



FORESIGHT BRIEF

Global Demographic Shifts

Population aging and decline

In countries around the world, populations are aging due to two main factors: declining fertility rates and increasing life expectancy. These changes shift societal dependency ratios: the percentage of workers and those who depend on them. While these trends are global, countries and regions are at different stages of the societal aging process. Countries in Asia—such as South Korea, China, and Singapore—will experience the most rapid population aging in the coming decades.

The economic and social impacts of aging are already becoming clear. These include labour and skill shortages, especially in the care sector; as a result, we are seeing trends such as shifting policies on immigration and a push for automation; strain on health and social care systems putting pressure on public finances; and high rates of saving that help to keep asset prices high and real interest rates low.

The brief explores policy implications in five areas:

- **Security:** rapid population aging is already considered to be an important issue because declines in the working-age population negatively impact national power;
- **Labour and migration:** as working age populations shrink, countries which now reject many would-be immigrants may find it harder to attract immigrants due to increased competition;
- **Trade, investment, and finance:** rapid aging in Asian economies could reduce their production capacity and growth potential. This could allow the West and aligned states to expand manufacturing, and shift global capital flows;
- **Assets and inequality:** differences between the needs of young workers—who want affordable housing and low cost of living—and those of retirees, who depend on high asset prices, could increasingly cause tensions;
- **Society and democracy:** tensions between generations could undermine social cohesion. But attitudes towards older people and immigrants could evolve in a positive direction.

This brief aims to deepen readers' understanding of global aging and population decline and their implications for a range of policy areas, including some that may be unexpected. Anyone who engages with the following areas might find this brief relevant to their work: security; economy; health; education and training; social cohesion; housing; work; industry; international affairs; and governance. Thinking about the changes shaping the future of global aging and population decline can help decision-makers understand some of the forces already influencing their policy environment. Considering the potential implications of such changes can also help policymakers identify opportunities to take decisions today that may benefit Canada in the future.

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Introduction

Global population aging and decline will together have far-reaching implications for the global economy, migration, values, and society. However, not all states will experience the same pressures from population aging on the same timeline. In some states, the population is both growing and aging. In others, fertility is declining steeply enough to lead to an absolute fall in the number of citizens.

At the global level, the population is aging. Declining fertility rates and lengthening life expectancy result in the growing proportion of older individuals in a society.

The total fertility rate across the world has dropped from 4.86 children per birth parent in 1950 to 2.31 in 2023,¹ reducing the rate of population growth. Life expectancy at birth has increased from a global average of 49 in 1950 to 74 in 2022. Experts predict it will continue to rise (see figure 1). This is mainly due to advances in health care and living standards.²

Life expectancy in 2060, by regional groupings used in the United Nations' sustainable development goals indicators, United States, and Canada

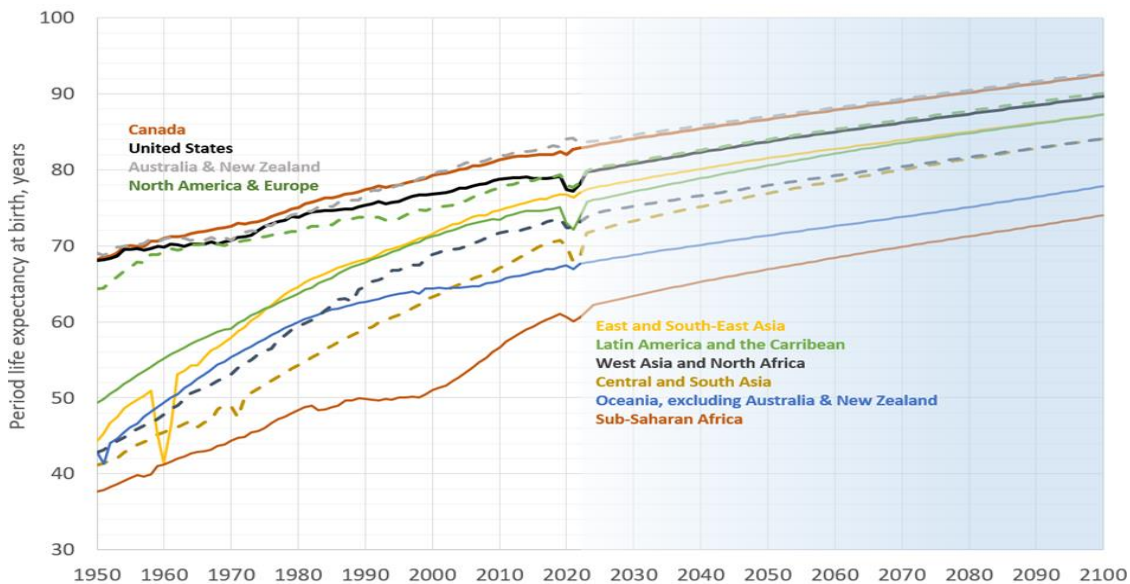


Figure 1. Life Expectancy at birth for selected countries and regions based on the UN 2022 Revision of World Population Prospects; United Nations Department of Economic and Social Affairs, Population Division.³

As discussed in Policy Horizons' work on [Future Lives](#), changes in family structure and life course also contribute to population aging trends. Delayed marriage and childbearing, and smaller family units are key factors.⁴

The rising proportion of older age groups in societies is changing dependency ratios overall. **Importantly, the old-age dependency ratio, which measures the share of working-aged people who must support older adults, is changing.** For reference, this dependency ratio for Canada in 2023 is 32% and will be 48.6% in 2060.⁵ An increase in dependency ratio is generally seen as a challenge for states.

The change in old-age dependency ratio will be more extreme in some regions, as show in the map in figure 2.

Global old-age dependency ratio in 2060

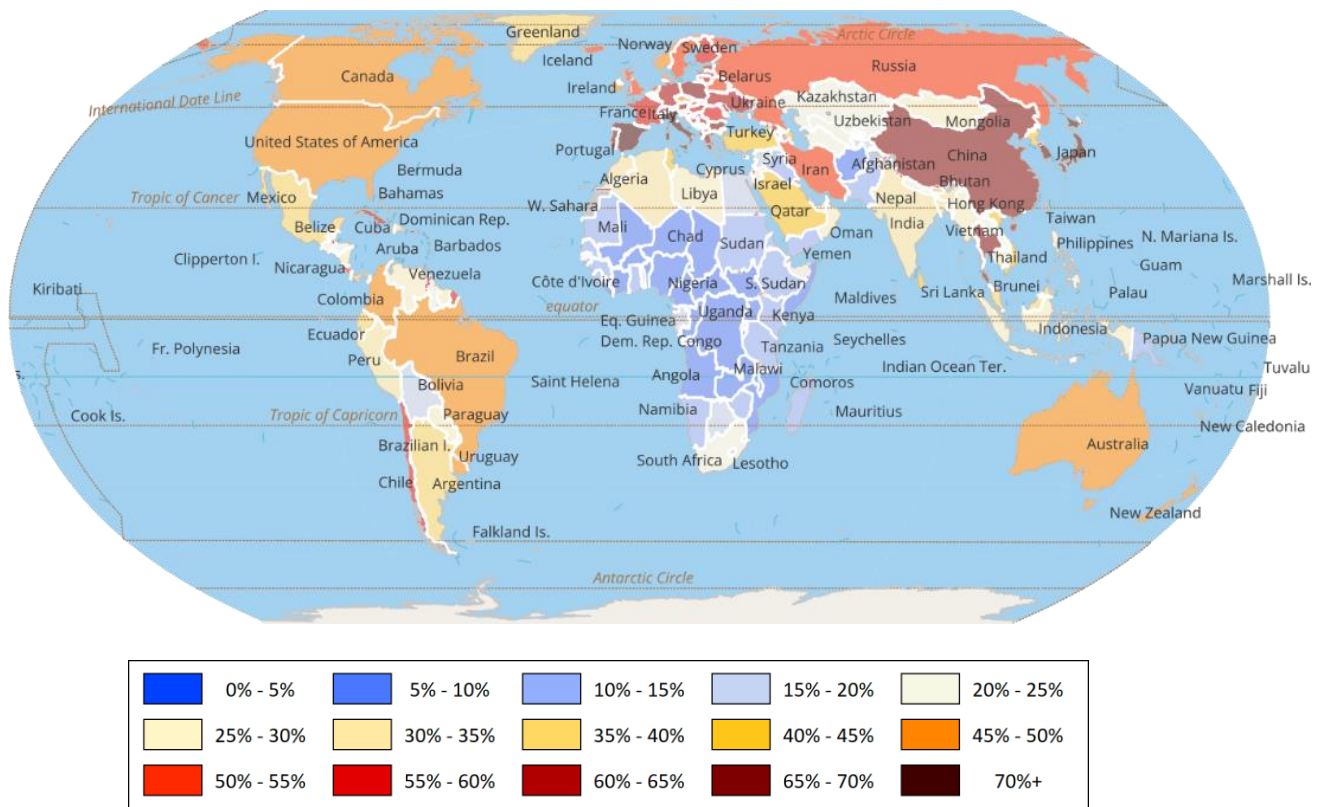


Figure 2. The old-age dependency ratio of people 65 years and older to people 18-64 years in 2060. All data are from the UN 2022 Revision of World Population Prospects.⁶

The above map highlights the importance of regional variations in changing dependency ratios. These differences match changes in population aging and demographic decline.

For example, the population in Canada and in the United States (U.S.) is getting older but is still increasing, thanks to in-migration of younger people. Recently, life expectancy in these countries has lowered, primarily due to COVID-19.⁷ This may be only a blip. Life expectancies in the U.S. are already rising as the pandemic's effects lessen.⁸ Going forward, both aging and immigration will likely influence dependency ratios in the U.S. and Canada.

In Europe, the population is aging overall. It is also set to decrease in countries such as Poland, Italy, Slovakia, and Latvia, and to increase in countries like Sweden, Ireland, and Norway because of immigration. Experts predict that the dependency ratio in Europe as a whole will increase by 2060.⁹ However, individual countries may have different experiences depending on their approach to immigration.

In East Asia, life expectancy continues to increase. Countries there are set to experience some of the biggest demographic shifts in their populations. Projections predict that the number of people aged 65 and older will more than double in the next few decades. Meanwhile, the labour force in this region will shrink by 30 to 40%. If these shifts happen as predicted, they will drive a major increase in dependency ratios in East Asia.

In Africa, the population aging process is just beginning. Life expectancy is increasing, but the birth rate remains high. The number of elderly people in Sub-Saharan Africa will quadruple between 2023 to 2060. Even so, it will still account for only 5.7% of the total population. As a result, changes in the dependency ratio should remain manageable in the region as a whole.

We appear to be approaching a critical tipping point where the impacts of global population aging will start to hit home. A range of short-term consequences for the economy and society are already visible in countries at the leading edge of the aging wave.

Growth. A shrinking work population and increased health care expenditure will likely reduce economic growth (see Annex A, B). For example, population aging in the U.S. is reducing growth by an estimated 0.4% a year.¹⁰ New healthcare spending in South Korea is projected to consume an additional 8% of GDP by 2060.¹¹

Asset pricing. Older populations tend to have more savers and fewer borrowers, which can translate into lower interest rates and higher asset prices.¹²

Finance. Rating agencies warn of downgrades to the credit ratings of countries that do not implement age-related policy reforms to reduce the debt load required to maintain current levels of elder care. Half the world's economies might face a downgrade in their ratings by 2050. Deteriorating outlooks could particularly affect Spain, France, Taiwan, China, and South Korea.¹³

Migration. Growing demand for labour is changing attitudes to migration. Japan, Taiwan, and South Korea are relaxing their historically restrictive immigration policies due to population aging.¹⁴

Life course. After decades of aiming to reduce population growth through its one-child policy, China has now reversed course and implemented a “three-child policy” to try to tackle falling fertility.¹⁵

As people live longer, many states are trying to keep older individuals in the labour force for longer by increasing the retirement age and encouraging more flexible working arrangements.¹⁶

Older adulthood. The mechanisms of social protection are shifting from institution-based to community-based elder care, with more support for housing and multigenerational co-residence.¹⁷ New forms of social insurance, combining taxation and co-payment, are springing up.¹⁸

Increased demand for products and services that promote quality of life in old age and help meet labour shortfalls in elder care, is driving technological development. Examples include the use of artificial intelligence (AI) in drug discovery,¹⁹ care robots in Japan,²⁰ and messenger ribonucleic acid (mRNA) vaccines to combat wrinkled skin.²¹

Policy implications

The implications below emerged through an exploration of plausible futures for global population aging and decline and may not reflect its current state. They are not predictions and they do not represent expected or desired futures—nor is this list exhaustive. These implications have been chosen to help policymakers build better models of the future.

Readers should suspend disbelief and imagine that the challenges and opportunities listed below develop.

In the coming decades global aging will have real consequences for the world, both at local levels and worldwide. Canada will face challenges and opportunities due to both domestic demographic shifts and those happening globally.

The potential impacts of these demographic shifts have not yet been fully taken into account. To prepare for the effects of these long-term demographic trends, societies may need to revisit some deeply held assumptions about the life course, prosperity, labour, technology, immigration, and social benefits. At the same time, these trends could interact with other novel forces of change, which could lead to unexpected outcomes in any of these or other areas.

This level of systemic disruption can be worrying. However, it also offers decision makers a chance to reflect on whether today's policies—and the assumptions they contain—are fit for purpose in the face of what may come.

The potential implications listed below are intended to help with this process of reflection. They offer examples of how population aging might disrupt the current policy toolkit over the coming decades.

Security

- **National power:** Rapid population aging is already seen as an important issue in Taiwan, China, Singapore, South Korea, and Thailand because declines in the working-age population impact national power. These declines could increasingly impact economies, military-industrial capacity, social care systems, family structures, social relations, and diplomacy.

Trade, investment, and finance

- **Manufacturing and trade:** Rapidly aging Asian countries could see a stagnation in the growth of their productive output. This might present opportunities for the West and allied countries to expand manufacturing. On the other hand, an aging China, boosted by its enormous manufacturing infrastructure and vast domestic consumer market, could maintain its dominant position through a combination of automation and regional offshoring.
- **Capital flows:** Slowing growth in some aging Asian countries could see global capital flows redirected to emerging economies with higher growth rates. This may be likely in Southeast or South Asia in the short to medium term, and Africa in the longer term. In time, such changes could help revise global patterns of trade and power.
- **Public debt and fiscal choices:** States unable to make up for population decline through immigration or automation may need to take on ever higher levels of public debt to support their aging populations. This could eventually lead to pressure to make difficult fiscal choices among age-related reforms, tax hikes, and spending cuts.

Labour and migration

- **Labour:** Population aging in East Asia is likely to increase global demand for labour in every sector, but especially care work. This could make it harder for countries such as Canada to address their labour and skill shortages. It could also strain the capacity of health and care systems to support an increasing number of older adults.
- **Immigration:** Countries accustomed to picking and choosing among many would-be immigrants may have to compete more vigorously to attract a shrinking pool of highly valued immigrant workers.
- **Automation:** Growth in the use of industrial, care, and social robots, alongside AI for certain types of knowledge work, could expand in response to labour shortages. This could boost productivity in the care sector and beyond.

- **Out-migration from industrialized countries:** High costs of living and growing stress on healthcare systems may lead more older people from developed countries to migrate to countries where they have greater buying power. This would help mitigate the stress on systems in the developed world, while increasing demand for services in the destination countries. But if sufficiently widespread, it could potentially also affect economic growth by reducing consumer spending and deflating asset prices in the countries of origin.

Assets and inequality

- **Inequality:** If high rates of saving keep asset prices higher, tensions could increase between younger workers—who want housing to be more affordable—and older asset holders—who need continued high prices to fund their retirements. This could deepen social and political divides, undermining social cohesion.
- **Market volatility:** Millennials and subsequent generations may continue to be faced with high house prices, an uncertain jobs market, and worries about the viability of social benefit programs. This may lead them to seek more risky investments in their search for sufficient returns to fund their own future retirements. This could lead to a “boiling economy” characterized by a series of market bubbles.
- **Deflation:** High house prices are not a given, however. Population decline and out-migration of older people could reduce demand for housing and prices. While welcome for younger workers, this would put growth at risk in states where economies have become highly dependent on the value of housing assets.

Society and democracy

- **Age-diverse society:** Longer life expectancy might lead to longer working lives, an increase in time spent on education, more frequent career changes, and changing family composition. New employment, social and leadership opportunities for older people could foster more positive attitudes towards aging.

- **Multiculturalism:** Some aging societies might adopt more aggressive immigration policies if they believe that immigration is the only way to source the labour necessary to drive growth. Traditionally monocultural societies might face significant social challenges as they attempt to integrate large immigrant populations with diverse cultural backgrounds. Some may opt for multiculturalism as a strategy to mitigate social disruption.
- **Women:** As women tend to live longer than men, aging could shift power to women voters, consumers, investors, and leaders. This could produce policies more reflective of women's priorities.
- **Intergenerational divisions:** As populations age in Western democracies the "grey" voting bloc could grow in influence. Conflicts between generations could create opportunities for authoritarian leaders to appeal to large age cohorts that feel threatened or ignored.

Conclusion

Global population aging is a remarkable success story for humankind. But its consequences will need to be carefully considered. Aging societies present serious risks. Notably, increased government spending on social assistance and caring for older adults could strain existing social support systems and worsen inequalities.

However, population aging also creates an opportunity to bring positive transformations to value systems and living arrangements. **Aging societies are not necessarily declining societies: their success will largely depend on their capacity to adapt to demographic change.**

Learn more

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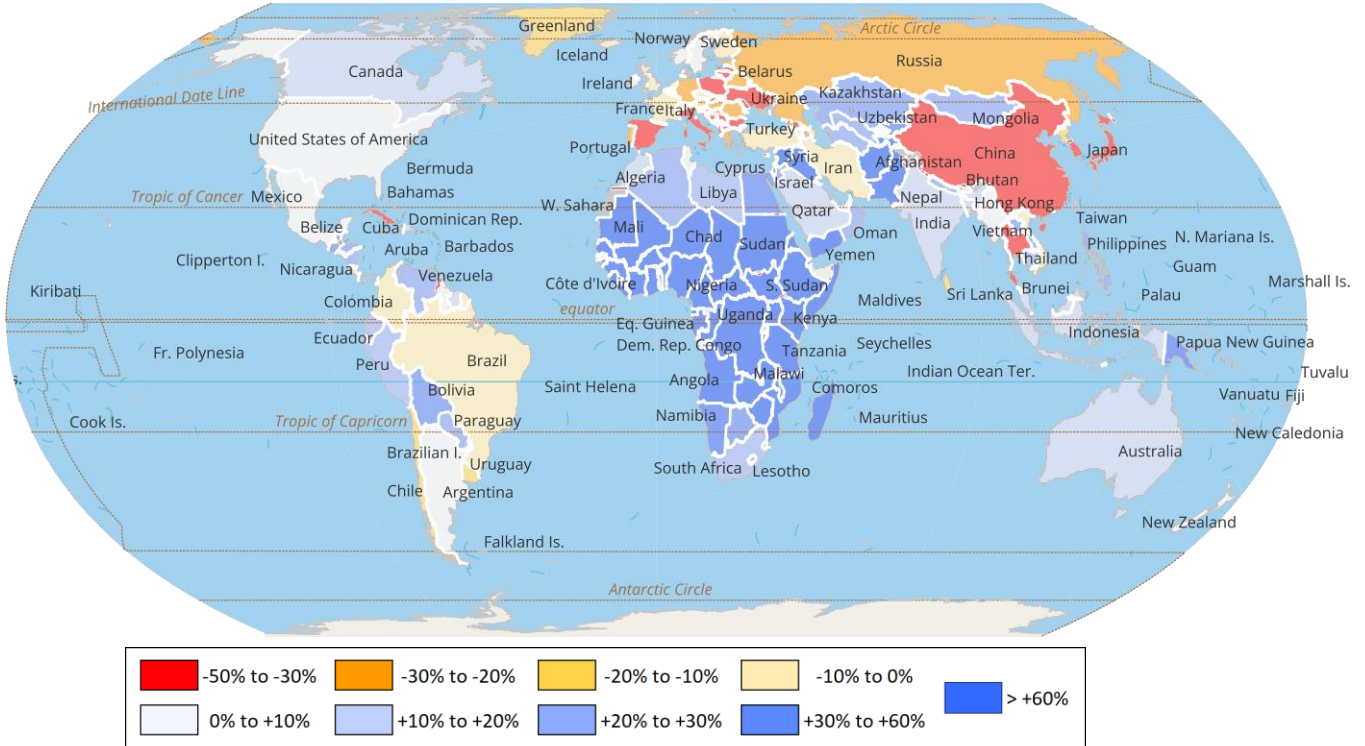
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Annex A

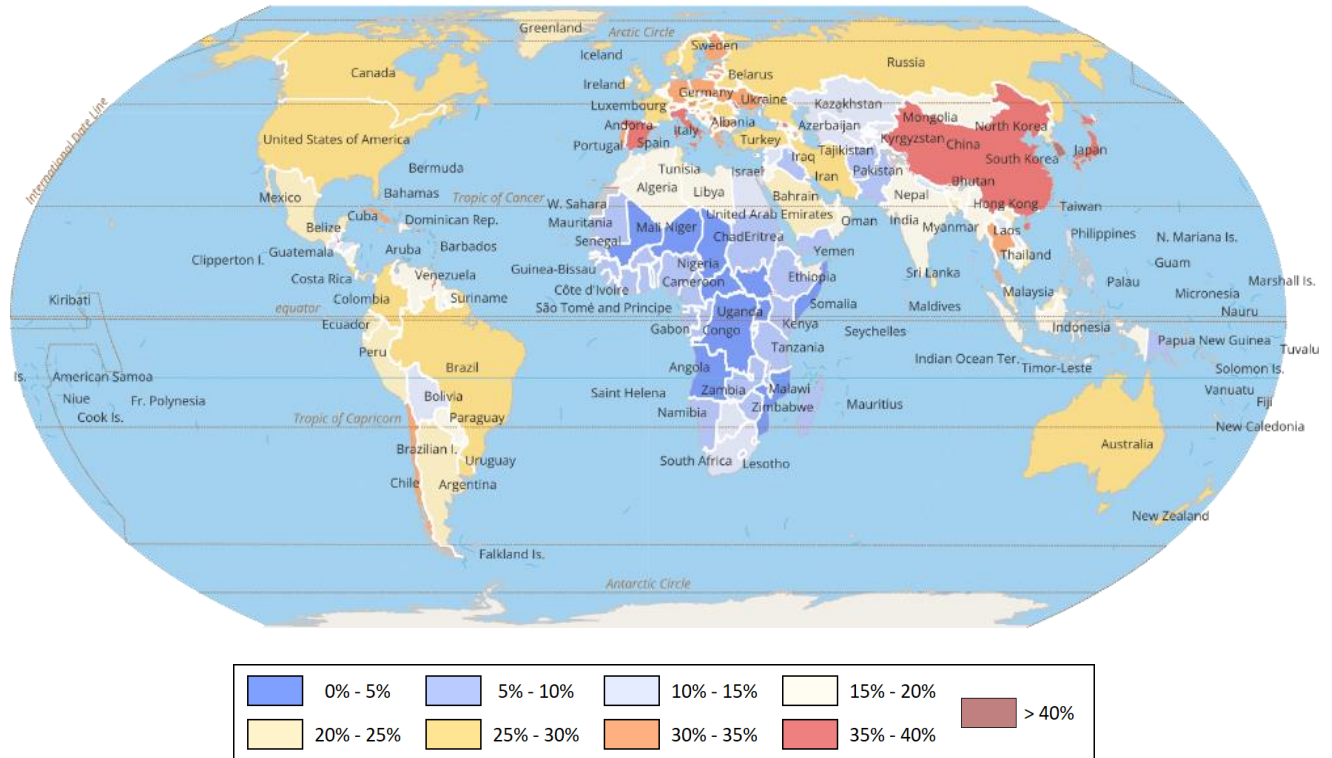
Change in labour force (18 to 64 year olds), 2023 to 2060



Change in labour force (18 to 64 year olds), 2023 to 2060. All data are from the UN 2022 Revision of World Population Prospects.²²

Annex B

Proportion of the population 65 years and older in 2060



Proportion of the population 65 years and older in 2060. All data are from the UN 2022 Revision of World Population Prospects.²³

Note: In 2023, Canada's proportion of the population 65 years and older was 19.5%.

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