use of healthcare services increases toward the end of life, population ageing increases the demand for healthcare, putting additional pressure on health systems. For instance, while burden from cardiovascular disease has been falling among younger age groups, the total number of cases among people aged above 80 years has been climbing since 1990. Projections indicate that cardiovascular disease prevalence will rise by 90% between 2025 and 2050 [32]. Population ageing is also changing the types of care that health systems must provide. The shift towards an older population is accompanied by a growing prevalence of chronic diseases, geriatric syndromes and multiple health conditions. Ageing-related diseases such as Alzheimer's disease and other forms of dementia are expected to become increasingly prominent causes of disability.

Rising demand for healthcare services creates additional pressures on public budgets and the healthcare workforce. In the EU, healthcare spending represents already a large share of the economy. In 2022, public healthcare expenditure accounted for 6.9% of GDP. This share is expected to rise by about 0.4 percentage points of GDP across the EU by 2070 [23]. With population ageing and more complex care needs, sustained pressure will be placed on public budgets. This calls for more efficient delivery of healthcare and sustainable financing models. The growing pressure on healthcare services coincides with labour shortages in the sector. The 2024 Health at a Glance Report [34] estimated that the EU faces a shortfall of 1.2 million health workers. Much of this pressure will intensify in the next 10 to 15 years, as large numbers of healthcare workers retire while demand continues to grow. Health workforce projections indicate that due to ageing, the numbers of doctors and nurses in the EU would need to grow by 30% and 33% respectively by 2071 compared with 2021 levels, if current disease prevalence remains constant [35].

Health promotion, disease prevention and healthy ageing are the most cost-effective ways of addressing the significant burden on health systems. The growing pressure on health systems stemming from population ageing requires stronger investment into health

(liii) For further information, see Commission Communication A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, COM(2021) 345 final

promotion and preventive health. The development and implementation of preventive public health strategies and medical advances in managing and treating cardiovascular diseases has already resulted in significant declines in morbidity and mortality. This has eased pressure on healthcare services [32]. According to the 2024 ‘Health at a Glance: Europe’ report, the return for every euro invested in well-designed public health interventions brings up to 14 euro in economic benefits, including reduced healthcare costs and increased productivity [34]. In 2023, spending on preventive health care among EU countries ranged from 0.9% to 5.2% of total healthcare expenditure. A large share of health problems is linked to risk factors that can be changed, such as high blood pressure, smoking, air pollution, and exposure to harmful substances. Reducing these risks could improve population health and ease demand on the healthcare workforce, particularly in ageing societies.

Several approaches can address healthcare workforce challenges. Workforce planning based on supply and demand projections, improved education and better working conditions can help retain and grow the health workforce. Ethical and smart use of digital technologies, including artificial intelligence, can boost capacity by automating administrative tasks, supporting clinical decisions and expanding access to online consultations. New care models, such as task sharing, can ease pressure on doctors and nurses while improving access. Structural reforms, including shifting care from hospitals to primary care, improved coordination of health and social care systems, expansion of home and community-based services, integrating health and long-term care and prioritising prevention, can also help manage costs without compromising coverage or quality [36].

Universal health coverage remains essential to meet growing healthcare needs equitably. People in lower income groups are disproportionately affected by gaps in access to healthcare. Healthcare coverage has a poverty-reducing impact comparable to cash transfers such as unemployment benefits. Therefore, universal health coverage is essential in the context of population ageing and intergenerational fairness, as it ensures that growing healthcare needs are met equitably and sustainably, without exposing individuals to financial hardship [37].

The European Union supports Member States in addressing the challenges posed by demographic change for healthcare systems. In the EU, national governments hold primary responsibility for delivering health services and medical care to their citizens, while EU initiatives serve to complement national policies. These include the European Health Union ^(liv) and the EU4Health programme ^(lv).

The European Health Union strives to strengthen Europe’s preparedness and resilience, improve access to healthcare and prevent and manage major health challenges through key initiatives such as the EU pharmaceutical policy ^(lvi), the European Health Data Space ^(lvii),

^(liv) For further information, see Commission Communication on The European Health Union: acting together for people's health, COM(2024) 206 final

^(lv) For further information, see Regulation (EU) 2021/522 of the European Parliament and of the Council of 24 March 2021 establishing a Programme for the Union’s action in the field of health (‘EU4Health Programme’) for the period 2021-2027

^(lvi) Adopted on 25 November 2020, the Pharmaceutical Strategy for Europe aims at creating a future proof regulatory framework and at supporting the industry in promoting research and technologies that reach patients to fulfil their therapeutic needs while addressing market failures. In 2023, the Commission adopted a proposal for a new Directive and a new Regulation which revise and replace the existing general pharmaceutical legislation. See Commission Communication on Pharmaceutical Strategy for Europe, COM/2020/761 final

^(lvii) For further information, see Regulation (EU) 2025/327 of the European Parliament and of the Council of 11 February 2025 on the European Health Data Space

the ‘Healthier Together’ EU non-communicable diseases initiative ^(lviii), Europe’s Beating Cancer Plan ^(lix), the Communication on a comprehensive approach to mental health ^(lx) and the Safe Hearts Plan ^(lxi). The EU4Health programme provides funding to improve health in the Union, tackle cross-border health threats, improve the availability and affordability of medicinal products, and crisis-relevant products and increase health systems’ resilience through systemic improvements of health coverage and actions focused on primary care and health workforce. Efforts are also being made to foster innovation in the healthcare sector. The European Health Data Space (EHDS) aims to establish a common framework for the use and exchange of electronic health data across the EU. EHDS provides a trustworthy setting for secure access to and processing of a wide range of health data. It builds on key existing horizontal EU data frameworks, including the General Data Protection Regulation (GDPR), the Data Governance Act, the Data Act and the Network and Information Systems Directive. The Joint Action HEROES brings together 19 European countries and 51 partner organisations to work together to improve the health workforce planning capacities so to ensure accessibility, sustainability and resilience of healthcare services. The Nursing Action is an EU-funded initiative by the European Commission and WHO/Europe aimed at addressing critical nursing shortages and workforce burnout. Backed by an initial EUR 1.3 million budget under the EU4Health programme, the project works with over 20 Member States to improve the recruitment, retention and working conditions of nurses.

3.5.2. Growing demand for long-term care

Long-term care encompasses a range of services and assistance for people who, as a result of mental or physical frailty, disease or disability over an extended period of time, depend on support for daily living activities or are in need of some permanent nursing care. These services can be provided formally by trained professionals or informally by family members, friends, or neighbours.

Among those aged 50 and above, around 22% of women and 15% of men have long-term care needs. The proportion increases sharply with age. For women, care needs rise from about 10% at age 50-54 to 59% at age 90-94. For men, the corresponding figures are 8% at age 50-54 and 58% at age 90-94. In 2019, 46.6% of people aged 65 and above with severe difficulties in personal care or household activities in the EU reported unmet needs for help. This means they were not receiving the assistance they required. Unmet needs were more common among lower-income groups: 51.2% of people in the lowest income quintile reported unmet needs, compared to 39.9% in the highest quintile.

Population ageing is driving a substantial increase in the number of people who will need long-term care. Based on current rates of care needs by age and sex, the number of people above 50 potentially requiring long-term care in the EU is projected to rise from 36 million in 2025 to 48 million by 2070. This would represent around 11% of the EU population. By 2070, around 18.4 million people in need of care would be aged between

^(lviii) For further information, see [Healthier together – EU non-communicable diseases initiative](#)

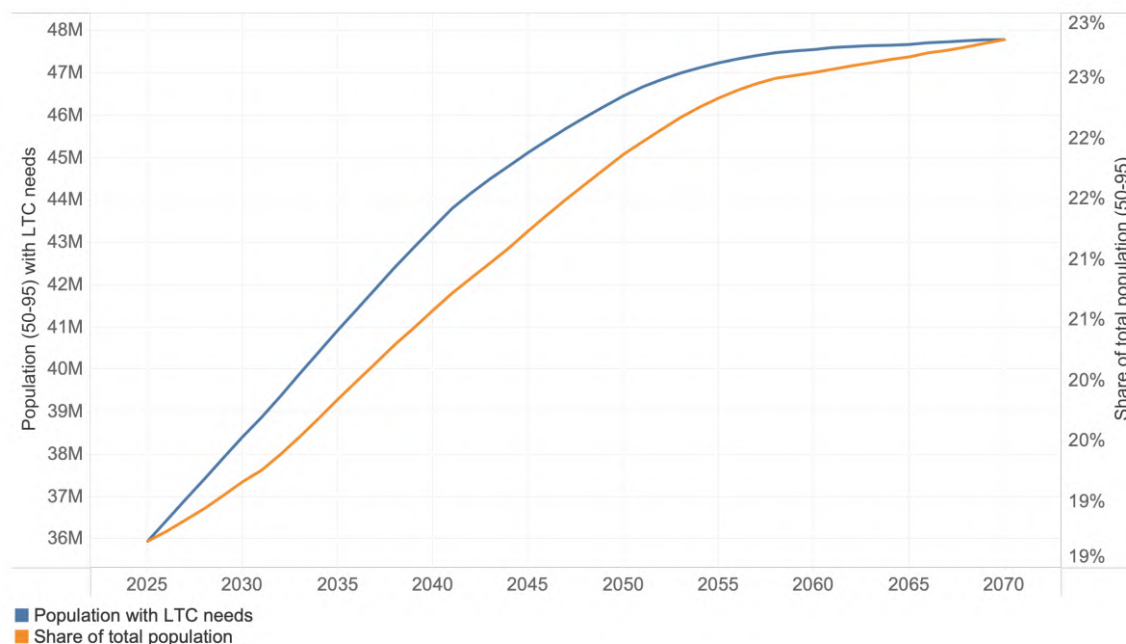
^(lix) Europe’s Beating Cancer Plan is a political commitment to turn the tide against cancer and another stepping stone towards a strong European Health Union and a more secure, better-prepared and more resilient EU. See Commission Communication on Europe’s Beating Cancer Plan, COM/2021/44 final

^(lx) Commission Communication on a comprehensive approach to mental health COM(2023) 298 final

^(lxi) The Safe Hearts Plan addresses the key challenges across the EU related to cardiovascular diseases, focusing on the special needs of vulnerable population groups such as children and young people and women. See Commission Communication on an EU cardiovascular health plan: the Safe Hearts Plan, COM(2025) 1024 final

80 and 89, accounting for 38% of the total. A further 6.3 million would be aged above 90, representing 13% of those in need of care.

Figure 21: Projections of population above (50-95) with long-term care (LTC) needs in the EU (2025–2070)



Source: JRC elaboration based on data from SHARE and Eurostat (proj_25np)

The increase in long-term care needs will have significant implications for public expenditure. On average, EU public spending on long-term care is projected to rise from 1.7% of GDP in 2025 to 2.5% of GDP in 2070. However, there are substantial differences between Member States. If current trends toward upward convergence continue, by 2070 long-term care expenditure could potentially exceed 3% of GDP in 7 Member States.

The long-term care sector faces significant workforce challenges. In 2025, 3.3 million workers were employed in the long-term care sector in the EU, representing around 1.6% of the total workforce. The workforce consists primarily of personal care workers, who make up 66% of the sector, and nurses, who account for 27%. The size of the LTC sector may in practice be larger, as the numbers above do not fully reflect those domestic workers active in LTC and the sector also has a significant incidence of undeclared work. Women represent 86% of the long-term care workforce. On average, there were 3.3 long-term care workers for every 100 individuals aged 65 and above in 2025. The long-term care sector faces challenges in attracting and retaining workers due to difficult working conditions, including health and safety concerns, as well as relatively low wages. In about half of the Member States, long-term care workers earn less than 80% of the mean gross hourly wage, with figures dropping as low as 64-65% in Bulgaria, Italy and Estonia. Insufficient career progression pathways and limited access to training opportunities also contribute to recruitment difficulties. Domestic and live-in carers, who are often mobile EU or third-country workers, may face particularly challenging conditions, including limited access to social protection. Despite these challenges, the sector has considerable job creation potential.

Informal care, provided by unpaid family members or friends, plays a significant role in Europe's care systems. It partially compensates for the lack of formal support. In 2019,

20% of women and 13% of men aged 45-64 in the EU provided high-intensity care ^(lxii). In some Member States, these rates exceeded 30%. Although both women and men struggle to balance work and care duties, the effect is more significant for women. The uneven sharing of caregiving duties also influences work-life balance and employment outcomes. One in five women who provide care report daily challenges in managing paid work alongside their caregiving duties. Women are more inclined than men to reduce their working hours to meet care obligations, while men's employment patterns remain largely unaffected. These disparities deepen gender inequalities in labour market involvement, earnings and career advancement. Although only a small proportion of carers leave the labour force completely, the uneven distribution of care restricts women's time available for work, limits their career prospects and reduces their earning potential [38].

While long-term care remains primarily a Member State responsibility, the EU has developed a comprehensive policy framework to address the challenges in this area. The 2022 European Care Strategy ^(lxiii) aims to ensure quality, affordable and accessible care services across the Union and improve the situation for both care receivers and the people caring for them, professionally or informally. The Care Strategy is accompanied by a Council Recommendation on access to affordable high-quality long-term care ^(lxiv), which set out a comprehensive policy framework to drive investments and reforms. Implementation at EU and national levels is advancing swiftly and is supported by a broad range of EU-level actions. The national implementation plans submitted in 2024 by all Member States show ambitious policy measures and investments at national and regional levels, with workforce and availability of services at the top of the policy reform agenda. Policy responses from more than two-thirds of the Member States focus on availability and workforce-related measures, with more than half of the countries reporting measures related to adequacy, quality and support for informal carers. The indicator-based framework for the LTC recommendation, finalised in May 2025, reinforces policy analysis and monitoring going forward.

Several EU funding instruments also support the long-term care sector. Twenty-two Member States have programmed European Social Fund Plus (ESF+) resources to support health and long-term care sectors, reaching a total of EUR 6.7 billion during the 2021-2027 programming period. Under the Recovery and Resilience Facility, reforms and investments in long-term care across Member States amount to EUR 8.1 billion. These funds aim to strengthen care systems and support a balanced provision of LTC across various settings, while increasing workforce and infrastructure capacity.

3.6. Demographic change and evolving housing needs

Population growth, life expectancy, urbanisation, migration patterns and the rise in single-person households shape housing demand by influencing the number and types of dwellings required. Conversely, housing availability, affordability and suitability influence demographic patterns. Housing unaffordability may constrain family formation and homeownership, creating intragenerational disparities in wealth accumulation. This creates a two-way relationship between housing and demography.

^(lxii) High-intensity care refers to treatment that exceeds the intensity of conventional hospital or nursing home services, and it is generally reserved for individuals who have complex medical needs

^(lxiii) Commission Communication on the European care strategy COM/2022/440 final

^(lxiv) Council Recommendation of 8 December 2022 on access to affordable high-quality long-term care 2022/C 476/01

Population growth, urbanisation and changing household patterns create persistent pressure on housing markets. Demographic trends such as urbanisation, ageing and evolving household structures are driving housing demand. Population growth, driven by urbanisation and migration, correlates with rising house prices especially in cities. Shifting household and family structures lead to more, smaller households, greater demand for flexible living arrangements and compact dwellings, while ageing populations require accessible housing. Between 2010 and end-2024, the EU housing stock increased from 218 million to around 248 million dwellings. However, in one-third of EU regions, construction has not managed to keep up with expanding demographic demand, highlighting a structural mismatch between population dynamics and housing development ^(lxv). Although housing shortages are primarily an urban issue, shrinking regions face their own challenges regarding housing, many of which are related directly to the population decline and depopulation [31]. The EU housing stock will need to expand significantly to accommodate the growing number of households. To close the gap between supply and demand over the next decade, the Commission estimates that Europe needs to build roughly 650 000 additional homes each year, on top of the 1.6 million currently constructed annually. Meeting this target would require approximately EUR 150 billion per year in public and private investment, equivalent to about 1% of EU GDP. Increasing supply could also be achieved in part by converting, repurposing or reusing existing buildings ^(lxv).

Demographic changes in household size and composition increase the demand for smaller housing units. Household composition in the EU has changed significantly in recent decades, reflecting demographic, social and economic shifts. Between 2010 and 2024, the total number of households increased by 10.34%, compared with a population growth of only 1.96% [39]. In 2024, the EU had 202 million households, with single-person households becoming the most common type at 75 million. The number of single households increased by 16.9% since 2015. Recent household projections indicate that the share of individuals living in single-person households is expected to increase for both men and women [40]. Couples without children have also increased in number between 2015 and 2024 by 5.2%, whereas other household categories have remained stable or declined [34]. These changes are not uniform across Member States, age groups, gender or degree of urbanisation, revealing diverse patterns in household formation.

In the EU, housing trends, household structures and urbanisation are pivotal in shaping the relationship between demography and climate change. Although total household emissions reach their maximum for people aged 40-44 reflecting peak income levels, per-capita emissions rise with age and peak at 55-59. As the population ages, smaller household sizes erode the ‘family economies of scale’, causing higher individual energy consumption for essential services such as heating and cooling. Consequently, older EU residents become more vulnerable to the physical impacts of climate change and to volatile energy prices. Many older and lower income households are ‘locked’ into carbon-intensive patterns; their residential energy expenditure is largely non-discretionary, and they often lack the financial capacity to alter their consumption habits. While urban living can lower carbon footprints through compact dwellings and shared infrastructure, older populations are disproportionately situated in rural areas where these ‘urban economies of scale’ are absent [41, 42].

^(lxv) For further information, see European Commission Staff Working Document, Understanding the housing crisis, SWD(2025) 1053/2

Housing affordability issues affect younger generations disproportionately. Growing demand combined with limited supply is pushing housing costs higher in relation to household earnings, especially in cities and tourist destinations. Across many urban areas, allocating up to 30% of average income is no longer sufficient to purchase a small apartment through a 30-year mortgage or to rent a modest dwelling [34].

A shortage of affordable, sustainable and quality housing across Europe carries significant social and economic consequences. Younger people, especially those on lower incomes, face constraints from high house prices, tight credit conditions and slow income growth compared to older age groups. In 2024, 49.1% of young people aged between 18 and 34 in the EU still lived at home with their parents, benefiting from the household income. Even in countries where young people leave their parents' home relatively early, the share has increased significantly since 2008 due to changes in job security and housing costs ^(lxvi).

While homeownership rates have increased among people aged 66 and older, they have declined among younger cohorts. The share of homeowners among people aged 25 to 35 decreased by 16.3% between 2007 and 2024 [9, 43]. The gap in homeownership rates between younger and older generations reflects disparities in real income. In addition, rising rental costs burden young people, as they rent more often than older generations [8]. These trends may deepen intergenerational inequalities in wealth, postpone family formation and pose a threat to long-term demographic stability ^{lxv}.

The European Affordable Housing Plan ^(lxvii) is the EU's first comprehensive strategy to address the housing crisis. The plan aims to increase housing supply, trigger investment and reforms, and support the people and areas most affected by unaffordable and unavailable housing. The strategy emphasises that efforts to improve affordability should go hand in hand with sustainability and quality, ensuring that energy-efficient, resilient homes built with low-carbon footprints reduce long-term costs while delivering lasting social, economic, and environmental benefits. A new European Housing Alliance will coordinate implementation across EU institutions, national, regional and local governments, financial institutions and other stakeholders.

Under the current Multi-annual Financial Framework (MFF) 2021-2027, the EU has mobilised at least EUR 43 billion in housing-related investment through cohesion policy funds and NextGenerationEU, and other funding programmes. The mid-term review of Cohesion Policy further incentivised countries to allocate funding to housing. The Social Climate Fund finances investments for energy efficiency and building renovation. Looking ahead, the Commission also proposed that the Member States can include in their future National and Regional Partnership Plans housing-related investments and reforms under the next long-term budget.

As part of the EU Social Package adopted in May 2006 and complementing the Anti-Poverty Strategy, the proposal for a Council Recommendation on Fighting Housing Exclusion aims to address the increasing obstacles faced by many Europeans in accessing proper housing and calls for systemic changes to improve housing conditions and support vulnerable populations, including older people in need of long-term care.

(lxvi) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Estimated average age of young persons leaving the parental household' [yth_demo_030], 2024

(lxvii) For further information, see Commission Communication on The European Affordable Housing Plan COM/2025/1025 final

4. CONCLUSIONS

Demographic change represents one of the most significant long-term transformations shaping European society in the twenty-first century. The main challenges of this transformation lie not so much in population size, but in the imbalances in the age structure of populations. European welfare, pension and healthcare systems were designed for a growing, relatively young population relying on transfers from working-age people to children and retirees. Adapting these policies to the new demographic reality is essential for their long-term effectiveness and sustainability.

The demographic transition, while demanding significant adaptation, offers opportunities. Longer, healthier lives create new possibilities for personal fulfilment, continued contribution to society and economic activity in later life. The expanding silver economy opens new markets for products, services and innovations tailored to the needs and preferences of older citizens, generating additional avenues for economic growth and job creation. This may encourage innovation in healthcare, technology and financial services and support more inclusive and resilient communities that value participation and well-being across all stages of life.

The report highlights the need to boost productivity and activate untapped talents to mitigate the impacts of a shrinking labour force. A smaller workforce must produce higher added value per person if living standards are to be maintained. It demands continued investment in innovation, digital technologies, education and skills throughout the life course. Improving labour force participation of underrepresented groups offers substantial potential for mitigating the economic impact of demographic change. Unlocking women's full participation in the labour market holds significant potential to reinforce the European labour force. Enabling older people to remain active beyond the pensionable age is essential in the context of a longevity society. Enhancing labour market opportunities for young people and equipping them with the skills demanded by a rapidly evolving economy is equally vital to ensure a sustainable and productive workforce pipeline. Ensuring a better match between skills supply and demand, with frequent up- and reskilling, will be key. Integrating AI technologies into European industry will be essential to unlock higher productivity. Migration can help address labour shortages and support economic growth.

Ensuring intergenerational fairness means sharing the costs and benefits of demographic change more evenly across age groups. It means that policy decisions do not shift costs, risks or burdens from one generation to another, but instead promote solidarity and shared responsibility across generations. Demographic change can become an opportunity, provided that the right investments are made. Policies investing in children and youth, promoting affordable housing programmes, age-friendly communities, lifelong learning, flexible work and sustainable pension reforms as well as health promotion and healthy ageing can strengthen societal resilience and enhance the well-being of all age groups. Such policies can help reduce inequalities, support economic security, and ensure that individuals of all ages, today and in the future, can actively participate in society and maintain a good quality of life.

Demographic challenges cannot be met through measures linked to fertility and migration alone. The drivers of demographic change are complex and multifaceted, involving individual choices about family formation, migration patterns and life expectancy trends that are not easily influenced by policy interventions alone. This report suggests that addressing demographic decline requires a mix of adaptation measures and approaches based on coordination, anticipation and sustained engagement across policy domains and levels of governance.

The EU's response to demographic change spans multiple policy domains. The European Commission is addressing the consequences of demographic change through a range of policy initiatives. The Demography Toolbox provides a structured framework designed to help Member States manage the social and economic impacts of demographic change. Building on good and promising practices from across the Union, the Toolbox complements national-level action and supports coordinated responses across governance levels. Beyond this overarching framework, demographic considerations are integrated across EU policy initiatives. This approach reflects the understanding that demographic challenges are inherently cross-cutting.

Reliable scientific knowledge and data represent an essential resource for anticipatory and evidence-based policy design. Understanding population dynamics requires maintaining and strengthening statistical systems that provide comparable, disaggregated data across Member States. Continued investment in demographic data collection and analysis at both EU and global levels remains essential for understanding demographic change and informing policy decisions.

The EU and Member States possess the policy tools, institutional frameworks and analytical capacity to navigate demographic change successfully. With sustained political commitment and enhanced cooperation at all levels of governance, the EU can not only manage the challenges of demographic change, but it can contribute to transforming them into opportunities for shared prosperity. The transition to a longevity society, while demanding significant adaptation, also offers economic and societal prospects. People live longer, healthier and more active lives that bring benefits to individuals, families and communities across all generations. By embracing this transformation and implementing the comprehensive policy frameworks already in place, the EU can ensure that its citizens continue to thrive in a demographic landscape that, properly managed, holds promise for greater wellbeing, solidarity and competitiveness in the decades ahead.

5. GLOSSARY

Age-related public expenditure: Government spending on programmes primarily directed at older people, including pensions, healthcare, long-term care and sometimes education.

Baby boomers: The generation of people born during the post-World War II period, commonly defined as those born between 1946 and 1964. This cohort is notably large compared to generations before and after it, and their transition into retirement is a significant driver of current demographic change in Europe.

Crude birth rate: The annual number of live births per 1,000 population. It is a basic measure of fertility levels in a country, though it does not account for the age structure of the population.

Crude death rate: The annual number of deaths per 1,000 population. Like the crude birth rate, this indicator does not account for differences in age structure across populations.

DALYs (Disability-Adjusted Life Years): A metric used to measure the overall burden of disease. One DALY represents a loss equivalent to one year of full health due to either premature mortality or disability. It combines mortality and morbidity data to assess population health.

Demographic dividend: The period of accelerated economic growth that a country can experience when the proportion of its working-age population (typically ages 15–64) is substantially larger than the dependent population (children and older people). This occurs when a country has a low dependency ratio, creating conditions for higher savings, investment and economic growth.

Demographic transition: A long-term shift in population patterns that occurs as countries develop economically and socially, moving from high birth and death rates to low ones, with corresponding changes in population growth over time. Most European countries have completed this transition.

Depopulation: The sustained decline in a region's population, often due to low fertility, out-migration, or both.

European Semester: The EU's annual cycle of economic and employment policy coordination, through which the Commission provides country-specific guidance.

Formal care: Long-term care services provided by trained professionals, either in institutional settings (such as care homes) or in community/home-based settings. Formal care is distinguished from informal care by the professional nature of the service and its regulation.

Gender employment gap: The difference between the employment rates of men and women.

Gender pension gap: The difference in pension income between men and women aged 65–79.

Healthy life years: Also called disability-free life expectancy, this is the number of years that a person is expected to continue to live in a healthy condition, defined as self-reported without limitation in functioning and without disability. It measures both the length and quality of life.

Informal care: Unpaid care provided by family members, friends or neighbours to people who, due to mental or physical frailty, disease or disability, depend on support for daily living activities.

Intergenerational fairness: The equitable distribution of resources, opportunities and responsibilities across generations.

Intergenerational transfers (non-monetary): Transfers such as time spent caring for children or older relatives within families.

Longevity society: A term used to describe a society in which people live longer and older people make up a growing share of the population. The concept emphasises not only longer lives but also healthier lives, with greater opportunities, participation, and wellbeing across generations. It reflects the shift from viewing ageing as a problem to recognising it as a transformed life stage requiring new policy approaches.

Long-term care (LTC): A range of services and assistance for people who, as a result of mental or physical frailty, disease, or disability over an extended period of time, depend on support for daily living activities or require some permanent nursing care. Services can be provided formally by trained professionals or informally by family members.

Median age: The age that divides the population into two equal halves: half the population is younger than this age and half is older. It is used to assess the age structure of a population, with higher median ages indicating older populations.

Natural population change: The difference between the number of live births and the number of deaths in a given population over a specified period. When births exceed deaths, natural change is positive; when deaths exceed births, it is negative.

NEET (Not in Employment, Education or Training): An indicator referring to young people aged 15–29 (or sometimes 18–24) who are not in employment, education, or training. NEET rates are used to measure labour market detachment among young people and identify those at risk of social exclusion.

Net migration: The balance between the number of people moving into a country (immigrants) and those moving out (emigrants) over a given period. A positive net migration figure indicates more people entering than leaving, while a negative figure indicates the opposite. Net migration is a key component of overall population change.

NUTS (Nomenclature of Territorial Units for Statistics): The EU's classification system for territorial units (NUTS 3 being the most granular, regional level).

Old-age dependency ratio (OADR): The number of individuals aged 65 or older per 100 people of working age (typically defined as those aged 20–64, though some definitions use 15–64). It measures the potential support available to older persons from the working-age population.

Pay-as-you-go pension system: A pension financing method in which current workers' contributions are used to pay pensions to current retirees. This intergenerational transfer mechanism relies on a large working-age population to support a relatively smaller retired population.

Pension adequacy: Whether pension benefits are sufficient to ensure a dignified standard of living in retirement.

Poverty rate (at-risk-of-poverty rate): The share of the population whose equivalised disposable income falls below a poverty threshold, typically set at 60% of the median equivalised household income in a country.

Replacement level fertility: The average number of children per woman required for a population to exactly replace itself across generations without immigration. In developed countries, this is approximately 2.1 live births per woman.

Social cohesion: Social cohesion encompasses the strength of social relationships, shared values, and a sense of belonging within a society.

Talent development trap: A situation where regions face a rapidly shrinking working-age population combined with below-average tertiary education levels or strong out-migration of young people.

Territorial cohesion: The EU objective of ensuring balanced and sustainable development across all territories, including rural and peripheral regions.

Total Fertility Rate (TFR): The average number of children a woman would have during her lifetime if age-specific birth rates remained unchanged throughout her childbearing years. It is the most commonly used indicator of fertility levels. A TFR of approximately 2.1 is needed to maintain a stable population in the absence of migration.

Universal health coverage: A system ensuring all people can access needed health services without financial hardship.

Vocational Education and Training (VET): Education and training programmes that provide skills and competencies for specific occupations or trades. VET prepares learners for direct employment or further study in their field.

6. ACRONYMS USED IN THIS DOCUMENT

AI	Artificial Intelligence
DALYs	Disability-Adjusted Life Years
ERDF	European Regional Development Fund
ESDE	Employment and Social Developments in Europe
ESF+	European Social Fund Plus
EU	European Union
EUR	Euro (currency)
GDPR	General Data Protection Regulation
GDP	Gross Domestic Product
IHME	Institute for Health Metrics and Evaluation
JRC	Joint Research Centre
JTF	Just Transition Fund
LAU	Local Administrative Units
LTC	Long-Term Care
NEET	Not in Employment, Education or Training
NUTS	Nomenclature of Territorial Units for Statistics
OADR	Old-Age Dependency Ratio
OECD	Organisation for Economic Co-operation and Development
RRF	Recovery and Resilience Facility
SHARE	Survey of Health, Ageing and Retirement in Europe
STEM	Science, Technology, Engineering and Mathematics
TFR	Total Fertility Rate
UNDESA	United Nations Department of Economic and Social Affairs
VET	Vocational Education and Training
WHO	World Health Organization

7. REFERENCES

1. Skirbekk V, Dieleman JL, Stonawski M, Fejkiel K, Tyrovolas S, Chang AY. The health-adjusted dependency ratio as a new global measure of the burden of ageing: a population-based study. *The Lancet Healthy Longevity*. 2022;3: e332–e338. doi:10.1016/S2666-7568(22)00075-7
2. Gietel-Basten S, Rotkirch A, Sobotka T. Changing the perspective on low birth rates: why simplistic solutions won't work. *BMJ*. 2022; e072670. doi:10.1136/bmj-2022-072670
3. Gauthier AH, Gietel-Basten S. Family Policies in Low Fertility Countries: Evidence and Reflections. *Population & Development Rev*. 2024; padr.12691. doi:10.1111/padr.12691
4. European Commission. Joint Research Centre. Low Fertility in the EU: A Review of Trends and Drivers. 2024. Available: <https://publications.jrc.ec.europa.eu/repository/handle/JRC137492>
5. UNDESA. World Population Prospects 2024. 2024. Available: <https://www.un.org/development/desa/pd/content/world-population-prospects-2024-dataset>
6. European Commission. Directorate General for Employment, Social Affairs and Inclusion., Fondazione Giacomo Brodolini., European Centre for Social Welfare Policy and Research. Study on intergenerational fairness: final report. LU: Publications Office; 2021. doi:10.2767/26828
7. European Commission. Directorate General for Employment, Social Affairs and Inclusion. The 2024 pension adequacy report: current and future income adequacy in old age in the EU. LU: Publications Office; 2024. Available: <https://data.europa.eu/doi/10.2767/909323>
8. European Commission. Joint Research Centre. Intergenerational fairness in the EU: income and housing dynamics in the context of demographic change. 2025. Available: <https://publications.jrc.ec.europa.eu/repository/handle/JRC144437>
9. OECD. Housing, wealth accumulation and wealth distribution: Evidence and stylized facts. 2019 Dec. Report No.: 1588. doi:10.1787/86954c10-en
10. Vanhuysse P, Medgyesi M, Gal RI. Welfare states as lifecycle redistribution machines: Decomposing the roles of age and socio-economic status shows that European tax-and-benefit systems primarily redistribute across age groups. Tyrowicz J, editor. *PLoS ONE*. 2021;16: e0255760. doi:10.1371/journal.pone.0255760
11. European Commission. Joint Research Centre. Informal long-term care in the context of demographic change and intergenerational fairness in the EU. 2026. Available: <https://publications.jrc.ec.europa.eu/repository/handle/JRC145258>
12. Mario Draghi. The future of European competitiveness. 2024. Available: https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en

13. Lee R, Mason A. Is low fertility really a problem? Population aging, dependency, and consumption. *Science*. 2014;346: 7.
14. European Commission. Directorate General for Employment, Social Affairs and Inclusion. Employment and Social Developments in Europe 2025. 2025. doi:<https://data.europa.eu/doi/10.2767/9505984>
15. European Commission. Joint Research Centre. A demographic perspective on the future of European labour force participation. LU: Publications Office; 2025. Available: <https://data.europa.eu/doi/10.2760/0326281>
16. European Foundation for the Improvement of Living and Working Conditions, editor. Becoming adults: young people in a post-pandemic world. Luxembourg: Publications Office; 2024. doi:10.2806/57635
17. International Labour Organization. Employment and social trends 2026. [1st ed.]. Geneva: ILO; 2026. doi:10.54394/AHRT2681
18. OECD. OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market. OECD Publishing; 2023 July. doi:10.1787/08785bba-en
19. Brynjolfsson E, Chandar B, Chen R. Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence.
20. OECD. International Migration Outlook 2025. OECD Publishing; 2025 Nov. doi:10.1787/ae26c893-en
21. Pinkus, D. and J. F. Kirkegaard. The macroeconomic impact of ageing, EU immigration policy and pension expenditures. Bruegel; 2025. Report No.: 24/2025.
22. European Commission. Joint Research Centre. Projecting the net fiscal impact of immigration in the EU. LU: Publications Office; 2020. Available: <https://data.europa.eu/doi/10.2760/68847>
23. European Commission. Directorate General for Economic and Financial Affairs. 2024 ageing report: economic & budgetary projections for the EU Member States (2022–2070). LU: Publications Office; 2024. Available: <https://data.europa.eu/doi/10.2765/022983>
24. European Commission Directorate-General for Taxation and Customs. Annual report on taxation 2025: review of taxation policies in the EU Member States. LU: Publications Office; 2025. Available: <https://data.europa.eu/doi/10.2778/6367826>
25. European Commission. Directorate General for Employment, Social Affairs and Inclusion. The future of social protection and of the welfare state in the EU. LU: Publications Office; 2023. doi:10.2767/35425
26. OECD. Pensions at a Glance 2025: OECD and G20 Indicators. OECD Publishing; 2025 Nov. doi:10.1787/e40274c1-en
27. European Commission. Joint Research Centre. Demographic outlook on right to stay: beyond the Letta report. LU: Publications Office; 2025. doi:10.2760/4989571

28. European Commission. Directorate General for Regional and Urban Policy. Ninth report on economic, social and territorial cohesion. LU: Publications Office; 2024. Available: <https://data.europa.eu/doi/10.2776/264833>
29. Enrico Letta. Much more than a market. 2024. Available: <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>
30. Rodríguez-Pose A, Dijkstra L, Poelman H. The Geography of EU Discontent and the Regional Development Trap. *Economic Geography*. 2024;100: 213–245. doi:10.1080/00130095.2024.2337657
31. OECD. Shrinking Smartly and Sustainably: Strategies for Action. OECD Publishing; 2025 May. doi:10.1787/f91693e3-en
32. OECD. The State of Cardiovascular Health in the European Union. OECD Publishing; 2025 Dec. doi:10.1787/ea7a15f4-en
33. WHO. How does population ageing affect health system financial sustainability and affordable access to health care in Europe? 2025. Available: <https://www.who.int/europe/publications/i/item/9789289061810>
34. OECD, European Commission. Health at a Glance: Europe 2024: State of Health in the EU Cycle. OECD Publishing; 2024 Nov. doi:10.1787/b3704e14-en
35. European Commission. Joint Research Centre. Healthcare workforce demand and supply in the EU27: projections for the period 2021-2071. Luxembourg: Publications Office; 2024. doi:10.2760/7520726
36. European Commission. Directorate General for Economic and Financial Affairs. The impact of ageing on the fiscal sustainability of EU health care systems. LU: Publications Office of the European Union; 2025. doi:10.2765/772825
37. European Commission. Directorate General for Health and Food Safety. The role of healthcare in reducing inequalities and poverty in the EU. LU: Publications Office; 2025. doi:10.2875/4749240
38. European Institute for Gender Equality. Sharing care, closing gender gaps. LU: Publications Office of the European Union; 2026. doi:10.2839/3368911
39. European Commission: Eurostat. Private households by household composition, number of children and age of youngest child. Household statistics - Labour force surveys; 2026. doi:https://doi.org/10.2908/LFST_HHNHTYCH
40. European Commission. Joint Research Centre. The future of EU households: projected population distribution by household types. 2026. doi:<https://dx.doi.org/10.2760/1299066>
41. European Commission. Joint Research Centre. Demography and climate change. Publications Office of the European Union; 2023. doi:10.2760/26411
42. European Commission. Directorate-General for Environment. The EU environmental foresight system (FORENV). Final report of 2021-22 annual cycle: emerging

environmental issues due to demographic changes in the EU. Publications Office of the European Union; 2023. doi:10.2779/495525

43. European Commission. Directorate General for Economic and Financial Affairs. Housing in the European Union: market developments, underlying drivers, and policies. LU: Publications Office; 2025. Available: <https://data.europa.eu/doi/10.2765/3521352>