

## **Contents**

-(	reword		
Ξ>	kecutive	summary	4
n	ntroduction		
1	Principl	e 1: Ensure financial resilience across key life events	6
	1.1	The case for action	7
	1.2	Principles in practice	9
	1.3	Opportunities for collaboration and impact	10
	1.4	Topic spotlight: Affordable housing – the key to flourishing	11
	1.5	Longevity story: "Never managed to fully regain my career"	11
2	Principle 2: Provide universal access to impartial financial education		12
	2.1	The case for action	13
	2.2	Principles in practice	14
	2.3	Opportunities for collaboration and impact	16
	2.4	Topic spotlight: Technology – building resilience through financial education	17
3	Principl	e 3: Prioritize healthy ageing as foundational for the longevity economy	18
	3.1	The case for action	19
	3.2	Principles in practice	21
	3.3	Opportunities for collaboration and impact	22
	3.4	Topic spotlight: Health equity – foundational for the longevity economy	23
4	Principle 4: Evolve jobs and lifelong skill-building for a multigenerational workforce		24
	4.1	The case for action	25
	4.2	Principles in practice	26
	4.3	Opportunities for collaboration and impact	28
	4.4	Topic spotlight: Early childhood education – invest in future centenarians	29
	4.5	Longevity story: Mid-career transitions – lifelong learning and social support	29
5	Principle 5: Design systems and environments for social connection and purpose		30
	5.1	The case for action	31
		Principles in practice	32
		Opportunities for collaboration and impact	33
		Topic spotlight: Loneliness epidemic – a social, not individual, problem	34
		Longevity story: Learning and adapting are the keys to resilience	34
3	Principle 6: Intentionally address longevity inequalities, including across gender, race, and class		35
	6.1	The case for action	36
	6.2	Principles in practice	38
	6.3	Opportunities for collaboration and impact	39
	6.4	Topic spotlight: Caregiving – how to care for the caregivers?	40
	onclusio		41 42
	Contributors		
Ξr	indnotes		

#### Disclaimer

This document is published by the World Economic Forum as a contribution to a project, insight area or interaction. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the World Economic Forum but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners or other stakeholders.

© 2024 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

#### The Foundation for a Financially Resilient Future

## **Foreword**



Haleh Nazeri Lead, Longevity Economy, World Economic Forum



Rich Nuzum Executive Director, Investment and Global Chief Investment Strategist, Mercer

Today's world is marked by unprecedented transformation and disruption. Yet one trend remains constant and inevitable – the ageing of our global population. The longevity economy principles described in the following pages offer a cross-industry approach to tackling global issues in an ageing society while shaping a future that ensures the financial resilience of all generations.

These principles are a starting point to address the most pressing challenges that society will face in this longevity economy, ranging from achieving financial resilience to living a long and healthy life. They have been designed by a multistakeholder consortium of leaders across the finance sector, health industry, academia and government.

The longevity economy principles aim to frame a shared approach to an issue that each country addresses differently. Pensions, retirement systems and social benefits vary from one nation to another, differing in rules, retirement ages and programme

designs. However, all individuals yearn for similar outcomes: meeting their basic financial needs, enjoying a healthy life, accessing employment opportunities and living a life imbued with purpose.

This is not an easy topic. Difficult conversations will need to take place. Most people do not like to talk about death or money, but these taboo topics are at the crux of this discussion. Other delicate subjects include the widespread ageism that many older workers experience, the growing gender pension gap that is exacerbated by women taking on the vast majority of caregiving duties and the vast gulf in retirement savings between different races and socioeconomic classes around the world.

These principles offer a place to begin this conversation with a unifying language and a clear guiding direction. While this topic is extremely broad, this report provides a compass for the necessary actions societies and economies must take to prepare for the coming demographic transformation.

# **Executive summary**

Six principles to address the challenges of ageing populations and promote financial resilience for extended lifespans.

Demographic ageing is profoundly affecting the global economic and social fabric, accelerated by decades of declining birth rates. While improved life expectancy is a remarkable achievement, many people cannot fund these extra years.

The World Economic Forum's Longevity Economy Initiative has convened leaders across business, government and civil society to establish longevity economy principles. These principles aim to raise the profile of the longevity discussion, promoting alignment across sectors in addressing the demographic and financial challenges of global ageing and supporting individuals to be resilient in their longer lives.

#### TABLE 1

#### Six principles for the longevity economy



Principle 1

#### Ensure financial resilience across key life events

Nearly 40% globally face financial instability after unplanned career interruptions, including career breaks, illness or unexpected retirement. Public-private collaboration is crucial to support individuals navigating these challenges.



## Principle 2

#### Provide universal access to impartial financial education

Only 33% of the global population is deemed financially literate, 2 contributing to wealth inequalities, strongly correlated with life expectancy inequalities. Comprehensive, impartial financial education empowers individuals to make informed financial decisions.



#### Principle 3

#### Prioritize healthy ageing as foundational for the longevity economy

Around one-fifth of life is expected to be lived with illness,3 and 80% of adults in developing countries are concerned with the cost of medical expenses. 4 Equitable access to health services can facilitate well-being for both the individual and broader society.



## Principle 4

#### Evolve jobs and lifelong skill-building for a multigenerational workforce

Internationally, up to 25% of individuals aged 55 and older wish to work in old age but face barriers in finding opportunities.<sup>5</sup> Demographic shifts and technology innovations require jobs and skill-building to adapt and evolve, enabling individuals to extend their working years as desired.



## Principle 5

#### Design systems and environments for social connection and purpose

Social connection is integral to healthy longevity. Socially isolated older adults have a higher risk of poor health and earlier death. Intentional design of systems and environments for social connection can mitigate these impacts.



## Principle 6

#### Intentionally address longevity inequalities, including across gender, race and class

Benefits of longevity are not distributed equitably. Advocacy for pay and pension equity, as well as support for informal caregivers, are some of the crucial elements to ensure that financial security and the benefits of longevity can be more accessible to all.

## Introduction

By 2050, over 2.1 billion will be aged over 60. Multistakeholder collaboration is essential for a sustainable and equitable longevity economy.

In 2020, 1 billion people were aged above 60; by 2050, this number is projected to have more than doubled to 2.1 billion. While population ageing started in high-income countries, it is now lowand middle-income countries that are experiencing the greatest change.<sup>6</sup>

For individuals to thrive in their longer lives, an intentional focus on financial resilience is essential. Based on a 2023 S&P survey of 81 countries, if ageing-related fiscal policies do not change, the typical government would run a deficit of 9.1% of gross domestic product (GDP) by 2060, compared with 2.4% in 2025.7 It is predicted that people worldwide could risk outliving their retirement savings by between eight and up to twenty years, with the highest burden on women.8

However, a focus on finances alone is not enough. Increasingly, it is becoming apparent that to enable greater financial resilience of ageing global populations, society needs to transform how it understands and views ageing. Businesses, governments and civil society must collaborate to tackle longevity challenges, including falling birth rates, retirement equity, healthy ageing, a sustainable workforce, ageism and the growing loneliness epidemic.

## A holistic approach to longevity and financial resilience

The current dialogue around longevity is largely fragmented. Different sectors, organizations and government policies are targeting individual aspects through a variety of perspectives, such as healthy living, effective retirement savings, long-term caregiving and improving opportunities for older workers in the workforce.

The following set of longevity economy principles has been developed in an effort to create a common language and framework to bring together the many core factors that an ageing population needs to consider in order to age well.

Increases in lifespans require a corresponding increase in time spent in good health. Employers need to create an inclusive environment for all generations, with education and reskilling opportunities available for all workers in the multigenerational workforce, not only for young and new employees. Finding purpose is essential to remaining happy and healthy in a longer life, and a continued focus on equality is vital, particularly to support those from disadvantaged backgrounds.

#### Multistakeholder engagement

These longevity economy principles aim to establish long-lasting solutions that empower individuals to flourish and lead sustainable, resilient lives. Governments, employers and individuals have a shared responsibility to ensure the financial resilience of the future by redefining what it means to retire, investing in ways to retain productive talent for longer, enabling ageing populations to continue to engage in the workforce in meaningful ways, facilitating greater levels of short-term and long-term savings, and investing in health and well-being.

Fundamentally, these longevity economy principles place the individual's needs at the heart of the discussion. The world is facing a global crisis of public trust, in which many people are losing faith in institutions' ability to serve their needs over the longer term. Stakeholders must work collaboratively to ensure that future solutions address the challenges and harness the opportunities of the longevity economy in a way that is grounded in stability, accountability, equity and integrity.

#### BOX 1 | Chapter structure

For each longevity economy principle, there is a short description, followed by the following sections:

- The case for action: Why is it critical to address this principle? What is the impact on individuals, workplaces, social systems, and society at large?
- Principles in practice: How have ideas behind this principle been applied around the world in different contexts and across different sectors? What new ideas can these applications generate?

Opportunities for collaboration and impact:
 How can public, private and not-for-profit sectors collaborate on addressing these principles?

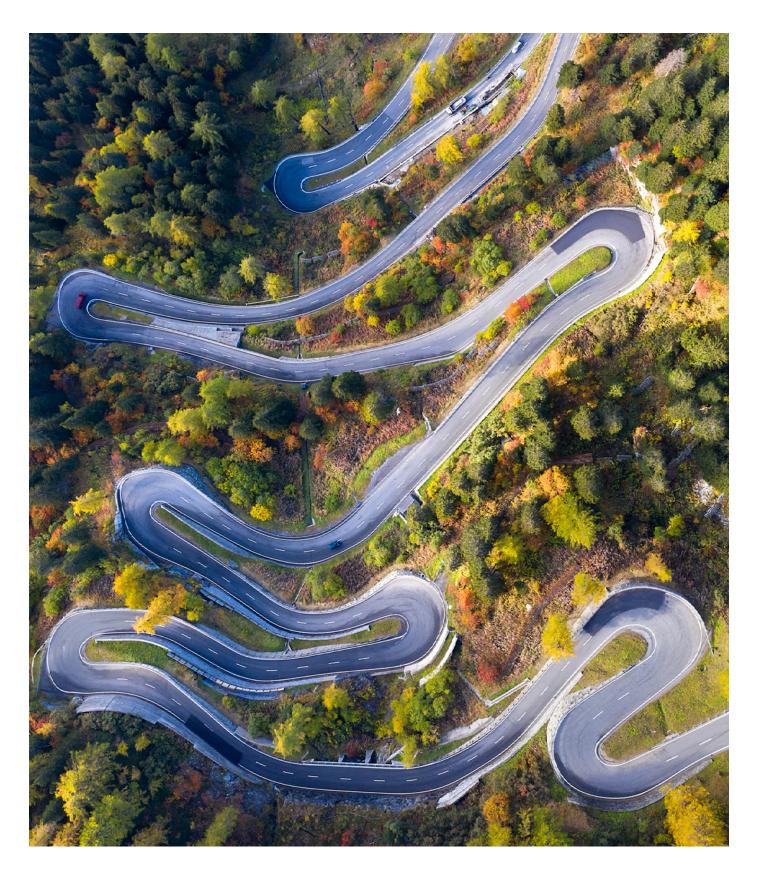
Additionally, there are topic spotlights and longevity stories. Topic spotlights provide deeper insights into important topics that could not be fully covered in each principle. Longevity stories tell real stories of people who either embody the principles or are deeply impacted by them to illustrate the heart of this work.

Principle 1



# Ensure financial resilience across key life events

Building public-private collaborations to support individuals during times of financial challenge.



Key life events, both planned and unplanned, have the potential to push individuals and their families to financial hardship and, in extreme cases, the brink of poverty. These life events can include unplanned and planned career breaks, lay-offs, caregiving responsibilities, ill health, the death of loved ones and retirement. How can the public and private sectors collaborate to ensure that individuals during times of financial challenge have equitable access to resources, insurance, savings programmes and strategies to support their financial resilience?

## 1.1 The case for action

According to the World Bank, the number of people in extreme poverty increased by approximately 70 million in 2020 alone. In a 2020 survey of the Organisation for Economic Co-operation and Development (OECD) member countries, if there were a loss of income, approximately half of people

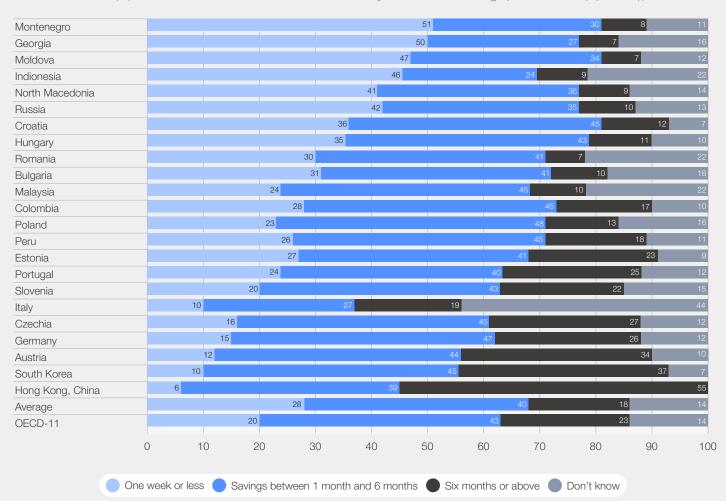
would run out of savings within a month and 28% within a week.<sup>10</sup> This precarious financial situation impacts not only the well-being of each individual but also their performance in the workplace and the sustainability of social systems.

FIGURE 1

Differences in available financial cushion

#### Percentages of adults who responded they have a financial cushion to last them

(i) One week or less; (ii) Savings between 1 month and 6 months; and (iii) Savings of 6 months or above; and (iv) answers with don't know. Sorted by the size of the gap between (iii) and (i)



Note: Malta and Thailand did not ask this question in their surveys and are not in this figure. The OECD member countries in the sample are: Austria, Colombia, Czech Republic, Estonia, Germany, Hungary, Italy, Korea, Poland, Portugal and Slovenia.

Source: OECD, OECD/INFE 2020 International Survey of Adult Financial Literacy, 2020, <a href="https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf">https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf</a>.



Impact on the individual: The 2021 Global Findex by the World Bank reported that 41% of adults globally would find it either impossible or very difficult to access emergency money within 30 days, and 65% are worried about having enough money for normal monthly expenses. 11 Financial worries are highly correlated with psychological distress. 12 Not having enough money saved for retirement and outliving one's money remains one of the biggest financial worries. 13 This distress impacts an individual's ability to function in day-to-day life, as well as their capacity to save and plan for their longer-term future.

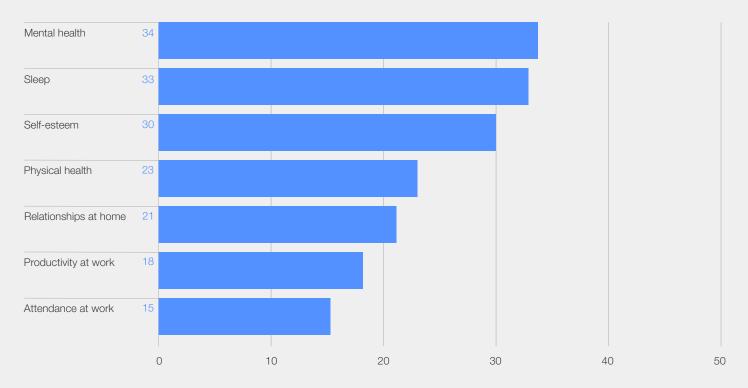
**Impact on the workplace:** Employers are also adversely impacted if employees are distracted and suffering from stress. 41% of individuals

indicate that financial stress has severely or majorly impacted their productivity at work.<sup>14</sup> Organizations estimate that lost productivity due to financial stress could cost 11-14% of payroll. 15 Employers are being increasingly urged to better support the financial resilience of their workforce by incorporating flexibility in work arrangements, ensuring access to quality health, retirement, savings and risk benefits, offering leave in case of illness, family, or caregiving responsibilities and creating opportunities for reskilling and career advancement. Failure to provide employees with at least a minimum level of protection for life events such as death, disability, or a prolonged period of serious ill health can lead not only to negative consequences for the employee but also reputational damage.

FIGURE 2

Personal financial issues impact employees physically, emotionally, mentally and socially

Employees say that financial stress/money worries in the past year have had a severe or major impact on their...



Q: In the past year, how much of a negative impact have financial stress/money worries had on...

Source: PwC, 2022 PwC Employee Financial Wellness Survey, 2022, https://www.pwc.com/us/en/services/consulting/business-transformation/library/assets/pwc-2022-employee-financial-wellness-survey-results.pdf.

Without adjustments to ageing-related fiscal policies, governments could face a substantial deficit increase, projecting an increase from 2.4% of GDP in 2025 to 9.1% by 2060.

Impact on society and social systems: As the global population ages, this poses a challenge to the sustainability of social services and public benefits. A 2023 S&P survey across 81 countries warns that without adjustments to ageing-related fiscal policies, governments could face a substantial deficit increase, projecting an increase from 2.4% of GDP in 2025 to 9.1% by 2060.16 Additionally, a significant portion of the population has limited access to personal or employer-sponsored savings outside of their public benefits. For example, in the United States, where nearly half of the workforce is employed by small and medium-sized enterprises (SMEs), SMEs are significantly less likely than large employers to provide health and retirement benefits due to the administrative complexities, the time and cost of setting up and running plans, and the fiduciary risks involved. The public sector has a critical role to play in co-designing and facilitating systems that enable the private sector to improve workers' short- and long-term financial health in

a more equitable manner, as well as serving as a safety net for those unable to work. Collaboration with private sector and civil society organizations to build political will for action is imperative.

Any interventions designed to address financial resilience need to be integrated into the fabric of the overall system and should not place the burden solely on the individual to take action. Behavioural economics has a very important role to play in addressing this, helping to design policies to guide individuals to take actions that best serve them while retaining their own agency in decision-making. Leveraging behavioural nudges and working in alignment with individuals' default behaviours can have a strong impact on supporting short- and long-term financial resilience. Finding ways to compel or encourage those who can afford to pay towards ensuring their own financial resilience will be a key element of an overall strategy that will continue to provide sustainable state support for those who really need it.

## 1.2 | Principles in practice

#### CASE STUDY 1

## Netherlands - redesigning occupational retirement plans

The Netherlands Government passed a law in 2023 designed to make it easier to employ older workers, and to make the system more sustainable and transparent. Under the existing law, most retirement plans are either defined benefit plans or age-related defined contribution plans, under which contributions increase with age.

The new law will compel all occupational retirement plans to switch to a flat (non-age

related) defined contribution design for future service by 1 January 2028 at the latest. If overall contributions remain the same as in the existing plans, then this will result in higher contribution rates for younger employees and lower contributions for older workers. The high rate of contributions for older workers within the existing system has been seen as a barrier for older workers trying to rejoin the workforce.

#### CASE STUDY 2

#### Estonia - innovations in social services

According to the Social Progress Index, Estonia is ranked in the top 15 countries in terms of "foundations of well-being". The With a population of just 1.3 million, Estonia does not have a significant welfare budget, and of all the countries in the top 15, it has the lowest GDP per capita by a large margin. To achieve its well-being ranking, Estonia leverages technology to ease administration in order to utilize its welfare budget efficiently, and it offers important social benefits to protect individuals during key life events, including unemployment insurance, disability protections and one of the most generous parental leave policies across Europe.

For example, shared parental benefits are provided for approximately 475 days in the first three years of a child's life, which can be shared between both parents for flexibility. 18 During this time, the parent who is granted the parental benefit is insured with state health and pension insurance. To facilitate the process for applying to access social services, Estonia provides everyone with a national ID card that provides online access to all parental benefits and leave amounts on a self-service portal online, and parental benefits can be scheduled on a daily basis until the child's third birthday. 19

#### CASE STUDY 3

### United Kingdom – from savers to winners

Linking savings to specific offers or creatively incentivizing participation in investing and savings programmes can prove to be impactful. An example is the Premium Bond in the UK, where the investment products are issued by a trusted entity such as the national government. However, rather than earning interest or a dividend income, an individual's Premium Bond is entered into a monthly prize draw. In the UK, the Premium Bonds issued by National Savings and Investment allow people an opportunity

to win between £25 and £1 million tax-free.20 In a study of lottery-linked savings in Haiti in collaboration with the World Bank,21 where most Haitians are more familiar with lottery wagers than other financial transactions or traditional savings products, the introduction of a lottery-linked savings product increased total upfront savings by 22%. While this is still only an experimental study in Haiti, the research indicates there might be an opportunity for creative product design to enhance financial inclusion and savings.

## Opportunities for collaboration and impact

#### FIGURE 3

How stakeholder groups can collaborate to ensure financial resilience across key life events



## For policy-makers

- Design policies and programmes that provide individuals with protection against falling into poverty as a result of key life events
- Partner with the private sector in designing financial savings vehicles that allow individuals easy and equitable access to short-term, long-term and retirement savings programmes, with a particular emphasis on supporting underserved sectors such as SMEs
- Encourage retirement savings of individuals by providing financial incentives and offering comparable opportunities compared with those who have access to occupational plans
- Ensure long-term sustainability of social programmes through fiscal responsibility
- Develop policies and programmes specifically to support informal caregivers in the workforce, including financial support, respite care and caregiving skills training
- Effectively utilize behavioural finance principles to encourage savings at an individual level



## For employers

- Provide workers with access to financial savings and insurance vehicles
- Provide workers with access to a reasonable wage, meet a minimum standard of care, and directly contribute toward workers' retirement savings
- Educate and empower employees to take action towards their financial goals by making it easy to see the link between changes made now and longer-term outcomes
- Support informal caregivers by providing workplace benefits such as caregiving leave, and collaborate with public sector to develop policies and programmes to support informal caregivers in the workforce



#### For financial services

- Effectively utilize behavioral finance principles to encourage savings at an individual level
- Develop innovative programmes and financial savings vehicles and incentives in partnership with public sector policies
- Be transparent in the financial services offered and ensure the financial well-being of customers is prioritized in decision-making



## For civil society

- Serve as the trusted resource for individuals in navigating available safety net benefits, retirement savings and financial tools
- Collaborate with the public sector to give voice to the needs of community members and ensure they are involved in the process of co-creating solutions

## Affordable housing – the key to flourishing

Access to affordable housing is the predicate for all things critical to human flourishing: education, employment, personal safety and community,22 the key to long-term financial stability and a foundation for healthy longevity.

For many people across the world, the home is their most valuable financial asset and the anchor of their long-term financial stability. In the United States, for instance, home equity accounts for more than half of the retirement assets of older Americans and home ownership is also the primary driver of intergenerational wealth and financial stability. In countries such as Germany and Switzerland, homeowners have five to seven times more per capita wealth than renters.<sup>23</sup> Safe and affordable housing provides a stable platform for the education of children and for the long-term employment of adults. When housing is not affordable, families tend to struggle, often at the expense of long-term

savings. In the US, seven out of ten low-income families spend more than half their income on housing, meaning less goes to food and healthcare, with typically very little for retirement savings.

Access to stable and affordable housing is also critical to healthy longevity. Housing is the largest expense of most families, so affordable housing means that people have sufficient resources left over to invest in adequate healthcare, healthier foods and other essentials critical to healthy longevity. Stable housing also encourages social engagement and support, which are so critical to health. Having long-term housing arrangements allows for community relationships to flourish and facilitates the development of personal networks, all critical to care as people age.24

#### Ken Stern

Chair, Longevity Project

#### 1.5 LONGEVITY STORY

## "Never managed to fully regain my career"

Michael, now 59, was once a manager in the UK who believed he had reached the zenith of his career. He was graced with awards, achievements and happiness, and had a commitment to pushing boundaries and making a difference. However, he was made redundant at the age of 51. He then embarked on a six-year freelancing journey but, as he describes it, "never managed to fully regain my career".

With a skillset that had diminished in market value, a lack of savings, and having experienced ageism in different recruitment processes, Michael found himself reliant on benefits, living pay cheque to pay cheque and surviving on the rare occasions when work actually did materialize. This precarious situation compelled him to make significant lifestyle adjustments, teetering on the brink of poverty and experiencing the embarrassment of transitioning from middle-class comfort to destitution. Adding to these challenges, going through a divorce stressed both his personal finances and his mental well-being.

While disparities in the labour market play a substantial role in generating economic inequalities, when unexpected disruptions occur later in a person's career, as in Michael's case, their repercussions go beyond the immediate income setbacks and can lead to a reduction in social security contributions, thereby perpetuating economic disparities well into retirement.

This journey illustrates the importance of cultivating financial resilience and bolstering workers' employability across the lifespan to effectively navigate life's uncertainties, particularly within the evolving landscape of the longevity economy.

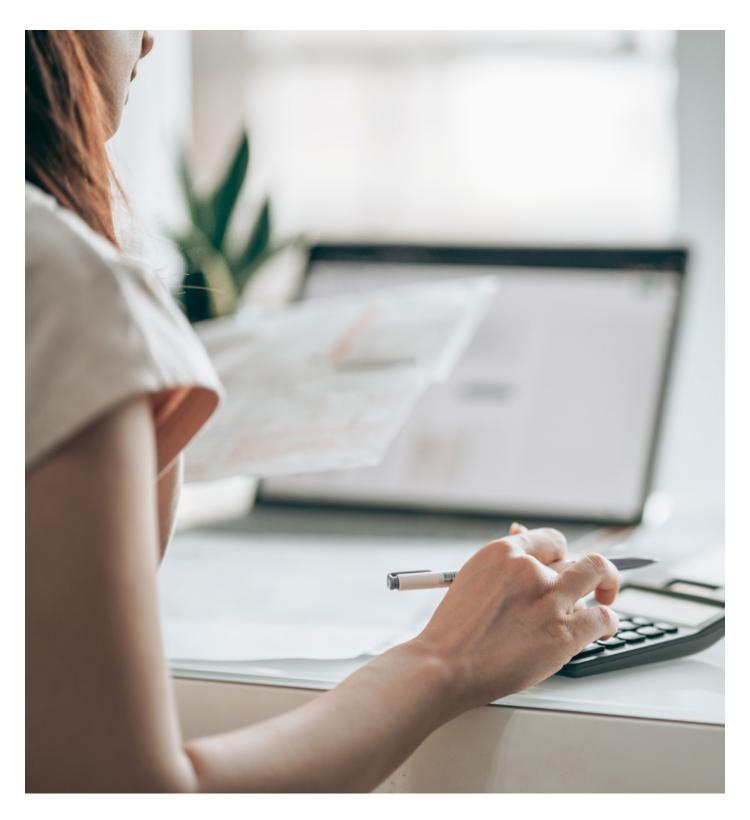
#### Lidia Lafoz

Research Data Analyst, Innovation Foundation, The Adecco Group



# Principle 2 Provide universal access to impartial financial education

Setting the foundation for making empowered financial decisions across all ages.



A strong foundation of financial literacy can empower individuals to make financial decisions that best serve them through their working years and into retirement. How can public-private collaboration facilitate access to meaningful, impartial financial education and planning support for all from childhood onward?

#### The case for action 2.1

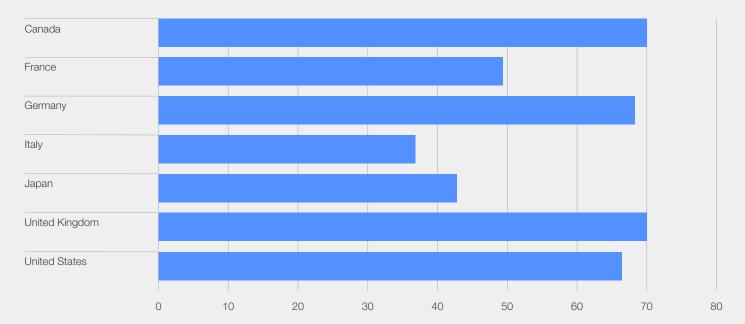
Providing access to financial education for all can spread a positive ripple effect throughout society, interrupting the cycle of intergenerational poverty

by ensuring that all have access to the resources and tools to design their own financial destiny.

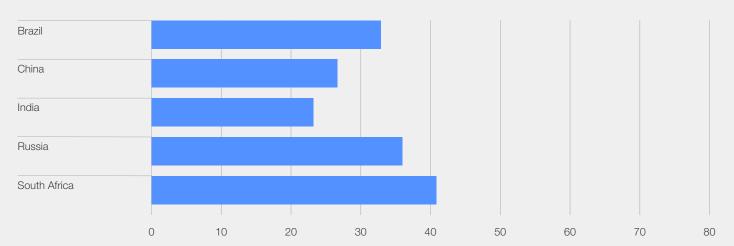
FIGURE 4

Wide variation in financial literacy around the world (percentage of financially literate adults)

#### Major advanced economies



#### Major emerging economies



Source: Klapper, L. et al, Financial Literacy Around the World, S&P, 2016, https://gflec.org/wp-content/uploads/2015/11/3313-Finlit\_Report\_FINAL-5.11.16.pdf; S&P Global FinLit Survey.

In effective financial ecosystems, it is critical that the individual retains freedom in decision-making, while having system guardrails that allow them the support they need to thrive.

Impact on the individual: According to a study conducted by S&P's Rating Services across 140 countries in collaboration with the Global Financial Literacy Excellence Centre, only 33% of people globally were deemed financially literate.<sup>25</sup> This lack of financial literacy has a significant impact, in retirement, on financial stress, as well as financial security. In a study by the OECD across 26 countries, 42% of individuals worry about meeting their everyday living expenses, and 37% are just getting by financially.<sup>26</sup> The lack of financial education can significantly impact the level of resources someone is able to access and retain. Financial literacy is strongly correlated with income level and educational attainment;27 when adequate financial education is not distributed equitably, it can lead to deepening wealth inequality.

Impact on the workplace: 60% of individuals are more likely to stay engaged with an employer that offers programmes that help them to understand their financial needs and plan accordingly.<sup>28</sup> Most do not know how long people live on average after retirement age,29 and those who do show a better understanding are much more likely to be saving adequately for their retirement years, better balancing their financial needs between the present and the future. By providing access to

financial education, workplaces also better plan for employees' retirement patterns and ensure their employees are prepared when it is time for them to exit the workforce.

Impact on society and social systems: Those who do not have access to suitable financial education may find themselves falling prey to others' predatory financial behaviours; this issue is particularly stark for those in old age. Additionally, when individuals do not have access to financial education to support them through building savings during their working years, they may find themselves more reliant on public social systems in retirement, which are falling under increasing levels of strain.

While it is essential to support individual financial literacy and agency, the onus of financial decisionmaking must not be placed on the individual alone. As referenced in principle 1, system guardrails, behavioural economics, and just-in-time financial education should be integrated into the development of financial ecosystems so that while the individual retains freedom in decision-making, they can have the support they need to thrive. This is particularly vital in supporting lower-income communities, where financial stress and resulting psychological stress are magnified.30

## 2.2 | Principles in practice

#### CASE STUDY 4

## Singapore – make money make sense

MoneySense is Singapore's national financial education program, started in 2003 and co-led by the Monetary Authority of Singapore and the Ministry of Manpower.31 This programme was designed to help Singaporeans manage their money and make sound financial decisions. MoneySense covers three tiers of financial literacy: basic money management, financial planning and investment know-how. MoneySense also

partners with community organizations, financial industry associations, institutes of higher learning and workplaces in order to develop and deliver the materials to the public. Singapore Polytechnic collaborates with MoneySense in the Institute for Financial Literacy, which provides free financial education programmes to workplaces and community groups.



#### CASE STUDY 5

#### New Zealand – designing for inclusion

New Zealand has a nationally funded programme called Sorted in Schools (Te whai hua – kia ora),<sup>32</sup> which is currently in over 80% of schools. The programme is led by Te Ara Ahunga Ora Retirement Commission (formerly the Commission for Financial Capability), available for both English and Māori education, and designed by teachers for teachers. Resources cover topics ranging from debt and money management to KiwiSaver and

insurance. The resources are free and available to all secondary school students (ages 13-18).

This programme is tailored to individual communities and their needs. Not only is the curriculum extensive, but the Māori strand of the programme (Te whai hua – kia ora) embeds Māori knowledge systems centrally in the design.

#### CASE STUDY 6

#### Denmark - compulsory financial education

Denmark has one of the highest financial literacy rates in the world, at 71%. 33 Since 2015, financial education has been a compulsory part of the Danish national curriculum for school students in the seventh to ninth grades (ages 13-15). As part of the curriculum, students learn about a variety of topics, including budgeting, savings, loans, their rights as consumers and how banks operate.

Each year, around 20,000 students and 700 schools participate in Danish Money Week.<sup>34</sup> During this campaign, employees from the

financial sector visit classes to highlight the importance of financial education. Guest training is coordinated by Finance Denmark, which is the business association for banks and financial institutions in Denmark. Throughout the week, the programme offers digital teaching materials for in-classroom activities, developed in collaboration between Finance Denmark, the Danish Association of Maths Teachers, and publisher Alinea. All Money Week activities are endorsed by the Danish Financial Authority, the Danish Consumer Council, the Central Bank of Denmark and the Danish Tax Agency.<sup>35</sup>



## 2.3 | Opportunities for collaboration and impact

#### FIGURE 5

How stakeholder groups can collaborate to provide universal access to impartial financial education



## For policy-makers

- Collaborate with the private sector and civil society to develop a financial literacy curriculum and approach for public outreach, including digital channel delivery
- Promote integrating financial education in schools, making resources available for training and programme funding
- Simplify policies to balance protecting individuals from predatory financial behaviour while ensuring financial planning remains accessible and affordable



## For employers

- Provide workers with relevant financial education and guidance to build financial literacy for themselves and their families
- Provide workers with programmes to engage the next generation in financial literacy
- Provide education and support for workers to navigate workplace benefits, including retirement savings
- Incorporate longevity literacy into workplace retirement education



## For financial services

- Develop unbiased financial education content in collaboration with the public sector and social sector, including schools and workplaces
- Support community partners and employers in delivering financial education, including digital channel delivery
- Encourage partnerships across the private sector to broaden access to programmes and resources in specific communities where access to these resources is limited
- Work with the public sector to also provide access to financial literacy programmes and resources to small businesses and self-employed individuals



## For civil society

- Serve as convening power in partnership with the public and private sectors to support communities with access to financial education
- Give voice to the needs of community members and ensure they are involved in the process of co-creating solutions



## Technology - building resilience through financial education

When it comes to long-term planning, employees' needs - from an emotional as well as functional perspective – are mostly related to de-risking: removing risk factors they may face in their lives to be more resilient during uncertainty. This is very consistent regardless of age, gender, socioeconomic cluster, or marital status.

However, education and guidance are needed to better adopt habits that are consistent with objectives, especially when it comes to planning financially. Technology may help nudge people towards appropriate behaviours, both in terms of savings and other financial decisions, such as insurance purchases, so that better outcomes are achieved without restricting freedom of choice. Personalized recommendations tailored to each person's unique situation and alerts triggered by behavioural tracking of, for example, spending versus savings patterns may be better accepted if provided by an unbiased virtual companion.

Gamification, with the use of points, badges and challenges applied to financial literacy training, will help people better visualize different versions of themselves without relying only on distant advisers. Social comparison against an immediate circle of family and friends can be very effective as they are often the most influential examples.36

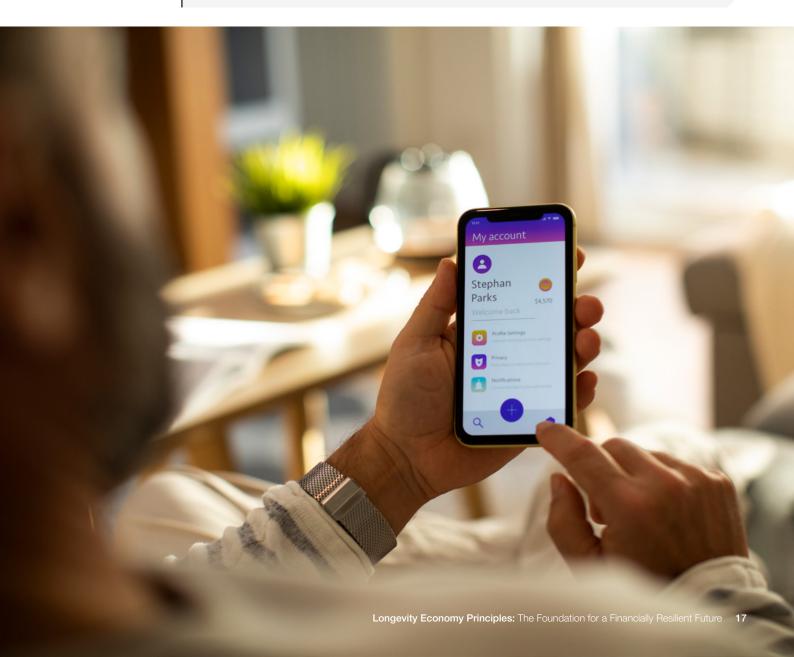
Long-term education through the use of digital tools can help individuals make better decisions based on rational input, improved literacy and relevant recommendations, driving better financial resilience during times of uncertainty in life.

#### Wendy Liu

Chief Executive Officer, Zurich Integrated Benefits & International Life, Zurich Insurance Company

#### Paolo Marini

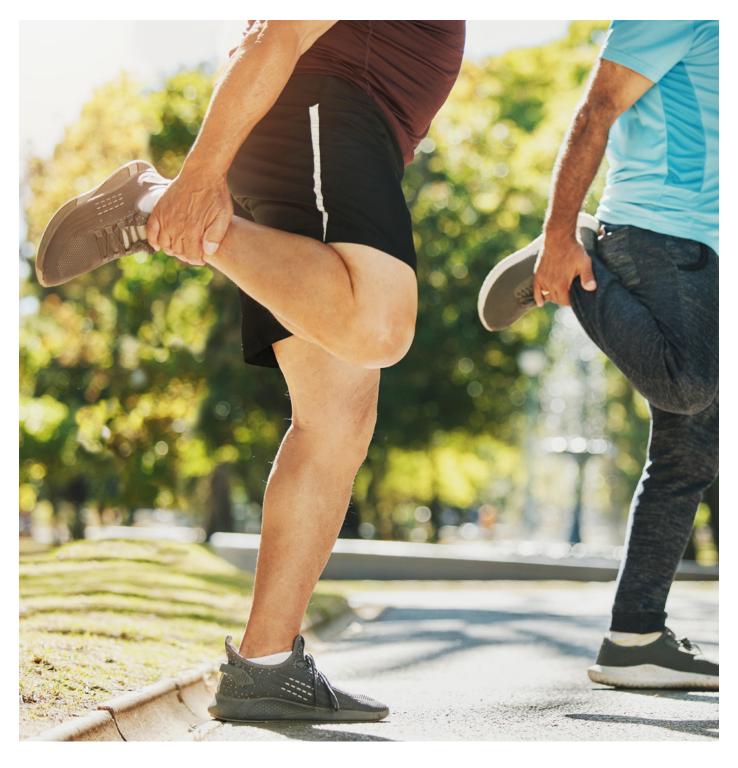
Global Head, Broker Relationship Management, Integrated Benefits, Zurich Insurance Company





# Principle 3 Prioritize healthy ageing as foundational for the longevity economy

A greater focus on prevention rather than intervention will help improve quality of life in old age.



Life expectancy has increased significantly over the past few decades, but it is not only the number of years that is important but also the quality of those years.

How can public-private collaboration enable equitable access to health education and services to improve healthy life expectancy and overall quality of life?

#### The case for action 3.1

While the average life expectancy has risen by over 55% from 47 to 73 years across the past seven decades, one-fifth of an individual's life on average is now expected to be lived with morbidity or in a state of illness.37

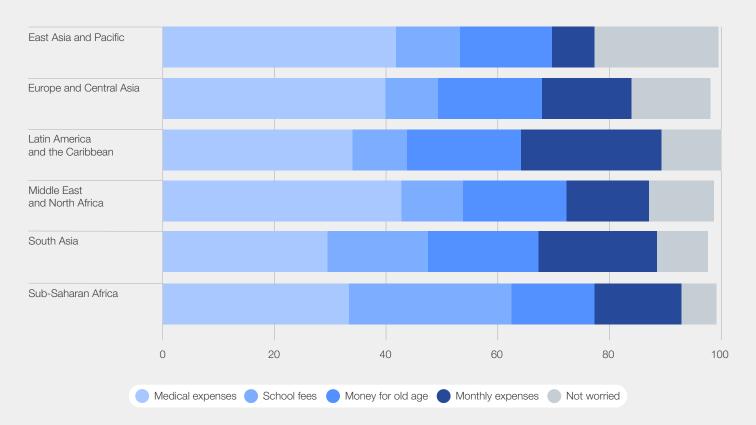
The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity". The WHO notes that current public health approaches to population ageing need to evolve to become more effective, as the health of older people has not kept up with increasing longevity.38 There is a significant opportunity to positively impact results through the lens of person-centred integrated care, with a much greater focus on prevention rather than intervention. This should be driven by collaboration across the public sector, private companies and civil society in order to create a new framework for action. Reducing the burden of treating preventable conditions will help improve the quality of healthcare that can be provided to all.

Impact on the individual: Beyond the health impact, the UN Capital Development Fund estimates that 80% of adults in developing countries were worried about not having sufficient financial means to meet future medical expenses in case of serious illness or accident.39 Those who experience chronic health conditions, estimated at almost 60% of the US adult population, struggle to accumulate wealth and save for retirement.40

FIGURE 6

In developing economies in every world region, adults named medical expenses as their biggest financial worry

#### Adults identifying their biggest financial worry (%) 2021



Note: A small share of adults did not know or refused to disclose their main cause of worry.

Source: World Bank, Global Findex Database 2021, 2021, https://www.worldbank.org/en/publication/globalfindex/.

Impact on the workplace. The primary reason older individuals leave their jobs before reaching the state pension age is declining health. People who leave the workforce on their own terms are much more likely to be psychologically well and less likely to be dependent on public welfare.41 There are opportunities for workplaces to better design for age-friendly environments, work flexibility, retraining and promotion of healthy lifestyles in order to enable people to have longer careers and enhance wellbeing in later life. In the US, the Integrated Benefits Institute estimates that poor health annually costs US employers \$575 billion and 1.5 billion days of lost productivity.42

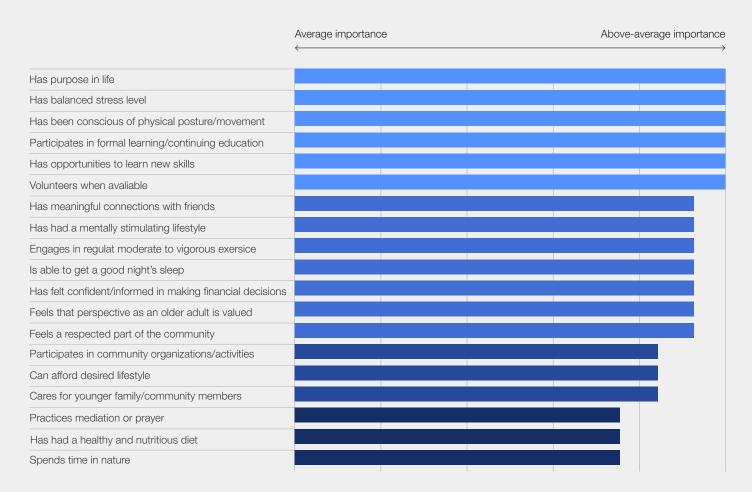
Impact on society and social systems. In the US, the estimated cost of ill health in old age was more than \$12 trillion in 2017, accounting for approximately 15% of global real GDP.43 While global population ageing is an undeniable reality, countries and communities differ significantly in their preparedness to tackle this megatrend. On average, between countries, there is a difference of 31 years in healthy life expectancy at birth and a difference of 11 years of healthy life expectancy at 60 years.44 Many older people face barriers that prevent them from accessing basic resources, experiencing health and well-being, and fully participating in society. Equitable access to quality health services for all people needs to be a critical priority to ensure the societal and financial resilience of the future.

FIGURE 7

Top factors of individual health (out of 53 factors tested)

Having purpose, managing stress, physical activity, lifelong learning, and interacting with others matter most to overall health.

Top factors of individual health (out of 53 factors tested), 1 relative importance index2



<sup>1</sup>Questions: When considering the entire course of your life, how much do you agree with the following statements? Today and moving forward, how much do you agree with the following statements?

Source: McKinsey Health Institute, Age is Just a Number: How Older Adults View Healthy Ageing, 22 May 2023, https://www.mckinsey.com/mhi/our-insights/ageis-just-a-number-how-older-adults-view-healthy-aging.

<sup>&</sup>lt;sup>2</sup>To understand the importance of individual factors of health, we calculated the correlations of each factor with each of the four health dimensions across countries in aggregate. We grouped these correlations in magnitude levels based on quartiles. Each factor was then assigned an index value, and these values were summed across dimensions to arrive at an overall relative importance index.

## 3.2 | Principles in practice

#### CASE STUDY 7

## Netherlands - living labs

The Amsterdam University of Applied Science research group Urban Vitality conducts research in "living labs", where they actively engage with patients and the local community to incorporate their experiences in spaces such as care centres and schools.45

One of these living labs is the Amstelhuis, which is a residential facility in Amsterdam containing

120 social housing units for individuals over the age of 70 who have a need for minimal care. They also have access to a residents' club, which provides a meeting place for both residents as well as older people living in the neighbourhood. Interdisciplinary teams create projects and activities for the residents while simultaneously producing research to support their long-term health and well-being.

#### CASE STUDY 8

## Global - bridging health and wealth

Behavioural insurance is an innovative approach to traditional insurance, leveraging behavioural science to educate, incentivize and reward users for steps they take that correlate with living longer and healthier lives. An example of this is the John Hancock Vitality programme, which provides not only financial protection through life insurance but also rewards users with savings and other benefits when they make healthy lifestyle choices. This can support all parties involved: the user, the insurer and society as a whole.

This behavioural insurance model has seen success in long-term impact on health metrics. For John Hancock Vitality, over the past eight years, programme users have seen a significant improvement in user-reported health, 46 healthy weight, 47 cholesterol reduction 48 and blood pressure.49 Additionally, 92% of participants say that they are also benefitting financially due to rewards and savings offered through the behavioural insurance programme.<sup>50</sup>

#### CASE STUDY 9

#### Indonesia – a community for care

Indonesia's healthcare system aims to combine community-based interventions with primary healthcare facility services, striving for early health risk factor identification, monitoring and follow-up. Access may be limited in underresourced areas; however, where available, the community-based interventions (Posbindu and Posyandu Lansia) are supported by public and local government funds. Posbindu employs community health volunteers who conduct screening and counselling, facilitating early intervention and ensuring inclusivity. Posyandu Lansia focuses on older adults, collaborating with primary healthcare facilities to engage

approximately 2.5 million older individuals through health outreach and referrals. These programmes are implemented jointly by the community, cadres, NGOs and private and social organizations.

Public health centres (Puskesmas) and family doctors then deliver integrated services supported by the National Social Health Insurance. Those at moderate or high risk of health issues are encouraged to consult primary healthcare providers for prompt diagnosis and treatment, ensuring broader healthcare accessibility and coverage.51



## 3.3 | Opportunities for collaboration and impact

FIGURE 8

How stakeholder groups can collaborate to prioritize healthy aging, as foundational for the longevity economy



## For policy-makers

- Enable equitable access including affordability, accessibility and availability - to quality health education and services in order to improve health span and enhance quality of life
- Promote prevention programmes and increase the capacity of preventive check-ups for key disease groups
- Incentivize healthy ageing practices through policies linked to activities proven to contribute to positive health outcomes if practised over the longer term
- Collaborate with private sector to build the capacities of health and care workers
- Design policies and regulations to ensure that all individuals, regardless of their job status, receive access to healthcare benefits, including part-time, gig and contract workers
- Collaborate with the health services industry to build equitable care systems for ageing populations to remove barriers to care for older adults



## For employers

- Provide quality, affordable and accessible health and well-being benefits for workers, regardless of their job status
- Invest in programmes to help improve worker health and well-being, including education, health insurance, long-term care, critical illness coverage and mental health benefits
- Enable individuals to remain active and engaged in the workforce for longer by building healthier workforces
- Leverage health screening and wellness programmes provided through employee benefits programmes to support worker health



## For health services

- Collaborate with public sector to deliver education and equitable access to quality health education and services
- In designing health services, prioritize lifelong education and support around physical and mental well-being to promote the prevention of disease and a decline in physical and mental capacities
- Design insurance solutions for workers in the gig economy (and alternative workforce) that address challenges with benefits access



## For civil society

- Serve as a trusted partner to provide health education and accessible services to people at all life stages
- Give voice to the needs of community members and ensure they are involved in the process of co-creating solutions

# Health equity – foundational for the longevity economy

Health equity is the ability to fulfil one's potential in all aspects of health and well-being; however, significant inequities persist both across and within countries. Babies born in Japan in 2021 can expect to live to almost 85 years on average, compared to only about 53 years for babies born in Nigeria at the same time. <sup>52</sup> Disparities also exist within countries. In 2021, the life expectancy for Black Americans was about 65, compared to 83.5 for Asian Americans. <sup>53</sup> Reducing life expectancy inequalities and optimizing opportunities that enable healthy ageing are foundational components of a longevity economy.

Populations that experience inequities in the social, economic and environmental drivers often have shorter life expectancies, lower well-being and worse health outcomes, and struggle to achieve financial security as they age.<sup>54</sup> Climate change has raised the risk of infectious disease transmission by 60%,<sup>55</sup> and climate-related conditions impact Black Americans at twice the rate of their white counterparts.<sup>56</sup> If the current state persists, Americans could see growing disparities among different demographic groups despite them living longer on average.<sup>57</sup>

Health outcomes and financial stability are linked. According to a survey by the US Federal Reserve Board, 23% of American adults reported unexpected medical expenses in the past year, with the median cost between \$1,000 and \$1,999, and 16% of American adults have medical debt because of high healthcare costs for themselves or a family member.<sup>58</sup> This cost keeps some communities in a cycle of poverty and can lead to worse health outcomes. Additionally, people who experience chronic health conditions, estimated at almost 60% of the US adult population, struggle to accumulate wealth and save for retirement.<sup>59</sup> According to the Center for Disease Control and Prevention, 90% of the nation's \$4.1 trillion per year healthcare costs can be attributed to chronic disease and mental health challenges. 60 It is essential to prioritize accessible care for and education about physical, mental and financial well-being in an effort to build healthier, wealthier and more equitable, resilient societies.

#### **David Rabinowitz**

Principal, Deloitte Consulting LLP

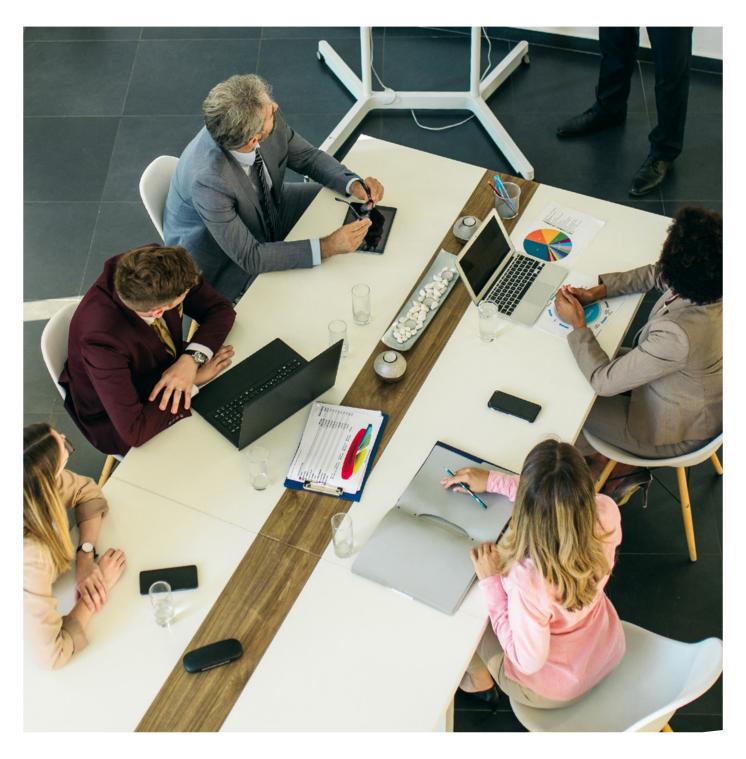


Principle 4



# Evolve jobs and lifelong skill-building for a multigenerational workforce

Creating opportunities for older workers to thrive in the workforce will benefit everyone.



As society continues to adapt to the demands of technology and ageing demographics, it becomes more crucial for jobs and skills training to evolve to enhance opportunities for the multigenerational workforce.

How can employers drive a culture of inclusivity to enable individuals to remain connected to the workforce for longer, and how can innovations in technology support targeted skill building?

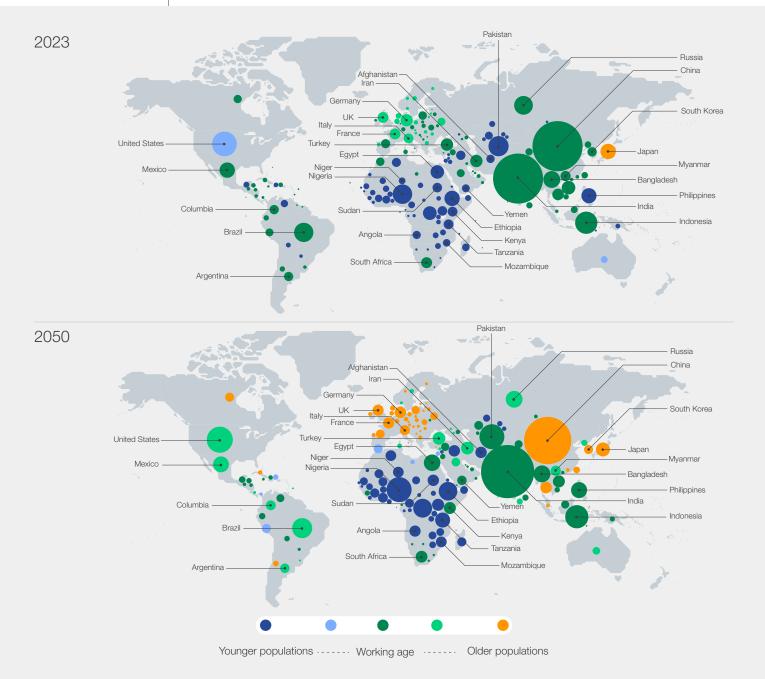
#### The case for action 4.1

Across the globe, declining birth rates are precipitating a change in the balance between working-age and non-working-age populations, with more people either retiring or exiting the labour force due to health concerns than those

joining the labour force, particularly in developed economies. In OECD countries, in order to maintain the current balance between working-age and nonworking-age populations, by 2050, retirement ages would need to increase by an estimated 8.4 years.<sup>61</sup>

#### FIGURE 9

#### UN world population prospects for 2023 and 2050



Source: New York Times, How a Vast Demographic Shift Will Reshape the World, 16 July 2023, https://www.nytimes.com/interactive/2023/07/16/world/

In high-income economies alone, there is a potential \$5 trillion in incremental annual GDP that remains untapped by not employing older adults looking for work.

Technology and the impact of climate change will change the nature of many jobs, further increasing the need to enhance workforce opportunities for older workers and encourage skill building, both to improve the well-being of the individual as well as to ensure the long-term sustainability of workplaces and social systems.

Impact on the individual: In a 2023 global survey of 21,000 adults aged 55 and older across 21 countries, 19-25% of respondents indicated they would like to work in old age but are not currently doing so, citing a lack of attractive opportunities and difficulty finding a job.62 The workforce participation rate for people aged 55 and older dropped significantly during COVID-1963 due to a combination of older workers being forced out of the workforce and changes in working environments leading others to choose to leave or retire. As the share of the working-age population declines as society ages, companies need to evolve their job designs for flexibility to provide older individuals who wish to continue working with the ability to remain employed for longer.

Impact on the workplace: Based on the World Economic Forum's latest Future of Jobs Report 2023, the key barriers facing organizations of all industries are skills gaps and an inability to attract talent. The OECD estimates that technology is poised to reshape over 1 billion jobs, representing nearly a third of all jobs worldwide, within the coming decade. 64 As the workforce ages, traditional recruitment methods will need to adapt as companies engage more midcareer and older skilled workers. Reskilling workers as they grow through the organization will be critical as businesses transform to embrace technology and adapt to climate change. In G20 nations, failure to adapt skill building to meet technological demands could jeopardize \$11.5 trillion in potential GDP growth over the next decade. 65 In many countries, a cultural change is needed to encourage employers to engage older workers, and in many company pension plans, flexible retirement or working for the same employer while receiving a pension is still not possible. In highincome economies alone, there is a potential \$5 trillion in incremental annual GDP that remains untapped by not employing older adults looking for work.<sup>66</sup>

Impact on society and social systems: If the skills gap is not addressed and the nature of jobs is not adequately redesigned, existing inequalities will continue to be reinforced by the impact of ageing demographics. Those in physically demanding jobs will have an increasing relative disadvantage compared with those who can keep working in older age, emphasizing how crucial it is to promote policies that adapt workplaces to better suit individuals with disabilities and those with long-term health conditions. Challenges that older workers face in securing employment would significantly impact public finances due to the greater need to secure retirement protection from public sources. Retirement systems need to be designed in order to not discourage older workers from continuing to work.

## 4.2 | Principles in practice

#### CASE STUDY 10

## Singapore – creating opportunities for the older workforce

Singapore is taking a skills-first approach to prepare its workforce for the future by anticipating the skills needs of the market and encouraging citizens to gain those skills to increase employment and productivity. This effort is being led by the SkillsFuture Singapore Agency (SSG). SSG provides resources such as SkillsFuture Credit, Jobs-Skills Insights, Skills Advisory services and the MySkillsFuture online portal to empower Singaporeans to chart their own career and lifelong learning pathways.<sup>67</sup>

Singapore also has a thoughtful approach to retaining older workers by building an ageinclusive culture and providing funding for employers to create suitable work environments for their mature workforce. Employers are required to offer re-employment to eligible employees who turn 63, up to the age of 68, to help older workers who wish to continue working as long as they are willing and able. The Ministry of Manpower provides grants for employers to create physically easier, safer and technologically smarter work environments for employees aged 50 and above. 68 Organizations offer flexible work arrangements, with flexible hours or time banks, to enable mature workers to contribute and earn in the way most manageable for them.

#### South Korea – collaborative ecosystem for mid-career transition

Good Job 5060, launched in South Korea in 2018, aimed to train 1,000 middle-aged people and help at least half of them find re-employment. This cross-sector effort was led by the Hyundai Motor Group, alongside Seoul City 50 Plus Foundation, the Korean Ministry of Employment and Labour, and the social enterprise Sangsang Woori. As of 2021, the programme had a 65% success rate, significantly exceeding the 30-40% reemployment rates of previous programmes.

A collaborative ecosystem was developed to address key pain points faced by middleaged individuals looking for work, including time-consuming processes for recruitment, limited funds for training after retirement, and ensuring the programme design aligned with business needs. Sangsang Woori developed re-employment training programmes. Seoul 50 Plus Foundation addressed advertising, recruitment and applicant selection. The Ministry of Employment and Labour provided policy support and engaged with potential employers.

The economic and social impact that Good Job 5060 created between 2018 and 2020 was about \$4 million, accounting for the social value of job matching and increased income for older workers. The social return on investment was computed as 4.7, i.e. every \$100 spent on this programme could generate a social value of \$470 for society.69



#### CASE STUDY 12

## Global - redesigning phased retirement

Upon noting that over the next ten years, onethird of its employees would move into early retirement, Swiss Re leveraged design thinking to create people-focused solutions to address the needs of their workers transitioning to retirement.

Formalized programmes include Flex58+, where an employee can flexibly reduce working time before entering regular retirement while their previous base salary is still insured in the pension fund, and taking on an advisory role, where the individual continues working on a contract basis after retirement begins. This flexibility allows the role to accommodate the needs of both the worker and the employer.70

## 4.3 | Opportunities for collaboration and impact

FIGURE 10

How stakeholder groups can collaborate to evolve jobs and lifelong skill-building for a multigenerational workforce



## For policy-makers

- Develop policies that help companies and workers facilitate evolution beyond traditional retirement ages to reflect the diversity of life goals, health outcomes, life expectancy and ability to continue working
- Engage in constructive discussions on the positive effects of working longer and provide funding for further studies on these effects as a basis for working on creating flexibility in retirement systems
- 3 Support public programmes and incentives that assist individuals with returning to the workforce after breaks in career
- Implement legislation that financially protects workers in physically or mentally demanding roles at greater risk of leaving the workforce before their desired retirement age
- Engage the education sector to collaborate on opportunities to help workers continue up-skilling throughout their working lives
- 6 Promote micro-credentials and re-evaluate the existing educational accreditation systems to adjust to the needs of ever-longer careers



## For companies

- Promote policies, practices and training resources that make it easier for workers to rejoin the workforce after breaks in career.
- 2 Lengthen the time that people can remain in productive employment by driving a culture of inclusivity and lifelong learning with flexible job design and career paths
- 3 Enhance opportunities and adapt jobs for workers in physically or mentally demanding roles at greater risk of leaving the workforce before their desired retirement age
- 4 Encourage the adoption of technological innovations to support targeted skill building within the workforce



## For civil society

- Engage the public sector for direction, guidance and funding for skill-building initiatives
- 2 Collaborate with private sector to understand best practices in training for key skill gaps
- As a trusted partner for community members, deploy services to aid community members most in need of skill-building support
- 4 Give voice to the needs of community members and ensure they are involved in the process of co-creating solutions



## 44 | TOPIC SPOTLIGHT

# Early childhood education – invest in future centenarians

Lifelong skill building begins with childhood, and many children born today are expected to live to 100 years old. Investing in these future centenarians starts with access to high-quality childcare and early childhood education, which has proven to deliver double benefits to families. Children develop foundational skills for future success and wellbeing, while parents can pursue adult education, employment and higher income. In Increasing social mobility for families helps decrease children's adverse experiences (e.g. violence and neglect). High-quality childcare has also been found to improve maths and reading ability and decrease the likelihood of children receiving public assistance and coming into contact with the justice system.

The pivotal years between birth and kindergarten are the optimal time for children to acquire many of the cognitive, emotional and social skills needed

for a healthy, happy and long life. Economic models suggest that comprehensive, high-quality early education and childcare programmes are excellent public investments, delivering a lifetime return on investment of 13% each year. 73 Programmes that target the earliest years of childhood provide even stronger rates of return in human capital.

As people live longer, qualities such as resilience, self-efficacy and curiosity will become the emotional toolkit for longevity. People who learn these traits in early childhood have more time to practice and hone them and will be better equipped to navigate the challenging passages often experienced throughout the course of life.

#### Martha Deevy

Associate Director and Senior Research Scholar, Stanford Centre on Longevity

## 4.5 | LONGEVITY STORY

# Mid-career transitions – lifelong learning and social support

Sixty-two-year-old Spencer exemplifies the spirit of lifelong learning and reskilling. At 55, after dedicating 10 years to a career as a production planner in the metal finishing industry, Spencer boldly transitioned into a field he was passionate about: the healthcare industry. He enrolled in a course on Operating Theatre Support, utilizing his SkillsFuture Credit to facilitate this career pivot. Through this 3.5-month programme, he honed his skills and transitioned into the role of a Senior Operating Theatre Technician Associate at the Singapore General Hospital.

The orientation scheme and buddy system proved instrumental in his acclimation during the initial stages of his new role. Spencer also expressed heartfelt gratitude for the unwavering support of his family and friends, who provided encouragement and stood by him throughout his training period.

Spencer's story exemplifies the importance of dedication to continuous learning, as well as the need for social support for reskilling. SkillsFuture Credit helped Spencer offset part of the course fee to ensure he had the resources to enrol in the reskilling curriculum, and formal courses trained Spencer in the skills required to succeed in his new career. Additionally, Spencer had the support of a buddy in his new career and the support of his friends and family. Spencer pursued his passions and embraced lifelong learning, and his success has been possible in large part due to his unwavering support systems, both formal and informal.

#### Gog Soon Joo

Chief Skills Officer, SkillsFuture Singapore

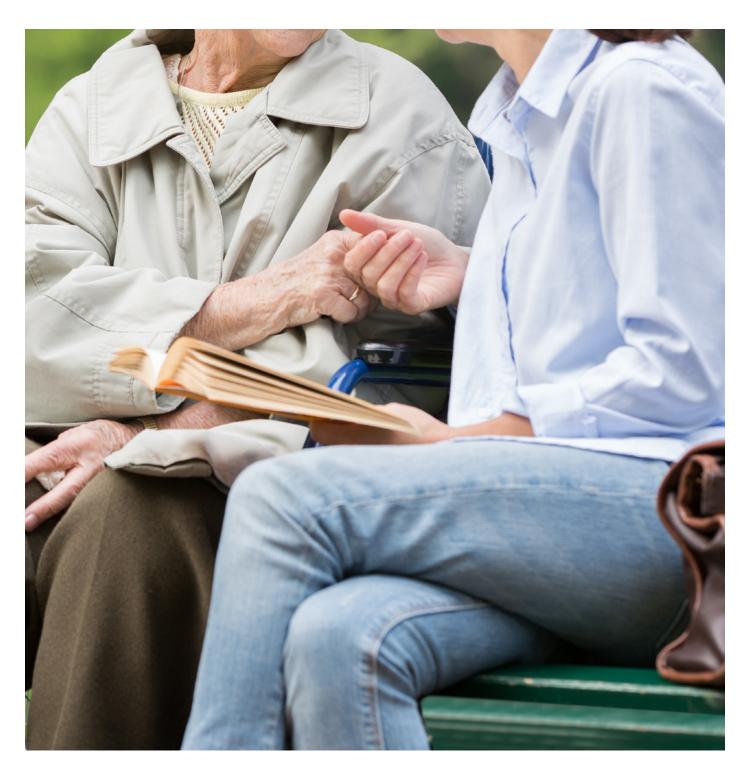
#### Valerie Yek

Senior Manager, Media Relations, SkillsFuture Singapore Principle 5



# Design systems and environments for social connection and purpose

Cultivating community and multigenerational connection are key to improving health and quality of life.



Social connection is imperative for healthy longevity. This connection can be cultivated through a variety of methods - through the workplace, the built environment and through multigenerational living.

How can companies and governments collaborate to provide thoughtful methods to combat the loneliness epidemic across an individual's entire lifetime, but especially in older age?

#### 5.1 The case for action

Loneliness, with the absence of social connection and a sense of purpose, can have a significant impact on health and well-being, which comes with great social and economic costs. The impact is felt in the workplace and the community and across the lifespan of individuals impacted. This effect can be compounded by age discrimination.

**Impact on the individual:** A study found that for older Japanese adults, having "ikigai" - a motivating force, sense of purpose or reason for living - is associated with a 31% lower risk of developing functional disability and 36% lower risk of developing dementia, along with decreased depressive symptoms and higher life satisfaction.74 Socially isolated older adults are at greater risk of poor health and earlier death than those who are not. In the United Kingdom, the London School of Economics estimates that the potential cost of loneliness ranges from £1,700 to £6,000 per person.75 The lack of social contacts among older

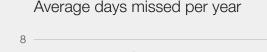
adults is associated with an estimated \$6.7 billion in additional US Medicare spending annually.76

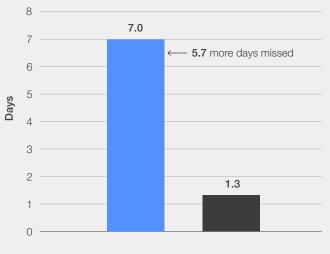
Impact on the workplace: Workers of all ages experiencing loneliness demonstrate higher rates of avoidable stress-related absenteeism, on average missing more than five additional workdays per year than those who do not identify as lonely. For example, in the United States, a study by Cigna estimated that businesses face an annual cost of \$154 billion due to absenteeism resulting from loneliness.77 One way this can be addressed is through mentoring channels, both formal and informal, creating a private learning space for older leaders while offering intellectual stimulation for younger workers, improving their commitment to the organization and reducing turnover.<sup>78</sup> Intergenerational mentoring can also address concerns about ageism, as 78% of older workers in the US indicate that they have seen or experienced age discrimination in the workplace.79

#### FIGURE 11

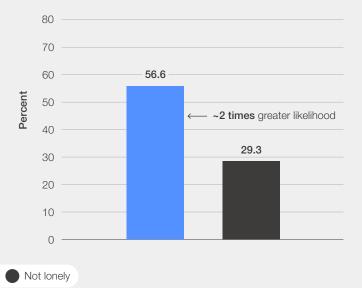
#### The impact of loneliness on workforce productivity

Lonely employees demonstrate higher rates of avoidable (stress-related) absenteeism, missing more than five additional work days per year than those who do not identify as lonely. They also express a greater intention to quit their job within the next 12 months, nearly twice as likely as other workers.





#### Intention to quit job within the next year



Source: Cigna Healthcare, The Business Case for Addressing Loneliness in the Workforce, n.d., https://newsroom.cigna.com/business-case-addressingloneliness-workforce; Analysis of Cigna Loneliness Index data for employed respondents (5,927 workers).

Impact on society and social systems: Social isolation is associated with an approximately 50% increased risk of dementia and significantly increases a person's risk of premature death from all causes.80 Vulnerable older adults, including immigrants, minorities, those who identify as LGBT and others from traditionally disadvantaged communities, tend to experience loneliness more often, amplifying the impact of inequalities across society.81 The built

environment significantly influences the health and level of social connection of older adults, especially those from lower-income communities.82 Good urban design can play a major role in allowing seniors to "age in place", safely and independently live in their own homes and community as they age, and remain active.83 If people can remain independent for longer, the burden on families and social systems to provide care is reduced.

## 5.2 | Principles in practice

#### CASE STUDY 13

#### Japan - improving health through community

Japan reformed the Long-term Care Insurance Act in 2015 to focus on community-based care and social determinants of health.84 The government's plans are inspired by "ikoino saron", which are gathering salons for people aged 65 and older. Currently, 30% of the population in Japan is 65 or older.85 These gathering salons are managed by local volunteers and are held once or twice a month in local communal spaces with a very low participation fee. The balance of the cost is met by public funds. Each salon typically has between 20 and 100 participants. A key aspect of these salons is

that they are targeted at and tailored to the entire community. This integrated community approach has helped eliminate the stigma of participating.

By 2017, salons were used in over 85% of all Japanese municipalities. Salon participation was associated with a halved incidence of long-term care needs and about a one-third reduction in the risk of dementia onset. Across Japan, the salons have increased social interaction and stimulated increased participation in other community activities.

#### CASE STUDY 14

## South Africa - ageing well through peer support

AgeWells are elderly caregivers whose job is to check on the health and well-being of other seniors who are clients in the AgeWell programme, with whom they are trained and matched to support. The AgeWell programme was piloted in Cape Town, South Africa, in 2014 and has since been launched internationally, achieving a 50% increase in well-being scores among participants and a 95% reduction in signs of depression.

The programme integrates social engagement among peers in old age, offers flexible employment for seniors, leverages smartphone technology for health screenings and provides referrals to social services and medical professionals in the community. In doing so, the programme averts high-cost interventions and creates cost savings by minimizing hospitalizations and unnecessary emergency room utilization. Ultimately, AgeWell workers foster independence and connection among seniors while helping them remain in their own homes and communities.86

#### Uganda - for grandmothers, by grandmothers

The Grandmothers Consortium was established in Uganda to create a unified voice for advocacy for grandmothers led by grandmothers. The consortium is made up of six Ugandan grassroots organizations working with grandmothers, creating a platform for advocacy and lobbying for their rights. One key objective is to reduce the impact of HIV and AIDS, poverty and the associated burden of care for orphans and vulnerable children on grandmothers in Uganda.

The consortium's overall aim is to create an environment where grandmothers' rights and needs are prioritized and integrated into all national programmes in Uganda. The consortium creates a community for grandmothers and widows to take care of one another, as well as any orphaned children.87 In the words of the chair of the Grandmothers Consortium, "In the village where we work, our grandmothers are the leaders. Grassroots mobilization has given grandmothers back their lives."88



## 5.3 | Opportunities for collaboration and impact

#### FIGURE 12

How stakeholder groups can collaborate to design systems and environments for social connection and purpose



## For policy-makers

- Collaborate with the private sector to leverage human-centred design to build environments that enable communities to connect, allowing for multigenerational interaction
- Encourage accessible technology in the design of physical and digital spaces for social connection, promoting multigenerational collaboration as well as supporting individual autonomy while ageing
- Actively address ageism through policies and public commitments in collaboration with the private sector and civil society



#### For companies

- In recognizing that the workplace often empowers individuals with a sense of purpose through establishing professional identities and relationships, enable individuals to remain connected to work environments for as long as possible
- Offer formal and informal mentorship options for intergenerational collaboration within the workplace through both traditional mentorship and reverse mentorship
- Encourage community engagement through workplace team-building activities, volunteering opportunities and other social bonding events
- Collaborate with the public sector to actively address ageism in the workplace



## For civil society

- Serve as a trusted resource and convener for individuals tackling social isolation
- Collaborate with the public and private sectors to encourage engagement in activities designed to attract intergenerational community members
- Give voice to the needs of community members and ensure they are involved in the process of co-creating solutions

## 5.4 | TOPIC SPOTLIGHT

## Loneliness epidemic - a social, not individual, problem

A recent EU-wide survey on loneliness found that 13% of respondents reported feeling lonely most or all the time over the previous four weeks, while 35% reported being lonely at least some of the time. This is concerning as the negative effects of loneliness on physical and mental health are well documented. Loneliness has been compared to obesity and smoking in the mortality risks that it entails. A higher risk of depression, anxiety, suicidal ideation and suicide attempts, cardiovascular diseases, mobility limitations and cognitive decline are all connected with loneliness. The causal relationship between loneliness and health can go both ways.

Loneliness may also push lonely people even further away from others. People who are lonely tend to feel more threatened, which can lead to more mistrust and intolerance of others. Ultimately, this may pose a risk to social cohesion. According to recent

research, those feeling lonely are less likely to trust others (-27%) and more likely to not vote (+42%).

Despite its name, loneliness is a social, not an individual, problem. Addressing it requires a multiangled approach. Building a sense of belonging and companionship is a key ingredient, together with an increase in awareness and a reduction of the stigma associated with this phenomenon. This requires a concerted effort from the whole of society, including regulators, businesses and citizens.

#### Marco La Marca

Cabinet Member, Demography and Democracy, European Commission

#### Toma Šutić

Cabinet Member, Demography and Democracy, European Commission

## 5.5 | LONGEVITY STORY

## Learning and adapting are the keys to resilience

Clive's career started in real estate. He belongs to a generation that may have expected to stay with the same employer for most of his career. 13 years ago, he lost his job due to a takeover and took time out to look after his mother. Clive got back to work as a steward at the Wimbledon tennis championships. From there, he was recruited by a firm offering security for the London Olympics, who recognized his customer service skills and trained him on the technical aspects of the job that were new to him. For the past five years, Clive has been working as a VIP Chauffeur for a large UK travel company, taking clients from their homes to the airport on their day of travel. Many of the passengers are of a similar age and life experience. Clive gets great personal satisfaction from his

work, the flexibility it offers and the independence from earning an income.

When you talk to Clive, you are struck by his warmth and interest in other people. He wants to learn and generously share his knowledge and experience with others. He has learned to be adaptable, seek opportunities and take on challenges when they arise. His ability to build on his interpersonal skills and learn new skills, along with his openness to new opportunities, means that he has been able to adapt to changes in his life and remain financially resilient.

#### Mike Mansfield

Chief Executive Officer, ProAge



# Intentionally address longevity inequalities, including across gender, race, and class

Widening wealth disparities are linked to inequalities in life expectancy and health.



The benefits of the longevity economy are not felt equally by all. In developing programmes to ensure financial resilience for all generations, public and private stakeholders need to recognize and address the intersectional factors that contribute to disparities.

How can education, resources and tools be designed through a lens of inclusion, and how can disparities in longevity and financial resources be addressed collaboratively?

## 6.1 The case for action

Inequalities in income, wealth and well-being can create widespread discontent, posing significant societal and business challenges by eroding social unity, diminishing trust in institutions, fuelling conflicts and polarization, and ultimately weakening society's ability to collectively address pressing issues. These disparities are being exacerbated as society ages.

#### Impact on the individual:

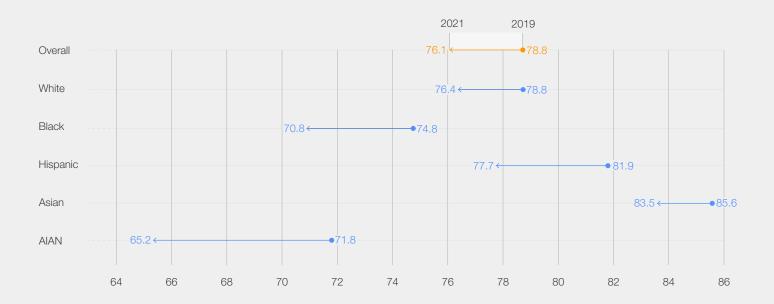
- Across gender: Across all OECD countries, on average, women aged 65 and above receive 26% less retirement income compared to men.<sup>89</sup> While there are many factors behind these trends, one significant reason is that most informal, unpaid caregivers (approximately 57% to 81%) are women,<sup>90</sup> impacting their ability to accrue lifetime earnings and maintain a career.
- Across race: In the United States, approximately
  1 in 6 Black Americans over the age of 65 live in poverty, compared with 1 in 15 white Americans.

Older Hispanic women who live alone have the highest poverty rates, approximately 1 in 3.91 Life expectancies also differ significantly by race: while overall US life expectancy at birth is 76 years, 92 it is 65 years for Indigenous Americans, which is the same as the life expectancy for the total US population in 1950.93

Across class: Global studies reveal a troubling connection between income inequality within countries and disparities in life expectancy. For instance, in both the United States and Denmark, higher-income individuals are experiencing gains in life expectancy while lower-income groups face stagnancy or declines. In the US, the richest men and women live up to 30 years longer than the poorest. In Denmark, despite its reputation for social safety programmes, the gap is still significant, with the richest men outliving the poorest by approximately nine years on average. In both cases, the gaps have only increased over time as income inequality within the countries has grown.

#### FIGURE 13

#### Life expectancy in years by race/ethnicity (US), 2019-2021



**Note:** Estimates based on provisional data for 2021 and final data for 2019 life expectancy at birth. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic.

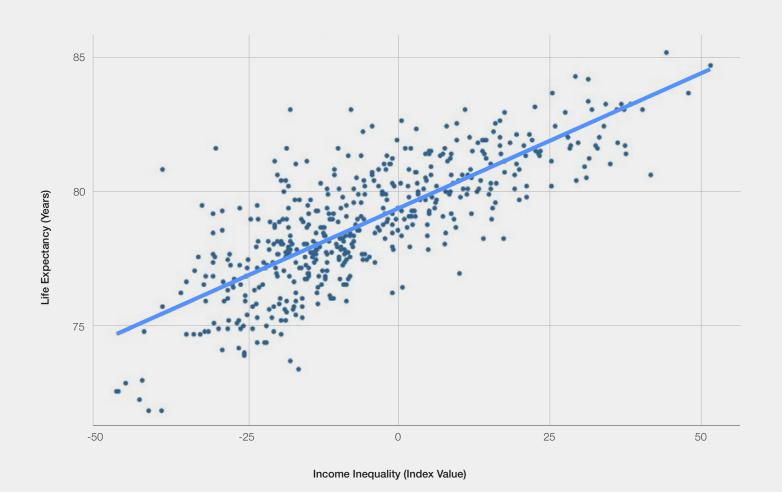
Sources: KFF, What is Driving Widening Racial Disparities in Life Expectancy?, 23 May 2023, <a href="https://www.kff.org/racial-equity-and-health-policy/issue-brief/what-is-driving-widening-racial-disparities-in-life-expectancy/">https://www.kff.org/racial-equity-and-health-policy/issue-brief/what-is-driving-widening-racial-disparities-in-life-expectancy/</a>; Arias, E., B. Tejada-Vera, K.D. Kochanek, F.B. Ahmad, *Provisional life expectancy estimates for 2021*, National Center for Health Statistics, 2022, <a href="https://dx.doi.org/10.15620/cdc:118999">https://dx.doi.org/10.15620/cdc:118999</a>.

Impact on the workplace: There is a significant opportunity to address some of these disparities in the workplace. For instance, improving gender parity could also add as much as \$13 trillion to global GDP.96 Closing the living wage gap worldwide could generate an additional \$4.56 trillion every year through increased productivity.97 Significant disparities persist in the provision of unpaid informal eldercare, with 30% of caregivers from low-income households providing daily care, perpetuating economic insecurity as unpaid caregiving contributes to higher old-age poverty.98 To address the costs and pressure related to caregiving, workplaces can provide benefits and leaves targeted to support informal caregivers. As more workers enter the gig economy, there is a growing need for access to employment benefits, regardless of job status.

Impact on society and social systems: As the global population ages and the ratio between the size of the working population and the retiree population becomes increasingly untenable for the sustainability of social systems, future generations will need to pay more to support people in retirement than current workers. As the disparities noted above are only increasing, certain segments in society will be impacted more than others, including women, people of colour and other traditionally disadvantaged communities. If the public and private sectors do not collaboratively act now, problems will be compounded for these groups for generations to come, and social safety nets will come under increasing pressure while the richest will amass an increasing proportion of overall wealth. Intergenerational inequity risks increasing political polarization and social tension, which would only limit society's ability to align on the adjustments that would need to be made to solve these issues.

### FIGURE 14

#### Correlation between income inequality and life expectancy in 500 US cities (2019)



Note: Across the City Health Dashboard's 500 cities, cities with higher concentrations of people in the top 20% of the income distribution also tended to have longer life expectancies

Source: American Communities Project, The Income Gap's Impact on Life Expectancy, 15 October 2019, https://www.americancommunities.org/the-income-

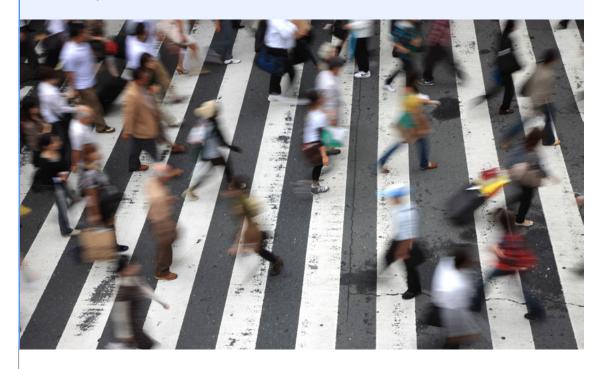
# 6.2 | Principles in practice

### CASE STUDY 16

## Germany - a caregiver's retirement

Germany has developed and implemented a national approach to supporting family caregivers in order to simultaneously maintain engagement in the workforce, supplement lost income and help people save for retirement. Employees have access to paid care leave (10 days per instance of caregiving need), as well as unpaid care leave for up to three months as needed. Caregivers who have worked for their employer for a requisite period have the right to work part-time on an ongoing or temporary basis if they intend to return to full-time work.99

For retirement security, support is provided through caregiver credits and the long-term care insurance system. A caregiver credit in the state pension plan is provided for the parent who is mostly responsible for childcare for the first three years of their child's life. 100 Additionally, the long-term care insurance system in Germany provides monetary contributions to the national pension system on behalf of caregivers who are unable to work due to caregiving responsibilities.



### United Kingdom - reducing inequality at the city level

Inspired by the work of Sir Michael Marmot, Marmot cities are cities where the aim is to create a healthier and more equitable community, particularly focusing on vulnerable and disadvantaged populations. Coventry, a UK city, committed to joining the Marmot network, given the persistent health inequalities in the city (e.g. men, on average, lived 10.7 years longer in affluent areas than in the most deprived areas, and 8.4 years longer for women).

As a Marmot city, Coventry has engaged in a series of initiatives and strategies designed to address health disparities in collaboration with the city council and other public sector and civil society organizations. Coventry recognizes the importance of community engagement in shaping its initiatives, ensuring that the voices of its residents are heard and integrated into the city's plan. Since becoming a Marmot city, Coventry has seen improvements in school readiness, health outcomes, life satisfaction and employment. 101

### Global - combatting ageism at work

AXA has signed a Charter of commitments with the European Works Council to enhance the role and place for employees over the age of 50 within the company. These commitments bring out the importance of intergenerational relations and the value of experienced employees, while emphasizing respect and care towards all employees regardless of their age. Furthermore, these commitments address specific areas concerning workers aged 50+, including recruitment, skills and career development, health and well-being, and the transition to retirement. These commitments draw inspiration from the charter of French think tank Club

Landoy and will be implemented gradually between 2024 and 2026 by each AXA entity in the Group.

In 2022, AXA France developed programs to support employees aged 50+ and fight ageism, including "L'Audace n'a pas d'âge" (Audacity knows no age). Beyond creating opportunities to facilitate career mobility for employees aged 50+, including through interviews and workshops, the programs also challenge age-related stereotypes through tools like podcasts to showcase personal narratives from workers, offering inspiration to listeners.

# 6.3 | Opportunities for collaboration and impact

#### FIGURE 15

How stakeholder groups can collaborate to intentionally address longevity inequalities, including across gender, race and class



# For policy-makers

- Recognize and address the intersectional factors that contribute to disparities in financial resilience and longevity, including gender, race, ethnicity, geography, disability, socioeconomic background and other traditionally disadvantaged communities
- Collaborate with civil society and the private sector to ensure that financial education, resources, savings schemes and tools are designed through a lens of inclusion for individuals from all backgrounds
- Address disparities in life expectancy by designing policies and programmes that promote equitable access to quality health and social care for individuals from all backgrounds
- Address disparities in the value of pay and benefits by designing policies and programmes that provide targeted interventions for traditionally disadvantaged groups
- Design policies to incentivize companies to create inclusive opportunities specifically for traditionally disadvantaged groups



### For companies

- Recognize and address the intersectional factors that contribute to disparities in financial resilience and longevity, including gender, race, ethnicity, geography, disability, socioeconomic background and other traditionally disadvantaged communities
- Ensure that financial education, resources, savings schemes and tools are designed through a lens of inclusion for individuals from all backgrounds
- Promote equitable access to quality health. retirement and social care for individuals from all backgrounds, regardless of employment contract
- Address disparities in pay and pension through targeted interventions, including offering catch-up provisions for retirement contributions, remediating career differentials, providing support for informal caregivers and prioritizing pay equity



# For civil society

- Continue serving as a mouthpiece for community members who feel marginalized, and keep holding the private and public sectors accountable for addressing issues related to inequality
- As a trusted partner for community members, collaborate with the public and private sectors to ensure that interventions, tools and resources developed for community members include their voices in the design and that they reach their intended taraet aroups
- Contribute to a culture of co-creation from the grassroots level to design and deliver programmes and solutions to drive change in perspectives, attitudes and behaviours

# Caregiving – how to care for the caregivers?

In our ageing world, the need for caregiving grows. From aiding with simple tasks, such as cooking meals and shopping, to assisting with activities of daily living, such as bathing, dressing and eating, caregivers have a more vital role in societies than ever before. Yet population ageing is outpacing the growth of paid caregivers, pointing toward a caregiving crisis. Many families cannot afford professional care, and for those who can, the low pay and mental stress of the job, coupled with parttime work and temporary assignments, have made it difficult to recruit and retain paid caregivers. This leaves much of the care of older people to unpaid family members, who experience job and income interruptions as a result. In the United States alone, family caregivers lose an estimated \$522 billion in wages each year, 103 with the estimated economic value of this unpaid care at \$600 billion annually. 104

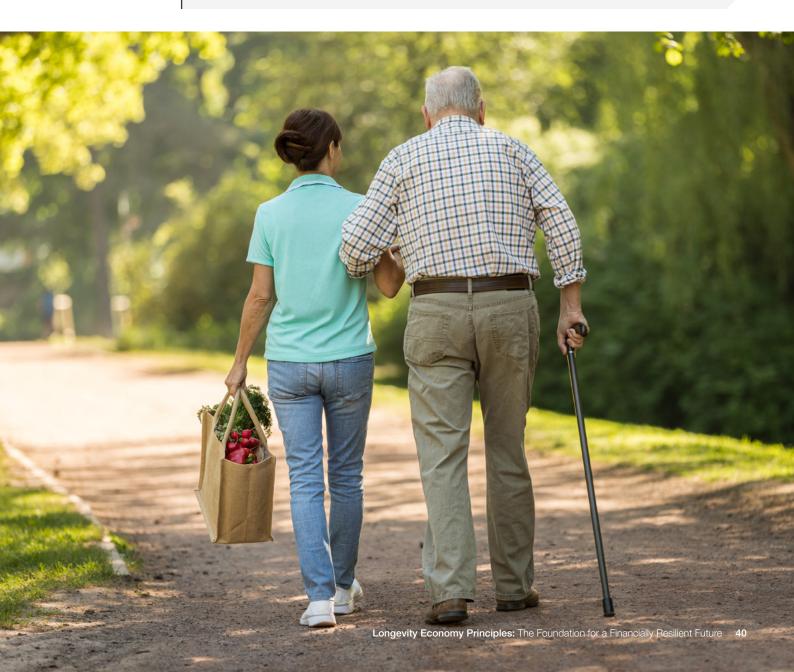
Although more men are assuming the role of carers, all over the world, it is still women who primarily care for older family members. 105

Providing unpaid care compounds the financial and retirement security challenges women face of earning less and living longer, which is particularly acute for women of colour.

Recognizing this convergence of factors – and taking steps to address challenges and improve access to resources – is crucial to ensuring caregivers across all generations can meet their own needs while meeting the needs of others. Governments and employers need to work towards implementing policies and services that can improve the burden on caregivers, including a pay supplement or allowance for family caregivers, tax breaks for out-of-pocket expenses and access to healthcare and retirement plans that can reduce caregiver financial and mental health stress and improve retirement readiness.

#### Joanne Moore

Vice-President of Thought Leadership and Strategic Content, Corebridge Financial



# Conclusion

The longevity economy principles outline a path towards a future where individuals can thrive throughout their longer lives. The collective roles played by governments, employers, civil society and individuals are critical in ensuring financial resilience can be equitably realized across society and across generations.

The goals of the public and private sectors are in strong alignment. The private sector is currently grappling with a talent shortage, magnified by demographic shifts. Meanwhile, the public sector is focused on driving overall economic growth, which requires the financial sustainability of its social services and public benefits; this entails fostering a society where individuals can be empowered to remain in the workforce as long as they are able and willing to do so. Both public and private sectors have a shared interest in supporting individuals in developing financial resilience as they age and facilitating more adaptable career paths to enable workforce engagement. Addressing this necessitates a concerted effort, with public-private collaboration, towards reskilling, combatting ageism, promoting healthy ageing and fostering social connectedness.

It is imperative to address inequalities. Society and economies are suffering from early exits from the workforce largely due to health or caregiving reasons; this is especially pronounced for women, who are more likely to leave the workforce to

care for others. Public and private sectors bear a shared responsibility to co-create systems that support the financial resilience of all individuals, especially those from traditionally disadvantaged backgrounds. In the context of an ageing society, inequality manifests in various dimensions, with the growing wealth and health disparity being a pressing concern, as inequalities in wealth are correlated with inequalities in lifespan. It is critical that the onus of action not be placed solely on the individual but on designing resilient systems that support them.

Everyone has a role to play. While the public and private sectors play a substantial part in developing the framework for financial resilience, it is critical that civil society and individuals themselves play key roles. Civil society organizations and advocates have a significant impact in ensuring that the community's voices and needs are represented in policy and programmes. Individuals must be empowered to play a central role in designing their own financial destiny and making decisions for their health, wealth and career.

Building a financially resilient society for a globally ageing population is a collective endeavour that requires collaboration alongside the public sector, private sector, civil society and individuals. All stakeholders can work together to build a future where all generations thrive, leading healthy lives with purpose, financial resilience and social connection.

# **Contributors**

#### World Economic Forum

#### Morgan Camp

Coordinator, World Economic Forum

#### Haleh Nazeri

Lead, Longevity Economy, World Economic Forum

#### Mercer

#### **Graham Pearce**

Senior Partner, Global Defined Benefit Segment Leader, Mercer

#### Lin Shi

Principal, Global Consulting, Mercer; Fellow, Longevity Economy, World Economic Forum

# Acknowledgements

The World Economic Forum would like to thank the following individuals for their active participation, guidance and thought leadership throughout this initiative.

## **Steering Committee**

#### Anne Ackerley

Head, Retirement Group, BlackRock

### Ramsey L. Alwin

President and Chief Executive Officer, National Council on Aging

#### Joseph Coughlin

Director, MIT AgeLab, Massachusetts Institute of Technology

#### Cynthia Hansen

Head, Innovation Foundation, The Adecco Group

#### Lukas Junker

Head, Global Center of Competence Life, Allianz

#### **Deland Kamanga**

Group Head, Wealth Management, BMO Financial Group

#### Charles-Antoine Laplante

Head, Finance and Strategy, Global Retirement, Manulife Financial

#### Wendy Liu

Chief Executive Officer, Zurich Integrated Benefits and International Life, Zurich Insurance Company

#### Liana Magner

Executive Vice-President, Institutional and Retirement Strategy, Natixis Investment Managers

#### Lisa Margeson

Managing Director, Retirement Research and Insights, Bank of America

#### Michael J. Morrissey

Chairman of the Board, Protective Life

#### Rich Nuzum

Executive Director, Investment and Global Chief Investment Strategist, Mercer

#### Tara Perkins

Managing Director, Head of Global Public Affairs, Canada Pension Plan Investment Board

#### Samuel Rhee

Co-Founder, Chairman and Chief Investment Officer, Endowus Singapore

#### **Annabel Spring**

Chief Executive Officer, Global Private Banking and Wealth, HSBC Holdings

#### Ken Stern

Chair, Longevity Project

## **Working Group**

#### Pablo Antolin

Principal Economist, Private Pension Unit, Organisation for Economic Co-operation and Development (OECD)

#### Chloe Barz

Director, International Government and External Affairs, Robinhood Markets

#### **KC Boas**

Head, Retirement Thought Leadership, BlackRock

#### Yan Chee Cheng

Managing Director, Mandatory Provident Fund Schemes Authority

#### Anne-Elise Chevillard

Head, Diversity and Inclusion, AXA France

#### Caroline Dabu

Senior Adviser, Wealth Management, **BMO** Financial Group

#### Martha Deevy

Associate Director and Senior Research Scholar, Stanford Centre on Longevity

#### Kevin Finney

Senior Vice-President, Consultant Relations, Natixis Investment Managers

#### **Catherine Foot**

Director, Phoenix Insights, Phoenix Group UK

#### Mark Glover

Global Head, Financial Planning, HSBC Holdings

#### Michael W. Hodin

Chief Executive Officer, Global Coalition on Aging

#### Lidia Lafoz

Research Data Analyst, Innovation Foundation, The Adecco Group

#### Mike Mansfield

Chief Executive Officer, ProAge

#### Marco La Marca

Cabinet Member, Demography & Democracy, European Commission

#### Paolo Marini

Global Head, Broker Relationship Management, Integrated Benefits, Zurich Insurance Company

#### JoAnne Moore

Vice-President, Thought Leadership and Strategic Content, Corebridge Financial

#### **Alwin Oerlemans**

Head, Product Management, APG Asset Management

#### **David Rabinowitz**

Principal, Deloitte Consulting

#### Rachel Snyderman

Director, Economic Policy, Bipartisan Policy Center

#### Alastair Baillie Strong

Global Head, Systematic Investing, Fidelity International

#### Toma Šutić

Cabinet Member, Demography and Democracy, European Commission

#### Lisenn Le Trécole

Head, Executive Office, AXA Life and Health International Solutions

#### **Emilie Vicente**

Foresight and Innovation Manager, AXA Sante & Collectives

#### Ashley Vogeli

Managing Director, Public Affairs and Communications, Canada Pension Plan Investment Board

#### Ninie Y. Wang

Founder and Chief Executive Officer, Pinetree Care Group

#### Additional thanks

#### **Brooke Lapointe**

Senior Associate, Global Retirement and Investments Program Manager, Mercer

#### Matt Strahan

Research and Analysis Specialist, World Economic Forum

#### Yuka Sumi

Medical Officer

#### Gog Soon Joo

Chief Skills Officer, SkillsFuture Singapore

### **Production**

#### Rose Chilvers

Designer, Studio Miko

#### Laurence Denmark

Creative Director, Studio Miko

#### Martha Howlett

Editor, Studio Miko

# **Endnotes**

- 1. Organisation for Economic Cooperation and Development (OECD) and International Network on Financial Education (INFE), OECD/INFE 2020 International Survey of Adult Financial Literacy, 2020, https://www.oecd.org/financial/education/ oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf.
- 2. Klapper, L. et al., Financial Literacy Around the World, The Standard & Poor's (S&P) Rating Services, https://gflec.org/wp-content/uploads/2015/11/Finlit\_paper\_16\_F2\_singles.pdf.
- 3. Garmany, A. et al., "Longevity Leap: Mind the Healthspan Gap", NPJ Regenerative Medicine, vol. 6(1), 2021, p. 57, https://www.nature.com/articles/s41536-021-00169-5.
- 4 UN Capital Development Fund, Why Financial Health Must be Treated as the True North to Augment the Success of Financial Inclusion, 26 July 2022, https://www.uncdf.org/article/7883/why-financial-health-must-be-treated-as-the-truenorth-to-augment-the-success-of-financial-inclusion.
- 5. McKinsey Health Institute, Age is Just a Number: How Older Adults View Healthy Aging, 22 May 2023, https://www.mckinsey.com/mhi/our-insights/age-is-just-a-number-how-older-adults-view-healthy-aging.
- 6. World Health Organization (WHO) Ageing and Health, 1 October 2022, https://www.who.int/news-room/fact-sheets/ detail/ageing-and-health.
- S&P Global, Global Aging 2023, 18 January 2023, https://www.spglobal.com/ratings/en/research/articles/230118-7. executive-summary-global-aging-2023-12586530.
- World Economic Forum, Investing in (and for) Our Future, 2019, https://www3.weforum.org/docs/WEF\_Investing\_in\_our\_ 8. Future report 2019.pdf.
- 9. World Bank, Poverty and Shared Prosperity, 2022, https://www.worldbank.org/en/publication/poverty-and-shared-prosperity.
- OECD and INFE, 2020. 10.
- 11. World Bank, The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19, 2021, https://www.worldbank.org/en/publication/globalfindex.
- Sturgeon, J.A. et al, "The Psychosocial Context of Financial Stress: Implications for Inflammation and Psychological 12. Health", Psychosomatic Medicine, vol. 78(2), 2016, pp. 134-143, https://journals.lww.com/psychosomaticmedicine/ abstract/2016/02000/the psychosocial context of financial stress .3.aspx.
- 13. Gallup, Americans' Financial Worries Tick up in Past Year, 9 May 2022, https://news.gallup.com/poll/392432/americansfinancial-worries-tick-past-year.aspx.
- 14. PwC, 2022 PwC Employee Financial Wellness Survey, 2022, https://www.pwc.com/us/en/services/consulting/businesstransformation/library/assets/pwc-2022-employee-financial-wellness-survey-results.pdf.
- Salary Finance, The Employer's Guide to Financial Wellness 2019, 2019, https://resources.salaryfinance.com/hubfs/ 15. Campaigns/USGuide19/Employers Guide to Financial Wellness 2019 Salary Finance.pdf?utm campaign=USGuide19.
- 16. S&P Global, 2023.
- 17. Social Progress Imperative, Global Index 2022: Overview, 2022, https://www.socialprogress.org/global-index-2022overview/.
- 18. Riigiiportaal, Shared Parental Benefit and Parental Leave, 12 August 2022, https://www.eesti.ee/en/family/benefits-andallowances/shared-parental-benefit-and-parental-leave.
- 19. E-Estonia, E-Identity, https://e-estonia.com/solutions/e-identity/id-card/.
- UK National Savings and Investments, *Premium Bonds*, <a href="https://www.nsandi.com/products/premium-bonds">https://www.nsandi.com/products/premium-bonds</a>. 20.
- 21. Dizon, F. and Lybbert, T.J., "Leveraging the Lottery for Financial Inclusion: Lotto-linked Savings Accounts in Haiti", Economic Development Cultural Change, vol. 69 (4), 2021, https://www.journals.uchicago.edu/doi/10.1086/705681.
- 22. United Nations, Universal Declaration of Human Rights, 10 December 1948, https://www.un.org/en/about-us/universaldeclaration-of-human-rights.
- 23. Kuhn, U., and Grabka, M., "Homeownership and Wealth in Switzerland and Germany", Social Dynamics in Swiss Society, vol. 9, 2018, pp. 175-185, https://link.springer.com/chapter/10.1007/978-3-319-89557-4\_12#Sec7.
- 24. Urban Institute, Enhancing Longevity and Well-Being for All Incomes, 1 August 2016, https://housingmatters.urban.org/ articles/enhancing-longevity-and-well-being-all-incomes.
- 25. Klapper, L. et al.
- 26. OECD/INFE, 2020.
- 27. Klapper, L. et al.
- 28. Salary Finance, Inside the Wallets of Working Americans, 2020, https://www.salaryfinance.com/us/inside-the-wallets-ofworking-americans/.
- 29. World Economic Forum, Living Longer, Better: Understanding Longevity Literacy, 8 June 2023, https://www.weforum.org/ <u>publications/living-longer-better-understanding-longevity-literacy.</u>

- 30. Kaiser, T. and Menkhoff, L., "Does Financial Education Impact Financial Literacy and Financial Behaviour, and If So, When?", The World Bank Economic Review, vol. 31(3), 2017, pp. 611-630. https://www.jstor.org/stable/48557255.
- 31. Money Sense, <a href="https://www.moneysense.gov.sg/">https://www.moneysense.gov.sg/</a>.
- 32. Sorted in Schools, https://sortedinschools.org.nz/.
- 33. Klapper, L. et al.
- 34. Pengeuge, <a href="https://pengeuge.dk/">https://pengeuge.dk/</a>.
- 35. Global Money Week, 2023 Denmark Global Money Week, https://globalmoneyweek.org/countries/155-denmark.
- 36. Zurich Insurance Group and Smith School of Enterprise and the Environment, Oxford University, Shaping a Brighter Future of Work, https://www.zurich.com/en/knowledge/industry-knowledge-platforms/oxford-smith-school.
- 37. Garmany, A. et al., 2021.
- WHO, 2022. 38
- 39. UN Capital Development Fund, 2022.
- 40. National Council on Aging, The Inequities in the Cost of Chronic Disease: Why It Matters for Older Adults, 21 April 2022,  $\underline{\text{https://www.ncoa.org/article/the-inequities-in-the-cost-of-chronic-disease-why-it-matters-for-older-adults.}$
- Honge Gong, C. and Kendig, H., "Impacts of voluntary and involuntary workforce transitions at mature ages: Longitudinal 41. evidence from HILDA", Australasian Journal on Ageing, vol. 37(1), 2018, pp. 11-1, https://onlinelibrary.wiley.com/ doi/10.1111/ajag.12468.
- 42. Integrated Benefits Institute, Full Cost Estimator (FCE), https://www.ibiweb.org/tools-analysis/full-cost-estimator.
- McKinsey & Company, Prioritizing Health: A Prescription for Prosperity, 8 July 2020, https://www.mckinsey.com/industries/ 43. healthcare/our-insights/prioritizing-health-a-prescription-for-prosperity.
- 44. WHO, UN Decade of Healthy Ageing: Plan of Action 2021-2030, 2020, https://cdn.who.int/media/docs/default-source/ decade-of-healthy-ageing/decade-proposal-final-apr2020-en.pdf.
- 45. Amsterdam Smart City, Amstelhuis - Living Lab, 7 June 2016, https://amsterdamsmartcity.com/updates/project/ amstelhuis--living-lab.
- John Hancock, Vitality Health Review self-reported data (2021-2022) from registered John Hancock Vitality PLUS 46. members
- John Hancock, Vitality Health Check data (2021-2022) based on members that had a BMI response. 47.
- John Hancock, Vitality Health Check data (2021-2022) based on members that had a cholesterol response. 48.
- 49. John Hancock, Vitality Health Check data (2021-2022) based on members that had a BMI response.
- 50. Ihid
- SUNI-SEA Project, The Core Concept of SUNI-SEA, https://www.suni-sea.org/en/project/core-concept/. 51.
- 52. Roser, M. et al., Life Expectancy, Our World in Data, 2019, https://ourworldindata.org/life-expectancy.
- 53. Kaiser Family Foundation (KFF), What is Driving Widening Racial Disparities in Life Expectancy?, 23 May 2023, https://www.kff.org/racial-equity-and-health-policy/issue-brief/what-is-driving-widening-racial-disparities-in-life-expectancy/.
- 54. US Department of Health and Human Services, Social Determinants of Health, https://health.gov/healthypeople/priorityareas/social-determinants-health.
- 55. Rice University, Natural Disasters Widen Racial Wealth Gap, 20 August 2018, https://www.eurekalert.org/news-releases/460222.
- 56. USA Today, People of Colour Face Disproportionate Harm from Climate Change, EPA says, 2 September 2021, https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-https://www.usatoday.com/story/news/2021/09/02/epa-people-color-face-disproportionate-harm-climate-h change/5700723001/.
- 57. Deloitte, How Employers Can Spark a Movement to Help us Live Longer and Healthier Lives, 20 June 2023, https://www2.deloitte.com/xe/en/insights/industry/health-care/employers-aging-and-health.html.
- 58. Yahoo Finance, Health Care: Americans are Increasingly Delaying Medical Care Due to Cost, 24 May 2023, https://finance.yahoo.com/news/health-care-americans-delaying-medical-care-cost-fed-survey-182533109.html.
- National Council on Aging, The Inequities in the Cost of Chronic Disease: Why It Matters for Older Adults, 21 April 2022, 59. https://www.ncoa.org/article/the-inequities-in-the-cost-of-chronic-disease-why-it-matters-for-older-adults.
- 60. Centres for Disease Control and Prevention, Health and Economic Costs of Chronic Diseases, 23 March 2023, https://www.cdc.gov/chronicdisease/about/costs/index.htm.
- 61. Centre for Economic Policy Research, Population Ageing: Pension Policies Alone Will Not Prevent the Decline in the Relative Size of the Labour Force, 4 June 2018, https://cepr.org/voxeu/columns/population-ageing-pension-policies-alone-willnot-prevent-decline-relative-size.
- McKinsey Health Institute, 2023. 62.
- 63. United Nations Department of Economic and Social Affairs, 2022 Revision of World Population Prospects, 2022, https://population.un.org/wpp/.

- World Economic Forum, Future of Jobs Report 2023, 30 April 2023, https://www.weforum.org/publications/the-future-of-64 jobs-report-2023/.
- 65. Boston Consulting Group, Powering up a Post-Pandemic Rebound for MSMEs through Digital Transformation, 31 August 2022, https://www.bcg.com/publications/2022/powering-up-post-pandemic-rebound-for-msmes.
- 66. McKinsey Health Institute, 2023.
- 67. Skillsfuture, https://www.skillsfuture.gov.sg/.
- Singapore Ministry of Manpower and Workforce Singapore, Factsheet on WorkFro, 1 July 2016, https://www.mom.gov. 68. sg/~/media/mom/documents/employment-practices/workpro/factsheet-on-enhanced-workpro.pdf?la=en.
- Lee, H. et al., Tackling Involuntary Retirement in South Korea, Stanford Social Innovation Review, 2021, 69. https://ssir.org/articles/entry/tackling involuntary retirement in south korea.
- 70. SwissRe, Time to be Flexible and Curious - High Time to Start Reskilling, 25 November 2020, https://www.swissre.com/ institute/conferences/the-ageing-effect/time-to-be-flexible-and-curious-high-time-to-start-reskilling.html.
- García, J.L. et al., The Life-Cycle Benefits of an Influential Early Childhood Program (No. w22993), National Bureau of 71. Economic Research, 2017, https://www.nber.org/system/files/working\_papers/w22993.w22993.pdf.
- 72. Sparling, J. et al., Mental Health and Social Development Effects of the Abecedarian Approach, International Journal of Environmental Research and Public Health, vol. 18(13), 2021, p. 6997, https://www.mdpi.com/1660-4601/18/13/6997.
- Heckman, J.J., Skill Formation and the Economics of Investing in Disadvantaged Children, Science, vol. 312(5782), 2006, 73. pp. 1900-1902, https://jenni.uchicago.edu/papers/Heckman Science v312 2006.pdf.
- 74. Okuzono, S.S. et al., "Ikigai and Subsequent Health and Wellbeing Among Japanese Older Adults: Longitudinal Outcome-wide Analysis", The Lancet: Regional Health (Western Pacific), vol. 21, 2022, p. 100391, https://www.thelancet. com/journals/lanwpc/article/PIIS2666-6065(22)00010-4/fulltext.
- 75. McDaid, D. et al., "Making the Economic Case for Investing in Actions to Prevent and/or Tackle Loneliness: A Systematic Review", London School of Economics, 2017, https://www.lse.ac.uk/business/consulting/assets/documents/making-theeconomic-case-for-investing-in-actions-to-prevent-and-or-tackle-loneliness-a-systematic-review.pdf.
- 76. AARP, Medicare Spends More on Socially Isolated Older Adults, https://www.aarp.org/pri/topics/health/coverage-access/ medicare-spends-more-on-socially-isolated-older-adults.html.
- 77. Cigna Healthcare, The Business Case for Addressing Loneliness in the Workforce, https://newsroom.cigna.com/businesscase-addressing-loneliness-workforce.
- Browne, I., "Exploring Reverse Mentoring: "Win-win" Relationships in the Multi-Generational Workplace", International 78. Journal of Evidence Based Coaching and Mentoring, vol. S15, 2021, pp. 246-259, https://radar.brookes.ac.uk/radar/ items/1795163d-0ca9-4ca8-93b7-290f2a35797c/1/.
- AARP, Age Discrimination Continues to Hold Older Workers Back, 6 May 2021, https://www.aarp.org/pri/topics/work-79 finances-retirement/employers-workforce/older-workers-new-skills-covid-19-pandemic.html.
- 80. Centres for Disease Control and Prevention, Loneliness and Social Isolation Linked to Serious Health Conditions, 29 April 2021, <a href="https://www.cdc.gov/aging/publications/features/lonely-older-adults.html">https://www.cdc.gov/aging/publications/features/lonely-older-adults.html</a>.
- 81.
- 82. Zheng, Z. et al., "The Influence Mechanism of Community-built Environment on the Health of Older Adults: from the Perspective of Low-income Groups", BMC Geriatrics, vol. 22(1), 2022, p. 590, https://bmcgeriatr.biomedcentral.com/ articles/10.1186/s12877-022-03278-y.
- 83. Australian Local Government Association, Age-Friendly Built Environments, https://icma.org/sites/default/files/107241\_ Agefriendly built environment paper.pdf.
- 84. Saito, J. et al., Community-Based Care for Healthy Ageing: Lessons from Japan, Bulletin of the World Health Organization, vol. 97(8), 2019, pp. 570-574, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6653820/pdf/BLT.18.223057.pdf.
- 85. United Nations, World Population Prospects 2022, https://population.un.org/wpp/.
- 86. AgeWell Global, https://www.agewellglobal.com/.
- Grandmothers Consortium, <a href="https://www.grandmothersconsortium.org/">https://www.grandmothersconsortium.org/</a>. 87.
- 88. Reach One Touch One Ministries, Grannies Helping Grannies Across Borders, https://reachone-touchone.org/us/stories/ grandmothers-project-rotom.
- 89. OECD, Towards Improved Retirement Savings Outcomes for Women, OECD Publishing, Paris, 2021, https://www.oecdilibrary.org/finance-and-investment/towards-improved-retirement-savings-outcomes-for-women\_f7b48808-en.
- 90. Sharma, N. et al., "Gender Differences in Caregiving Among Family - Caregivers of People with Mental Illnesses", World  ${\it Journal of Psychiatry}, vol. \ 6(1), \ 2016, \ pp. \ 7-17, \ \underline{https://www.wjgnet.com/2220-3206/full/v6/i1/7.htm}.$
- National Council on Aging, Get the Facts on Older Americans, 12 December 2022, https://www.ncoa.org/article/get-the-91. facts-on-older-americans.
- 92. National Council on Aging, Inequity on Display in New Life Expectancy Estimates, 6 September 2022, https://www.ncoa.org/article/inequity-on-display-in-new-life-expectancy-estimates.
- KFF, 2023. 93.

- 94. Neumayer, E. and Plümper, T., "Inequalities of Income and Inequalities of Longevity: A Cross-Country Study", American Journal of Public Health, vol. 106(1), 2016, pp. 160-165, https://ajph.aphapublications.org/doi/full/10.2105/ AJPH.2015.302849.
- 95. Dahl, G.B. et al., Understanding the Rise in Life Expectancy Inequality, The Review of Economics and Statistics, 2021, https://direct.mit.edu/rest/article-abstract/doi/10.1162/rest\_a\_01148/108830/Understanding-the-Rise-in-Life-Expectance y?redirectedFrom=fulltext.
- 96. McKinsey Global Institute, COVID-19 and gender equality: Countering the regressive effects, 15 July 2020, https://www. mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-countering-the-regressive-effects.
- Business Commission to Tackle Inequality and World Business Council for Sustainable Development, Tackling inequality: 97. An Agenda for Business Action, 3 May 2023, https://www.wbcsd.org/Imperatives/Equity-Action/News/BCTI-Tackling-Inequality-Report.
- 98. Schwartz Centre for Economic Policy Analysis, Reducing the Unequal Burden of Unpaid Eldercare Work, 3 May 2023, https://www.economicpolicyresearch.org/resource-library/research/reducing-the-unequal-burden-of-unpaid-eldercare-work.
- US Government Accountability Office, Retirement Security: Other Countries' Experiences with Caregiver Policies, 99. 30 September 2020, https://www.gao.gov/products/gao-20-623.
- Jankowski, J., "Caregiver Credits in France, Germany, and Sweden: Lessons for the United States", Social Security 100. Bulletin, vol. 71(4), 2011, pp. 61-76, https://www.ssa.gov/policy/docs/ssb/v71n4/v71n4p61.pdf.
- 101. Coventry City Council, Coventry: A Marmot City, https://www.coventry.gov.uk/coventry-marmot-city-1/coventry-marmot-city.
- 102. Unilever, Creating the Future Workplace, https://www.unilever.com/planet-and-society/future-of-work/future-workplace/.
- 103. National Alliance for Caregiving, This Week in Caregiving, January 2022, https://www.caregiving.org/this-week-in-caregiving/.
- AARP Public Policy Institute, Valuing the Invaluable 2023 Update, 8 March 2023, https://www.aarp.org/ppi/info-2015/ 104. valuing-the-invaluable-2015-update.html.
- 105. Sharma, N. et al., 2016.



#### COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

### World Economic Forum

91–93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0) 22 869 1212 Fax: +41 (0) 22 786 2744 contact@weforum.org www.weforum.org