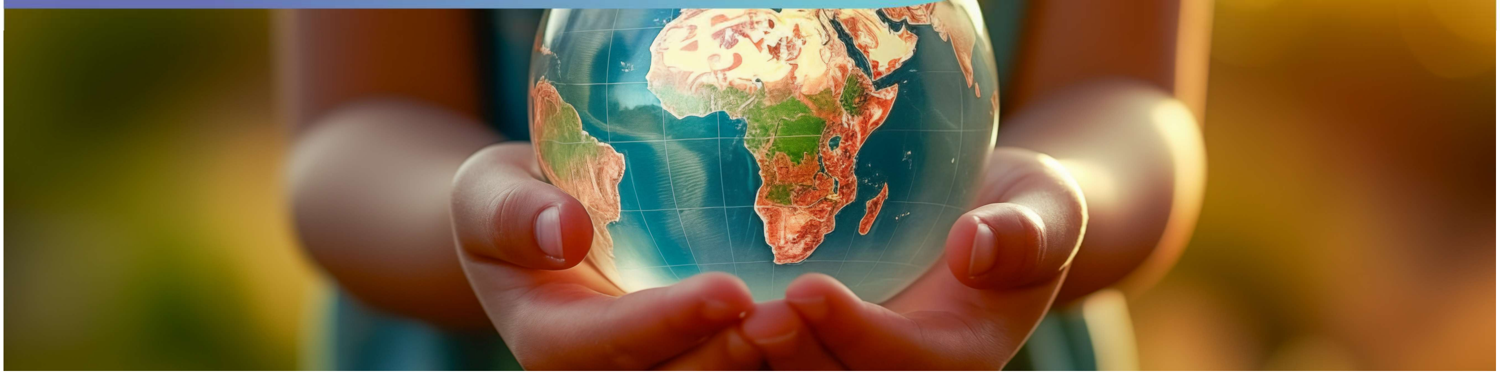
JRC137252

SCIENCE FOR POLICY BRIEF



Why global demography is important for EU policies

HIGHLIGHTS

- Demographic projections, with a time horizon of several decades into the future, entail inherently significant uncertainties especially when moving to the second half of this century.
- To deal with such uncertainties experts surveys like the one jointly conducted recently by IIASA, UNDESA and JRC can shed light and provide useful insights for global projections.
- While experts have different opinions about the pace of future demographic change, they agree on the key trends of ageing and a stabilisation of population growth in most regions of the world, of shrinking working age population in Europe and East Asia, and further population growth in Africa until the end of 2100.
- These trends imply that by 2050 the global demographic landscape will look dramatically different from what it is today.
- Dialogue between demographers and EU policy makers highlight the importance of anticipating these demographic changes more proactively in a wide range of EU policies; both in the internal dimension of EU labour markets and competitiveness, regional cohesion and migration and in the external dimension of development and EU external relations.

INTRODUCTION

Insight into the future of the world population is key for policy planning. National statistical offices and international organisations regularly produce population projections employing a variety of methods. Some of these projections directly rely on expert opinions to define assumptions and scenarios about future fertility, mortality, and migration while others incorporate expert knowledge indirectly in the development and calibration of statistical models.

In order to inform such exercises the International Institute for Applied System Analysis (IIASA), the United Nations Population Division (UNDESA) and the European Commission Joint Research Centre have conducted an expert survey on the determinants and drivers of future population change.

The results of this survey resulted in a JRC technical report[1] and were presented and discussed with EU policymakers and demographic experts during a workshop held on 13th December 2023 in Brussels.

The workshop facilitated dialogue between policymakers and demographers with the objective to better connect scientific knowledge and policymaking in the EU on the challenges arising from demographic dynamics in the EU and worldwide. The first part of this policy brief summarises the key findings from the survey and the presentations of experts during the workshop, in relation to fertility, mortality and migration and the role of policies.

The second part presents conclusions from four roundtables discussions between demographic experts and policy makers. The roundtable discussions centred on producing foresight-based scientific advice for evidence-based policy-making, contextualising demographic challenges with other long-term driving forces of social, economic and environmental change.

RESULTS OF THE SURVEY AND VIEWS OF EXPERTS

Fertility

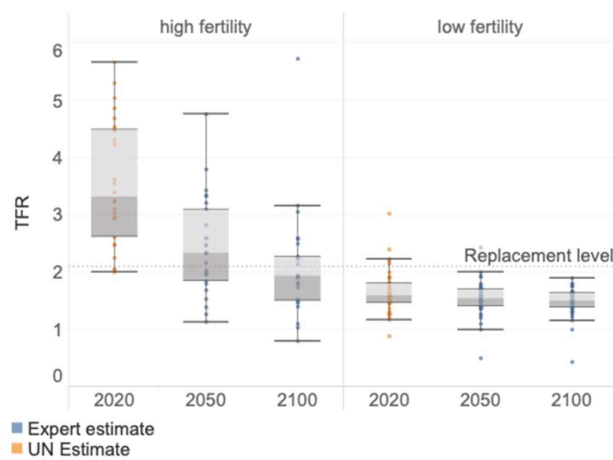
The experts consulted in the global survey widely concur on the continuing decline of fertility in today's high fertility countries. This decline is in line with the demographic transition theory that describes how societies move from a pre-modern regime of high fertility and high mortality to a regime of low fertility and low mortality during the process of modernisation, urbanisation as well as socioeconomic development.

Despite differing views on the pace of fertility decline, particularly in Sub-Saharan Africa, the experts generally agree on the main drivers of fertility decline.

It is widely accepted that urbanisation, reductions in child mortality, greater educational and employment opportunities for women, older age at first marriage, broader acceptance of modern contraception, and changes in family ideals will continue to drive the decline of the total fertility rates.

There is less agreement among experts about future fertility in countries that have completed the demographic transition and are now experiencing low levels of fertility.

Figure 1 – Expert opinion on the future level of fertility in 2050 and in 2100 in high and low fertility countries.



Source: results of the global survey on demographic determinants. Note: Orange dots are the UNDESA estimates the current Total Fertility Rate (TFR). Each blue dot represents the mean of the estimates given for a specific country by experts for 2050 and 2100. For high fertility countries, experts assume a continued transition to lower fertility rates. In low fertility countries, fertility is expected to remain below the replacement level of 2.1 birth per woman.

More research is needed to better understand the drivers of low fertility in the EU and other post-transition countries. It is important to have a holistic and integrated approach on issues such as the delay of parenthood, social norms and changing values, economic, geopolitical and environmental insecurity or housing, as well as the role of government policies, such as the provision of universal access to childcare and child subsidies, greater availability and advancement of technology assisting reproduction, or more flexible work practices.

While in the case of countries with high fertility, demographers can rely on the demographic transition theory as universal reference indicating the direction of change, in post transition contexts there is a lack of theoretical understanding to trace future trajectories.

Many European countries are experiencing declining fertility rates, resulting in ageing populations and a

[1] https://publications.jrc.ec.europa.eu/repository/handle/JRC135012

potential decline in the relative and absolute size of their work forces, posing challenges for social support systems and labour markets. It is important to note, however, that sustained low fertility rates do not necessarily result in a declining population, as this outcome also depends on mortality and migration trends.

There is significant interest from countries with low fertility rates also outside of the European Union in understanding effective policy approaches. The experts highlighted the relevance of considering global principles for the local implementation of policies to create an environment supportive of individuals and families in deciding when and how many children to have.

SURVEY DETAILS

The Global Survey on Drivers and Consequences of Demographic Change was conducted in 2023. A total of 237 respondents, primarily members of the main demographic associations shared their opinions on 240 arguments related to future trends and drivers of fertility, mortality, immigration, and emigration, as well as on the policy consequences of key demographic megatrends. They also provided numerical estimates of future fertility and life expectancy levels in 2050 and 2100, with 80% confidence intervals.

Mortality

Demographers broadly anticipate a continuation of the increase in life expectancy across world regions throughout the century.

The extent of the ongoing transformation towards a longevity society becomes striking when referring to a frequently quoted calculation that 50% of children born in several EU MS between 2000 and 2007 are expected to reach the age of and above 100[2].

A key idea in the recently launched EC Communication on the Demographic Toolbox[3] is the effort to shift the negative notion of challenges of ageing populations towards the more positive concept of building a 'longevity society'. Such a longevity society would allow to capitalise on the longer lifetime spent in older age, by empowering older citizens and nurturing the welfare and well-being of present and future generations. It will require allowing better access to financial services to increase individual savings allocated to long-term investments, transforming working conditions and life-long skill-building for a multi-generational workforce, extending working years as desired, reforming health and welfare systems to meet the increasing demands of an ageing population and addressing loneliness and age discrimination[4].

Besides a general optimism about what is and can still be achieved thanks to economic, technological and medical progress, there are concerns about the risks of a slowdown of the convergence in life expectancy across countries and within populations.

A significant part of the global increase in life expectancy recorded since 1950 is due to a decline of age-specific mortality rates in children in high mortality countries.

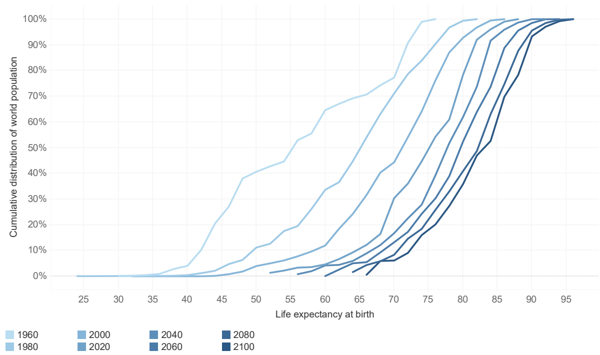
As child mortality has fallen to relatively low levels, further improvements in life expectancy are more influenced by decreases of mortality rates in older age groups. As a result, it will be more difficult to maintain the same pace of progress and the trends of convergence in life expectancy recorded so far might slow down. However, there is no agreement among experts and various factors, including improvements in income, health, nutrition, education, sanitation, and medicine could further contribute to sustained progress in life expectancy at all ages.

[2] Christensen, Kaare, Gabriele Doblhammer, Roland Rau, and James W Vaupel. 2009. 'Ageing Populations: The Challenges Ahead'. The Lancet 374(9696): 1196–1208.

[3] COM(2023) 577 final

[4] See also Longevity Economy Principles: The Foundation for a Financially Resilient Future by the World Economic Forum https://www.weforum.org/publications/longevity-economy-principles-the-foundation-for-a-financially-resilient-future/

Figure 2 – Evolution of the cumulative distribution of world population by life expectancy at birth.



Source: own elaboration of data from UNDESA WPP 2022. The increasingly vertical distributions over time point to a convergence. The narrowing of lines across time indicates a levelling off in the increase in life expectancy.

In countries where life expectancy is low, mostly developing countries, possible future setbacks are attributed to economic problems and limited access to medical services, while in countries with higher life expectancy uncertainties about continuing progress are mostly related to the persistence of lifespan differentials among sub-populations, the resilience of health systems, and the potential effects of climate change.

The mortality trajectory is therefore ambiguous. On the one hand, great progress has been made in reducing mortality across the world. On the other hand, much of the margins for improvements in life expectancy coming from decreases in child mortality, have been exploited, and trends stemming from current global developments are threating the continuation of progress. For example, emerging challenges linked to climate change, widening inequalities within countries in the access to health services, and economic difficulties to establish and maintain universally accessible family support systems needs to be addressed politically.

Migration

With regard to migration, demographers consulted in the survey provided separate answers on the drivers and consequences of emigration and immigration. Experts generally agree that income differentials between countries can be a major driver for migration.

In some cases, expert opinion differs considerably when considering countries that are perceived as destinations for immigration, and countries that are perceived as countries of origin for emigration. For example, experts highly agree that climate change will be a driver for immigration into countries of destination. However, there is less agreement that climate change would be much of a factor for people leaving their country of origin and emigrating to another country.

Experts also discussed the issue of measuring migration. There is a lack of comprehensive statistics based on timely, disaggregated data. Available data suffer from discrepancies in reported figures, despite efforts on the European and international level to harmonise migration statistics. There is a need to better make use of traditional sources of migration data such as survey, census and administrative data and complement those with new non-traditional data sources from internet-based platforms or satellite imagery which need to comply with consistent concepts, definitions, and estimates.

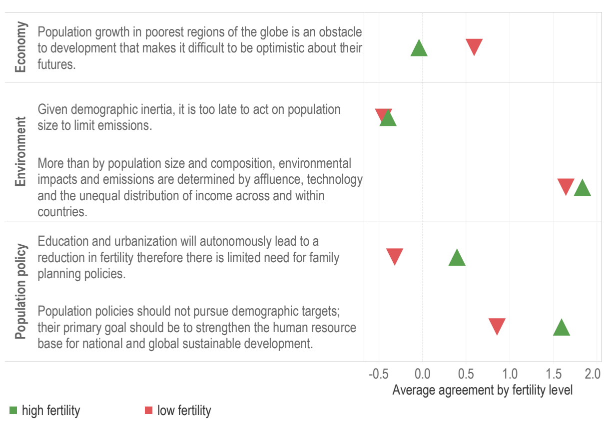
Considering migration to Europe, expert answers displayed a high level of uncertainty about future trends. It is important to note that policy responses to uncertainty surrounding European migration (which includes intra- and extra-EU migration movements) will vary among countries and regions, depending on their specific circumstances, political and legislative contexts, and societal dynamics. In addition, the experts present at the workshop also pointed to the uncertainty related to the future impact of climate change on migration, returns and duration of stay of migrants, as well as migration policies. Therefore, a comprehensive and context-specific approach is necessary to address the challenges and opportunities associated with migration uncertainty effectively.

Population policies

The results of the survey suggest that demographers' viewpoints can be broadly categorised into two 'perspectives' concerning the role of population policies, especially in relation to fertility. One group, advocates for a more prominent role for population policies focused on gender equality, female empowerment and family planning grounded in a human-rights based approach. A second group broadly argues that the autonomous forces of economic development and education, autonomously lead to a decline in fertility rates.

Opinions on the role of population policies can vary, depending on whether a low or high fertility context is considered or according to the salience of economic and environmental sustainability implication of demographic change.

Figure 3 – Differences in agreement in relation to statements on the implications of demographic change for economies and the environment and on the role of policy.



Source: results of the global survey on demographic determinants.
The experts in high fertility countries agree more than in low fertility countries that we should not set demographic targets in population policies and that education will work as autonomous drivers in lowering fertility. On the other hand, experts in low fertility countries are more pessimistic on the adverse consequences of high population growth on economic development. In both context there is disagreement on the fact that given demographic inertia it would be too late to intervene on population size to limit emissions.

This divergence implies that achieving international consensus on population policies has become a more intricate task, requiring a delicate balance of various priorities, perspectives, and objectives.

Experts at the workshop highlighted the following main reasons that can make population policies controversial:

- while the need to reduce rapid population growth dominated population policy debates during the second half of last century, new priorities are emerging as more and more countries are facing the prospects of shrinking and ageing populations;
- fertility and migration being to some degree substitutable components in population change, there are opposing views whether to leverage one or the other given different trade-offs;

While it may be tempting to believe that a one-size-fits-all population policy can work, the reality is that different regions, cultures, and socioeconomic contexts have unique demographic characteristics. Therefore, population policies need to be tailored to the specific context and goals of each population.

The experts at workshop offered three sets of recommendations on how policies can face the consequences of demographic change.

Firstly, it is important to **approach demographic targets with caution** considering the potential ethical and practical implications. Some concerns include the potential for discrimination, stigmatisation, or infringement on individual rights. Policies that solely focus on demographic targets may overlook the complexity and diversity within groups, leading to oversimplification and ineffective outcomes. Hence, the decision to pursue demographic targets in policies should be based on a careful assessment of the specific context, goals, and values of a society. It is important to strike a balance between addressing societal needs and challenges while respecting individual rights and promoting inclusivity. In relation to low fertility, it is debated whether there are realistic perspectives of returning to replacement levels once countries are in the post-demographic transition phase.

Secondly, **population policies should not abdicate from their central role in the context of development, urbanisation and environmental sustainability**. However, it is essential that policies regarding family planning and reproductive health are grounded in a fundamental respect for human rights and allow couples to decide freely the number, spacing and timing of children they want to have. In that way, population policies can contribute to lower fertility rates.

Thirdly, in addition to direct interventions on the demographic components, **social and economic policies at large can proactively contribute to adaptation**. Demographic projections are painting a different world for the future in terms of population. As Europe is ageing and the shrinking workforces seem inevitable, the majority of population and population growth will be in other regions of the world such as Africa and parts of Asia. This will also have an influence on the system of values, where Western ones would not be the predominant ones. Despite uncertainties about the pace of change, there is a common agreement about the future occurrence of such trends.

Box 1: Structure of the workshop

The workshop was held in Brussels on 13/12/2023 and involved around 60 participants from policy DGs of the European Commission and six external experts in demography. It was structured in parallel sessions along four policy areas of: regional policies, labour market education and welfare, migration, development and external relations. The policy areas were selected by grouping fields across Directorates of the EU Commission.

The roundtables consisted in three rounds.

In the first round, participants were presented with a set of challenges related to their policy area and given the chance to identify and cluster solutions for each of them.

In the second-round participants selected the most relevant megatrend which could impact these solutions among a set of the 14 megatrends[5] developed by the Competence Centre on Foresight.

The third round was about stress-testing solutions against megatrends. This involved assessing how the main solutions identified in round one might be impacted by the megatrends selected.

OUTCOME OF THE ROUND TABLES BETWEEN POLICYMAKER AND EXPERTS

The roundtable on **Regional Cohesion** was presented with challenges related to the balanced development across rural-urban typologies, the availability of public services in shrinking regions and the affordability of housing. Participants in this table identified a set of solutions to the challenges. Firstly, they found that digital connectivity and development in transport infrastructure can help reduce remoteness and under-developed regions. In addition, the availability of services online would narrow the gap between poor and rich areas. Lastly, the construction of social public housing would help in the case of lack of housing. In addition, digitalisation and remote work would help reducing the pressure on city centres and on users. The megatrends selected were accelerating technological change, climate change and environmental degradation, widening inequalities.

The roundtable on **Labour Market, Education and Welfare** was presented with the following challenges: matching realisation of family plans with education, adjusting pension systems to ageing societies, skill shortages and mismatch between families and work. The proposed solutions to these challenges were to redesign the education system as the current one is not fit to people's longer lives. In addition, participants identified as potential solution to the second challenge the creation of better safety nets to enable people to have smoother transitions across different life stages that are not only education, work and retirement. This would empower young people to make the transition from one job to another, and to accompany them across different transitions. The participants tried to make a match between megatrends and solutions identified. The megatrends selected were technological change, shifting health challenges and climate change.

The roundtable on **migration** was assigned the following challenges: foresight in migration policy, attracting skilled migrants, and losses of human capital in countries of origin. For better planning of migration policy, the group saw targeted approaches as promising, such as time-limited labour arrangements paired with greater accessibility of housing and other services. The remaining topics were seen as two sides of the same coin. Education in migrant-sending countries was identified as a critical factor, which can either be tailored to the labour needs of destination countries to accelerate skilled migration, or designed for domestic labour participation to help reduce human capital losses in the countries of origin, including many eastern and southern EU member states. All three migration challenges were seen as

[5] Megatrends are defined as long-term global driving forces that are observable in the present and are likely to continue to have a significant influence for a few decades. They can help to identify probable and preferable futures.

interconnected with security concerns, inequalities, and shifting geopolitical power.

The roundtable on **development and external relations** was presented with the following three challenges: effective support for demographic dividend, waning international consensus on population and development agenda, and the imbalance in population dynamics (Stability and security in countries with population growth, root causes of migration, migration partnerships). Then, to each challenge, the following set of solutions was identified: fostering support for universal access to quality education, empowering women in education and the labour market, changing the narrative on development and making EU solutions part of global solutions. Other important aspects identified are reciprocal international partnerships at eye-level as well as enabling and managing mobility within and across countries. The megatrends chosen were widening inequalities, diversification of education and continuing urbanisation.

The roundtable discussions highlighted the importance of policy in addressing future demographic challenges. Across the different roundtable topics, service provision, particularly in education, was identified as an important factor. While specific global megatrends are associated with the different demographic challenges, the one global megatrend that exacerbates demographic challenges was the widening of inequalities between and within countries.

Concluding remarks

The Global Demography Expert Survey on the Drivers and Consequences of Demographic change has offered the opportunity to reflect on current and future demographic challenges and how these challenges affect different areas of the world.

The joint workshop, which brought together demographic experts and policy-makers to discuss the results of the survey, has contributed to supporting EU policies with evidence-based science and knowledge on demographic developments in Europe in its global context.

The global demographic context creates the backdrop for a pressure on competitiveness in Europe. Economic growth cannot be sustained by an abundance of labour and innovative capabilities risk to decline as our ageing society lacks the creative potential and the innovative dynamism of younger cohorts. Therefore, Europe will increasingly need to move towards an economy based on productivity and high-quality human capital.

By looking at Europe in relation to other regions of the world, it is possible to appreciate how current trends and challenges are present also outside of Europe. Although Europe was the first to embark on the demographic transition, many other world regions are now going through a similar process. For instance, low levels of fertility are already common in many regions of the world. Hence, the challenges and opportunities of a smaller workforce and more mature age structure will be shared by a steadily expanding group of countries.

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