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**Europe's Demographic Transition and
its Global Context:
Challenges and Responses**

Argyrios K. Pisiotis



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Europe's Demographic Transition and its Global Context: Challenges and Responses

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Early this morning, 1 January 2021, three minutes after midnight, the last human being to be born on earth was killed in a pub brawl in a suburb of Buenos Aires, aged twenty-five years, two months and twelve days.
P.D. James, *The Children of Men*¹

In fact, going back to the economist's worrying arguments, the calculations were very easy to make, if a certain proportion of the inactive population are paying their national insurance, and a certain proportion of the inactive population are retired, either for reasons of old age or disability, and therefore drawing on the active population for their pensions, and the active population is constantly on the decrease with respect to the inactive population, and the inactive population is constantly on the increase, it's hard to understand why no one saw at once that the disappearance of death, apparently the peak, the pinnacle, the supreme happiness, was not, after all, a good thing.
José Saramago, *Death at Intervals*²

The phenomenon: demographic decline (a.k.a. demographic 'ageing')

Both excerpts above present dystopian views of our human society as literary imagination conceived them. Yet there is a fundamental difference between them. British writer James presents what would have always been perceived as a catastrophic prospect, namely a vision of the imminent extinction of the human species due to a total lack of new births. In contrast, the Portuguese Nobel laureate's ingenuity brings to our attention the calamitous consequences upon our society and economy that the fulfilment of one of humans' most ancient and primordial desires would have -the extinction of death and the attainment of eternal life. And while no one can regret living longer and enjoying life, finishing it as well as possible remains a challenge, as Saramago points out, indeed with the erudition of a civil-service or academic expert.

In their fiction, the two writers have raised the specter of what is the statistical reality of the current demographic development in European countries –demographic decline characterized by 'demographic ageing' and territorial depopulation. Moreover, James and Saramago have identified what are, in statistical terms, the combined drivers of this demographic decline: a) persistently low fertility and b) increased longevity. These trends are stable and can be anticipated with good confidence. With fertility and mortality largely in balance on the EU level, international migration flows are central to the shaping of the different population dynamics across Member States.

¹ P.D. James, *The Children of Men*, Faber and Faber: London, 1992, p. 1.

² José Saramago, *Death at Intervals*, Vintage Classics: London, 2017, pp. 70-71.

These two trends bring about a substantial social and economic transformation of the EU, in fact one that is increasingly seen as at least as important as climate change and the response to it, also called 'the green transition' and the adaptation and mastery of fast-paced technological change, often referred to with the shorthand 'digital transition.' So, what is the current demographic situation of the EU and what are the projections of future development in a no-(policy-)change scenario?

The European Union is facing demographic shifts characterized by an ageing population due to prolonged life expectancy (averaging 81.5 years at EU level in 2023; see figure 1), combined with persistently low birth rates. The population's age structure is being transformed, with a significant increase in the proportion of older individuals. By 2050, it is expected that those aged 65 and older will constitute 29.0% of the population, representing a 7.9 percentage point increase from the 21.1% recorded at present, while the cohort of individuals over 80 is expected to nearly triple. In contrast, the noticeable decline in the working-age population (20-64 years) observed over the past decade. will continue. The share of the subset of the working population referred to as 'prime working-age people (15-64)' will decrease to 57.4%,³ and the young population (0-14) will decline to 13.6%, 1.4 percentage points lower than today. This shift will elevate the old age dependency ratio from 33% to 57% by 2050. By the end of the century, the projected distribution will be 13.1% young people, 54.4% working-age individuals, and 32.5% older persons.

³ This indicator has increased by 5.7 percentage points (pp) between 2013 (when it stood at 27.7%) and 2023. In 2023, the highest ratios were registered in Portugal (38.0%), Italy and Finland (both 37.8%). The lowest ratios were in Luxembourg (21.5%), Ireland (23.2%) and Cyprus (24.7%). See [EU median age increased by 2.3 years since 2013 - Eurostat \(europa.eu\)](#) and [Old-age dependency ratio increases across EU regions - Products Eurostat News - Eurostat \(europa.eu\)](#)

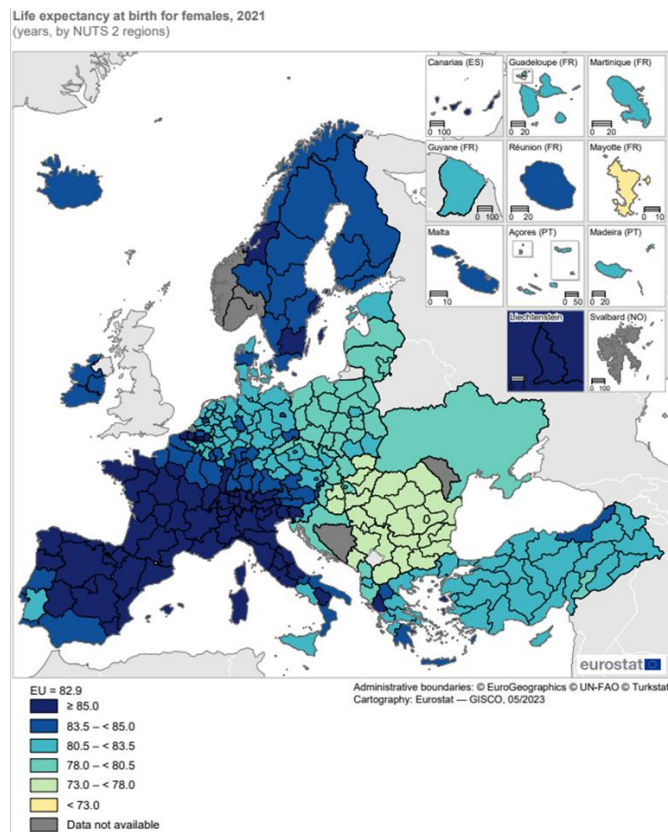


Figure 1: Life expectancy at birth for females in the EU's NUTS 2 regions, 2021.⁴

Despite a relatively stable total EU population in recent years, with numbers oscillating between 446 million in 2018 and 448 million in 2023, significant demographic changes are underway. This change is primarily driven by the current fertility rate of 1.5 childbirths per woman, well below the replacement level of 2.1 necessary for a stable population. The peak of the EU's total population is foreseen around 2026-2027, reaching 453 million before it is projected to decline, falling to 445 million by 2050 and to 415 million by 2100, which marks a decrease of over 7% from the 2022 figure.⁵ While the ('unobservable' and primarily subjective) root causes of the decline in fertility rates are still being discussed by researchers (see short expose later on in this article), the most easily 'observable' factor contributing to lower fertility rates is the trend of women in the EU opting to have their first child at a later age (see Figure 2), which subsequently shortens the timeframe for having more children. These ongoing demographic trends indicate a future where the EU will need to adapt to a substantially older population with a shrinking workforce.

⁴ Eurostat, 3 May 2024, <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20240503-2>

⁵ EC-EPC's 2024 Ageing Report (Volume 1), and based on Eurostat Europop 2023.

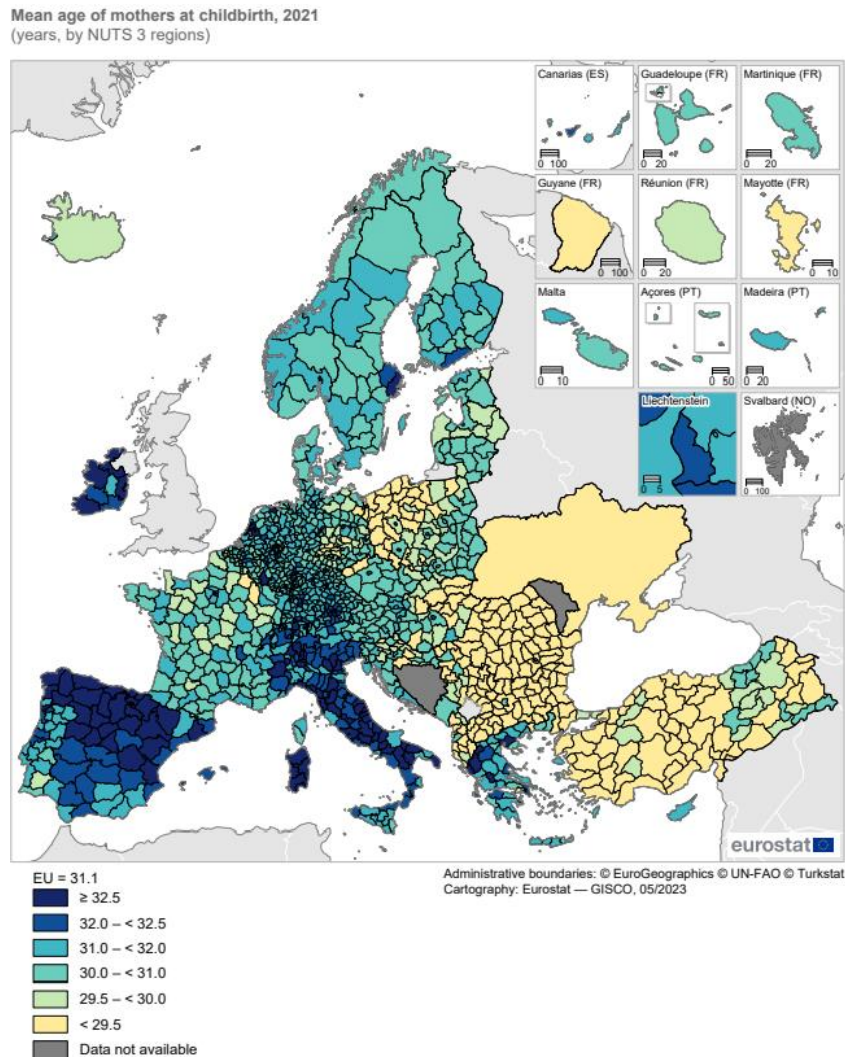


Figure 2: Mean age of mothers at childbirth in the EU's NUTS 3, 2021.⁶

Territorial dimension of demography and impacts on economy and politics

Demographic change displays asymmetric patterns across EU regions, reflecting longevity, fertility, and mobility trends and leading in some cases to depopulation. Accelerating demographic change saw 34% of the EU population living in shrinking regions in 2021 (see figure 3).⁷ This is projected to reach 51% in 2040.

⁶ Source: Eurostat Statistical Atlas, Regional Yearbook 2023.

⁷ European Commission, Directorate-General Regional and urban Policy, Ninth report on economic, social and territorial cohesion, Office of Publications: Luxembourg, April 2024.

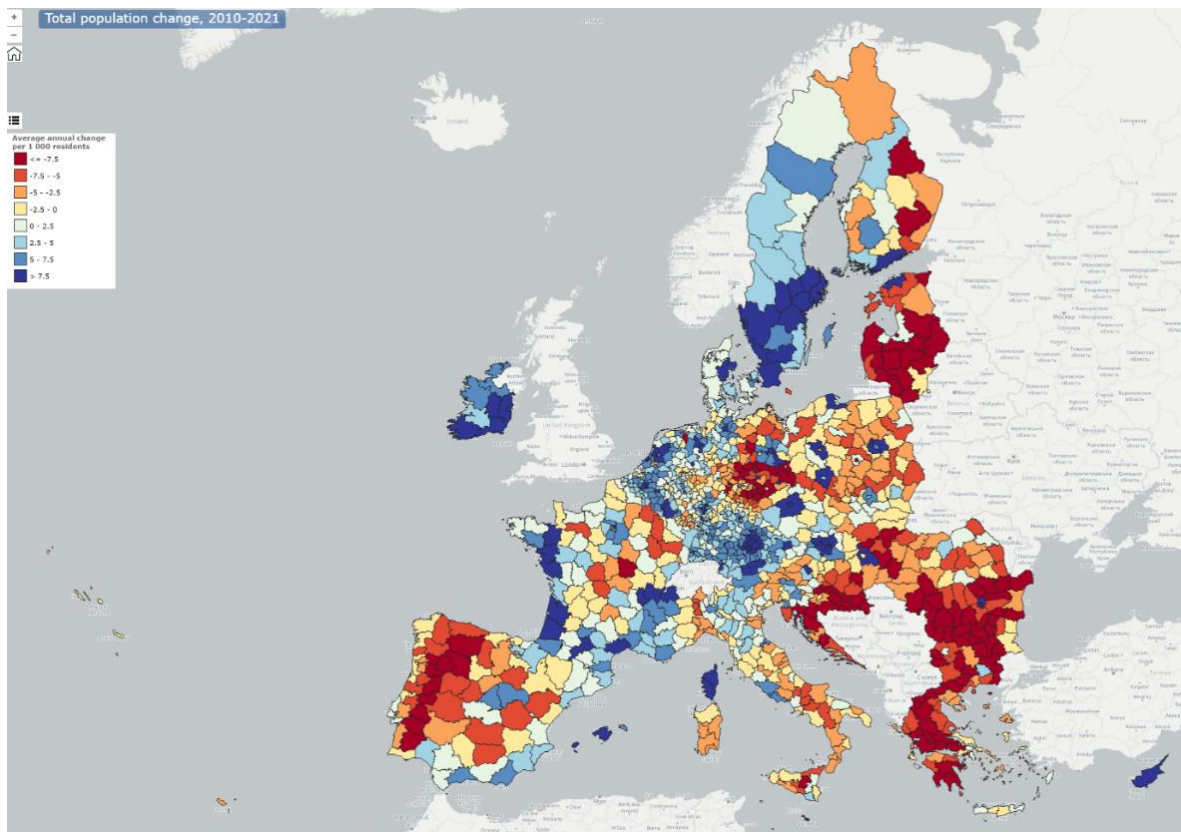


Figure 3: Average annual population change in European NUTS 2 regions, 2010-2021. All the red hues denote population decline. Source: interactive maps of the 9th Cohesion report.⁸

In 2021, the crude rate of natural population change⁹ in the overwhelming majority of the EU's NUTS 3¹⁰ regions was negative, Ireland being the only Member State where that rate was still positive in all regions (see Figure 4). Population decline exhibits very uneven patterns across EU territories and types of settlement (urban, rural, semi-urban), potentially amplifying pre-existing disparities. The urban-rural divide is widening, with increasingly ageing and shrinking populations in rural regions. Regions with a high share of old people, frequently rural and remote, are also the ones which are expected to experience the strongest decrease in total population. Half of villages and more than 40% of towns in the EU lost population in the last decade. While EU towns and villages close to cities grew on average over the last decade, those more than 30 minutes from cities lost

⁸ Interactive maps accompanying the European Commission, Directorate-General Regional and urban Policy, Ninth report on economic, social and territorial cohesion, Office of Publications: Luxembourg, April 2024, at https://ec.europa.eu/regional_policy/information-sources/cohesion-report_en

⁹ The crude rate of natural change is the ratio of the natural change during the year (live births minus deaths) to the average population in that year. The value is expressed per 1 000 persons.

¹⁰ NUTS refers to the Nomenclature of Territorial Units for Statistics (NUTS), part of the a geocode standard for referencing the territorial-administrative subdivisions of EU Member States and EU candidate countries for statistical purposes. The standard is developed and regulated by the European Union and is instrumental in delivering the European Union's Structural Funds. In ascending order, the numeration following the NUTS acronym corresponds to ever smaller administrative units.

population. Furthermore, most EU regions experienced a substantial increase in the population aged 65 and older between 2014 and 2021, with a 27% projected increase across the EU by 2040. On the other hand, the working-age population (defined as those aged 20-64) shrunk by 2.5% during 2014-2022. This has affected many regions, particularly in the eastern and southern Member States, with some experiencing reductions of over 10%. For the 0-19 age group there was a slightly smaller decrease at the EU level (of 1.2%) during this period, yet similarly with many southern and eastern regions seeing reductions of over 10%. By contrast, the number of young people grew in several regions in Sweden, Czechia and the eastern part of Germany, as well as in capital regions in many other Member States.

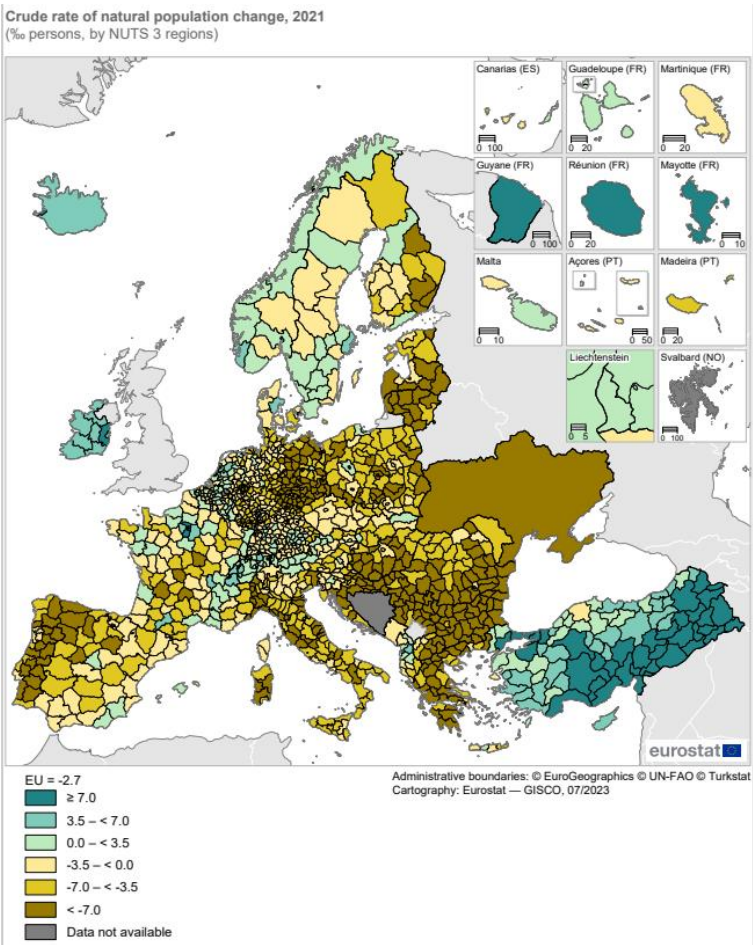


Figure 4: Crude rate of natural population change in the EU's NUTS 3 regions, 2021.

Regions experiencing population decline face the challenge of adjusting public services and infrastructure to suit smaller populations and tighter budgets. The European Commission has repeatedly emphasized the importance of balancing costs with service accessibility, which includes availability and the ability of users to reach services within acceptable travel

times.¹¹ Demographic shifts affect the operation and expenses of educational institutions, with schools in sparse rural areas incurring approximately 20% higher costs per student than in urban areas.¹² Additionally, lengthy commutes to Early Childhood Education and Care (ECEC) facilities can limit employment opportunities or discourage the use of ECEC, in turn also depriving children of skills-development opportunities and impeding the reconciliation of childcare and work for parents.

Struggling with the provision of essential services to citizens is only one of the issues faced by a significant number of EU regions which are caught in development traps. These regions, which include rural and old industrial areas, underperform in income, productivity, and employment compared to national and European counterparts. They face structural issues that hinder the restoration of their economic vitality or the enhancement of their residents' wealth and prosperity. They are more common in western Europe, with some experiencing economic stagnation since the 1990s. Among the EU's 242 NUTS2 regions, 82 are losing talent and essential services due to depopulation driven by negative natural growth and out-migration, leading in some cases to the depopulation of rural areas.

The uneven demographic trends across EU regions are disrupting the territorial equilibrium at both the subnational and international levels, with implications for European democracy and political stability. Economic challenges compound with cultural and identity issues, resulting in feelings of cultural estrangement and economic marginalization, particularly among males, older individuals, and the less educated. This "geography of discontent" is characterized by anti-EU sentiment and hostility against mainstream politics and European integration, as seen in job loss, talent drain, and disappearing public services. Brexit exemplified this phenomenon, with citizens feeling that European integration exacerbated their problems. Discontent extends to political and social realms, with support for Eurosceptic parties increasing from 7% to 27% in national elections between 2008 and 2022.¹³ The continued support provided by the European Union's Structural and Investment Funds to foster structural investments and reforms and to strengthen cohesion also has a positive impact on counteracting the erosive effects of development traps on European democracy. Among other EU funds, in the 2021-2027 funding period, the European Regional Development Fund and the European Social

¹¹ See, for instance, European Commission, *Cohesion in Europe towards 2050. Eighth report on economic, social and territorial cohesion*, Publications Office of the European Union, Luxembourg, 2021.

¹² OECD and European Commission, Joint research Center, *Access and cost of education and health services: Preparing regions for demographic change*, OECD Publishing, Paris, 2021.

¹³ Soft Eurosceptics oppose specific EU policies, while hard ones frequently outright challenge the EU's viability and existence. Both types of parties gained traction by rallying this growing geographically rooted discontent. A. Rodríguez-Pose, L. Dijkstra and H. Poelman, *The geography of EU discontent and the regional development trap*, Luxembourg: Publications Office of the European Union, 2023, p. 5.

Fund+ are expected to continue supporting economic, territorial and social cohesion in the EU, thus also addressing the multiple challenges from demographic change.

EU demographic developments in a global comparative context

The demographic transition, characterized by a low equilibrium between birth and death rates (resulting in relative stability of natural population growth, i.e. the rate of growth before the intervention of net migration) and a growing share of older people is a reality for many countries. Population growth in most other high and middle-income countries outside of the EU is slowing down. Since roughly the mid-point of the past century, world population has increased very substantially and the relative weight of the population of each continent has also shifted starkly but the rate of growth has decelerated in the last decade. In ca. 1950, world population was approximately 2.5 billion, distributed roughly as follows across the continents:

- Asia: approx.1.4 billion people (representing over half of global population).
- Europe: 550 million people (from the Atlantic to the Urals, the second most populous continent at the time).
- Africa: 221 million.
- North America: 172 million.
- Latin America and the Caribbean: 167 million.
- Oceania: 12.5 million including Australia and New Zealand.

By ca. 2023, the distribution of the world's estimated 7.9 billion people, was:

- Asia: 4.6 billion people.
- Africa: over 1.3 billion
- Europe: 748 million people
- Latin America and the Caribbean: 659 million.
- North America: 368 million.
- Oceania: 43 million.

These figures¹⁴ illustrate significant demographic changes over time, with Asia maintaining its position as the most populous continent and Africa experiencing the most rapid growth rate. Europe's growth rate is comparatively slower, and in some countries, the population is either stabilizing or declining due to low birth rates and ageing populations. Africa is the only continent where population will continue to increase at a high pace for a great part of the century. The share of the EU population in the global population will shrink from 6% in 2022 to 3% in 2100. In the same period, the share of the African population will increase from 18% to 38%.¹⁵

¹⁴ Combined data from the World Bank and the United Nations Department of Economic and Social Affairs.

¹⁵ EC-EPC's 2024 Ageing Report (Volume 1)¹⁵, and based on Eurostat Europop 2023.

However, the demographic transition is not a phenomenon just in Europe and other industrialized countries but a global one. For most of human history, the population aged 65+ represented less than 5% of the world's population; it rose to 10% in 2022 and could reach 21% by 2100 according to the United Nations, i.e. 2 billion out of 11 billion people.

So far, global demographic developments are in line with the theoretical concept of demographic transition. This concept describes the transformation of human populations from conditions of high fertility and mortality to low fertility and mortality, typically as societies progress from pre-industrial to industrialized economic systems. This transition is characterized by four distinct stages:

Pre-Transition (Stage One): In the pre-industrial period, both birth rates and death rates are high, which results in a relatively stable population with slow growth. The high mortality rate is often due to limited access to healthcare, poor sanitation, and a lack of reliable food sources. Similarly, high fertility is a response to high infant and child mortality, as well as a lack of birth control and the economic benefits of having more children.

Early Transition (Stage Two): As a society begins to industrialize, it experiences significant improvements in healthcare, nutrition, and sanitation. These advancements lead to a rapid decline in death rates, particularly among infants and children, while birth rates remain high. Consequently, this stage is marked by a surge in population growth.

Late Transition (Stage Three): Over time, changes in socio-economic conditions (increased urbanization, education, and the empowerment of women) along with improved access to contraception, lead to a decline in birth rates. The population continues to grow but at a slower pace, as the gap between birth rates and death rates narrows.

Post-Transition (Stage Four): In the final stage, both birth and death rates are low, stabilizing the population growth. This equilibrium is a result of a continued low mortality rate and a birth rate that has decreased to a level where it roughly balances the death rate. Some models include a fifth stage characterized by a declining population due to birth rates falling below death rates.

The demographic transition model is a valuable tool for understanding the population dynamics associated with economic and social development. However, the transition may not occur uniformly across all societies or regions due to cultural, economic, and political differences. Additionally, some demographers have argued that the model may need to be updated or expanded to account for contemporary fertility patterns and the potential impacts of globalization and climate change on demographic behaviors.

Comparison of the EU with other principal economies and regions

The United States is expected to witness a 12% population growth between 2020 and 2050. Despite high illness rates and a fertility rate below the replacement level, the U.S. maintains a growing population, supported by a higher fertility rate—over 40% greater than that of East Asia—and significant immigration influx. The number of deaths in the U.S. is increasing, but births will continue to outnumber deaths until the early to mid-2040s. Demographically, the U.S. has a strategic advantage, with a projected potential support ratio of 2.3 working-age individuals per senior citizen by 2050, which is more favorable than any major Western economy.

Experiencing a population boom after World War II, East Asia's population grew from under 700 million in 1950 to almost 1.7 billion by 2020, an increase of almost 80 % from 1950 to 1980 alone. However, fertility rates have since dropped below replacement levels in the region, with Japan currently being the most fertile yet still 40 % below the necessary rate to sustain its population. East Asia is facing a demographic decline, with a predicted 2 % decrease from 2020 to 2035 and further reductions thereafter. By 2050, China's and Japan's populations are expected to decrease by eight and 18 %, respectively, while South Korea and Taiwan are projected to see reductions of 12 and eight %. The region's potential support ratios are set to plummet, with Japan and South Korea reaching a near 1:1 ratio of working-age individuals to seniors, indicating a significant ageing population and imminent depopulation challenges.

Africa's population is projected to double by 2050, followed by a similar increase from 2050 to 2100. Ageing trends, seen globally, will become more prominent in Africa in the latter part of the century, with an increase in the proportion of those aged 65 and over, as well as those aged 80 and over. This demographic shift is attributed to advancements in health, nutrition, and living conditions. The EU population is expected to decline from 450 million in 2026 to 416 million by 2100, with those aged 65 and over comprising 31.3 % of the population. This ageing trend is expected to strain social protection systems, necessitating potential increases in activity rates, birth rates, or immigration, or EU expansion to mitigate the impact. The average age will continue to rise due to lower fertility and higher life expectancy, leading to increased health and retirement-related expenditures and a potential privatization of social services. In contrast, emerging and developing countries, including those in Africa, currently rely more on family and community-based support systems. While population growth is slowing in Europe and other high and middle-income regions, Africa's global population proportion is expected to rise from 18 % in 2022 to 38 % by 2100, as opposed to the EU's share decreasing from 5.6 % to 3.3 % in the same timeframe.¹⁶

¹⁶ According to projections by the three main institutions formulating global population projections: UN Population Division (UNDESA), International Institute for Applied Systems Analysis (IIASA), Institute for Health Metrics and Evaluation (IHME).

Considering the aforementioned demographic trajectories within key global economies and regions, the inference drawn by European experts who authored a report on the future of cohesion in the EU appears well-founded. On the global level, the relative demographic decline of the EU “is impacting its influence and status as an economic and political power and as a model for the rest of the world”.¹⁷

Depopulation in history

Depopulation has many historical precedents across the continents. The Black Death, striking for the first time in Europe in 1347 and persisting in different bouts into the 15th century, resulted in the deaths of an estimated 75 million to 200 million people across Eurasia, an estimated one-third of the population. This would have meant a reduction of the European population from around 75-80 million before the plague to approximately 50 million afterwards, though these numbers are subject to debate due to the scarcity of accurate historical population data. The Thirty Years War (1618-1648), as is generally agreed, caused the loss of up to one third of the population of the Holy Roman Empire. Other regions are no strangers to depopulation. For instance, after 1200, China’s population shrank by more than half under the combined effect of wars and developments in the agricultural economy, taking almost 350 years to recover. Japan and Korea also endured long-term depopulations before they began modernizing.

The fundamental difference between historical and today’s trends of demographic decline is that prolonged contractions in the past resulted from calamities of horrendous proportions, beyond the control of individuals and occasionally also beyond the control of governments. It is no accident that the four Horsemen of the Apocalypse, symbolic images of Christian eschatology inspired by the four riders in the New Testament's Book of Revelation (6:1-8) are vivid allusions to such traditional scourges of human populations throughout history and stand for pestilence, war, famine, and death itself. In contrast, demographic decline today is voluntary, as it is occurring in an environment of improved health conditions and spreading prosperity. China provides a stark illustration: despite the suspension in 2015 of a decades-old coercive one-child policy, annual births have fallen by more than half since.

Impacts on the EU workforce

The first impacts of these demographic trends are already being felt in the EU workforce. Firstly, the current demographic trajectory of the EU portends a contraction in the workforce's size. The EU working-age population (20-64 years) is projected to decline from 265 million in 2022 to 258 million by

¹⁷ Report of the Group of High-level Specialists on the Future of Cohesion Policy (February 2024), available at https://ec.europa.eu/regional_policy/policy/how/future-cohesion-policy_en

2030, and further to 236 million by 2050 —a 36 million decrease since 2009.¹⁸ This dwindling demographic, under the assumption of constant activity rates across educational and population subgroups, will likely result in the active workforce diminishing from its apex of 205 million in 2022 to 184 million by 2050.¹⁹

Secondly, the demographic transition exerts influence on the composition of the EU's workforce, making the latter progressively older. A comparison between 2012 and 2022 demographics reveals a decrease in young workers (15-24 years) from 9.4% to 8.7%, a decline in prime-age workers (25-54 years) from 75% to 69.4%, while the proportion of older workers (55-64 years) has expanded from 13.8% to 18.3%, and those beyond typical working age (65 and over) have increased from 1.7% to 2.6%.²⁰

This aging workforce is contributing to persistent skill shortages, with nearly two-thirds of the EU's small and medium-sized enterprises (SMEs) reporting difficulties in recruiting workers with the requisite skills. Currently, 42 occupations across all skill levels face EU-wide shortages, including healthcare, long-term care and social work activities, construction, manufacturing, transportation and storage, accommodation and food services, engineering, technical and scientific activities and Information and Communications Technology (ICT). The healthcare sector is indeed a case in point: employment in the sector has grown by 11% from 2012 to 2022, whereas the job vacancy rate has doubled from 1.5% to approximately 3.0% over the same period.²¹

If unaddressed, such shortages may diminish countries' attractiveness for innovation and research, reducing competitiveness and slowing digitization and green transitions. Addressing the underrepresentation of women, the less educated, migrants, and older and younger demographic cohorts in the labour market and facilitating sectoral shifts, particularly into renewable energy, is vital. The green transition alone could generate between 198,000 and 468,000 jobs by 2030, necessitating retraining and upskilling investments between 1.7 and 4.1 billion EUR. Skills gaps in specialized STEM roles, evolving skills requirements, and substandard working conditions in certain occupations deter workforce participation, exacerbating shortages. Migrant workers, 8.7 percentage points more likely to be employed in shortage occupations, primarily fill low-skilled roles, partially bridging these gaps. Furthermore, 86% of shortage occupations are dominated by one or the other gender, which narrows the potential workforce for these sectors.

¹⁸ According to Eurostat's EUROPOP2023 baseline population projections.

¹⁹ This assumption does not take into account potential measures to increase the active population in the EU.

²⁰ My calculations based on Eurostat dataset lfsa-pganws.

²¹ See Employment and Social Developments in Europe 2023: Addressing labour shortages and skills gaps in the EU, pp. 44-45.

Impacts on the EU Social Model

Demographers tend to distinguish 'chronological age,' which refers to the actual number of years since an individual's birth, from 'biological age,' which denotes individuals' physiological condition, often impacting their health status and mortality risk. Economic age, on the other hand, is concerned with an individual's or population's contribution to the economy relative to their consumption needs. It is this latter concept of economic age that is more pertinent in macroeconomic analyses as it directly correlates with the labor supply, innovation, productivity, and the capacity to satisfy the needs of the older segments of the population, often referred to as the third and fourth ages. To analyze these relations, economics have devised the concept of the economic dependency ratio, an indicator that quantifies the ratio of non-workers, including children, the unemployed, and those outside the labor force, such as retirees, to the working population. Within this context, the old-age dependency ratio is particularly significant; it measures the proportion of persons aged 65+ to those aged 15-64.

Simulations suggest an increased strain on economic dependency and social security contributions over the next decades.²² The economic dependency ratio is projected to surge from 47% in 2022 to 72.1% by 2050 and 86% by 2100. The mounting economic dependency ratio could compel governments to offset the deteriorating fiscal balance by augmenting social security contributions. Simulations indicate that to maintain fiscal equilibrium social security contributions should rise by almost 2% by 2050 relative to their 2022 levels and by 2.4% by the turn of the century. Due to the diminishing workforce, the increase in social security contributions would have to be paid for by a lower number of people. Consequently, social security contributions per person employed are projected to increase by 13.6% by 2050 and reach 30% increase by 2100 relative to their 2022 levels. By 2050, the employed population is projected to decrease by over 10% in comparison to 2022 and by 21% by 2100.

²² See Employment and Social Developments in Europe 2023: Addressing labour shortages and skills gaps in the EU, Chapter 2.4. This scenario is applied to 11 EU Member States. using Eurostat's baseline projections by age. The share of low-educated, middle-educated and highly educated people was assumed to remain unchanged for each age group.

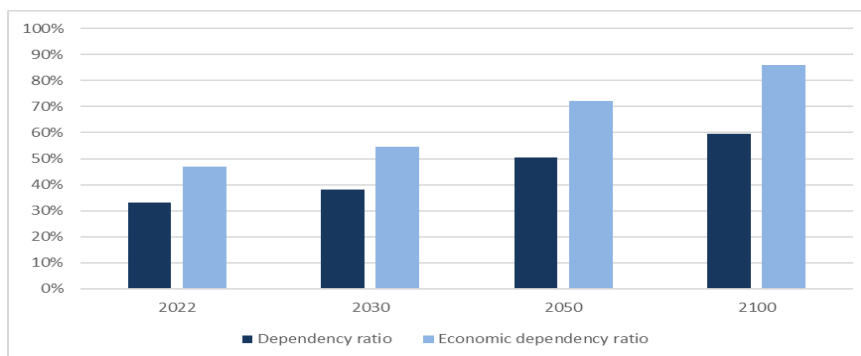


Figure 5: Old-age dependency and economic dependency ratios by time horizon.²³

Put more simply, as the population ages, societies face profound economic and social challenges. The financial burden of dependency is set to increase with the upward trend in life expectancy. In the context of fiscal constraints and ecological transition, policymakers will likely face difficult choices. Will individuals extend their working years, impacting growth, social security contributions, and tax revenues, or will they consume more during their working life, saving more in preparation for retirement and other ageing-related expenses? Another question is whether intergenerational solidarity within a welfare state will persist or if there will be a shift toward private insurance for health, retirement, and long-term care. Business decisions about retaining older workers will also vary, influenced by factors such as sectoral activity and the physical demands of the job.

At the level of national economies, the demographic transition could put pressure on the crown jewels of EU Member States' social policies: the welfare state. The projected total ageing-related expenditure in the EU is expected to rise from 24.4% of GDP in 2022, to 25.6% of GDP in 2070.²⁴ Under adverse scenarios, including lower than expected productivity growth or non-demographic drivers of health care and long-term care spending²⁵, the total costs of ageing could increase to 28.5% of GDP by 2070.²⁶

This means that, in a no-change demographic scenario, the EU social model, along with the sustainability of the EU pension and health systems, are becoming precarious. Ensuring long-term sustainability would require first and foremost prolonging working lives through flexible work arrangements,

²³ Source: "Thematic Focus: Demographic changes and pension reforms in the EU", Employment and Social Developments in Europe, *Quarterly Review*, November 2023.

²⁴ 2024 Ageing Report, Volume 2 (Economic and Budgetary Projections for the EU Member States 2022-2070), forthcoming Spring 2024.

²⁵ Such non-demographic drivers and assumptions about them concern, for instance, differential scenarios about the level of 'healthy ageing', i.e. the number of years spent in poor health during a lifetime or estimating the evolution of public health care expenditure, or differential scenarios about the unit costs of labour in the health sector, considering it is and is expected to remain a highly labour-intensive sector. See 2024 Ageing Report: Underlying Assumptions and Projection Methodologies (Vol. 1), *Institutional Paper 257*, November 2023, European Commission, pp. 99-100.

²⁶ 2024 Ageing Report, Volume 2 (Economic and Budgetary Projections for the EU Member States 2022-2070), Spring 2024. Ageing-related expenditure comprises pensions and health-care costs for the ageing population.

flexible retirement and closing of early retirement paths, before the less socially fair options of higher retirement contributions and lower pensions are tried.

A declining working age population and higher social security contributions could in turn reduce employment. With the labour force expected to become scarcer, wage levels could be expected to increase, thus reducing labour demand. In a parallel development, social security contributions per person employed would also raise wages, exercising additional downward pressure on labour demand. Accordingly, the EU employment rate (ages 15-69) is anticipated to drop from 65.2% in 2022 to approximately 63.9% in 2050, eventually settling at 63.4% in 2100.

At the level of individuals, insuring against the risks associated with ageing is rational, yet coverage rates remain low, and such insurance is often inaccessible to most of the population in need.²⁷ For instance, survey data indicate that in France, less than 7% of people aged 65 or over could finance their care expenses from income alone, with the figure being less than 2% in Italy but almost 16% in Belgium. On average, only 6% of dependent individuals could afford care.²⁸ This percentage increases when considering the use of financial assets, sale of real estate (excluding primary residence), or taking out a life mortgage loan on a primary residence.²⁹ Factoring in the imputed value/cost of informal support, such as currently provided by one's children, underscores further the necessity for moving to a comprehensive insurance system, be it public, private, or a combination of both. The financing challenge for ageing-related dependency necessitates coordination among families, authorities, and care institutions to ensure dignity in life's final stages. Nonetheless, disparities are likely to grow due to variations in access to family support and the availability and affordability of public, private, or hybrid insurance solutions. Depending on the country, the role of family support, the cost of private insurance, and the coverage of public insurance will vary, affecting the experiences of the elderly in different societies.

Individuals may need to assume greater personal responsibility for their health and financial security during retirement, which raises concerns about the implications for those unable to afford care, especially in societies that value youth and individualism. Behavioral adjustments in anticipation of ageing, particularly in affluent countries and among higher social strata, could manifest in altered consumption patterns, savings, and work-life balance. Large shares of dependent individuals unable to afford private care Individual decisions could lead to societal stratification, as those capable of providing for their old age may distance themselves from less fortunate

²⁷ G. Ponthière, *Économie du vieillissement*, La Découverte, Paris, 2017, p. 96.

²⁸ C. Bonnet et al., "Financer sa perte d'autonomie", *Économie et statistique*, no. 507-508, pp. 5-26.

²⁹ J.-C. Verez, *Les enjeux majeurs du XXIe siècle: économie, société et environnement*, Ellipses, Paris, 2023.

members of society. This raises the question of whether the growth of individualism in Western societies will also extend to increasing personal responsibility for one's health, retirement, and life expectancy. In case of failure to assume such individual responsibility voluntarily, the alternative might be governments gradually coercing individuals to do so, as the former find themselves increasingly unable to shoulder the rising cost of such responsibilities at societal level.

Impacts on the demand for and cost of healthcare and long-term care

As the proportion of people of old age increases, demand for healthcare and long-term care workers in the EU can also be expected to increase. Already at present, approximately 7.7 million women are currently out of EU labour markets because of care responsibilities, and this might increase in the future if no action is taken. On average, in 2019, 26.6% of people aged 65 or over and 39.4% aged 75 or over living in private households were in need of long-term care, according to 2019 data for the EU-27.³⁰ Further, 46.5% of people aged 65 or more with severe difficulties in personal care or household activities in the EU had an unmet need for help with such activities. This was significantly more pronounced for people in the lowest income quintile (51.2%) than those in the highest (39.9%).³¹ The main barriers to access are affordability and availability.

Challenges in access to long-term care are exacerbated by significant labour and skills shortages in the care sector. They are driven by low pay and difficult working conditions. In 2019, there were 6.3 million long-term care workers in the EU (3.2% of overall workforce).³² The long-term care sector has a significant job creation potential, with employment in the sector growing steadily in recent years and forecast to continue doing so. Between 2011 and 2022, it grew by 20%.³³ According to the projections from the Ageing Working Group (AWG) reference scenario in the 2021 Ageing Report³⁴ the number of potential dependants in the EU-27 is expected to rise from about 30.8 million in 2019 to 33.7 million in 2030 and 38.1 million in 2050 (+23.5%).

³⁰ According to 2019 data for the EU-27. EHIS, 2019, indicator hlth_ehis_tadli.

³¹ European Commission, Directorate-General for Employment, Social Affairs and Inclusion, *Joint Employment Report 2024 – Commission proposal*, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2767/17157>

³² Eurofound, 2020, [Long-term care workforce: Employment and working conditions](#), OP EU, Luxembourg.

³³ Eurofound (2023), [Measures to tackle labour shortages: Lessons for future policy](#), OP Office EU, Luxembourg.

³⁴ European Commission (Directorate-General for Economic and Financial Affairs), *The 2021 ageing report Economic & budgetary projections for the EU Member States (2019-2070)*. Publications Office of the European Union, 2021.

Impacts on intergenerational fairness, age equality, and on climate and environment policy

Intergenerational fairness is understood as the equitable treatment and well-being of both current and future generations. It balances the needs and challenges of different generations, which is crucial for societal cohesion and the welfare of all age groups. Among other, intergenerational fairness encompasses environmental stewardship and policies, whereby investments made today benefit future generations; ensuring sustainable public finances through fiscal policies that balance the distribution of various social expenditures and investments (e.g., in education and skills) to serve young, working-age, retirement-age and future generations equitably.

Citizens tend to express higher levels of life satisfaction in countries with lower age-related inequalities.³⁵ Enhanced intergenerational fairness can also build trust in the capacity of the political system to address generational challenges.³⁶ However, citizens today tend to express concerns for youth and future generations. For instance, between 2017 and 2022, the share of EU citizens agreeing that they have equal opportunities for getting ahead in life decreased from 57% to 47% (-10 pp), a decline particularly noticeable among youth aged 15-24 (-16 pp).³⁷ In 2017, only 46% agreed that opportunities to get ahead have become more equal compared to 30 years ago.³⁸ Promoting intergenerational learning, fostering multigenerational workforces, and supporting community-based care can enhance solidarity and retain human capital, mitigating demographic changes.

However, intergenerational fairness in the EU is challenged, with the pact between generations eroded due to the triple burden faced by today's young workers and future generations. Namely, young Europeans will have to pay higher social security contributions and will therefore take home a lower pay. Secondly, they will have lower pensions relative to wages than today's pensions as cost-containing measures in the pension systems seem inevitable. Finally, they are more likely to have fragmented working careers and be in precarious employment, which further decreases their future pension entitlements. Lower incomes and job insecurity, which tend to be typical for younger cohorts, impact household formation and fertility, further ageing the population. The EU welfare state is not only more generous than that of other principal economies; it also has a markedly pro-elderly bias, notably in the European South and West, with Germany and the central and east European member States increasingly conforming to this pattern as well, rather than the more balanced distribution of the Nordics. This means that reforms will need to balance social expenditure on benefits and services (e.g., on pensions, healthcare) on the one hand and

³⁵ OECD (2020), [How's Life? 2020: Measuring Well-being](#), OECD Publishing, Paris.

³⁶ European Commission (2023), [2023 Strategic Foresight Report](#), COM(2023) 376 final.

³⁷ European Commission (2023). [Perceptions of inequality and fairness](#): what has changed over the past 5 years? Fairness Policy Brief 1/2023.

³⁸ Special Eurobarometer 471 (2018), [Fairness, inequality and inter-generational mobility](#).

social investment on the other hand – the latter benefitting young and future generations and having a larger positive effect on productivity, growth and economic resilience (e.g., through education, early childhood education and care, etc.).

A substantial disequilibrium in intergenerational fairness could induce intergenerational tensions, including provoking negative views of and discrimination against older people (ageism). According to the 2023 Special Eurobarometer on discrimination, 45% of respondents in the EU think discrimination on the basis of being perceived as too old or too young is widespread in their country. According to WHO (2021), one in three people over 65 in the EU report being a target of ageism: insulted, abused, or denied services because of their age. Policies that promote longer working lives, enhance the skills and therefore the employability and job security of young people seem to be in line with citizen preferences: according to the same Eurobarometer survey, most citizens favor measures that ensure pensions are adequate but also remain affordable for future generations (49% in the EU).³⁹

The growing shares of old population in the EU might also slow progress toward climate neutrality. This is because the carbon and environmental footprint of older people is larger than that of the younger population. Older individuals generally have higher incomes, live in smaller households, and use more carbon-intensive services like heating. They are also less likely to view climate change as severe and the need to fight against it as urgent or to adopt sustainable practices, as confirmed by Eurobarometer data on perceptions of a fair green transition. Young people are much more likely to believe that climate change is a very serious problem. In addition, climate anxiety – a relatively recent phenomenon related to psychological distress caused by climate change – is becoming more common among young generations.⁴⁰ The Special Eurobarometer on Fairness perceptions of the green transition⁴¹ shows that for young people it is important to have a job that contributes to advancing the green transition or that their current skills allow them to contribute to the green transition (64% of 15–24-year-olds compared to 45% of 55+ year olds). There is also evidence⁴² of young people desiring jobs that contribute to advancing the green transition or acquiring skills that allow them to contribute to the green transition (64% of 15–24-year-olds compared to 45% of 55+ year olds). However, unless conducted with the scientific rigor and with longitudinal dimensions, survey findings should be interpreted with much caution. In this case, we could juxtapose the Eurobarometer findings with other recent surveys, which suggest greater infiltration of young cohorts by far-right-wing ideologies, a

³⁹ Flash Eurobarometer 534, [Demographic change in Europe](#), September 2023.

⁴⁰ Hickman et al. 2021. [Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey \(thelancet.com\)](#)

⁴¹ [Fairness perceptions of the green transition - October 2022 - - Eurobarometer survey \(europa.eu\)](#)

⁴² [Fairness perceptions of the green transition - October 2022 - - Eurobarometer survey \(europa.eu\)](#)

mainstay of which has notoriously been opposition to environmental and climate policies. According to surveys conducted in 9 EU countries in 2022, just 21% of Generation Z and millennials consistently support democracy compared to 66% of respondents aged 70 and up. In Poland, only a quarter of 18 to 29-year-olds showed consistent support for democracy —17 percentage points below the national average. In France that share was only 14%, and in Italy 34%, with older Italians nearly twice as likely to support democracy.⁴³

Impacts on state power

While history -contrary to the popular aphorism- does not repeat itself, it does teach about the importance of fundamental underlying drivers of the actions and achievements of human societies and the ambition or limitations such drivers determine. One of these lessons of global history is that demographics are crucial to state power, with populous countries typically boasting more workers, larger economies, and greater military potential. Conversely, nations with shrinking populations face challenges in economic growth, social welfare funding, and military strength, as they grapple with internal pressures. The demographic shifts in the EU threaten to diminish economic vitality and pose a strain on societies with populations of older people, who contribute less economically than younger, working-age individuals (15-64 years). In contrast, the US is not in the same predicament. For instance, by 2050, the military-age male population in the U.S. will exceed Cold War era numbers, with the recruitment pool projected to be just two and a half times smaller than China's, compared to seven times smaller in 1990.⁴⁴

As Europe navigates its growing demographic disadvantage, policies to boost labor productivity face limitations. The increasing demands of elder care are likely to reduce individual productivity, savings, and investment, while governments must find ways to expand spending on social welfare, including pensions and healthcare, despite slow economic growth. EU countries are confronted with difficult decisions regarding their 18-to-23-year-old population, who possess high education and technical skills, but represent a diminishing proportion of the population. Especially in a context of heightened geopolitical uncertainty and security risks, balancing young people's roles in the military and in the economy presents a trade-off. The recent calls by policymakers in some EU countries for building up larger standing armies of conscripts must consider these dilemmas and the implications of choosing between conscription and labor force

⁴³ Surveys conducted by the Foundation International Communications Hub, reported in Matthew Mac Williams, "Demography: The ticking time bomb threatening Europe's democracy", *Politico EU*, 21 May 2024.

⁴⁴ Nicolas Eberstadt, "'East Asia' s Coming Population Collapse And How It Will Reshape World Politics'", *Foreign Affairs*, May 8, 2024.

participation.⁴⁵ Moreover, Europe may become more sensitive to military casualties due to a smaller youth demographic compared to the share of older people. To be sure, Europe could invest in technology like artificial intelligence and autonomous weapons to offset unfavorable military demographics. However, manpower remains irreplaceable in large-scale military conflicts, as evidenced by the war in Ukraine. Maintaining a capable military force in societies where individuals of military age are essentially in scarcity and cultural norms assign high value to individual life will become increasingly challenging. Ultimately, this demographic reality may also strain transatlantic relations. With declining populations and waning economic competitiveness, EU nations might eventually be forced to reduce their regional security contributions, despite growing US pressure to the contrary. Such a development will likely further exacerbate U.S. grievances about insufficient defence spending by European allies.

Consideration of the importance of population to competitiveness and weight in global economy and trade are far from alien to the EU. In her 2023 state of the Union speech, the President of the European Commission introduced the imperative of further enlargement not only in terms of the benefits to potential new Member States but also with a view to the Union's larger population weight and its implications for economic and geopolitical influence: "In a world where size and weight matters, it is clearly in Europe's strategic and security interests to complete our Union. [...] we need to picture what is at stake. We need to set out a vision for a successful enlargement. A Union complete with over 500 million people living in a free, democratic and prosperous Union".⁴⁶ Nor was the word choice of French President Emmanuel Macron three months later accidental, when he spoke of 'demographic rearmament' to launch a campaign against low fertility rates in the midst of war analysts' underscoring Russia's opting for an attritional strategy in Ukraine, on the wings of a 3,5 to 1 population advantage.⁴⁷

Changing political priorities, policy responses and shifting narratives

Demographic developments have been typically monitored for many decades by national administrations, international institutions, think tanks and other independent research centres. Therefore, there is a large body of research and long history of policy measures designed to sustain fertility rates and/or to counter-act or adapt to the negative impacts of demographic decline on labour markets. Traditionally, the latter, i.e. policies that address the impacts of demographic decline (which we analyzed above) policies have contained a variable mix of the following broad measures:

⁴⁵ See J. Posaner, "Serving the Vaterland: Germany debates reviving conscription", *Politico EU*, 13 May 2024.

⁴⁶ Ursula von der Leyen, State of the Union address, 2023.

⁴⁷ "Demographic rearmament': Macron plans to reform parental leave and fight infertility", *Le Monde*, 17 January 2024.

- Reforming tax and benefit systems to improve work incentives.
- Investing in adult learning and skills development and training programmes, as well as better job matching with people's education, experience, and skills.
- Improving working conditions to attract additional workers.
- Making quality early childhood education and care available, accessible and affordable, which can lower barriers to labor market participation.
- Promoting targeted labour migration from non-EU countries to reduce labour shortages in specific skills groups.
- Enhancing social dialogue and involving social partners in training, improving working conditions, and facilitating adult learning opportunities.

In the last few years, there has also been a growing realization that the gradual deterioration of the demographic trends in EU member States warrant closer monitoring and more coordinated policy oversight and action at EU level. Already at the beginning of its 2019-2024 mandate, in December 2019, the European Commission recognised the importance of addressing demographic challenges and assigned a new Democracy and Demography portfolio. This mandate⁴⁸ is unique in international and national politics and gives a clear and firm political message about the urgency of responding to the demographic challenges. Though the legal basis for direct policy intervention by the European Commission is limited, there has been considerable progress in identifying the main issues in view of tackling the ongoing demographic change.

In October 2023 the European Commission proceeded to a further umbrella initiative. In the Communication "Demographic change in Europe: a toolbox for action", the Commission identified all existing EU policies that can be leveraged to address the above challenges. The Demography Toolbox,⁴⁹ as the Communication is summarily referred to, identifies policy action under four 'Pillars' to be pursued jointly by the EU and Member States to adapt to the negative impacts of demographic trends and reap the most out of the new opportunities inherent in the transition's longevity silver lining – in the process switching the narrative from 'ageing' to 'longevity societies':

1. Supporting working-age population and attracting talent to the EU (incl. activation of demographic groups underrepresented in the labour market, reconciliation of work and domestic/family/care responsibilities that weigh on activation of substantial shares of the EU population; early childhood education and care; skills-enhancing policies to boost productivity and competitiveness; efficient allocation of human capital through intra-EU mobility and migration into the EU; policies that address territorial disparities).
2. Empowering children and youth (incl. through the Child Guarantee, the Youth Guarantee, various youth-focused policies enhancing their

⁴⁸ Assigned to Vice-President Dubravka Šuica.

participation in education, the labour market, and in decision-making).

3. Meeting the needs induced by longevity (through prolongation of working lives; flexible work arrangements, ensuring age equality, ensuring the fiscal sustainability and adequacy of pensions in the long-term; supporting a healthy longevity through healthcare, long-term care and other support services; seeking coordinated solutions and inspiration from a global perspective, through international collaboration.
4. Monitoring and analysing demographic developments and understanding better the drivers of low fertility (in particular through better data, research, tools) and building up resources dedicated to demography as a new, 'umbrella' policy field.

As some of the most significant impacts of demographic change are felt in the size and composition of the EU workforce, a multitude of policies that fall under the 4 categories above had already been standard parts to the EU's broader economic governance. For instance, the annual publication of Employment Guidelines call on Member States to provide unemployed and inactive people with effective, timely, coordinated and tailor-made support for job searches, training, requalification and access to other enabling services, paying particular attention to vulnerable groups.

Furthermore, Member States are encouraged to proactively facilitate the labor force participation of all potential labor, especially of groups that are underrepresented or typically face barriers, such as women, youth, older people with lower skills, disabilities, migrant backgrounds (including those granted temporary protection), and marginalized communities. The EU's ambitious goal of attaining a minimum 78% employment rate among adults by the year 2030 hinges on the effectiveness of active labor market policies, including by providing incentives to encourage labor market participation, especially for low-income earners and secondary earners, often women. These issues receive consistent attention within the European Semester framework.

Since its inception in 2017, the European Pillar of Social Rights and the subsequent 2021 Action Plan⁴⁹ for its implementation have set EU-level benchmarks spanning the entire spectrum of employment and social policies. These policies have both an indirect and a direct beneficial effect on counteracting negative demographic developments. Their primary aim is to enhance the activation of the EU's population, draw talent, empower children and young people, and maximize the benefits of European longevity. Consequently, they also substantially address labor shortages. In

⁴⁹ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Labour and Skills Shortages In the EU: An Action Plan, 20 March 2024, COM(2024) 131 final, at https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1507

this vein, the Commission has recently escalated its efforts, collaborating closely with Member States to enforce these policies.

In March 2024, the European Commission introduced an Action Plan to specifically address labor shortages, delineating key actions to be undertaken by the EU, Member States, and the social partners. Aimed at ameliorating labor and skill deficits, such actions are structured around five pillars: facilitating labor market entry for underrepresented groups; bolstering skill development, training, and education; enhancing working conditions; advocating for equitable intra-EU mobility of workers and learners; and attracting non-EU talent.

To implement this labor shortage action plan, the Commission has prioritized strategic interventions and optimized the use of public funds. Significant investments have been made, with approximately EUR 65 billion allocated from the European Social Fund Plus (ESF+) and the Recovery and Resilience Facility (RRF) towards skill enhancement programs.

Also, in April 2024, the report by former Italian Prime Minister Enrico Letta on the future of the EU Single Market, points to the waning provision of public essential services in depopulated EU regions and advocates for cohesion policy funding to promote access to such essential services. Letta thus calls for balancing the fundamental EU freedom of movement of people with general coverage of all regions by quality essential services, partly to moderate such movement where motivated by absolute necessity and partly to tend to the needs of the people (often of predominantly old age) who stay behind after the outmigration of the economically productive from their areas: "Residents of regions in decline often feel having no opportunities, but to relocate due to the lack of jobs, access to quality education, and adequate services necessary for cultivating a self-sustaining and dignified lifestyle within their own communities.... We must strive to continue securing the free movement of people but also ensure a 'freedom to stay'. The Single Market should empower citizens rather than create circumstances where they feel compelled to relocate in order to thrive. Opportunities must be available for individuals who wish to contribute to the development of their local communities. Free movement is a valuable asset, but it should be a choice, not a necessity".⁵⁰

Pivoting the political narrative from 'ageing societies' to 'longevity societies' has the advantage of highlighting the opportunities inherent in the prolongation of human life and healthy years. It is useful insofar as it helps to free political action from a mindset of gloom and doom and from

⁵⁰ Enrico Letta, *Much More Than A Market: Speed, Security, Solidarity - Empowering The Single Market To Deliver A Sustainable Future And Prosperity For All EU Citizens*, pp. 90-91 at

<https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>; see also Jacopo Barigazzi, Zoya Sheftalovich, "The Freedom to Stay Home: Brussels Playbook", *Politico EU*, 4 January 2024 at <https://www.politico.eu/newsletter/brussels-playbook/the-freedom-to-stay-home/>

widespread fatalistic resignation to seemingly inescapable demographic decline, which is the most likely outcome in a no-policy-change scenario.

On the other hand, from a technical viewpoint, longevity and ageing are not entirely interchangeable terms. In its literal and narrower meaning, ageing could be a synonym of longevity to characterize one of the two main drivers of demographic decline, i.e. the prolongation of average life expectancy to hitherto unprecedented levels. This prolongation would by itself inevitably lead to a proliferation of the absolute numbers of old people (over 65 and over 80). However, it would not necessarily lead into the substantial proliferation of old-age people in relative terms as well (i.e. as shares of the overall population) to an extent that risks to throw the population pyramid off equilibrium and complicate the relationship between the proportion of the population of old age and the rest of the population. It is this relative proliferation of the old-age part of the population that we refer to when we use 'ageing' as a shorthand for the general description of demographic decline in expressions such as 'ageing societies.' This relative proliferation of old-age population occurs most and faster where it is coupled with low birth rates and weak or negative net-migration rates. This is indeed the case of the EU, whereas the the case of the US is different: while narrow-sense 'ageing' occurs there, too (in the sense of the proliferation of the number of old and very-old-age people) the increase in the total share of the population that this number represents has so far been a lot more moderate than in the case of the EU and does not threaten to throw the functioning of the labour markets or the overall relations between the economically productive and the economically unproductive parts of the population off balance (this favorable US prospect is due to higher birth rates and positive net immigration). In other words, in the US, there is population ageing in the narrow sense but not in the more generalized sense of the term. The point here is that the change of narrative that substitutes 'longevity' for 'ageing' in all uses of the term would be more fitting to developments in the US than in the EU, where it could accurately characterize only the 'narrow' ageing, i.e. the prolongation of life expectancy.

The limits of managing demographic decline through policy

Despite a growing instrumentarium of employment and social policies, governments have only so much leeway to squeeze out more from less. For instance, we know that there has never yet been an instance of a country where birth rates fell 25% below replacement and then rebounded to replacement levels, even temporarily. Exactly how old-age support will work in societies so bereft of descendants is such a sobering conundrum that has typically been relegated to dystopian fiction. In the 2022 film by Japanese director Chie Hayakawa *Plan 75*, municipal authorities offer financial incentives to seniors who are euthanized voluntarily to reduce their

economic burden on society.⁵¹ At the opposite extreme of imagined futures, British writer Hanif Kureishi, in his 2015 short story 'The Land of the Old,' depicts a dystopia where all the wealth and power are concentrated in the hands of old people, who subject the young to exploitation and humiliation.⁵²

To be sure, policies promoting healthy ageing, more and better training and education, higher labor force participation, and longer careers has been evidenced to work in terms of achieving their primary objectives (which lie outside the realm of demography). However, they are indirect responses to the demographic transition, i.e. they address predominantly *the impacts* of that transition. Counteracting demographic decline head-on, i.e. dealing with its main driver (fertility rates below the replacement level of 2.1 children per woman) is far more complicated. Nonetheless, national administrations also have a long record with such so-called 'pronatal(ist)' policies, the simplest and most notable of which are entitlements for having additional children. Short of outright pronatal policies, some social policies, notably those that aim at reconciling child-rearing with work (e.g. parental leave), could also be considered as policies which may also have 'pronatal' spillovers, beyond their main labor-activation objective. This is because they allow working parents the necessary time away from economically productive activities in order to concentrate on the tasks of parenting the new generation.

Regardless of the primary objective of each specific social policy, the record of their effectiveness is mixed and suggests the need for further research into the drivers of low fertility. If the policies were effective, one would expect high -or considerably higher than average- birth rates in countries with a consistently good record of social (including gender-egalitarian) policies. For decades, Nordic countries, where fertility rates had been higher than in other EU countries, seemed to embody the empirical evidence of the effectiveness of such policies. However, since the beginning of the second decade of our century birth rates in Scandinavian countries have fallen, befuddling the scientific community.⁵³

The reversal of the Scandinavian high-fertility pattern suggests that generous and egalitarian social policies could still be accompanied by a declining desire to have children. It is this increasingly prevalent phenomenon of postponing family formation or abandoning it altogether that is yet to be sufficiently researched and convincingly explained. The task for experts is further complicated by the reasonable hypothesis that even

⁵¹ https://en.wikipedia.org/wiki/Plan_75

⁵² Hanif Kureishi, 'The Land of the Old' in *Love + Hate: Stories and essays*, Faber and faber: London, 2015.

⁵³ See J. Burn-Murdoch, "Why family-friendly policies don't boost birth rates", *Financial Times*, 29 March 2024, and S. Arnolfo, S. and N. Hiekel, "Pathways of family change: a typology of multipartnered fertility life courses in five Northern European countries", *MPIDR Working Paper WP-2024-005*, Max Planck Institute for Demographic Research: Rostock, (March 2024).

small differences in national or class cultures could contribute through different channels to the declining desire for children. This implies that research has a long way ahead before exhausting the causality of low fertility across space and cultures. Because the dynamics of marriage, housing, and work vary across countries, governments interested in raising fertility rates cannot forego investment on broad data collection on factors influencing fertility, preferably of a harmonized multinational and longitudinal type.⁵⁴

Rather than the effectiveness of social policies (which, to be sure, provide very considerable support to families who choose to have children) research points to changing cultural patterns in parenting in Western countries to explain declining fertility rates. Cultural changes are influenced by long-term economic developments, such as growing inequality of opportunities. In this context, the real and perceived parental investments in time and money necessary to ensure that their children have a path to success and upward social mobility have grown over time. This has transformed the hands-off parenting of the post-WWII era into a very time-intensive activity, often referred to as 'helicopter-parenting'. The argument is that the (very substantial yet underestimated) time and money transfers from (the economically productive) parents to (economically unproductive) children have over decades increased to such a high level as to represent the majority of the total resources that go into nurturing the capabilities of the next generations, even in societies whose generous education and social policies make substantial resources available to this task. Individuals' real or perceived inability to provide the considered minimum of such necessary resources may be deterring parents or prospective parents from having (additional) children or making them postpone childbearing to a later, biologically less fecund age. Comparisons of the time parents devote to activities with their children in countries like Korea (with its fertility rate of 0.72) to France, which has managed to maintain a more hands-off attitude to parenting over the years, the birth rate stands at 1.8, are consistent with this argument.⁵⁵ In terms of policy, such findings would imply greater investments in public resources that support equality of opportunities, notably in quality education and skills in general, generously coupled with monetary and non-monetary aspects of pronatal policies (remuneration, length and flexibility of paid and unpaid parental leave for both parents).

Another underlying cause of eroded birth rates is linked to increased cultural emphasis on intellectual and professional self-realization. The anxiety associated with this pursuit of young adults and especially of young women today as well as anxiety attributed to other causes may also deflate the desire to have children.⁵⁶

⁵⁴ Lyman Stone and Erin Wingerter, Is There Hope for Low Fertility? "Demographic Rearmament" in Southern Europe, *Institute for Family Studies*, May 2024.

⁵⁵ M. Doepke and F. Zilibotti. *Love, money, and parenting: How economics explains the way we raise our kids*. Princeton University Press: Princeton, NJ, 2019.

⁵⁶ L. Stone. "The global fertility crisis". *National Review* (2020) and L. Stone, "The decline of American motherhood". *The Atlantic* (2018).

Finally, the share of young adults living as a couple in Western countries, especially in the EU, is in decline -though for different reasons. One of them is women's increasing financial independence, which has removed a traditional -even if ethically questionable- reason for family formation. This explanation is consistent with the more recent segment of the downward slope of birth rates in Western countries, which seems to have been driven primarily by growing shares of people of reproductive age deciding not to have any (as opposed to fewer) children at all. Another version of young adults not experiencing the joint living that is essential to reproduction and child-rearing increasingly has to do with adverse economic conditions affecting youth today (see triple burden mentioned above), especially in the European South. These adversities are exacerbated by the recent housing crisis occurring across urban centers in the EU and other advanced economies, resulting in children spending longer periods of their adulthoods in the households of their parents, even in cultures where this used to be frowned upon until recently.⁵⁷

In industrialized and liberal societies such as those of the EU Member States, the prospect of fertility rates reverting to a figure commensurate with population replacement appears very improbable in the foreseeable future. Should such a demographic resurgence occur, it would be more likely to stem from widespread transformation of the societal and cultural fabric, rather than from policy action. While social policies make sense from many vantage points, including those aimed at increasing productivity, the challenges of ageing and diminishing populations, call for alternative strategies. At the very least, it is certain that overcoming depopulation in the future will not resemble past rebounds, when high birth rates restored populations almost as if by automatic reflex, once famine, war, or other disasters subsided.

This said, the impacts of the demographic transition in the EU are broad, multi-faceted and of increasing intensity. The policymakers' growing attention to them at the EU level is very timely and it can only be hoped that it is emulated consistently at national level.

⁵⁷ Eurofound (H. Dubois), *Unaffordable and inadequate housing in Europe*, Publications Office of the European Union, Luxembourg, 2023.



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