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Deep waves

Longevity—the undertow to the demographic wave



Introduction

In our “Deep Water Waves” publication,¹ we identified several powerful, connected and long-duration factors that will have a significant impact on investment returns over the next decades. One of these is the Demographic Wave.² Its impact is a distinct aging of the populations of some countries and high fertility rates and young populations in others. The countries that have driven global economic growth over the last generation are aging fast, creating productivity and growth challenges.

This paper is a derivative of “The Demographic Wave” and identifies the economic, political and investment implications for countries with lower fertility and growing life expectancy. The research that underpins this paper uses the analysis of the structural positioning of 110 countries (covered by our proprietary Country Risk Framework³) to outline potential policy direction and the signposts for investors to watch for. Growing demand for credit and a more constrained access to financing will play defining roles, along with the impact of geoeconomics and climate change in the next 20 years.

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Executive summary



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- For investors, demographics are a driver of country risk, as they can impact productivity, economic growth, sovereign financials and debt ratings. Longevity is a powerful driver within demographics.
- The age structure of a population is the most powerful factor, and fortunately its visibility should facilitate policy planning for governments.
- As countries begin to experience the process of lengthening life expectancy, they can continue investing in their economic development. To maximize the benefits of an experienced workforce and to accommodate the attendant health care and continuous training costs, it is an advantage to be open to trade and to have flexible labor markets.
- Existing pension fund structures appear inflexible—evidence from Japan and South Korea indicates that much can be done to improve the level of basic provision, avoid elderly poverty, and eliminate acute gender inequality in the outcomes.
- Targeting the poor early with microfinance and pro-inclusion initiatives like Brazil's "*Bolsa Familia*"⁴ helps to prepare for the future contraction of the workforce.
- A version of this government program could be effective at incentivizing retraining, new skills acquisition and wider education to facilitate longer working lives.
- The promise of AI appears primarily focused on areas that will extend life by way of R&D in pharmaceuticals and biotechnology in general. This is clearly a net positive, but governments need solutions for other challenges, such as the business of servicing an older population with a declining workforce. Expect bigger gains there, sooner.
- In industry, automation and the use of robots to take over physically demanding tasks are already underway. As labor forces shrink, the economic value of investment in these applications rises and, in all probability, costs fall, providing a boost to productivity.
- Taxation could incentivize rising personal pension contributions that go hand in hand with gradual increases in the retirement age. This will lead to changes in corporate behavior.
- Fintech already provides innovative solutions for retirement planning and financial management.
- There are asset allocation impacts that can also affect corporate behavior, i.e., sustained demand for a mix of growth and income generating assets with a focus on stability and moderate risk.
- We expect increased focus on valuing human capital and on treating customers fairly, especially recognizing that clients' cognitive abilities could decline over time.
- Overriding all these issues, however, will be the need for good governance, smooth functioning of the rule of law, and monetary policy flexibility, as the cohort of retirees increases and the prioritization of inflation control over economic growth becomes a potent election issue.

Longevity is the undertow⁵ to the Demographic Wave

Longevity is a powerful socioeconomic, political and—by extension—geoeconomic driver of country risk premiums. This importance does not appear to be fully reflected in the prevailing risk premiums.

Life expectancy has been growing around the world. People are living longer, and fertility rates are falling. This pattern is particularly clear in developed countries, where the changes in population age structures result in ever larger cohorts of older people.

Globally, from 2000 to 2019, life expectancy has increased from 66.8 years to 73.4 years.⁶ On its own, this is not a problem. The issue is that most countries' institutions and public services are not structured to cater for these growing numbers of older citizens.

Most people assume there is an automatic and unavoidable “hit” to economic growth for countries that are growing older faster. The reality is more complex; while demographics are not destiny, they set parameters that governments, institutions, businesses and citizens can theoretically work around.

Not being ready for change triggers fear. For individual citizens who know that their own life expectancy is lengthening, fears tend to be around health, dementia and cognitive decline, affordability of housing, having enough savings, etc. For institutions and public health systems, it's an understandable worry over growing health care liabilities that come with an aging population. For the United States, for instance, the estimated net present value of the additional health care costs expected in 2050 (assuming current trends of aging and fertility) is equivalent to 117% of 2023 gross domestic product (GDP).⁷ South Korea is at 75% of 2023 GDP, while Japan is better placed at 37%. The United Kingdom is close to 50%, while most European countries are between 25% and 35% of 2023 GDP.

This picture is less alarming for developed nations when considering the net present value of additional pension liabilities that come with an aging population. For the United States, for instance, the estimated net present value of the additional pension costs in 2050 (assuming current trends of aging and fertility) is equivalent to 15% of 2023 GDP.⁸ *(For a view of these countries' gross domestic savings, please refer to Exhibit 3 on page 6.)*

Most people assume there is an automatic and unavoidable “hit” to economic growth for countries that are growing older faster. The reality is more complex; while demographics are not destiny, they set parameters that governments, institutions, businesses and citizens can theoretically work around.

In China's case, the magnitude of future liabilities from pensions and health care (90% and 22% respectively) would seem to be because of the weakness of social safety nets in China. It might seem counterintuitive for a communist country, but its social welfare spending is barely half the OECD average of 21%⁹ of GDP, even with an aging demographic profile. This lack of security is reflected in the country's high savings rate of 46%¹⁰ of GDP.

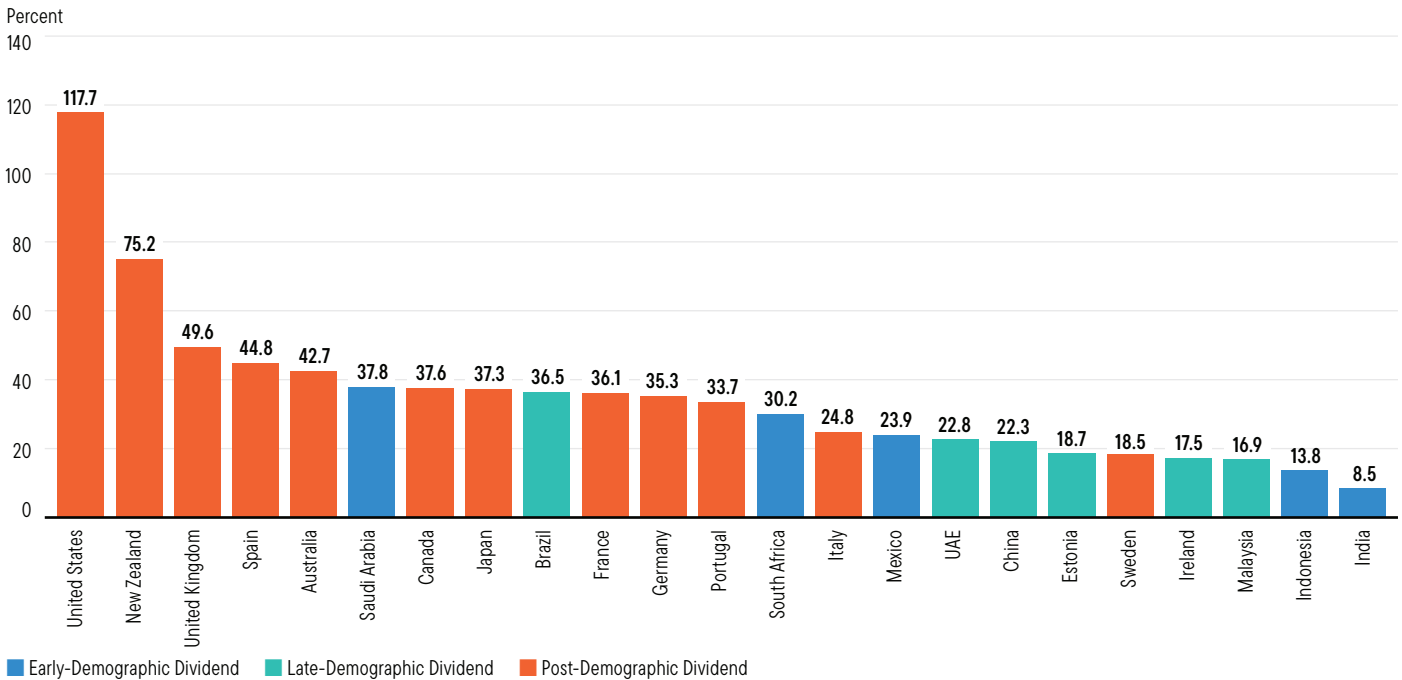
Investors need to incorporate these factors into their calculations of country risk premium, which is the minimum threshold return that investors expect to return from investing in a foreign country, compared to investing in their own. Ratings agencies already do, because these factors are drivers of a country's future liabilities.

There is a broadly accepted school of thought regarding the importance of population structure as a driver of economic development. The United Nations Population Fund definition holds that there is a demographic dividend, i.e., a period of accelerated economic growth that may occur when a country has a growing population of workers, because they are productive generators of economic wealth. Clearly, these new entrants into the job market need to be educated, healthy and able to access decent employment. That then enhances productivity, which drives growth. When these conditions are met, periods of sustained economic growth usually follow.

Exhibit 1: Rising Life Expectancies Will Increase the Needed Savings for Health Care in Many Countries

Net Present Value of Cost of Health Care Provision

2023–2050 Estimated Additional Cost as % of 2023 GDP

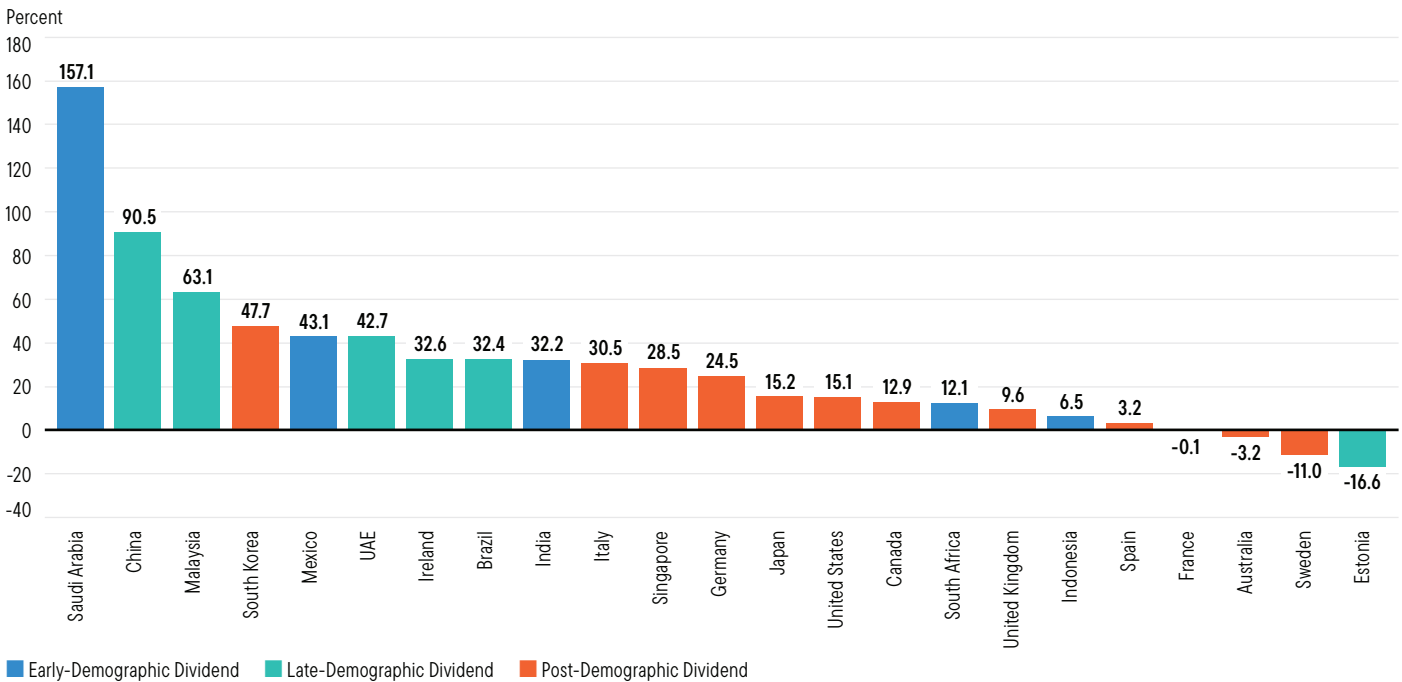


Sources: IMF Fiscal Monitor (April 2024), Macrobond. There is no assurance that any estimate, forecast or projection will be realized. As per United Nations, demographic dividend is the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older). The World Bank Group recognizes four stages of a demographic dividend cycle: pre-, early-, late- and post-demographic dividend.*

Exhibit 2: Rising Longevity Will Increase Retirement Savings Needs in Many Countries

Net Present Value of Cost of Pension Provision

2023–2050 Estimated Additional Cost as % of 2023 GDP

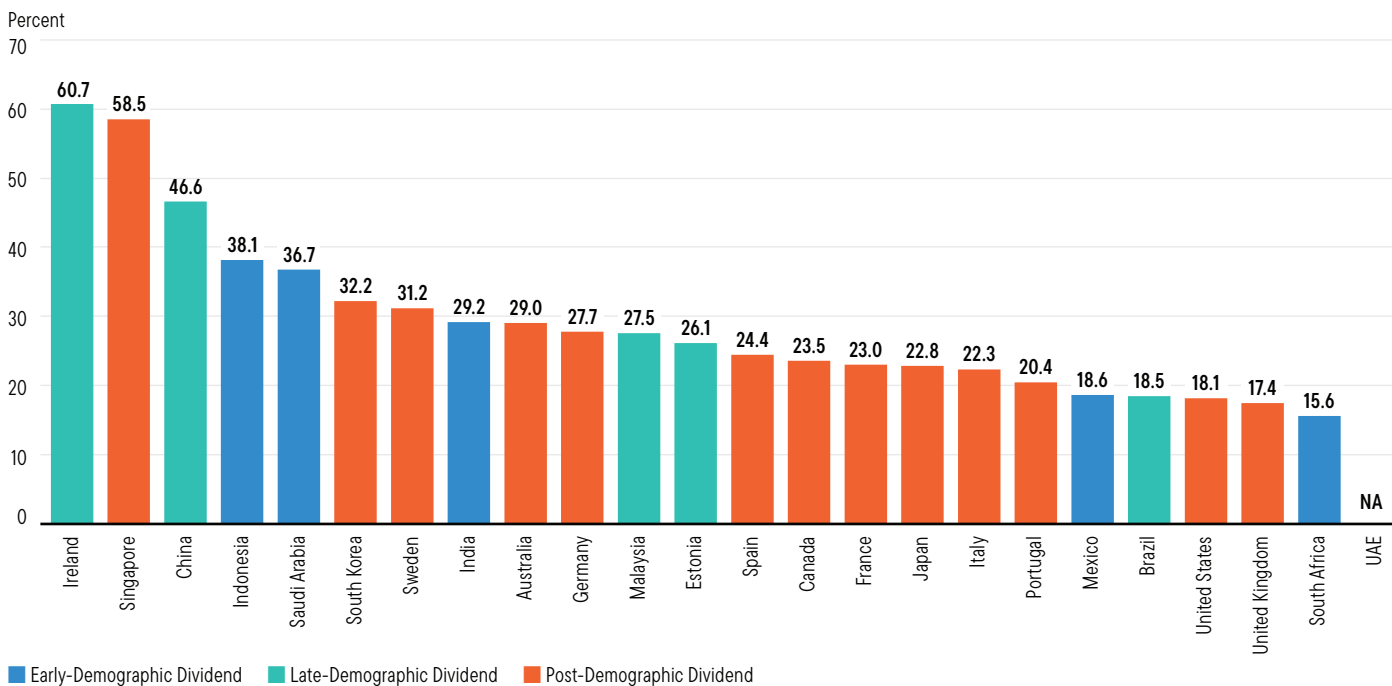


Sources: IMF Fiscal Monitor (April 2024), Macrobond. There is no assurance that any estimate, forecast or projection will be realized. As per United Nations, demographic dividend is the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger and 65 and older). World Bank Group recognizes four stages of demographic dividend cycle: pre-, early-, late- and post- demographic dividend.*

Exhibit 3: Rising Longevity Will Challenge Many Nations to Increase Their Savings Rates

Gross Domestic Savings (% of GDP)

As of 2023 or Latest Available



Sources: World Bank Group. As per United Nations, demographic dividend is the economic growth potential that can result from shifts in a population’s age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older). World Bank recognizes four stages of demographic dividend cycle: pre-, early-, late- and post- demographic dividend.*

Today, 92 countries are classified as either “late” or “post-demographic” dividend, meaning that their fertility rates are below the replacement rate¹¹ and in most cases their life expectancy is growing. Together, these countries account for 43% of the world’s population, 73% of GDP as of 2022 and, most importantly, 71% of the world’s economic growth over the last 20 years. The implications for the world’s future economic growth are serious.¹²

One of the potential solutions is directly linked to the fact that most of these aging populations are already wealthy and healthy. The average GDP per capita of the late demographic dividend countries is more than US\$12,000, while the average for post-demographic dividend countries is more than four times that number, at US\$50,000.¹³ The average life expectancy for late-demographic-dividend countries is 77 years, whereas the equivalent for post-demographic-dividend countries is 80 years.¹⁴ So, there is an opportunity for the older, wealthier (and healthier) countries to play to their increasing longevity.

Positive implications of longevity include economic growth, efficiency due to the continued use of the experience and accumulated knowledge of an older workforce, the possible increase in productivity from correctly harnessing technology, and the potential for delayed pension provision costs.

Negative implications include the urgent need for investment in technological adaptation of the work environment, the breadth of treatments and channels of health care provision and services and inevitably higher social costs. All avenues involve increased capital investment, so there is a growing need for credit issuance and any constraints on access to financing will play a defining role, along with the need to develop suitable legal and regulatory frameworks to facilitate innovative technologies and practices.

Digitalization is a prerequisite, as is raising educational standards. With longer working lives an objective, it is incumbent on governments to incentivize continuous learning, as workers will need new skills as modern technology becomes available.

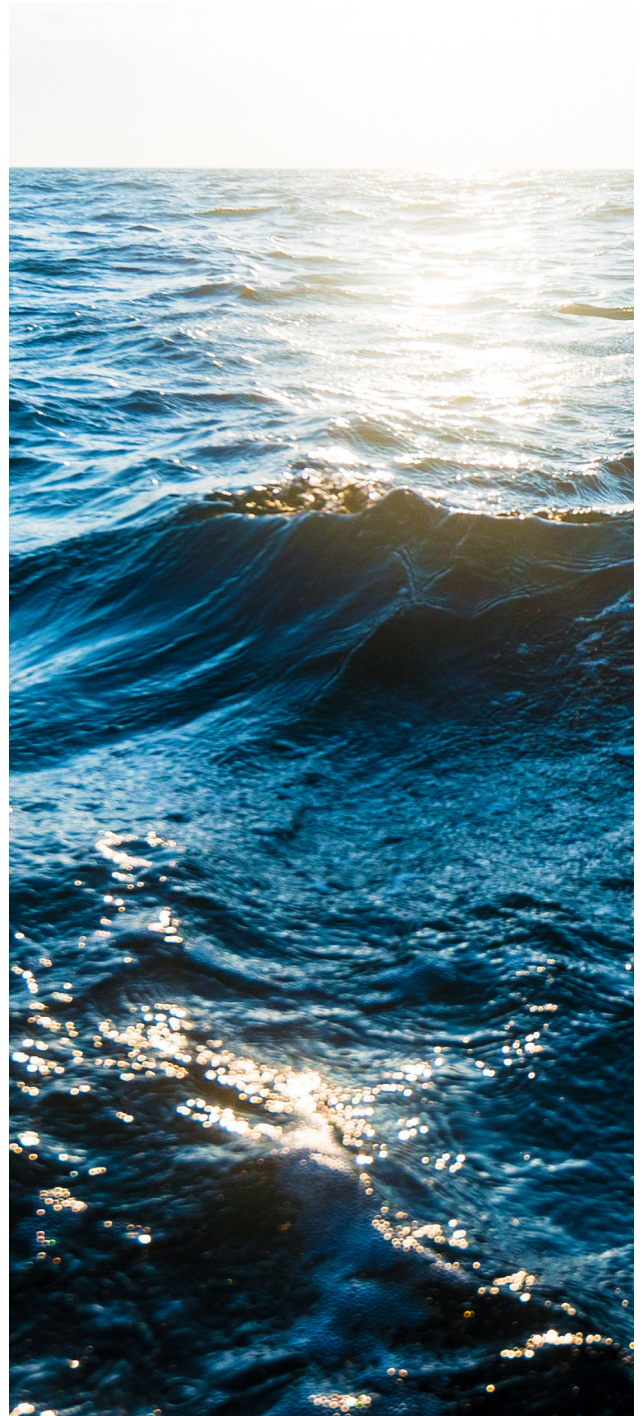
* **Pre-dividend countries** are mostly low-income countries, lagging in key human development indicators and with current fertility levels above four births per woman. **Early-dividend countries** are mostly lower-middle-income countries further along the fertility transition, with considerable increase in working-age share of population. **Late-dividend countries** are mostly upper middle-income countries. Fertility rates are typically above replacement levels, with shrinking working-age share of population. **Post-dividend countries** are mostly high-income countries where fertility has transitioned below replacement levels.

The implications for the financial services sector are positive

For financial services firms, longevity is a clear positive. At the individual and collective level, people will need to decide to save adequately for longer lives without income from employment. That speaks to increased savings rates, whether mandated or voluntary. Logically, there may be more frequent asset allocation changes as governments use taxation to incentivize higher savings, requiring new investment products. Financial services companies that can build lifelong client relationships and become trusted advisors will be in a strong position to benefit. One clear obligation on providers is to be explicitly transparent and ethical, to gain clients' trust. Successful (trusted) companies might then be able to win market share by incentivizing long client relationships, even at higher customer acquisition cost, because their customer lifetime value (CLV) would likely be consistently high.

Fintech is already providing innovative solutions for retirement planning and elder financial management, while lowering costs for insurers and banks. User-friendly, flexible versions of existing product lines will be necessary to help clients cope with changes to taxation status and balancing part-time work with maximizing income opportunities. New versions of insurance products could facilitate clients' desire to prepare for an unexpected health event, avoiding the need to call on family support.

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Avoid the simplistic take

It is not clear that longevity raises risk premiums and lowers real interest rates. Our analysis suggests that longevity does not impact risk premiums in a uniform way. It is possible to view each country's sovereign financial and economic structure through the prism of historical, social and institutional strengths and weaknesses, to identify the outer limits of policy direction. That knowledge helps instruct the adequate country risk premiums. Real interest rates may indeed reduce over time, if we imagine aging and longevity to be deflationary, as many argue it has been in Japan. But in each country, the outcome may be different.

Real rates are a function of economic growth, productivity, inflationary pressures and the fiscal policies of governments. In most high-income countries, there is relatively healthy social welfare provision, the cost of financing is low and access to credit is good. Further, these countries invest more in research and development (R&D) and can afford to implement digitization, automation and innovation to replace missing manpower and to provide productivity gains. That suggests an ability to control inflation. If the democracies in this group respond to demands for more generous welfare payments, it may be in exchange for greater generosity in migration policy, or for a higher savings rate, or by raising the statutory retirement age, or even all three. Others may risk higher inflation by simply bowing to demands for bigger payments, which could bring problems down the line.

Low- and lower-middle-income countries generally have younger populations, with lower life expectancies and very low welfare provisions. For them, the cost of borrowing is high and access to credit is limited. As a result, increasing the relatively low welfare payments is not realistic without productivity gains and economic growth. Life expectancy will only gradually increase.

Most developed countries have transitioned away from defined benefit¹⁵ pensions to defined contribution¹⁶ plans, shifting more of the responsibility of saving for retirement onto the individual worker. There is a strong possibility that a portion of the population has not saved enough and will struggle with retirement. From a public policy point of view, there is an implicit obligation to either make pension contributions obligatory or to deliver incentives and reminders to save at regular intervals. In 35 OECD¹⁷ countries, employees and employers earmark obligatory contributions for pensions. In Ireland, Spain and the United Kingdom, these are for social security in general, not specifically for pensions. As the population over 65 grows, the electorate's priorities could change, with inflation control becoming a high priority.

“In 23 out of 38 member countries, retirement ages are set to increase, reaching an average of 66.3 years for men and 65.8 years for women who join the workforce today. If expectations of life-expectancy prove accurate, the retirement age will rise to 70 years or more in Denmark, Estonia, Italy, the Netherlands, and Sweden, where legislated links with life expectancy apply.”

Pensions at a glance 2023, OECD

What should government/regulators be doing now?

Conventional wisdom points to aging demographics as an obstacle to economic advancement. The rationale is that older populations indicate a shrinking labor force, suggesting that there will be structural losses of productivity long into the future. The reality is more complicated, and while longevity can help fight the natural productivity decline, it requires holistic planning and investment.

Workers have the opportunity to be active for longer, incorporating technological advances and benefiting from their experience and know-how. The challenges are invariably around the costs and efforts involved in keeping this valuable cohort of workers healthy and active, and to adjust the structure of their work to allow for shorter days, higher flexibility, focused health care, well-being support, and enhanced continuous training and development. These challenges demand significant planning and execution skills, as well as political capital in democracies.

Governments will need to improve labor market data and encourage the recognition and transferability of formal and informal skills learning. Supportive evidence lies in the increasing acceptance of micro-credentials, which certify learning outcomes and help people gain skills in measured, targeted and flexible ways all through their working lives.¹⁸

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The importance of education

For aging countries, the challenge is primarily to ensure continuous improvement in educational standards, because their economies are becoming more knowledge- and technology-driven. These technical skills cannot simply be injected into the workforce; governments need to do the basics right, by ensuring that the workforce continuously raises the aggregate level of skills to facilitate adapting to innovation and new ways of working.

The strategy of ensuring this outcome involves multiple lines of policy action. These include improving health care so that workers can stay healthy and do not have to care for family members and incentivizing educational or vocational courses, possibly via cash transfers, as in Brazil's "*Programa Bolsa Família*" system. This program was launched in 2003 and has been credited with reducing poverty and improving educational attainment. A bespoke version of this kind of program would be one way to accelerate the changes required, especially if deployed early.

The International Labor Organization (ILO) has crystallized the main objectives around skills and learning outcomes per the UN Sustainable Development Goal (SDG) on education.¹⁹ This initiative defines skills in several categories, such as *foundational*, like numeracy and literacy (including environmental and digital) and *core work*, focused on communication (literally learning to learn) and problem-solving via teamwork. Individuals and companies will require coherent incentives, both financial and non-financial, including "learning accounts" for tracking and certification and tax breaks for relevant investments.

For governments to execute well, adequate legislative frameworks must be in place, along with high-quality technological and communications infrastructure. For example, technology for driverless trucks is available, but in most countries the 5G networks are not yet built nationwide and legislation has not been passed to allow them to operate. Both imply investment. Appropriate legislation will facilitate necessary innovations around the design and provision of financial, medical, legal and other services that an older workforce will require. Retirement ages will also have to increase, and the sooner the better.

Retirement age is increasingly a moving target

According to the OECD, retirement ages for individuals joining the workforce today are set to increase in 23 out of 38 member countries, reaching an average of 66.3 years for men and 65.8 years. And in some countries, the retirement age is linked to life expectancy by law, which means that the retirement age rises automatically as expectations of life-expectancy rise. In Denmark, Estonia, Italy, the Netherlands and Sweden, the retirement age will rise to 70 years or more in the next decade.²⁰

But in most countries, the retirement age is a political hot potato. In 1980, French President François Mitterrand reduced the country's retirement age from 65 to 60. At that point, male life expectancy was 71 years. In 2022, life expectancy was over 79 years, and President Emmanuel Macron suffered social unrest when he raised it again in 2023, from 60 to 62 years. This triggered a downgrade of French sovereign debt rating by Fitch, to AA-.²¹ In its rationale, the ratings agency explicitly

identified social unrest over this relatively small increase of the retirement age as the indicator of significant difficulties future French governments will have in their attempts to address the country's fiscal burden.

Raising the retirement age is a necessity, but in many countries, it will exacerbate the impact of a combination of social, economic, geopolitical and governance pressures.

In China, a proposal in 2021 to raise the retirement age faced intense backlash. The 20th Chinese Communist Party (CPC) National Congress later addressed this reform in 2022. The expectation is that China will implement the delayed retirement reform in 2025. The retirement age is going to increase gradually each year until 2055, when both men and women will have 65 years as their statutory retirement age. Rural migrant workers within China already work much longer because they rarely have employment contracts and do not qualify for urban pensions.

Exhibit 4: Rising Longevity Will Spur Global Debates about Raising the Retirement Age

Retirement Ages and Expected Life Years after Retirement in the OECD

Country	Retirement Age ²²	Effective Retirement Age ²³	Years in Retirement Men	Years in Retirement Women
Iceland	67	66	19.0	23.0
Israel	67	65	17.3	22.0
Norway	67	65	19.4	23.7
Germany	66	63	20.1	23.1
UK	66	64	20.2	23.5
US	66	65	18.6	21.3
Canada	65	64	20.7	24.5
Japan	65	68	17.8	23.5
Mexico	65	66	16.0	20.6
Spain	65	61	23.0	27.7
Sweden	65	66	19.8	22.1
Switzerland	65	65	20.0	23.8
Czechia	64	63	18.2	23.0
Estonia	64	64	16.8	20.6
EU Average	64	63	19.5	24.0
Brazil	62	67	17.2	24.1
France	62	60	23.5	27.1
Italy	62	62	22.1	26.2
South Korea	62	66	20.1	23.2
China ²⁴	60	66	18.0	
Russia	60	62	15.3	22.5
South Africa	60	62	14.2	21.4
India	58	67	12.9	13.9
Indonesia	57	69	11.5	13.2
Turkiye	52	61	20.2	25.1
Saudi Arabia	65*	59	19.0	28.0
OECD Average	64	63	19.5	23.8

Source: "Pensions at a Glance 2021." OECD. December 8, 2021. * On July 15, 2024, Saudi Arabia raised its retirement age to 65 years.

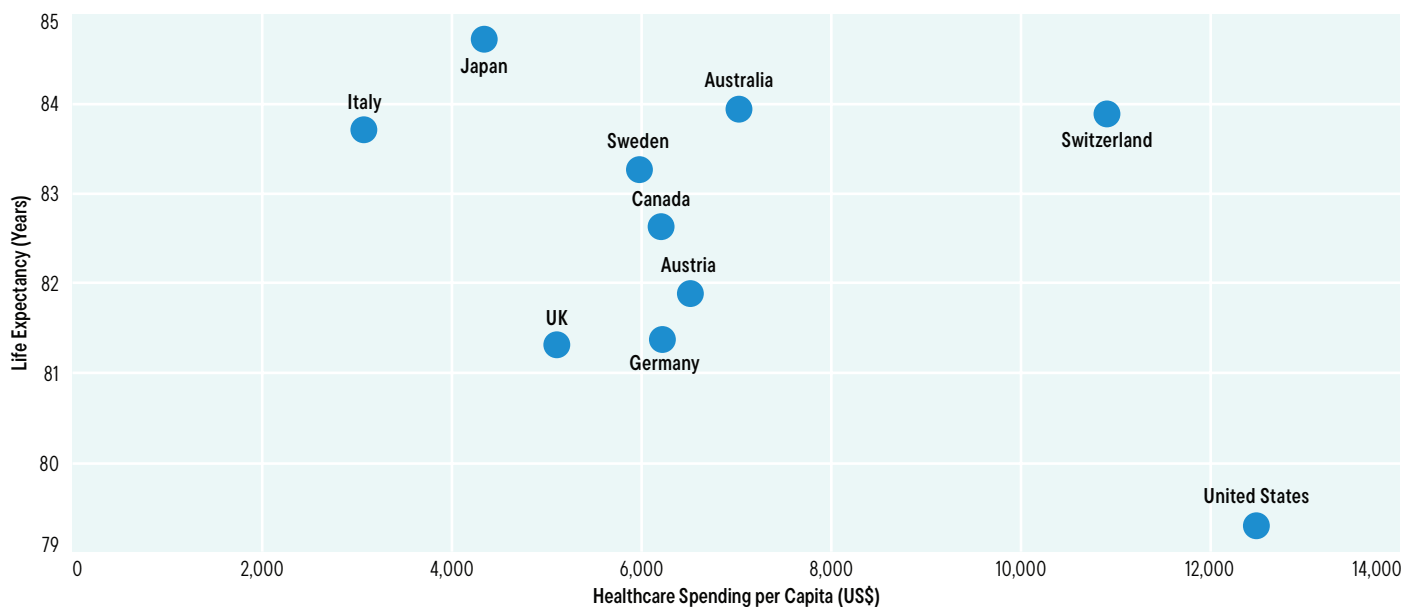
The over-50s consumer phenomenon

An established school of thought suggests the age group that spends the most money (the consumer cohort) is aged 50 or above. In most countries, this group of people can afford to spend more on services, apparel, travel, entertainment and property. As a result, monitoring this age group is relevant to investors. In the United States, 4.1 million people are turning 65 this year, with a very similar number projected until 2029, according to the US Social Security Administration.²⁵ They are 17%²⁶ of the population, generally wealthier and healthier than in the past and will likely continue to be active. Economically, they will work longer and consume more, and politically, they are a significant force that is likely to press for the prioritization of inflation control over economic growth.

According to the American Association of Retired Persons (AARP),²⁷ the percent of the global population age 50 years and over is set to grow from 24% to 33% by 2050. This group lives principally in the upper- and lower-middle-income groups of countries, using World Bank Group definitions. The country with the highest recorded consumption by this cohort now is Italy, where the over-50s' expenditure was 68%²⁸ of domestic consumer spending in 2021. Projections suggest that the global consumer spend by this age group will go from US\$35 trillion in 2020, to US\$96 trillion in 2050.

Exhibit 5: Health Care Spending²⁹ and Life Expectancy³⁰

Life Expectancy vs. Health Spending per Capita



Source: WHO Global Health Expenditure database, United Nations Population Division - World Population. Prospects: 2024 Revision. Health care spending per capita as of 2022 or latest available. Life expectancy as of 2023.

Allowing for cultural and wealth disparities between countries, consumption patterns generally will continue to develop. At the same time, the evolution of savings and investment will drive real interest rates, real exchange rates and even returns on investment. Demographics are not destiny, but it can set parameters.

Where is the correlation between health care spending & life expectancy?

The intuitive assumption is that a country with high health care spending must have a longer life expectancy. In fact, it's complicated. The United States spends more on health care than any other country, yet it doesn't seem to get the return from it. Japan spends a third of the US total, and yet its life expectancy is seven years longer. The devil must be in the details.

There are clear differences between countries—Japan's healthy diet, low on red meat and high in fish is often cited as a factor, whereas the United Kingdom's low costs are in part credited to the National Health Service (NHS), which provides lifelong care. It is worth noting, however, that for all these countries, health care spending has virtually doubled in dollar terms over the last 20 years.

What will technological innovation bring?

Artificial and Intelligence are two of the most overused words in our world right now. Nevertheless, it is unrealistic to think about the prospect of a fast-growing cohort of seniors without conceptualizing the inevitable role of technology, including artificial intelligence (AI), in the toolkit. The world lacks sufficient numbers of geriatric medicine practitioners and specialist caregivers, and the pipeline of new skilled recruits is limited. The availability of suitable housing is constrained, even in countries like Japan that already have 30% of the population in the over-65 category.

AI will surely fit in the jigsaw of policies and developments that emerge to support older adults as they live longer and more active lives, and we already know some areas of obvious application. A combination of AI and robotics can play a pivotal role in enabling comfortable, independent and active lives. Some applications can assist with social interactions and communications. In Japan, robots are viewed as cute, friendly and approachable. Their physical help is coupled with an element of companionship, which might be difficult to translate into other cultures, where the robot is not viewed so universally favorably. The power of Hollywood blockbusters that repeatedly portray AI as inherently negative could be to blame.

Meanwhile, we already have access to telemedicine services, and the pandemic has boosted their acceptance. We also have wearable devices that can monitor vital signs and raise the alarm if necessary. The value-add of AI will probably be in its contribution to sophisticated monitoring, rapidly detecting emergencies and triggering rapid responses. Enhanced monitoring and access to millions of medical records could also lead to highly personalized medical care, even to the point of predictive capabilities. Advances in genomics and biotechnology could mean that it becomes common to live beyond 100.

Naturally, all of this demands an accommodation between the promised benefits of a combination of robotics and AI versus the serious ethical considerations due to the irreversible implications for data security, privacy and human autonomy. The difficulty of regulating this area is clear, but the likelihood is that different countries may choose to follow their own paths, undermining optimal benefits by default. In any case, in democratic societies will probably have serious debates leading to a recalibration of the social compact.

Further regulation will play a determining role in the potential development of new health care technology. But it will be subject to intense debate in democracies, and it could potentially make significantly faster advances in countries without democratic checks and balances, where there is no public debate. The reason is that much of the blue-sky thinking on health tech involves human intervention in biology. In very simple terms, the process of aging is very uneven through time, in the way it manifests and in the very wide range of individual outcomes.

One option might be to try to delay aging by attempting to replace or restore damaged cells and tissues. Organ transplants provide a precedent. Replacing or restoring tissues could be equally invasive but reduce the probability of organ rejection or complications. However, it might be possible to “freeze” the process of aging in cells and tissues as a way of delaying aging. Would it trigger ethical debate if it led to possibly reversing the damage of time, to make people more youthful? Regulatory pathways for human aging intervention are not available today. We are limited currently to road maps for proxies, such as guidelines for developing drugs that treat the effects of diseases prevalent in aging, such as cardiovascular disease and Alzheimer’s.

It seems difficult to try to predict outcomes at this point, at least in part because we are still learning about the limitations and the advances of AI, especially given the rapid pace of development.

Dementia is a major cause of disability and dependency for older people

Dementia is a collective term used to cover a variety of illnesses that affect older people. The effect is to destroy nerve cells and impair memory and cognitive function, making it very difficult, or even impossible, for the sufferer to complete ordinary, daily activities. There is no cure, and it does get worse over time. The impacts are physical, psychological and economic, not just for the individual sufferer but also for their families and for society.

The World Health Organization (WHO) estimates that more than 55 million people have dementia globally, over 60% of whom live in low- and middle-income countries,³¹ according to the World Bank Group's classification system.

The total costs associated with the support of older people with dementia in the United Kingdom is estimated to rise by 172% between 2019 and 2040, as the number of dementia sufferers almost doubles to over 1.5 million in 2040.³² Globally, the cost of dealing with the disease is estimated at US \$1.3 trillion, and women are disproportionately affected, both as sufferers and as primary caregivers for their families.

An appropriate and supportive legislative environment based on internationally accepted human rights standards is required to ensure the highest quality of care for people with dementia and their caregivers.

Unfortunately, people living with dementia are frequently denied the basic rights and freedoms available to others. In many countries, physical and chemical restraints are used extensively in care homes for older people and in acute-care settings, even when regulations are in place to uphold the rights of people to freedom and choice. An appropriate and supportive legislative environment based on internationally accepted human rights standards is required to ensure the highest quality of care for people with dementia and their caregivers.



Case Study

The cost of dementia in the United Kingdom

A new report commissioned by Alzheimer's Society from Carnall Farrar sets out estimates of current and future economic and health care costs of dementia in the United Kingdom. It shows the huge impact that dementia has upon our health and social care system and how this will grow significantly in the future.

The current cost of dementia to the United Kingdom is forecast at £42 billion (US\$53.9 billion) for 2024, according to a recent study by Carnal Farrar for the UK Alzheimer Society.³³ It is projected to rise to £90 billion in 2040, as the number of sufferers rises from 982,000 to 1.4 million.

The report finds that the annual, per-person cost of mild dementia is around £28,500, climbing to £80,500 for severe cases. Families are currently taking on 63% of these costs in the country, and this proportion may not be sustainable. We know that early diagnosis can help delay the decline and keep costs lower for longer, but there is no general campaign for diagnosis. While social care providers are stretched by a chronic shortage of staff, the sector should prepare for a 43% increase in demand by 2040.

Old-age poverty—a worrying phenomenon

The OECD monitors old-age income poverty and, for international comparisons, it treats poverty as a “relative” concept. The yardstick for poverty depends on the median household income in the total population in a particular country at a particular point in time. In the United Kingdom, the poverty threshold is set at 50% of the median, equivalized household disposable income.

Limitations to this approach include its lack of consideration of assets, such as property ownership. However, in most countries (including the OECD membership), the elderly are not rich in assets when compared to the middle-aged cohort, who have generally benefitted from a long period of low inflation and interest rates as well as wider access to credit.

Scanning the database reveals that the 10 countries with the worst levels of old-age income poverty rates include some very wealthy countries with strong pension and long-term savings systems.

South Korea tops the list, with 40% of all citizens over 65 years of age classified as living in poverty. The country also leads the pack in terms of female old-age poverty, with fully 45% of women over 65 in that category. The magnitude of these numbers suggests a blind spot in policy or some kind of loop-hole in social welfare in the country. In the over-70s age group, around 30%³⁴ do not own their homes wholly or partially, which would seem to suggest that this is a genuine problem, exacerbated by gender inequality.

Scanning the database reveals that the 10 countries with the worst levels of old-age income poverty rates include some very wealthy countries with strong pension and long-term savings systems.

South Korea’s fertility rate is one of the lowest in the world at 0.8,³⁵ and UN population projections forecast that the country’s population will peak at 54 million in 2031,³⁶ falling thereafter until it halves to around 26 million by the year 2100. This dearth of babies represents a significant complication for Seoul, as life expectancy is 83 years and climbing, with all the collateral implications for financial liabilities and for the scale of the structural changes required to meet this challenge.

Japan is in a marginally better position, although the population peaked in 2017 and is also forecast to halve by 2100, to 59 million. Here, around 90%³⁷ of people in their 70s own their homes, somewhat alleviating the OECD’s poverty statistics. However, these are challenges that other high-income countries will face in the coming decades, and they need to be addressed now.

Exhibit 6: Nations with the 10 Worst Old-Age Income Poverty Rates, by Age and Gender

Country	All >65yrs	66-75yrs	>75yrs	Men	Women	Gender Inequality
South Korea	40.4%	31.4%	52.0%	34.0%	45.3%	11.3%
Estonia	34.6%	27.6%	43.0%	20.8%	41.8%	21.0%
Latvia	32.2%	24.7%	42.3%	19.0%	38.6%	19.6%
Lithuania	27.0%	25.7%	28.4%	13.9%	33.8%	19.9%
US	22.8%	20.1%	27.2%	19.8%	25.3%	5.5%
Australia	22.6%	19.7%	27.0%	18.2%	26.6%	8.4%
Costa Rica	22.4%	21.4%	24.0%	22.8%	22.1%	-0.7%
Japan	20.0%	16.4%	23.9%	16.4%	22.8%	6.4%
Mexico	19.8%	18.2%	22.3%	18.9%	20.4%	1.5%
Switzerland	18.8%	16.1%	22.1%	16.9%	20.6%	3.7%
OECD Average	12.5%					

Source: Income Distribution Database (data as of 2020 or latest available). OECD.

The obvious area to examine is the pension system. Both Japan and South Korea have established pension systems with two tiers. The basic pension is available to all citizens and is a low, subsistence-level payment. A second tier is for full-time employees, and their employers match the worker's contributions. The onus is on accumulating 30–40 years of continuous employment, which penalizes women who traditionally are expected to carry out the childcare and even senior care for the family units and do not get the option of developing their own careers. That could be a powerful contributor to the low birth rate. In Japan, 75% of women are active in the workforce. In South Korea, it is 62%, even lower than China's 70%.³⁸ This looks odd, as South Korean women are among the best educated globally, with 29% holding university degrees, versus 17% in Japan and 7% in China.³⁹

One lesson from all of this is that basic pensions are set too low, and the established systems—which require many decades of continuous employment—are particularly unfair to women. In South Korea's case, the shrinking labor force and the growing cohort of retirees have led the National Pension Service to forecast that it will run out of money in 2055.⁴⁰

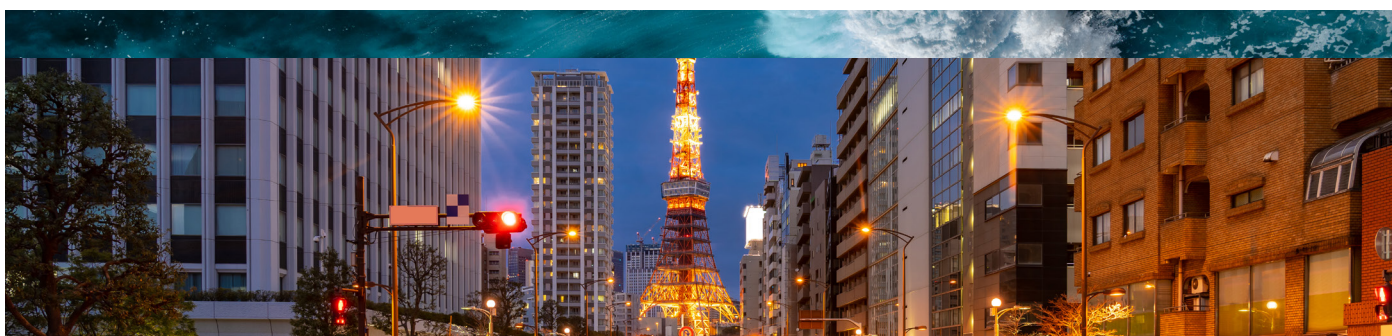
By the end of 2025, China's working-age population (15–64 years old) will decline by about 30 million, compared with 2019.⁴¹ This decline in the labor force will be associated with a sharp drop in the number of pension system contributors, and consequently, a sharp decline in China's pension revenue.

Another lesson from these countries is the retention of older employees. In South Korea, 60% of those between the ages of 65 and 69 are still working, although many are in low-quality jobs with poor conditions and low pay, because of a dearth of alternative employment. In Japan, it is only slightly lower, but the Ministry of Health, Labor and Welfare has an adjusted projection for 2030 assuming a higher retirement age to 70.

Japan and migration

Japan and South Korea are famously homogeneous societies. In both countries, politicians have historically avoided the issue of immigration. In Japan, as the worker shortage became apparent, the government revised the Immigration Control and Refugee Recognition Act in 1990, allowing people of Japanese descent, so-called *nikkeijin*, to enter the country and work without restrictions. The *nikkeijin* who entered Japan in the years that followed came from Brazil and other South American countries. Since then, the numbers have increased,

as have the origin countries, from China, to Vietnam to the Philippines. In 2023, 51%⁴² of companies cited shortages of regular full-time employees in Japan, while the number of foreign workers in the country has reached a record two million in 2022 (the official numbers show three million foreign residents, but it is estimated that one million are not officially working).⁴³ The numbers need to grow faster. A report from the Japan International Cooperation Agency (JICA) estimates that seven million foreign workers will be needed by 2040, a more than a threefold increase.⁴⁴



Conclusion

Avoid the simplistic take that longevity raises risk premiums and lowers real interest rates. Our analysis suggests that risk premiums do not experience uniform impact due to longevity. It is important to view each country's sovereign financial and economic structure through the prism of historical, social and institutional strengths and weaknesses to identify the outer limits of policy direction. That knowledge helps with estimating the appropriate country risk premiums. Real interest rates may indeed decline over time if we imagine aging and longevity to be deflationary, as many argue it has been in Japan. But in other countries, the outcome may be different.

Positive implications of longevity include economic growth, efficiency due to the continued use of the experience and accumulated knowledge of an older workforce, the possible increase in productivity from correctly fully harnessing technology and the potential for delayed pension provision costs.

Health technology advances could help policymakers to reorient national health services from a focus on disease treatment or management to a more proactive "disease prevention" approach, in which regular medical checks and incentives for healthy lifestyles could keep populations healthy, active and productive for longer.

Avoid the simplistic take that longevity raises risk premiums and lowers real interest rates. Our analysis suggests that risk premiums do not experience uniform impact due to longevity. It is important to view each country's sovereign financial and economic structure through the prism of historical, social and institutional strengths and weaknesses to identify the outer limits of policy direction. That knowledge helps with estimating the appropriate country risk premiums.

For financial services firms, longevity is a clear positive. Individuals and society broadly will need to decide on adequate savings for longer lives without income from employment. That speaks to regular reviews and asset allocation changes, requiring new investment products. Financial services companies that can build lifelong client relationships and become trusted advisors will be in the best position to benefit. One clear obligation on providers is to be explicitly transparent and ethical, to gain clients' trust. Successful (trusted) companies might then be able to win market share by incentivizing long client relationships (even at higher customer acquisition costs), because their customer lifetime value (CLV) will be high.

In the world of work, a combination of automation and the use of robots to take over physically demanding tasks is already underway. As labor forces shrink, the economic value of investment in these applications rises and, in all probability, costs fall, providing a boost to productivity.

The next stage would be the use of AI to directly contribute to the replacement of increasingly unavailable workers. Management teams in various sectors forecast production and revenue growth with their existing workforce thanks to AI. The speed of its adoption has already outstripped the adoption of past technological innovations.

If progress delivers significant productivity gains through technology and innovation, it could become a building block in fiscal policy, as governments in democracies are increasingly pressured by their aging voter base to prioritize inflation control over headline economic growth.

Taxation is a lever that policymakers could deploy, such as changes to incentivize rising personal pension contributions that go hand in hand with gradual increases in the retirement age. This kind of policy could prove particularly powerful, as companies could benefit from more experienced workforces and lower staff turnover. This might also moderate the rise in health care costs, especially if life and health insurance firms get in on the act. One example is the increasing number of insurance companies that reward clients for leading healthier lives with lowered life insurance costs in a win-win scenario for both the company and its customers.



For investors, there could be serious asset allocation impacts that also rub off on corporate behavior. For example, if the above taxation levers are pulled, this would likely mean sustained demand for a mix of growth-and-income-generating assets (as per the example of the Australian superannuation system) with a focus on stability and moderate risk.

This would also have implications for the behavior of individuals in terms of how they manage their lives, such as rethinking career paths and retirement. Multiple careers over a lifetime could become normal, which would help sustain demand for lifetime learning, education and training.

Negative implications include the urgent need for investment in technological adaptation of the work environment, the breadth of treatments and channels of health care provision and services and inevitably higher social costs. All avenues involve increased capital investment, increasing the need for credit issuance. Any constraints on access to financing will play a defining role, along with the need to develop suitable legal and regulatory frameworks to facilitate innovative technologies and practices. Digitalization is a prerequisite, as is raising educational standards.

At a corporate level, there must be increased focus on valuing human capital as well as treating customers fairly, especially considering the need to ensure that clients' cognitive abilities could be impacted over time. There is a parallel onus on regulators to reflect this reality.

Geoeconomic imperatives drive the return of the political economy, forcing supply-chain reconfiguration and forcing the pace for high-income countries to prioritize defense spending. This will inevitably lead to debate on how to prioritize financing requirements.

Overriding all these issues, however, will be the need for good governance, smooth functioning of the rule of law and monetary policy flexibility as the cohort of retirees increases and the prioritization of inflation control over economic growth becomes a potent election issue.

Contributors



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Appendix

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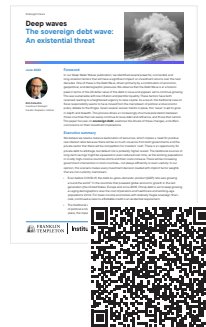
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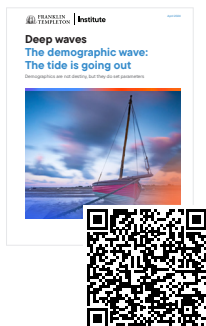
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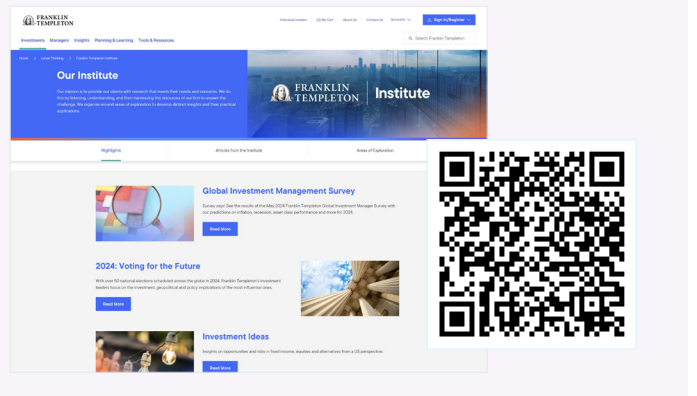
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Endnotes

1. Source: "Deep Water Waves." Franklin Templeton Institute.
2. Source: "Deep Water Waves." Franklin Templeton Institute.
3. The Franklin Templeton Country Risk Framework is a proprietary research tool that covers over 200 data points from 110 countries.
4. *Bolsa Familia* is a Brazilian government program offering low-income families conditional cash transfers, and it is credited with reducing poverty and improving educational attainment.
5. An undertow is a strong current of water moving in a different direction to the surface current.
6. Global Health Estimates. World Health Organization (WHO).
7. Source: IMF Fiscal Monitor (April 2024).
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10. Sources: World Bank Group national accounts data and OECD National Accounts data files.
11. In developed countries, the estimate of the replacement rate is 2.1 live births per woman; in a country with a high infant mortality rate, that number would likely be higher.
12. Source: World Bank Group. As of December 31, 2022.
13. Source: World Bank Group. As of December 31, 2022 (current US\$).
14. Source: World Bank Group. As of December 31, 2022.
15. Defined benefit pensions guarantee a specific payment for life, with the level depending on the final salary.
16. Defined contribution pensions pay out an amount that depends on the savings made and the investment returns they accumulate.
17. Source: "Pensions at a Glance 2021." OECD. December 8, 2021.
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21. Source: Fitch, "Fitch downgrades France to 'AA-,'" April 28, 2023.
22. Retirement age is the statutory age when national pension benefits are available.
23. Effective retirement age is the average age of exit from the labor force.
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28. Source: "Global Longevity Economy Outlook." AARP. 2021.
29. Source: World Health Organization Global Health Expenditure database. The data was retrieved on April 15, 2024.
30. Source: *World Population Prospects: 2024 Revision*. United Nations Population Division.
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33. Source: "The Economic and Healthcare Cost of Dementia," Carnal Farrar, commissioned by the UK Alzheimer Society. May 2024.
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