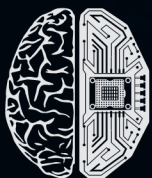


# Longevity Governance Industry Analytical Framework



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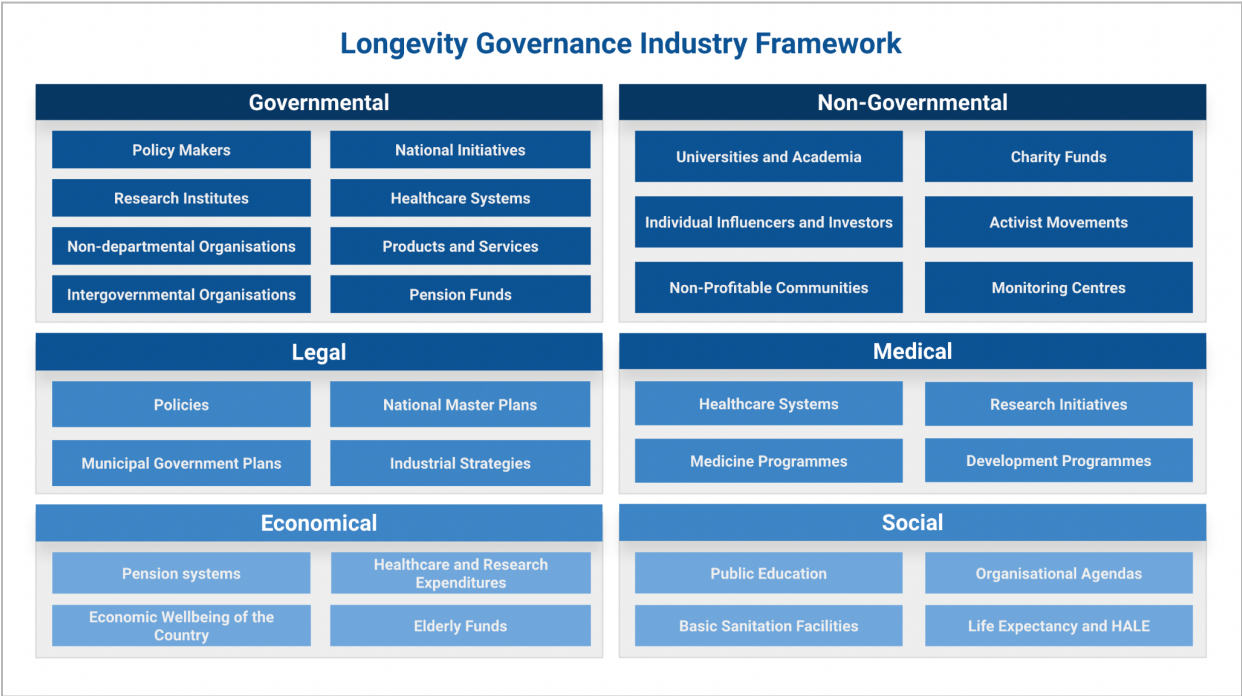
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# Introduction

The Longevity-focused analytical subsidiary of [Deep Knowledge Group](#) (DKG), [Aging Analytics Agency](#), in partnership with the DKG [AI and Data Science Division](#) has released a [Longevity Governance Industry Framework](#) evaluating the progress of national governments in advancing healthy Longevity. The framework's main goal is to assess how national governments are addressing the challenges and opportunities associated with an aging population and promoting healthy aging and Longevity.



## [Longevity Governance Industry Analytical Framework](#)

The framework considers a range of factors and indicators, including policy and regulatory frameworks, funding and investment in research and development, healthcare and social support systems, and societal attitudes and behaviors towards aging and Longevity. The framework also takes into account the specific challenges faced by different demographic groups, such as women, ethnic minorities, and low-income populations.

Over the last few years, the global megatrend of Longevity Industrialisation has made significant progress towards the goal of prolonging Healthy Human Longevity. Major national governments have declared aging populations to be one of their most pressing

strategic concerns and are openly pledging to improve National Healthy Longevity. In addition, the growth of municipal Longevity industrial policies, the formation of dedicated Longevity legislative groups, and the concept of Longevity entering the mainstream political arena have all contributed to the rise of the Longevity Industry. Longevity Governance aims not only to solve the challenges of aging but also to support and develop the massive socioeconomic opportunities of the Longevity Industry.

The process of healthy aging implies that all sectors share a common goal: to build and maintain functional ability, and an older person’s environment is critical for this. Governments guarantee that specific approaches are appropriate to local populations by using the needs and preferences of older people as a starting point for building age-friendly environments, rather than looking just at a service or adopting a supply-side attitude.

## Longevity Governance Big Data Analytics System and Dashboard

Longevity Governance Big Data Analytics System and Dashboard is designed to support, monitor, analyze, benchmark and forecast governmental decision making and population health optimization, and to compare best practices in Longevity Governance and the most progressive national healthcare systems.



[Longevity Governance Big Data Analytics System and Dashboard](#)

The Dashboard reveals key insights on e-governance solutions and synergies with Longevity Industrialization, AI in Healthcare, Preventive Medicine and other tech-driven drivers and enablers of technocratic national healthcare policy modernization.

**Key Parameters of Longevity Governance Big Data Analytics System and Dashboard**



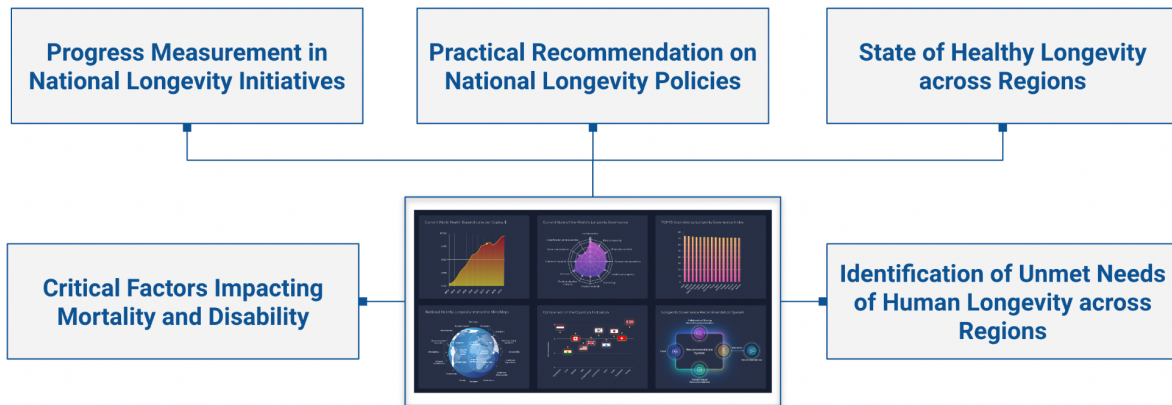
[Longevity Governance Big Data Analytics System and Dashboard](#)

Longevity Governance Big Data Analytics Dashboard enables access to continuous monitoring of the specific governmental policy activities directly impacting both National Healthy Longevity and Longevity Industrialization, and to consistently track and analyze data points related to government-led Longevity development initiatives.

It serves as an end-to-end analytical solution designed to provide dynamic data about main indicators related to Longevity across regions worldwide.

## Focus Areas of Longevity Governance Big Data Analytics System and Dashboard

Longevity Governance Big Data Analytics System and Dashboard serves as end-to-end analytical solution designed to provide dynamic data about main indicators related to longevity across regions worldwide.

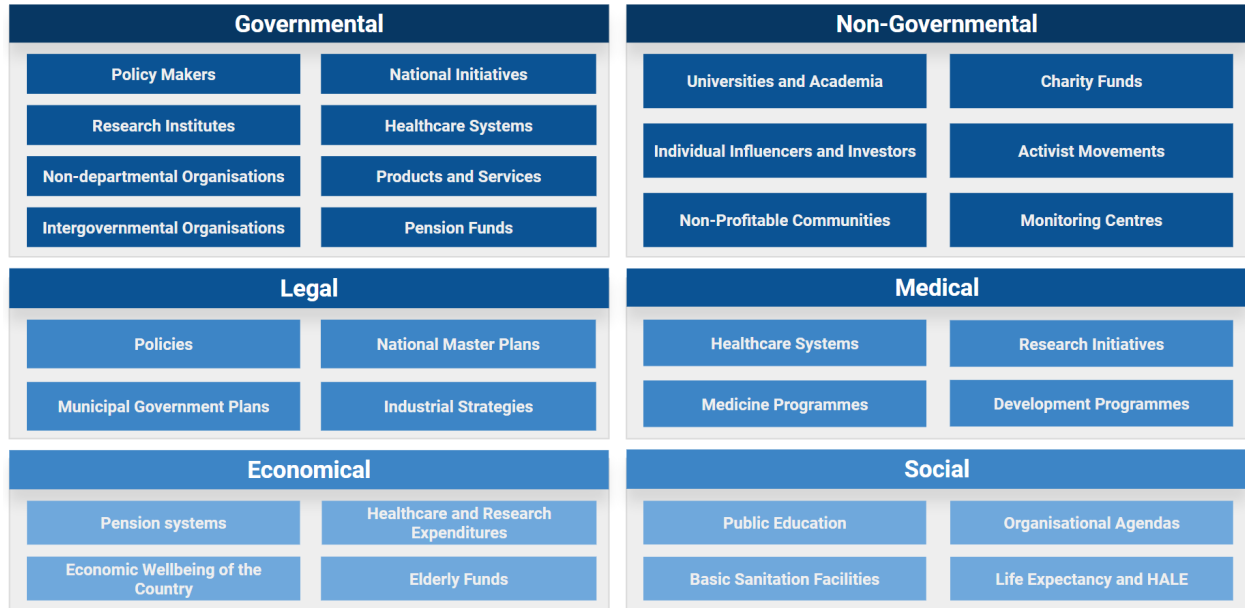


### [Longevity Governance Big Data Analytics System and Dashboard](#)

Key tools and solutions provided by the Dashboard:

- The Longevity Governance Dashboard delivers access to continuous monitoring of the specific governmental policy activities directly impacting both National Healthy Longevity and Longevity Industrialization, and to consistently track and analyze data points related to government-led Longevity Development initiatives.
- Applies big data analysis to identify social policy, healthcare, medical, financial and socioeconomic factors with the greatest effect on the gap between life expectancy and Health-Adjusted Life Expectancy (HALE) for 180+ countries.
- Identifies factors and practices behind regions' success in maintaining high National Healthy Longevity and a low gap between HALE and Life Expectancy
- Provides tangible and practical recommendations tuned to the specifics of individual countries, providing the necessary set of tools to allow countries currently leading the international Healthy Longevity race to maintain and improve their current standing.
- Features region-specific recommendation packs to enable governments currently lagging behind others to reduce their HALE gap and improve their comparative global standing, transforming the deficit and challenge of the silver tsunami into the asset and opportunity of Healthy Longevity for the mutual benefit of their citizens and their economy.

# Longevity Governance Industry Analytical Framework



Above are shown the main segments and subsectors that comprise the Longevity Governance industry Analytical Framework. These are documented in the next chapter, **Longevity Governance Industry Analytical Framework: Main Segments.**

The Longevity Governance Industry Framework is a comprehensive framework designed to evaluate how national governments are addressing the challenges and opportunities associated with aging populations and promoting healthy aging and Longevity. The framework is based on the understanding that the aging population presents significant challenges to societies, including increased healthcare costs, changes in workforce participation, and changes in social structures.

The framework aims to assess how national governments are responding to these challenges and opportunities by evaluating policies, programs, and initiatives related to healthy aging and Longevity. It examines factors such as healthcare, social care, employment and income security, research and development, and community engagement.



# Longevity Governance Industry Analytical Framework: Main Segments

## Governmental

The Governmental segment of the Longevity Governance Industry Framework is focused on providing services and solutions that promote the health and well-being of citizens as they age. As the global population continues to age, the need for effective and sustainable policies and programs that support healthy aging has become increasingly urgent. This segment encompasses a diverse range of initiatives and programs, including healthcare policies, research funding, and regulatory frameworks. Some key features and benefits of the Governmental segment include:

- Healthcare policies that support the development and delivery of healthcare services for aging populations, including policies related to Medicare and Medicaid, long-term care, and senior living.
- Research funding for studies that focus on the biological, social, and environmental factors that contribute to healthy aging. This includes funding for clinical trials, basic research, and translational studies that aim to develop new therapies and treatments for age-related diseases.
- Regulatory frameworks that ensure the safety and efficacy of therapies and treatments for age-related diseases, as well as guidelines for the use of medical technologies that support healthy aging.
- Collaboration with academic institutions, private sector organizations, and other government agencies to develop new services and solutions that support healthy aging.
- Public education campaigns and outreach initiatives that raise awareness about healthy aging and the importance of preventive care.

Overall, the Governmental segment plays a critical role in promoting the health and well-being of aging populations. By providing policies, funding, regulatory frameworks, and collaboration opportunities, this segment helps to ensure that citizens can age with dignity and independence while maintaining their quality of life. In order to address the challenges of aging populations, it is crucial for governments and other stakeholders to prioritize investment in the Governmental segment of the Longevity Governance Industry Framework.

## Policy Makers

As a part of the Governmental segment of the Global Longevity Governance Industry, Policy Makers play a critical role in shaping the regulatory and policy environment for Longevity-related research, development, and innovation. Here are some key features and benefits of Policy Makers in this industry:

- Development of policies and regulations that support the growth and development of Longevity-related research and innovation, including funding programs and tax incentives for companies and organizations working in this space.
- Collaboration with other government agencies, industry stakeholders, and researchers to develop evidence-based policies and regulations that balance innovation with safety and ethical considerations.
- Oversight of research and development activities to ensure that they are conducted in an ethical and responsible manner, with appropriate consideration for the potential risks and benefits of new technologies and interventions.
- Promotion of public awareness and understanding of Longevity-related research and innovation, including education and outreach programs to inform the public about the potential benefits and risks of new technologies and interventions.

## National Initiatives

National Initiatives are a critical part of the Governmental segment of the Global Longevity Governance Industry, as they play a key role in developing and implementing policies and programs that promote healthy aging and support the development of effective and sustainable Longevity solutions. Some key features and benefits of National Initiatives in this segment include:

- Development and implementation of national strategies and action plans to promote healthy aging and Longevity.
- Funding for research and development of innovative Longevity solutions.
- Support for the development and implementation of healthcare systems and services that meet the unique needs of aging populations.
- Promotion of collaboration between industry stakeholders, researchers, and government agencies to drive innovation and economic growth in the Longevity field.
- Implementation of policies and programs that promote equity and access to Longevity solutions for all citizens.

- Development of comprehensive policies and programs that address the social, economic, and environmental factors that affect healthy aging.

## Research Institutes

The Research Institutes subsegment of the Governmental segment of the Global Longevity Governance Industry is focused on conducting research and development activities related to aging, Longevity, and related fields. These institutes collaborate with government agencies, academic institutions, and private companies to advance scientific knowledge and develop innovative solutions for aging populations. Here are some of the key features and benefits of Research Institutes in this subsector:

- Basic and applied research on aging, Longevity, and related fields, including the development of new therapies and interventions to promote healthy aging.
- Collaboration with other organizations, such as government agencies and private companies, to advance scientific knowledge and develop innovative solutions for aging populations.
- Funding for academic research and education programs to train the next generation of researchers in aging-related fields.
- Partnership with industry to translate scientific discoveries into commercial products and services that improve the quality of life of older adults.
- Development of international research networks to promote collaboration and knowledge sharing across borders and disciplines.

## Healthcare Systems

The Healthcare Systems subsector of the Governmental segment of the Global Longevity Governance Industry focuses on providing healthcare services and support to promote healthy aging and prevent age-related diseases. These systems encompass a wide range of services, from preventative care to treatment and rehabilitation, and are essential in ensuring the wellbeing and quality of life of older adults. Here are some of the key features and benefits of the Healthcare Systems subsector:

- Preventative care services, including health screenings, vaccinations, and lifestyle counseling, to promote healthy aging and prevent age-related diseases.
- Treatment and management of chronic conditions that are more common in older adults, such as diabetes, cardiovascular disease, and osteoporosis.
- Rehabilitation services to support recovery from illness, injury, or surgery, and to promote functional independence and mobility.

- Palliative care and end-of-life care services to provide comfort and support for older adults and their families during the final stages of life.
- Collaboration with research institutions and other organizations to develop and implement evidence-based practices and interventions to improve the health and wellbeing of older adults.

## Non-Departmental Organizations

The Non-Departmental Organizations (NDOs) segment of the Governmental sector in the Global Longevity Governance Industry Framework focuses on promoting Longevity research and advocating for policies that support healthy aging. These organizations are typically non-profit and non-governmental, and they play a critical role in bringing together stakeholders from different sectors to collaborate on issues related to Longevity. Here are some key features and benefits of NDOs in the Global Longevity Governance Industry:

- Research and advocacy for policies that support healthy aging: NDOs promote research and development in the field of Longevity and advocate for policies that support healthy aging, such as disease prevention and access to healthcare.
- Collaboration with other organizations: NDOs work with other organizations in the Longevity industry, including government agencies, research institutions, and healthcare providers, to advance their mission.
- Fundraising for Longevity research: NDOs often raise funds to support research and development in the field of Longevity, including basic research into the mechanisms of aging and applied research into interventions to promote healthy aging.

## Products and Services

The Products and Services subsector of the Governmental segment of the Global Longevity Governance Industry is focused on developing and delivering a wide range of products and services that support the health and wellbeing of aging populations. Here are some of the key features and benefits of companies in this subsector:

- Development of innovative and effective products and services that address the unique needs and challenges of aging populations, including:
- Healthcare products and devices, such as mobility aids, hearing aids, and medical monitoring devices.

- Wellness and lifestyle products, such as nutritional supplements, fitness equipment, and personal care products.
- Home and community-based services, such as home healthcare, transportation, and social support services.
- Collaborative partnerships with healthcare providers, research institutions, and other stakeholders to develop and promote best practices in aging-related care and support.
- Access to government funding and support for research and development of new products and services, as well as for the delivery of care and support to aging populations.

## Intergovernmental Organizations

The Intergovernmental Organizations (IGOs) subsegment of the Governmental segment of the Global Longevity Governance Industry is focused on developing and implementing policies, programs, and initiatives that promote and support healthy aging, Longevity, and the well-being of older adults. These organizations are typically comprised of member countries and work collaboratively to address common issues related to aging and Longevity. Here are some of the key features and benefits of organizations in this subsegment:

- Development of global policies and frameworks to promote healthy aging and Longevity.
- Facilitation of international collaboration and coordination to address common issues related to aging and Longevity.
- Promotion of research and development in the field of aging and Longevity, including the dissemination of best practices and evidence-based interventions.
- Provision of technical assistance and capacity building to member countries to support the implementation of policies and programs related to aging and Longevity.
- Advocacy and promotion of the rights and well-being of older adults, including the prevention of age discrimination and the promotion of social inclusion and participation

## Pension Funds

The Pension Funds subsegment of the Governmental segment of the Global Longevity Governance Industry is focused on providing financial support for older adults during their retirement years. Pension funds are typically managed by private or public entities

and are funded through contributions from both employees and employers. Here are some key features and benefits of pension funds in this subsegment:

- Long-term investment strategies to ensure that funds are available to support future retirees.
- Diversified portfolios of investments in order to reduce risk and increase returns.
- Collaboration with government agencies and private companies to promote policies and regulations that support retirement security.
- Provision of retirement planning and financial education services to help individuals make informed decisions about their retirement savings.
- Active engagement with companies to encourage responsible corporate behavior and support long-term sustainability.
- Development of innovative financial products and services, such as annuities and retirement income funds, to meet the unique needs of retirees.

## Legal

The Legal segment of the Longevity Governance Industry Framework is focused on providing legal services and solutions that promote the health and well-being of citizens as they age. This segment plays a critical role in developing and implementing policies and regulations that support healthy aging and ensure the protection of older adults' rights. Here are some key features and benefits of the Legal segment:

- Development and implementation of policies and regulations that promote healthy aging and ensure the protection of older adults' rights. This includes policies related to age discrimination, elder abuse, and financial exploitation of seniors.
- Legal support for individuals and organizations involved in the development of products and services related to healthy aging. This includes support for the development of legal agreements, contracts, and intellectual property rights related to aging products and services.
- Legal advocacy for seniors' rights and access to healthcare services, including legal representation for seniors who face healthcare access challenges or other legal issues related to aging.
- Collaboration with government agencies, academic institutions, and private sector organizations to develop and implement legal frameworks that support healthy aging.

- Public education campaigns and outreach initiatives that raise awareness about legal issues related to healthy aging and the importance of protecting seniors' rights.

Overall, the Legal segment plays a crucial role in ensuring that policies and regulations support healthy aging and that older adults' rights are protected. By providing legal support and advocacy for seniors, this segment helps to ensure that aging populations can maintain their dignity and independence while accessing the resources and services they need. Investment in the Legal segment of the Longevity Governance Industry Framework is essential to address the legal challenges of aging populations effectively.

## Policies

The Policies subsegment of the Legal segment of the Global Longevity Governance Industry is focused on the development and implementation of policies that support healthy aging, Longevity, and the well-being of older adults. These policies are typically developed and implemented by national and local governments, but they can also be developed by intergovernmental organizations and other stakeholders. Here are some of the key features and benefits of policies in this subsegment:

- Development of policies and frameworks at the national and local levels that promote healthy aging and Longevity, including policies related to healthcare, social services, and workforce development.
- Collaboration with other stakeholders, including intergovernmental organizations and non-governmental organizations, to develop and implement policies related to aging and Longevity.
- Promotion of research and development in the field of aging and Longevity, including the dissemination of best practices and evidence-based interventions.
- Advocacy and promotion of the rights and well-being of older adults, including the prevention of age discrimination and the promotion of social inclusion and participation.

## National Master Plans

The National Master Plans subsegment of the Legal segment of the Global Longevity Governance Industry is focused on developing comprehensive plans and policies at the national level to address the challenges of aging and promote healthy Longevity. These plans and policies are designed to provide a coordinated and strategic approach to

addressing the needs of older adults, with a focus on ensuring access to high-quality care and services. Here are some of the key features and benefits of National Master Plans in this subsegment:

- Development of national policies and frameworks that promote healthy aging and Longevity.
- Coordination of efforts among different sectors and stakeholders to address the needs of older adults.
- Identification of key areas of focus, such as healthcare, social support, and housing, to ensure that comprehensive services are provided.
- Provision of guidance and resources to local governments, healthcare providers, and other stakeholders to implement policies and programs related to aging and Longevity.
- Promotion of research and development in the field of aging and Longevity to support evidence-based interventions.

## Municipal Government Plans

The Municipal Government Plans subsegment of the Legal segment in the Global Longevity Governance Industry is focused on creating policies and regulations at the local level that support healthy aging, Longevity, and the well-being of older adults. These plans are developed by municipalities and local government bodies and are designed to address the specific needs of their aging populations. Here are some of the key features and benefits of Municipal Government Plans in the Legal segment:

- Development of policies and regulations that are tailored to the specific needs and characteristics of local aging populations.
- Collaboration with local stakeholders, including healthcare providers, community organizations, and older adults themselves, to identify and address the unique challenges facing their communities.
- Provision of resources and funding to support the implementation of policies and programs related to aging and Longevity.
- Creation of age-friendly communities that promote social inclusion and participation, encourage physical activity and healthy behaviors, and provide access to appropriate services and resources.
- Advocacy and promotion of the rights and well-being of older adults, including the prevention of age discrimination and the promotion of social justice and equity.



## Industrial Strategies

The Industrial Strategies subsegment of the Legal segment of the Global Longevity Governance Industry focuses on developing and implementing strategies that promote and support healthy aging, Longevity, and the well-being of older adults. This subsegment is comprised of industries that are involved in the production, distribution, and commercialization of products and services that target aging populations. Here are some of the key features and benefits of organizations in this subsegment:

- Development of strategies and policies that encourage the development and commercialization of products and services that promote healthy aging and Longevity.
- Promotion of research and development in the field of aging and Longevity, including the development of new products and services, as well as the integration of technology and innovation.
- Provision of technical assistance and capacity building to companies and organizations to support the development and commercialization of products and services that target aging populations.
- Creation of partnerships and collaborations with other stakeholders, including governments, academic institutions, and non-governmental organizations, to promote healthy aging and Longevity.

## Economical

The Economical segment of the Longevity Governance Industry Framework is focused on promoting sustainable economic growth and development in the context of an aging population. As populations continue to age, there is a need for innovative economic policies and strategies that support productivity, entrepreneurship, and financial security for older adults. This segment encompasses a diverse range of initiatives and programs, including investment strategies, retirement planning, and workforce development. Some key features and benefits of the Economical segment include:

- Investment strategies that support the development and growth of businesses and industries that serve aging populations, including healthcare, housing, and technology.
- Retirement planning and pension systems that ensure financial security for older adults and promote long-term savings and investment.

- Workforce development programs that promote the retention and recruitment of older workers, as well as training and education programs that support career transitions and entrepreneurship.
- Collaboration with academic institutions, private sector organizations, and government agencies to develop new services and solutions that promote economic growth and development in the context of an aging population.
- Public education campaigns and outreach initiatives that raise awareness about the economic opportunities and challenges of an aging population.

Overall, the Economical segment plays a critical role in promoting sustainable economic growth and development in the context of an aging population. By providing investment strategies, retirement planning, workforce development, collaboration opportunities, and public education initiatives, this segment helps to ensure that older adults can contribute to and benefit from a thriving economy. In order to address the challenges and opportunities of an aging population, it is crucial for governments and other stakeholders to prioritize investment in the Economical segment of the Longevity Governance Industry Framework.

## Pension systems

The Pension systems subsegment of the Economical segment of the Global Longevity Governance Industry is focused on providing financial security to individuals as they age and retire. As the global population continues to age, the need for effective and sustainable pension systems has become increasingly urgent. This subsegment encompasses a diverse range of initiatives and programs, including:

- Development of sustainable and affordable pension systems that provide income security to individuals in their retirement years.
- Facilitation of international collaboration and coordination to address common issues related to pension systems, such as funding sustainability and population aging.
- Promotion of financial literacy and education for individuals to ensure they are able to make informed decisions regarding their retirement savings and income.
- Provision of technical assistance and capacity building to countries to support the implementation and improvement of pension systems.
- Advocacy and promotion of policies and programs that support retirement security for all individuals, including those in vulnerable or marginalized populations.

## Healthcare and Research Expenditures

The Healthcare and Research Expenditures subsegment of the Economical segment of the Global Longevity Governance Industry is focused on investing in healthcare and research to support healthy aging, Longevity, and the well-being of older adults. This subsegment includes both public and private expenditures that are dedicated to improving the health and well-being of aging populations. Here are some key features and benefits of the Healthcare and Research Expenditures subsegment:

- Increased funding for healthcare and research related to aging, including funding for clinical trials, basic research, and translational studies that aim to develop new therapies and treatments for age-related diseases.
- Investment in the development and delivery of healthcare services for aging populations, including policies related to Medicare and Medicaid, long-term care, and senior living.
- Collaboration with academic institutions, private sector organizations, and other government agencies to develop new services and solutions that support healthy aging.
- Creation of jobs and economic opportunities in the healthcare and research sectors, as well as in related industries such as pharmaceuticals and medical devices.

## Economic Wellbeing of the Country

The Economic Wellbeing of the Country subsegment of the Economical segment of the Global Longevity Governance Industry is focused on developing policies and strategies that promote economic growth and stability in the context of an aging population. As the world's population ages, there is a growing need for innovative solutions that support the financial well-being of individuals, businesses, and governments. Here are some of the key features and benefits of organizations in this subsegment:

- Development of policies and programs that support the economic wellbeing of aging populations, including social security, tax policies, and pension plans.
- Promotion of entrepreneurship and innovation in the aging sector, including the development of new technologies and services that support healthy aging and Longevity.
- Facilitation of public-private partnerships and collaborations to support research and development in the aging sector.

- Support for businesses and industries that serve aging populations, including healthcare, housing, and transportation.
- Development of training and education programs to support the growing workforce needs in the aging sector.

## Elderly Funds

The Elderly Funds sub-segment of the Economical segment of the Global Longevity Governance Industry is focused on providing financial assistance and support to older adults to promote their well-being and quality of life. These funds are typically established by governments, private organizations, or non-profits and are designed to help older adults meet their basic needs and maintain their independence as they age. Here are some key features and benefits of Elderly Funds:

- Financial assistance and support for basic needs such as housing, healthcare, and food, to improve the quality of life of older adults.
- Retirement plans and pension schemes to ensure financial security for older adults during their post-retirement years.
- Grants and loans for elderly entrepreneurs to support their business ventures and contribute to economic growth.
- Social programs and community activities to promote social engagement and reduce social isolation among older adults.
- Incentives and tax credits for employers to hire and retain older workers to promote their economic participation.
- Long-term care insurance and home care services to support the aging-in-place of older adults and alleviate the burden on family caregivers.

## Non-Governmental

The Non-Governmental segment of the Longevity Governance Industry Framework is focused on providing support and resources to aging populations through organizations that are independent of government control. This segment encompasses a wide range of non-profit and non-governmental organizations (NGOs) that are dedicated to improving the health and well-being of aging populations. Some key features and benefits of the Non-Governmental segment include:

- Advocacy for aging populations and their needs, including lobbying for policy changes and increased funding for programs that support healthy aging.

- Research funding for studies that focus on understanding the social, economic, and psychological factors that affect aging populations, as well as funding for research that develops new solutions and therapies for age-related diseases.
- Community-based programs that provide social support, education, and other resources to aging populations, including senior centers, caregiver support groups, and educational workshops.
- Collaboration with government agencies, academic institutions, and other NGOs to develop new initiatives and programs that support healthy aging.
- Outreach and education campaigns that raise awareness about the needs and challenges facing aging populations, as well as the importance of preventive care and healthy lifestyles.

Overall, the Non-Governmental segment plays a crucial role in promoting the health and well-being of aging populations. By providing advocacy, research funding, community-based programs, collaboration opportunities, and outreach and education campaigns, this segment helps to ensure that aging populations have access to the resources and support they need to maintain their quality of life. In order to address the challenges of aging populations, it is important for NGOs and other stakeholders to prioritize investment in the Non-Governmental segment of the Longevity Governance Industry Framework.

## Universities and Academia

The Universities and Academia subsegment of the Non-Governmental segment of the Global Longevity Governance Industry is focused on advancing research and education related to aging and Longevity. This subsegment includes universities, research institutes, and academic organizations that conduct research and provide education and training in fields related to aging, gerontology, and related disciplines. Here are some of the key features and benefits of organizations in this subsegment:

- Conducting research to advance knowledge on aging and Longevity, including the underlying biological mechanisms, social and economic implications, and interventions to promote healthy aging.
- Providing education and training programs for students, researchers, and healthcare professionals to improve their knowledge and skills in the field of aging and Longevity.
- Collaborating with other stakeholders in the Global Longevity Governance Industry to promote the development of policies and programs that support healthy aging and Longevity.

- Disseminating research findings and best practices to inform policy and practice in the field of aging and Longevity.

## Charity Funds

The Charity Funds subsegment of the Non-Governmental segment of the Global Longevity Governance Industry is focused on providing financial and social support for older adults who are in need. This subsegment includes a range of charitable organizations and foundations that raise and distribute funds to support programs and services that improve the well-being of older adults. Here are some of the key features and benefits of organizations in this subsegment:

- Raising funds through donations and other means to support programs and services that promote the well-being of older adults, such as healthcare, housing, and social services.
- Collaborating with other stakeholders in the Global Longevity Governance Industry to identify and address the most pressing needs of older adults, such as poverty, social isolation, and healthcare disparities.
- Distributing funds to community organizations and service providers that are working to improve the lives of older adults.
- Advocating for policies and programs that support the needs of older adults and address the root causes of social and economic inequality.

## Individual Influencers and Investors

The Individual Influencers and Investors subsegment of the Non-Governmental segment of the Global Longevity Governance Industry is focused on leveraging the expertise and resources of influential individuals and investors to advance research, innovation, and social impact related to aging and Longevity. Here are some of the key features of organizations and individuals in this subsegment:

- Investment in research and innovation related to aging and Longevity, such as funding for scientific research on aging or supporting the development of innovative products and services for older adults.
- Philanthropic support for programs and initiatives that improve the well-being of older adults, such as funding for healthcare, housing, and social services.
- Advocacy and promotion of policies and programs that support healthy aging and Longevity, including influencing public opinion and policy makers on issues related to aging and Longevity.

- Engagement with other stakeholders in the Global Longevity Governance Industry to promote collaboration and partnership, such as through joining or forming networks of influential individuals and investors in the field.

## Activist Movements

The Activist Movements subsegment of the Non-Governmental segment of the Global Longevity Governance Industry is focused on advocating for the rights, interests, and well-being of older adults through collective action, awareness-raising campaigns, and community organizing. Here are some of the key features and benefits of organizations and individuals in this subsegment:

- Raising public awareness about issues related to aging and Longevity, such as age discrimination, healthcare disparities, and social isolation.
- Advocating for policies and programs that promote healthy aging and address the root causes of social and economic inequality, such as affordable healthcare, housing, and social services.
- Organizing campaigns and initiatives that promote social inclusion and participation among older adults, such as intergenerational programs and community events.
- Mobilizing collective action and engagement to influence public opinion and policy makers on issues related to aging and Longevity.
- Building networks and partnerships with other stakeholders in the Global

## Non-Profitable Communities

The Non-Profitable Communities subsegment of the Non-Governmental segment of the Global Longevity Governance Industry is focused on creating and supporting grassroots communities and organizations that are dedicated to promoting healthy aging, social inclusion, and intergenerational connections. Here are some of the key features and benefits of organizations and individuals in this subsegment:

- Providing social support and connection for older adults, including through community events, group activities, and peer-to-peer support.
- Promoting healthy aging and wellness through programs and initiatives focused on physical fitness, nutrition, and mental health.
- Creating age-friendly environments and promoting intergenerational connections and community engagement.

- Advocating for policies and programs that support the needs and interests of older adults, such as affordable healthcare, housing, and social services.
- Mobilizing collective action and engagement to influence public opinion and policy makers on issues related to aging and Longevity.

## Monitoring Centers

The Monitoring Centres subsegment of the Non-Governmental segment focuses on analyzing data and monitoring the health and well-being of older adults. These centers work collaboratively to identify trends and emerging issues related to aging and Longevity, and provide evidence-based recommendations to inform policies and programs. Here are some of the key features and benefits of organizations in this subsegment:

- Collecting and analyzing data related to aging and Longevity to identify trends, patterns, and emerging issues.
- Providing evidence-based recommendations to inform policies and programs related to healthy aging and Longevity.
- Monitoring the health and well-being of older adults to identify and address issues related to healthcare, social isolation, and economic insecurity.
- Promoting interdisciplinary research and collaboration to advance knowledge and understanding of aging and Longevity.
- Building networks and partnerships with other stakeholders in the Global Longevity Governance Industry to promote collaboration, knowledge sharing, and collective impact.

## Medical

The Medical segment of the Longevity Governance Industry Framework is focused on providing healthcare services and products that support healthy aging and help to prevent and treat age-related diseases. As the global population continues to age, the demand for medical interventions that promote healthy aging has become increasingly urgent. This segment encompasses a diverse range of medical specialties and products, including geriatrics, neurology, cardiology, and regenerative medicine. Some key features and benefits of the Medical segment include:

- Geriatric medicine and care that specializes in the unique health needs of aging populations, including the prevention and treatment of age-related diseases, management of chronic conditions, and end-of-life care.



- Neurological care that focuses on the prevention and treatment of age-related cognitive decline and dementia, as well as the management of neurological disorders such as Parkinson's and Alzheimer's.
- Cardiovascular care that addresses the prevention and treatment of age-related cardiovascular diseases, such as hypertension, heart failure, and coronary artery disease.
- Regenerative medicine that aims to develop new therapies and treatments that can repair or replace damaged tissues and organs, potentially reversing the effects of aging and age-related diseases.
- Medical devices and technologies that support healthy aging and improve quality of life, such as hearing aids, mobility aids, and remote monitoring devices.

Overall, the Medical segment plays a critical role in promoting the health and well-being of aging populations. By providing specialized care, new therapies and treatments, and medical devices and technologies, this segment helps to ensure that aging populations can maintain their quality of life and independence as they age. In order to address the challenges of aging populations, it is crucial for stakeholders in the Medical segment to prioritize investment in research, development, and access to medical interventions that support healthy aging.

## Healthcare Systems

The Healthcare Systems subsegment of the Medical segment of the Global Longevity Governance Industry is focused on ensuring access to quality healthcare for older adults. These systems provide medical care, preventive services, and social support to help older adults maintain their health and well-being. Here are some of the key features and benefits of healthcare systems in this subsegment:

- Providing access to quality healthcare services, including medical care, preventive services, and social support.
- Ensuring that healthcare systems are equipped to meet the unique needs and challenges of older adults, such as chronic conditions and disabilities.
- Developing and implementing policies and programs to promote healthy aging and prevent disease and disability.
- Investing in research and innovation to improve the quality and effectiveness of healthcare services for older adults.
- Promoting collaboration and partnerships among healthcare providers, governments, and other stakeholders to ensure the delivery of comprehensive, integrated, and person-centered care for older adults.

## Research Initiatives

The Research Initiatives subsegment of the Medical segment of the Global Longevity Governance Industry is focused on advancing knowledge and understanding of aging and Longevity through scientific research. These initiatives support research in a variety of fields, including biology, genetics, epidemiology, and social sciences, to develop interventions that promote healthy aging and Longevity. Here are some of the key features and benefits of research initiatives in this subsegment:

- Supporting interdisciplinary research to advance knowledge and understanding of aging and Longevity.
- Promoting collaboration among researchers, institutions, and stakeholders to ensure that research is coordinated, efficient, and focused on addressing key questions.
- Investing in research infrastructure, such as data resources, biobanks, and clinical research networks, to support high-quality research.
- Developing and disseminating evidence-based interventions and best practices to promote healthy aging and Longevity.
- Advocating for policies and funding that support research on aging and Longevity.

## Medicine Programmes

The Medicine Programmes subsegment of the Medical segment of the Global Longevity Governance Industry is focused on the education and training of medical professionals to provide high-quality care for older adults. These programmes provide specialized training in geriatric medicine, palliative care, and other fields. Here are some of the key features and benefits of medicine programmes in this subsegment:

- Providing specialized training in geriatric medicine, palliative care, and other fields to healthcare providers to ensure that they are equipped to meet the unique needs of older adults.
- Developing and implementing curriculum and training standards for medical professionals to ensure that they receive comprehensive and up-to-date training in aging and Longevity.
- Promoting interdisciplinary training to ensure that medical professionals have a broad understanding of the medical, social, and environmental factors that impact aging and Longevity.

- Supporting continuing education and professional development for medical professionals to ensure that they stay current on the latest research and clinical practice guidelines related to aging and Longevity.

## Development Programmes

The Development Programmes subsegment of the Medical segment of the Global Longevity Governance Industry is focused on developing and implementing policies, programs, and initiatives to promote research and development in the field of aging and Longevity. Here are some of the key features and benefits of programs in this subsegment:

- Facilitation of research and development in the field of aging and Longevity, including the dissemination of best practices and evidence-based interventions.
- Provision of funding and technical assistance to support research and development in the field of aging and Longevity.
- Development of new technologies and interventions to promote healthy aging and Longevity.
- Promotion of collaboration and coordination between researchers, institutions, and organizations to address common issues related to aging and Longevity.
- Promotion of knowledge sharing and capacity building among researchers, institutions, and organizations to enhance research and development in the field of aging and Longevity.

## Social

The Social segment of the Longevity Governance Industry Framework is focused on addressing the social determinants of health and promoting social inclusion and engagement for aging populations. This segment recognizes that social factors such as income, education, and social support networks have a significant impact on the health and well-being of aging populations. Some key features and benefits of the Social segment include:

- Community-based programs that provide social support, education, and other resources to aging populations, including senior centers, caregiver support groups, and educational workshops.
- Housing and transportation policies that support aging in place and enable access to essential services and community resources.

- Workforce development programs that provide training and employment opportunities for older workers, enabling them to remain active and engaged in the workforce.
- Civic engagement initiatives that encourage participation in political and social activities, enabling aging populations to have a voice in shaping policies that affect their lives.
- Intergenerational programs that promote social connections and understanding between generations, such as mentoring programs and intergenerational housing.

Overall, the Social segment plays a critical role in promoting the health and well-being of aging populations. By addressing the social determinants of health and promoting social inclusion and engagement, this segment helps to ensure that aging populations can maintain their quality of life and independence as they age. In order to address the challenges of aging populations, it is crucial for stakeholders in the Social segment to prioritize investment in community-based programs, housing and transportation policies, workforce development, civic engagement, and intergenerational programs.

## Public Education

The Public Education subsegment of the Social segment in the Global Longevity Governance Industry focuses on promoting public awareness and education on issues related to aging and Longevity. Public education is essential for the Global Longevity Governance Industry's efforts to promote healthy aging and ensure that older adults can live with dignity. Here are some of the key features and benefits of this subsegment:

- Development of public education programs and initiatives to raise awareness about healthy aging, disease prevention, and lifestyle modifications for older adults.
- Promotion of research and knowledge sharing on aging and Longevity-related issues to inform public policy and decision-making.
- Provision of technical assistance and capacity building to help communities and countries develop effective public education programs and initiatives.
- Advocacy and promotion of social inclusion and participation for older adults, to help combat ageism and promote intergenerational solidarity.
- Collaboration and coordination with other subsegments of the Global Longevity Governance Industry to address common issues

## Organizational Agendas

The Organizational Agendas subsegment of the Social segment in the Global Longevity Governance Industry is focused on promoting policies and initiatives that support healthy aging and the well-being of older adults in workplaces, communities, and other organizations. The Organizational Agendas subsegment promotes age-friendly initiatives in workplaces and communities, helping older adults to remain engaged. Here are some of the key features and benefits of this subsegment:

- Development of policies and initiatives that promote age-friendly workplaces, including flexible working arrangements, training and development opportunities, and accommodations for older workers.
- Promotion of community-based initiatives that support older adults' social inclusion and participation, including volunteer opportunities and intergenerational programs.
- Provision of technical assistance and capacity building to help organizations and communities develop age-friendly policies and programs.
- Advocacy and promotion of the rights and well-being of older adults in organizations and communities, including the prevention of age discrimination and the promotion of intergenerational solidarity.

## Basic Sanitation Facilities

The Basic Sanitation Facilities subsegment of the Social segment in the Global Longevity Governance Industry is focused on promoting access to clean and safe sanitation facilities, which is essential for maintaining good health and well-being in older adults. Here are some of the key features and benefits of this subsegment:

- Promotion of policies and programs to improve access to basic sanitation facilities, such as toilets, waste management systems, and clean water.
- Provision of technical assistance and capacity building to help communities and countries improve their basic sanitation infrastructure.
- Advocacy and promotion of the importance of basic sanitation facilities for healthy aging and Longevity.
- Development of innovative solutions and technologies to improve access to basic sanitation facilities, especially in low-resource settings.
- Collaboration and coordination with other subsegments of the Global Longevity Governance Industry to address common issues related to basic sanitation facilities and healthy aging.

## Life Expectancy and HALE

The Life Expectancy and HALE subsegment of the Social segment in the Global Longevity Governance Industry is focused on improving the health and well-being of older adults by promoting policies and programs that increase life expectancy and healthy life years. Improving life expectancy and healthy life years is essential for achieving sustainable and equitable aging, which is a key goal of the Global Longevity Governance Industry. Here are some of the key features and benefits of this subsegment:

- Promotion of policies and programs to improve access to healthcare services and preventative care, which can help to increase life expectancy and healthy life years.
- Development of innovative solutions and technologies to improve healthcare delivery and management, especially for older adults.
- Provision of technical assistance and capacity building to help countries and communities improve their healthcare infrastructure and systems.
- Collaboration and coordination with other subsegments of the Global Longevity Governance Industry to address common issues related to life expectancy and healthy life years.

# Longevity Governance Industry Market Overview

## What is Longevity Governance?

**Healthy Longevity** is affected by many groups of factors such as: socioeconomic status, demography, income, wellbeing, the quality of the health system and the ability of people to access it, health behaviors such as tobacco and excessive alcohol consumption, poor nutrition and lack of exercise, social factors, genetic factors and environmental factors including overcrowded housing, lack of clean drinking water and adequate sanitation.

**Longevity** is becoming a topic of increasingly prominent recognition and prioritization among progressive governments, and the emergence in the past several years of Longevity Politics and Governance - a state in which the concept of optimized National Healthy Longevity becomes an actual political talking point and tangible goal among politicians and between national and municipal governments.

**Longevity** progressiveness is important for driving economic progress and competitiveness – both for developed and developing economies. Government has two roles in moving the Longevity industry forward: national initiatives such as social care, financial reforms, investment in biotechnologies and infrastructure for precision medicine ecosystems, and intergovernmental initiatives for marshaling the combined key technologies, resources and experts from nations around the world.

<b>Longevity Governance</b>	<b>Social Care</b>	<b>Industrial Strategies</b>	<b>Precision Health</b>
	<b>Advanced IT-Solutions</b>	<b>Financial Reforms</b>	<b>Modernization</b>

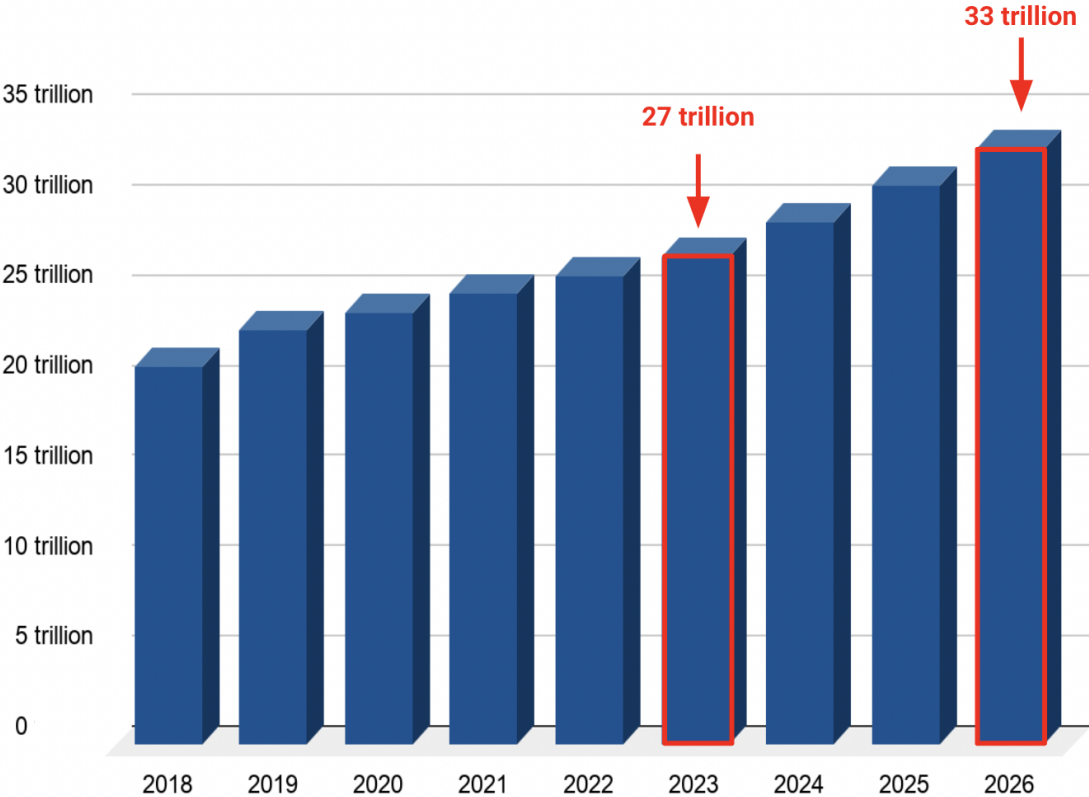
## Role of Longevity Governance in the Longevity Ecosystem

Not only does aging pose one of the most acute problems of our time - it also presents one of the most promising opportunities. Estimated at \$25 trillion in 2021, the global Longevity economy is growing steadily and expected to be worth \$33 trillion by 2026. By the most conservative estimates, it accounts for 20% of the global GDP. The Longevity Economy includes global healthcare spending affecting Longevity, the combined capitalization of publicly listed Longevity companies, the capitalization of

Longevity-related insurance and reinsurance companies, banks and pension funds and privately held Longevity companies.

Progress in Longevity is no longer simply a question of progress in Geroscience or advanced biomedicine. Progress is driven by the synergetic convergence of intersection of multiple distinct technological sectors and sub-sectors. The political conditions surrounding the Longevity sector are some of the most important factors on which its future depends.

### World Longevity Economy Size Projections, USD



### Longevity Governance vs. The Longevity Market

The Longevity market is not only limited to anti-aging applications of life sciences. It also includes some new sectors of the financial industry, as well as government projects (national Longevity development plans); hence, its overall size potentially exceeds \$25 trillion. As the majority of full-blown Longevity startups are quickly

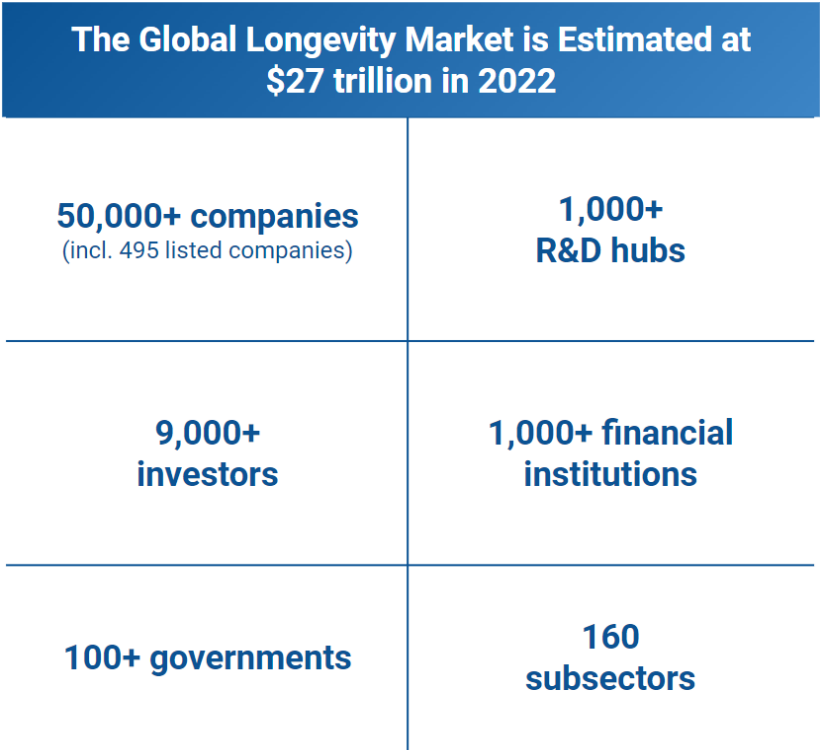


becoming mature companies, large institutional investors are making increasingly more investments into the industry and a full-fledged Longevity infrastructure is emerging.

There are at least 495 publicly traded corporations that can be considered part of the Longevity industry.

Longevity Biomedicine, FinTech, and AgeTech industries include 50,000+ companies, 9,000+ investors, 14 sectors, and 114 subsectors.

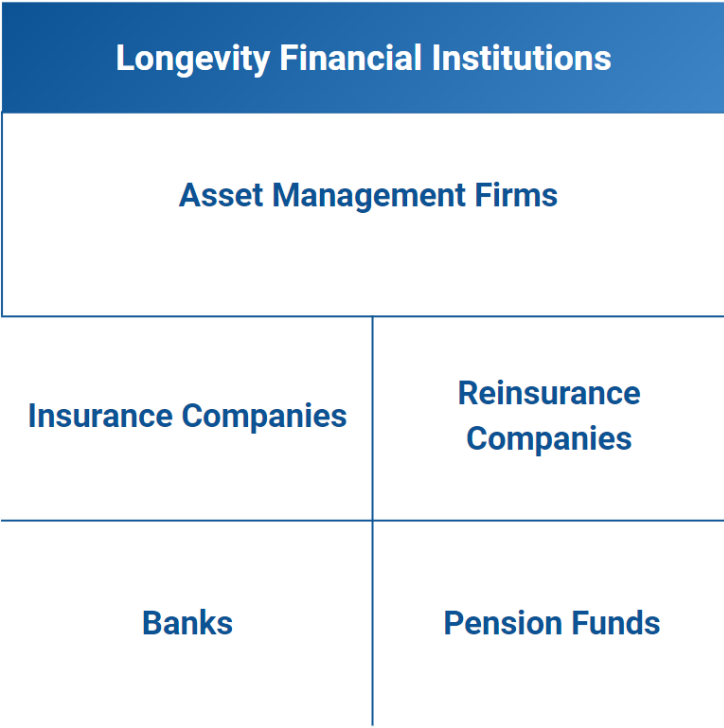
The Longevity Financial Industry includes 1,000+ corporations, 15 sectors, and 50 subsectors.



### Longevity Governance vs. Longevity Finance

Longevity has become a major focus of some of the largest financial institutions in the world, with many major institutional investors seeking opportunities to contribute to the development of the Longevity industry by investing in AgeTech, Longevity Fintech, Longevity Biomedical companies, and startups. Financial services innovators have an opportunity to enhance the financial lives of a billion people by designing new solutions, adapting existing products, such as Longevity-Enhanced Annuities (QLACs), Healthy

Lifestyle Bonuses Biological Age Based Insurance, Robo-Retirement, effectively de-risking the problem of Aging Population, and converting it into a source of growth and untapped market potential.



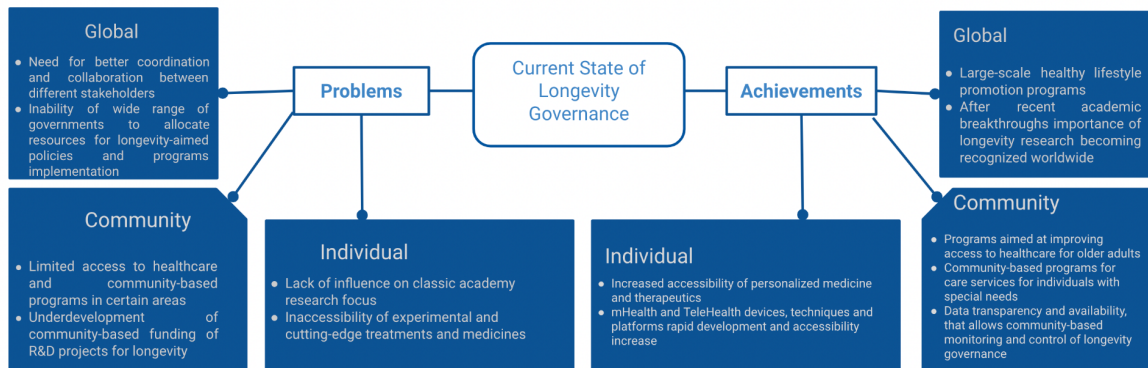
### The '7th Continent' of 1 Billion People in Retirement

There are more than 1 billion people aged 60 years and older in the world nowadays. In fact, there are so many of them that they can populate an entire '7th Continent'. Not only do they wield immense purchasing power, but they also hold the largest amount of financial assets compared to other age groups.



## Current State of the Longevity Governance (Key Achievements and Problems)

Growing recognition of the importance of Longevity Governance is associated with recent breakthroughs in age-related diseases research and need for increase in the study of aging and age-related diseases funding was one of initiating factors for capacities and responsibilities accumulation in Longevity Governance.



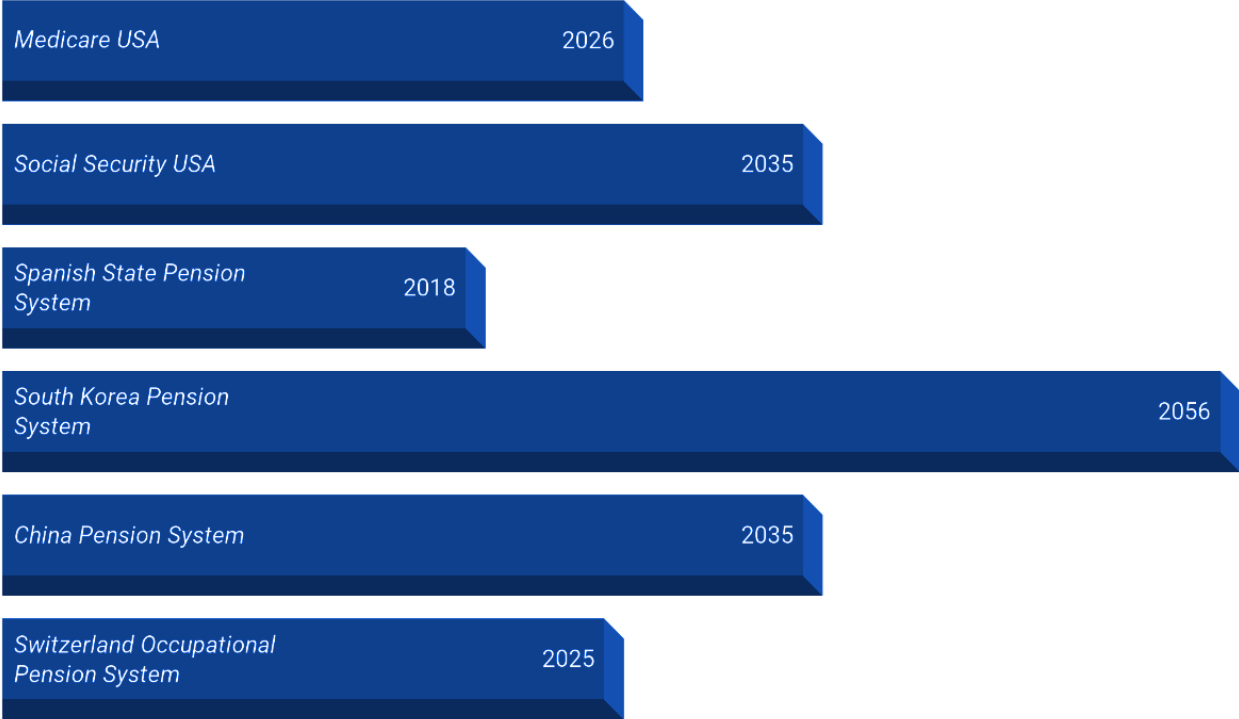
Current State of Longevity Governance

The challenge lies in the need for more research on the economic, social, and ethical implications of extending human lifespan and improving healthspan. This includes a better understanding of how these advancements will impact workforce, retirement, and healthcare systems, as well as the broader socio-economic implications of an aging population.

One of the key achievements has been the increasing recognition of the importance of Longevity governance by governments, international organizations, and private sector stakeholders. This has led to the development of various national and international initiatives and programs focused on addressing the challenges of aging populations.

## Insolvency Predictions for Government-Funded Schemes

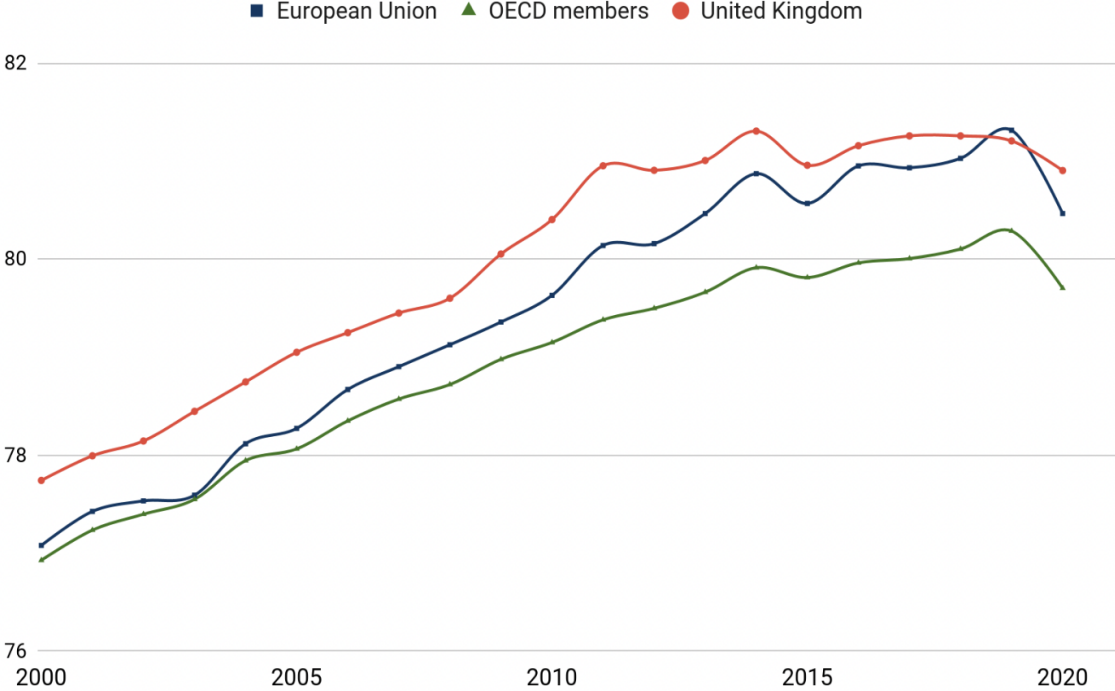
The figure on the right shows predicted insolvency dates for various countries' retirement programs. The US Medicare and Social Security programs are headed toward insolvency by 2026 and 2035, respectively. Spain's Social Security Reserve Fund had run out of money by 2018. South Korea's National Pension Service is expected to run dry by 2056. The Chinese Academy of Social Sciences reported that China's pension funds could become insolvent by 2035. The second pillar of Switzerland's pension system is under severe pressure, and pension schemes are projected to go down by 2025 with the rejection of the main reform proposal in a public referendum.



*Insolvency Predictions for Government-Funded Schemes*

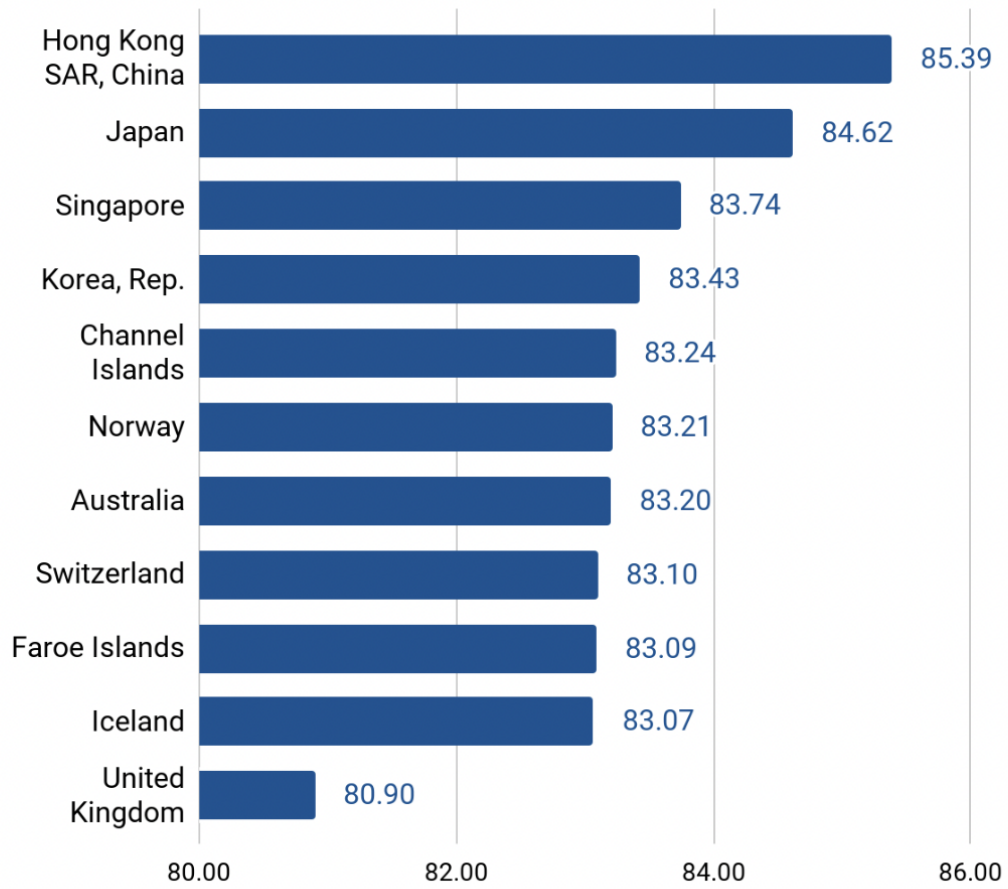
# Macro Trends on Life Expectancy

## Life Expectancy Dynamics, 2000-2020



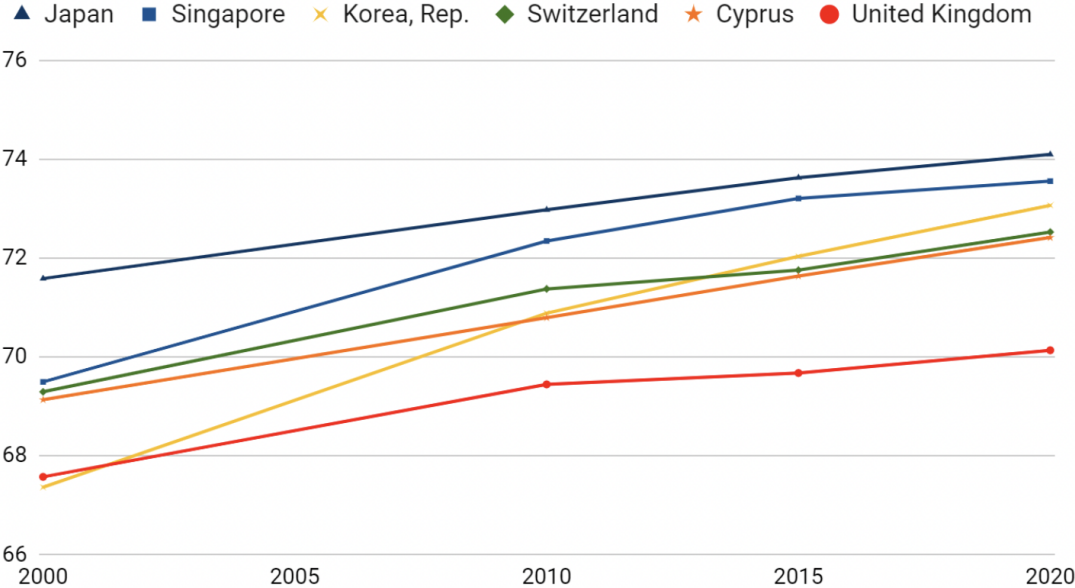
The average Life Expectancy at birth in the UK is 80.9 years, which is greater than average among OECD countries and members of the EU. However, the UK has been only the 33rd country in the world by this parameter. For the last 20 years, Life Expectancy in the UK has increased by 3.2 years. To compare, LE in the OECD countries has grown for 2.7 years and LE in the EU countries - for 3.4.

## Life Expectancy Ranking, 2020



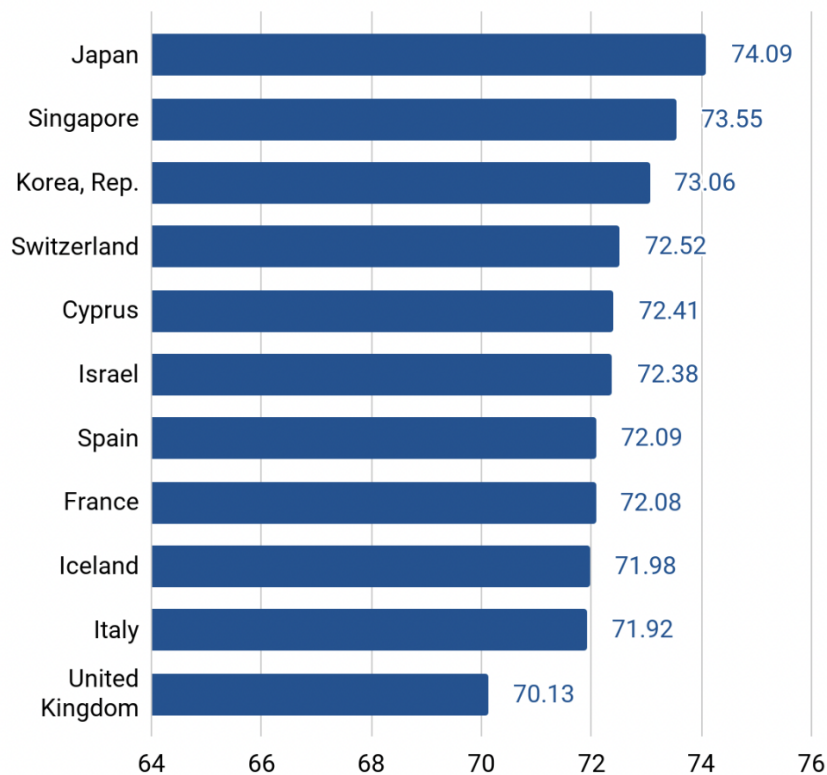
# Macro Trends on Health Adjusted Life Expectancy (HALE)

### HALE Dynamics, 2000-2020



The average HALE at birth in the UK is 70.13 years. In the world, the UK is 28th by this parameter, but the gap between the UK and top 10 countries is less than with LE. For the last 20 years, HALE in the UK has increased by 2.6 years, which is comparable with an increase in Japan by 2.5. However, Japan is a world leader by HALE with average 74.09 years and takes 2nd place by LE.

## HALE Ranking, 2020



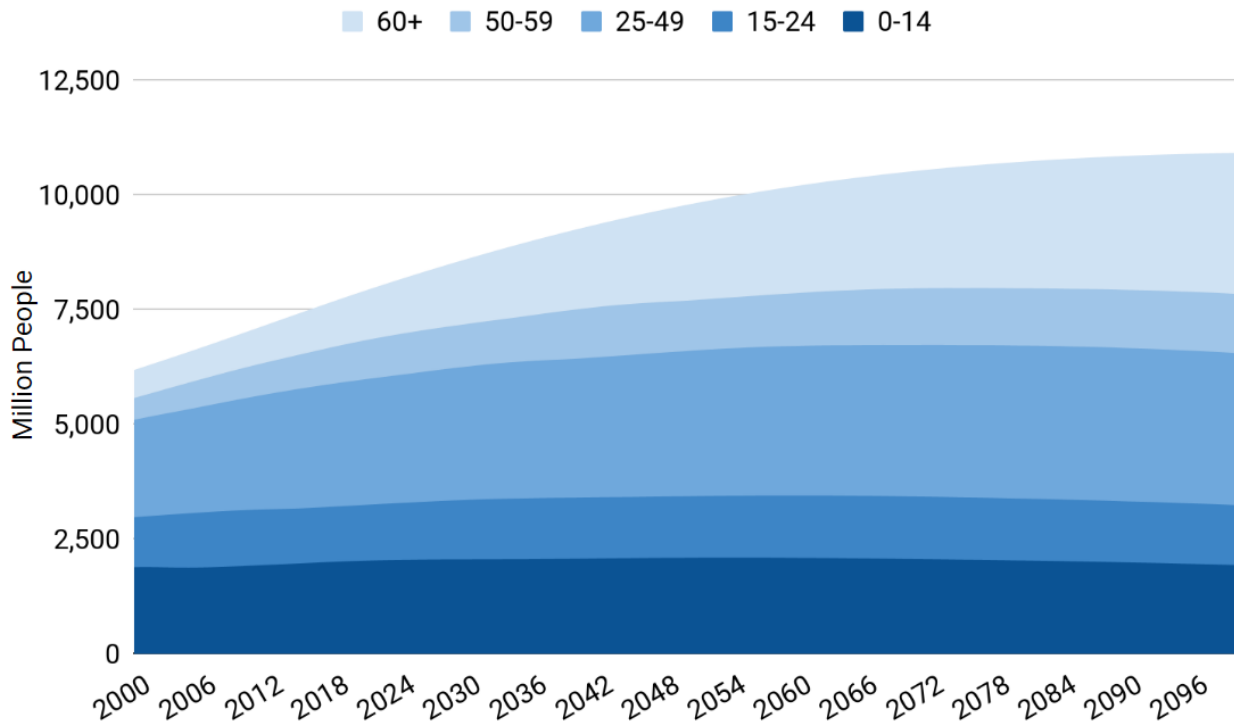
## Macro Trends on Aging Population

According to the UNISTAD population growth projection, the increase in the world population in the next 25-30 years will be primarily due to a gradual increase of young, working-age population (25-49) and rapid growth of seniors (60+). By 2050, approximately every 3rd of 10 will be 50+ y.o. (share of 50+ population will be 32% of the population), while youth and middle-aged together will constitute around 46%. By 2100, shares will almost align: 40% of 50+ aged and 42% of 15-49 y.o. population.

While some countries experience a mild increase in life expectancy together with decreasing birth rate and as a result of growth of the working-age population, other countries will face the problem of the aging population. However, by the end of the 21st century, 60+ aged people will be almost a third (28%) of the world population.



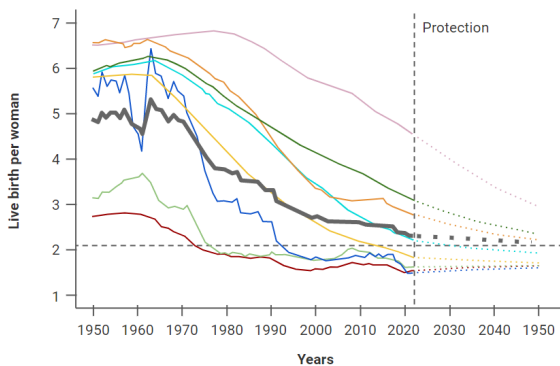
## World Population by Age, 2000-2100, Million People



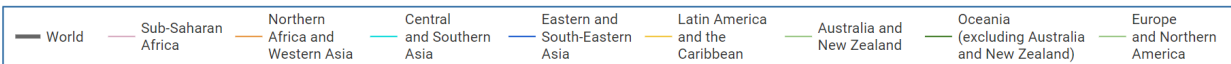
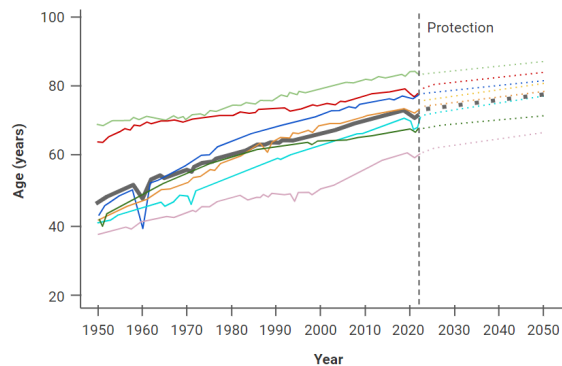
## Trends in Fertility, Aging, and Migration

The global population is expected to reach 9.7 billion in 2050 and 10.4 billion in 2100, according to the medium scenario, which assumes a decline of fertility for countries where large families are still prevalent.

Total fertility rate: estimates, 1950-2021, and scenario, 2022-2050

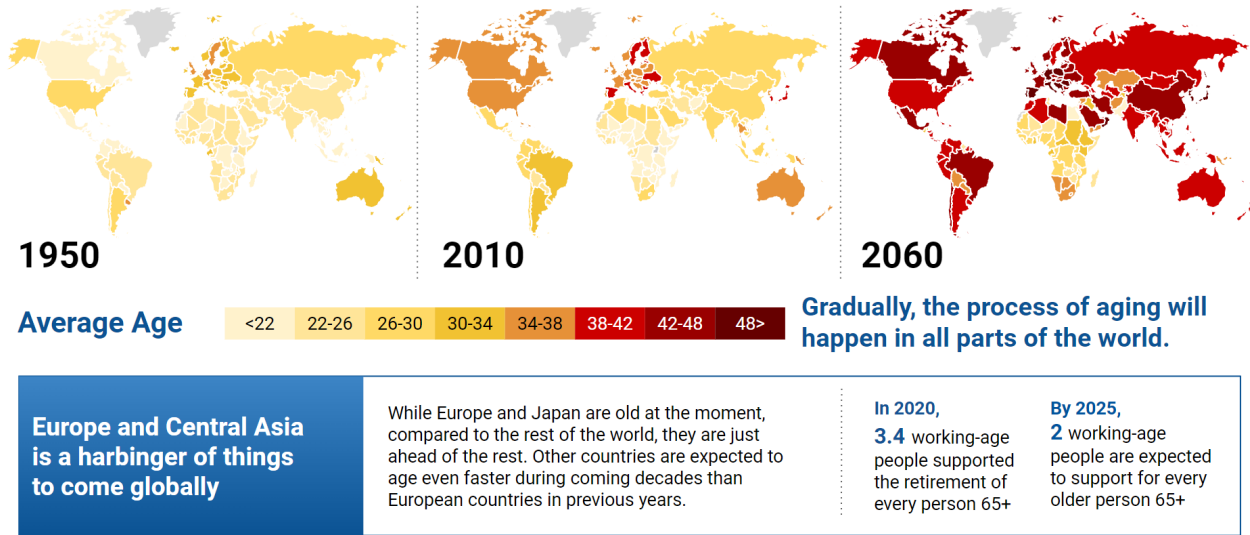


Life expectancy at birth: estimates, 1950-2021, and scenario, 2022-2050, by region



Aging puts long-term fiscal sustainability at risk, exacerbates fiscal challenges from the COVID-19 crisis, and weighs on potential growth. At the same time, aging will result in lower tax revenues because fewer people will be active in the labor market.

## True Costs of Aging



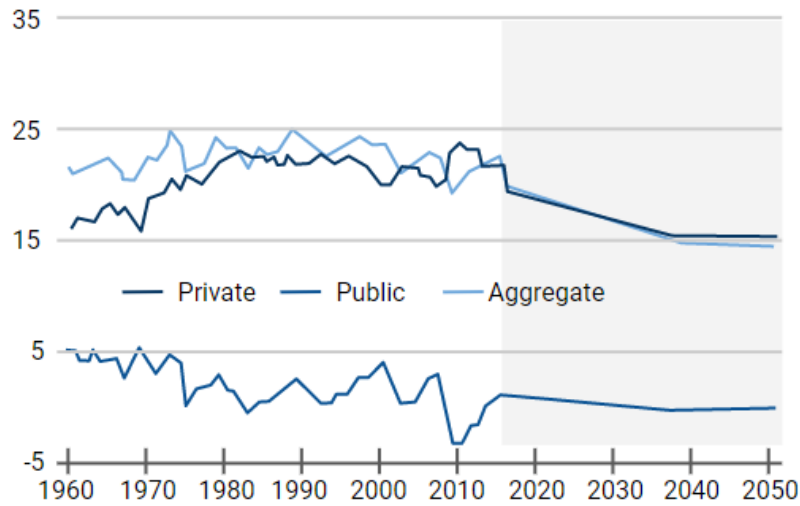
To mitigate the adverse impacts of aging, it is key to improve the sustainability of the pension system and the efficiency of public spending, promote healthy aging, extend working lives, and boost labor market participation.

## Policies for Longevity

### Future of Saving

By 2050, aggregate savings in advanced economies are projected to decline as governments spend more on pensions while an aging population saves less (projected savings as percent of GDP).

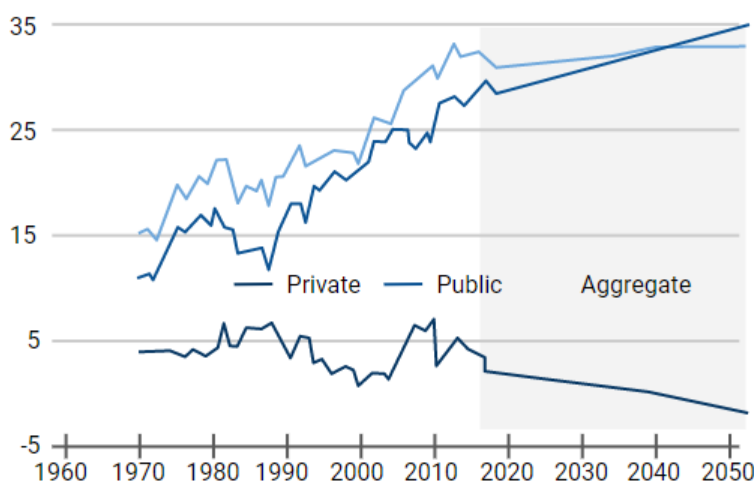
## Advanced Economies



Projections on savings of an aging population suggests promoting active policies in higher labor force participation among older workers, which will depend on:

- the generosity and availability of pension plans,
- health and support available to workers,
- the industrial structure and types of jobs offered.

## Emerging Market Economies and Low-Income Developing Countries



## New models

Public policies play an important role in supporting efforts to provide adequate income in retirement while ensuring the sustainability of pension systems.

Important factors to consider:



**71%**

of deaths globally are from NCDs

As with past health improvements, public education aimed at changing people's behaviour when it comes to activity, diet, engagement, and purpose.

By 2034, it is estimated that people aged 65+ living alone will make up



**55%**

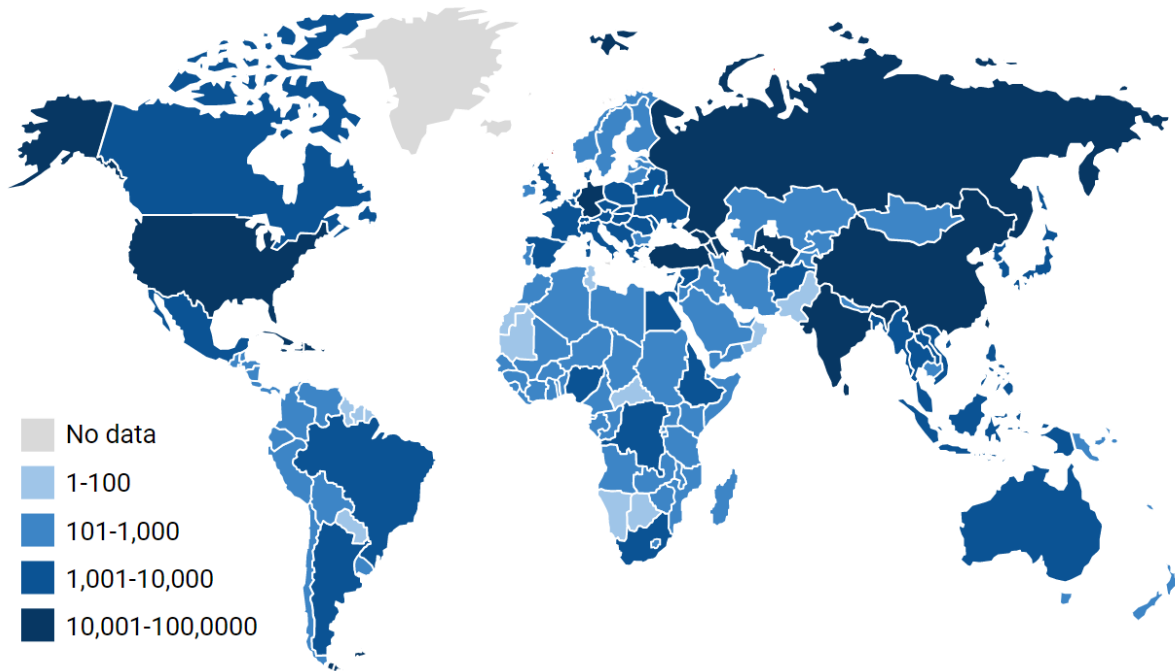
of all people living alone

As with past health improvements, public education aimed at changing people's behaviour when it comes to activity, diet, engagement, and purpose.

## Elder Adult Health Affected by Climate Change

Understanding the changing climate and its impact on public health, especially that of older adults, becomes more important than ever. Older adults are identified as a vulnerable population category, experiencing excess morbidity and mortality associated with extreme weather, such as alarming heatwaves, widespread wildfires and violent hurricanes.

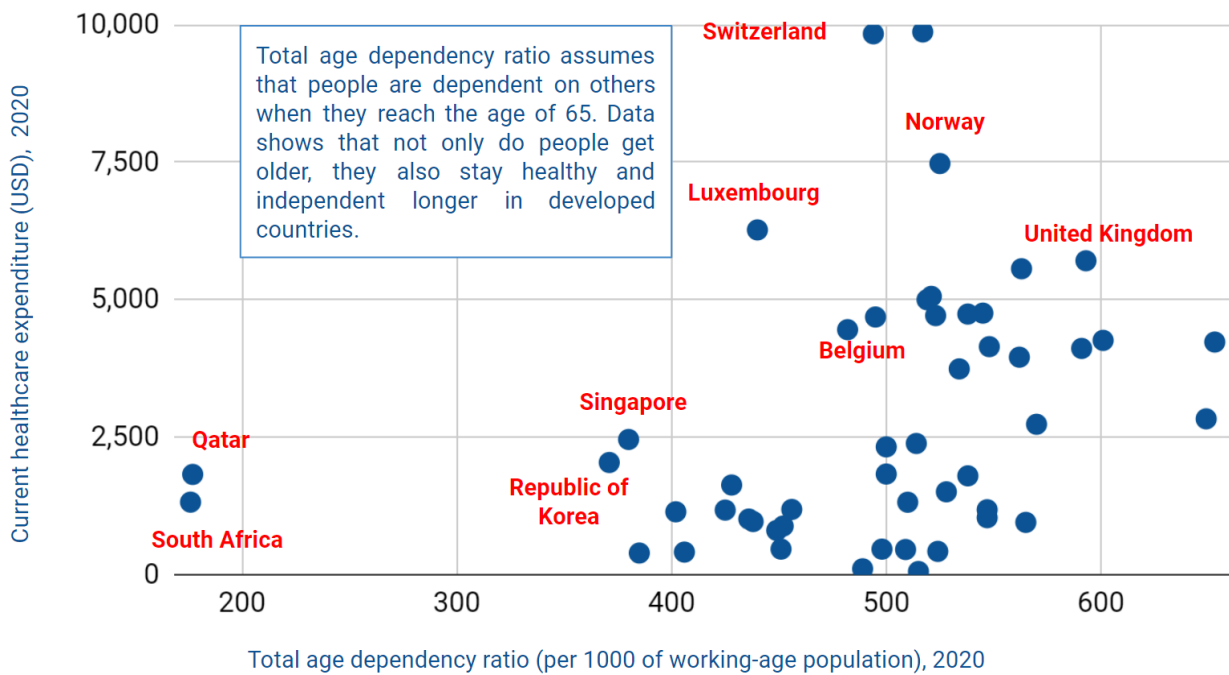
Annual heat-related mortality in the population 65+ (2014 to 2018), number of deaths.



Policymakers should adopt policies that will reduce carbon emissions and, thus, will improve public health and productivity:

- environment-friendly technologies and resources, such as renewable energy, should be used in the production process;
- healthcare expenditure on a national budget should be increased;
- clean drinking water and basic sanitation facilities must be ensured for all people.

## Analysis Example: Aging Population vs. Healthcare Expenditure



## Trends of National Healthy Longevity Initiatives

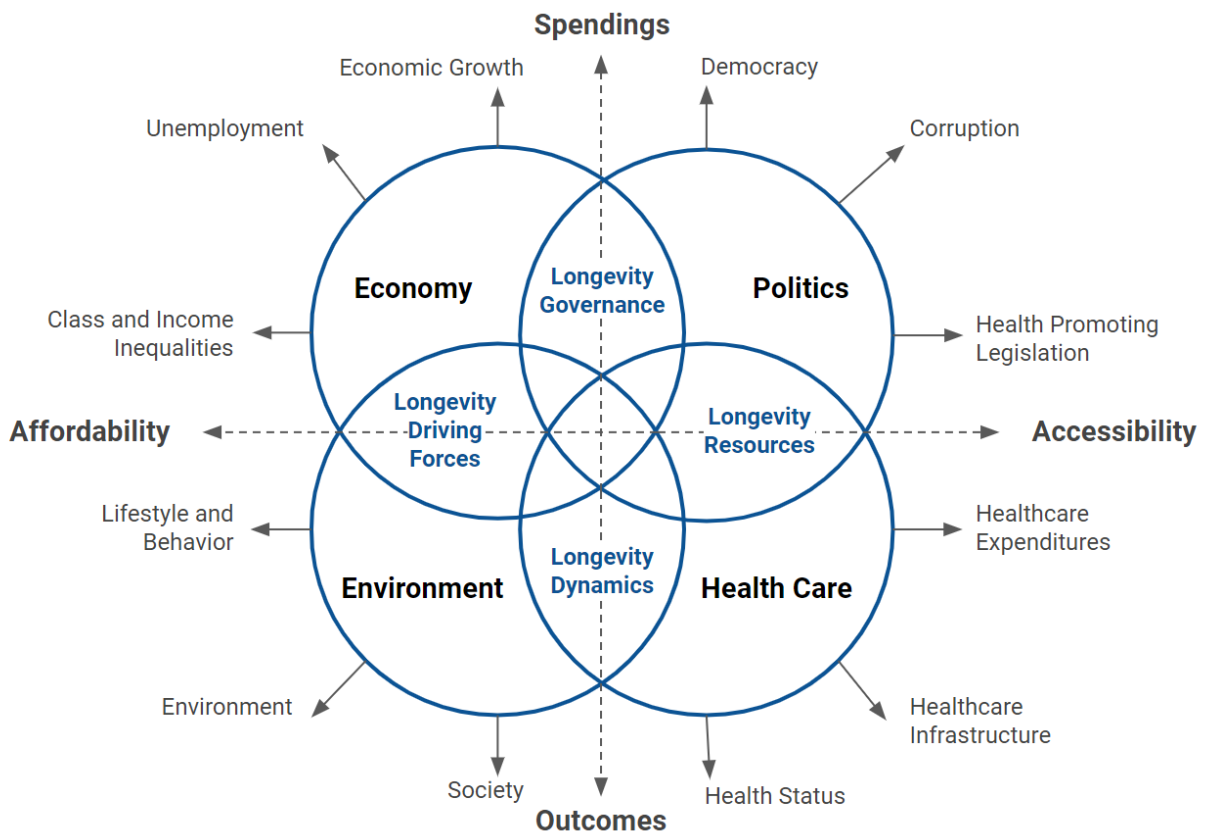
If the development of advanced biomedicine and the transition to Longevity Medicine outpaces the effects of demographic aging, these new technologies will allow us to turn the age of the Silver Tsunami into an age of prosperity.

The states which introduce such initiatives have, so far, mostly been small technocratic countries or tiger economies where initiatives for the benefit of the national population's health can be passed without dispute.

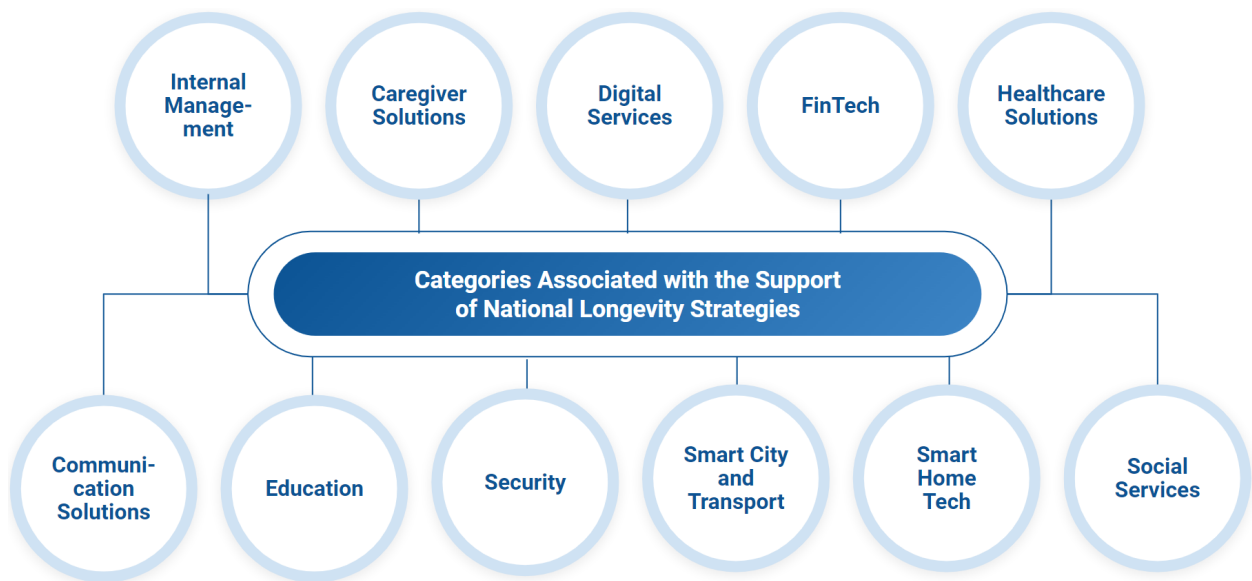
Longevity itself will come to be regarded as an asset to a state, and its attainment as central to the state's national industrial strategy. We refer to such a state as a 'Longevity State' and its industrial strategy as a 'National Longevity Development Plan.'

With a technocratically optimized approach, most National Longevity projects could also be completed in 5 to 7 years.

# Components of National Healthy Longevity Strategies



# GovTech as a Driver of Longevity Industry Development Strategies



## Health-Adjusted Life Expectancy and Life Expectancy

This table represents the distribution of countries by their Health Adjusted Life Expectancy (HALE) and Estimated average life expectancy (LE) and the gap. The gap is measured as the absolute difference between life expectancy and HALE in a particular country.

Countries are distributed unevenly, because the major countries are developed countries with approximately the same level of development and welfare.

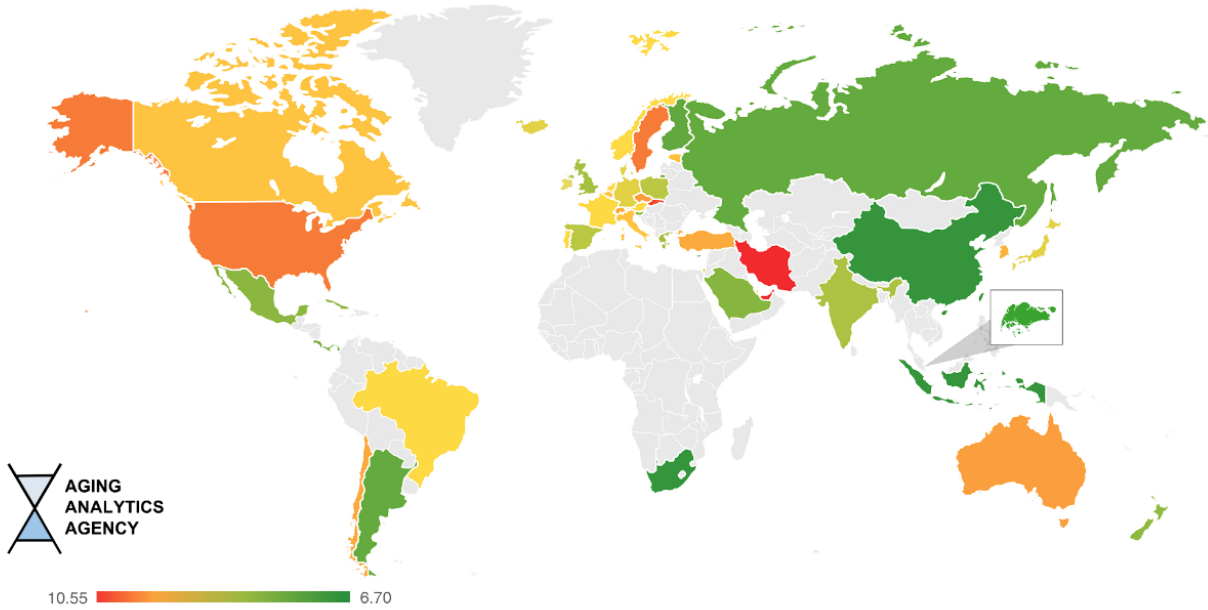
As can be seen, there are 10 countries in the group that combine a high level of HALE and LE and a big gap between the two indicators, which makes it the biggest group in the sample.

<b>High HALE and LE</b>	Australia, Austria, Canada, France, Italy, Luxembourg, Norway, Switzerland, Sweden, Republic of Korea	<b>Big GAP between HALE and Life Expectancy</b>
<b>Medium HALE and LE</b>	Belgium, Chile, Czech Republic, Denmark, Finland, Germany, Ireland, Slovenia	
<b>Low HALE and LE</b>	Estonia, United Arab Emirates, United States	
<b>High HALE and LE</b>	Iceland, Israel, Japan, New Zealand, Spain, United Kingdom of Great Britain and Northern Ireland	<b>Medium GAP between HALE and Life Expectancy</b>
<b>Medium HALE and LE</b>	Cuba, Greece, Malta, Netherlands, Portugal, Qatar	
<b>Low HALE and LE</b>	Brazil, India, Mexico, Poland, Slovakia, Saudi Arabia, Iran, Turkey	
<b>High HALE and LE</b>	Hong Kong, Singapore	<b>Small GAP between HALE and Life Expectancy</b>
<b>Medium HALE and LE</b>	China, Costa Rica, Panama	
<b>Low HALE and LE</b>	Argentina, Indonesia, Russia, South Africa	

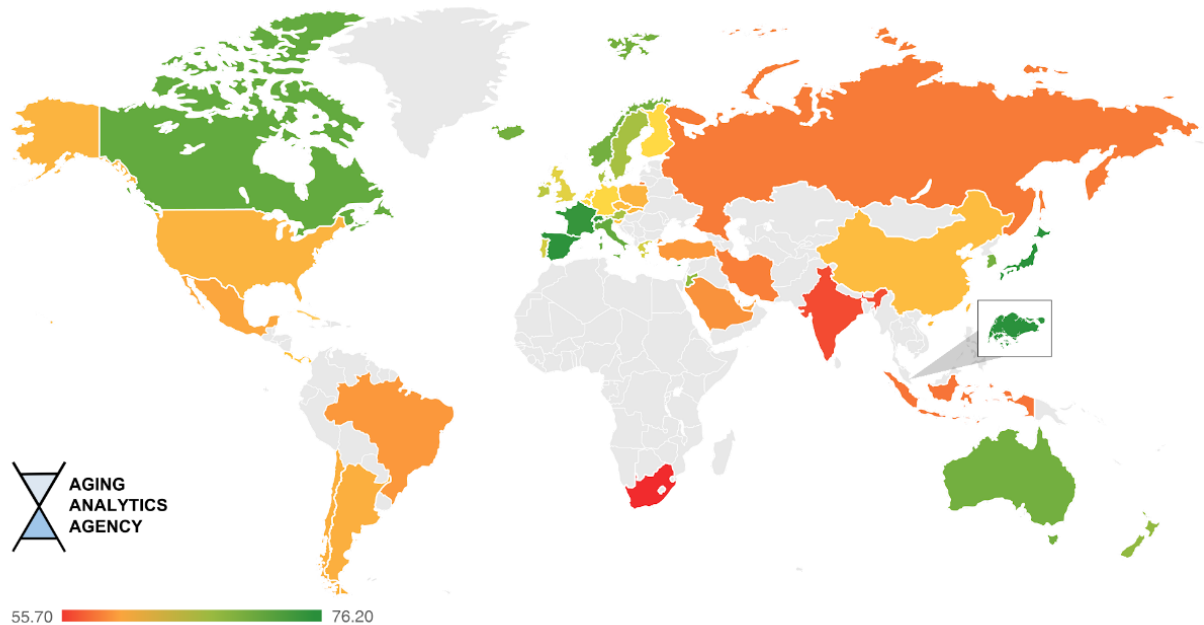


# Size of Gap Between Healthy Longevity and Life Expectancy

Health-Adjusted Life Expectancy (HALE), used here as a measure of Healthy Longevity, is the average number of years an individual can expect to live free of chronic age-related disease.



Life expectancy (LE) at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups in a given year – children and adolescents, adults and the elderly.



Healthy Longevity relates here to the number of years that a person lives without serious health problems or injuries.

## Government Longevity-Related Projects and Initiatives Countries Ranking

Different countries choose various ways to establish their Longevity-Related Projects and Initiatives:

Young parliamentary democracies like Spain, with limited history of relevant government projects. These nations produce a lot of government efforts for the aged citizens. Still, they do not make a deliberate attempt to resolve all issues of the demographic challenge, instead opting for a series of short-term strategies and ad hoc rules for aging communities.

Technologically advanced tiger economies such as Singapore, South Korea, and Hong Kong. These countries are similar to what we call “Longevity-progressive countries” – small technocratic countries that have been motivated to develop coordinated strategies for their Aging Populations. We may see a large number of aging and Longevity-related projects in these countries.

On the right is Ranking Countries by the Strength, Scope, and Relevance of Their Longevity-Related Projects and Initiatives

POSITION	COUNTRY	COUNTRY SCORE
1	United Kingdom	5.29
2	Netherlands	4.36
3	Singapore	4.15
4	South Korea	4.00
5	Israel	3.94
6	Switzerland	3.93
7	Hong Kong	3.41
8	Japan	3.10
9	USA	3.07
10	Spain	1.94
11	European Union	1.88
12	China	1.85

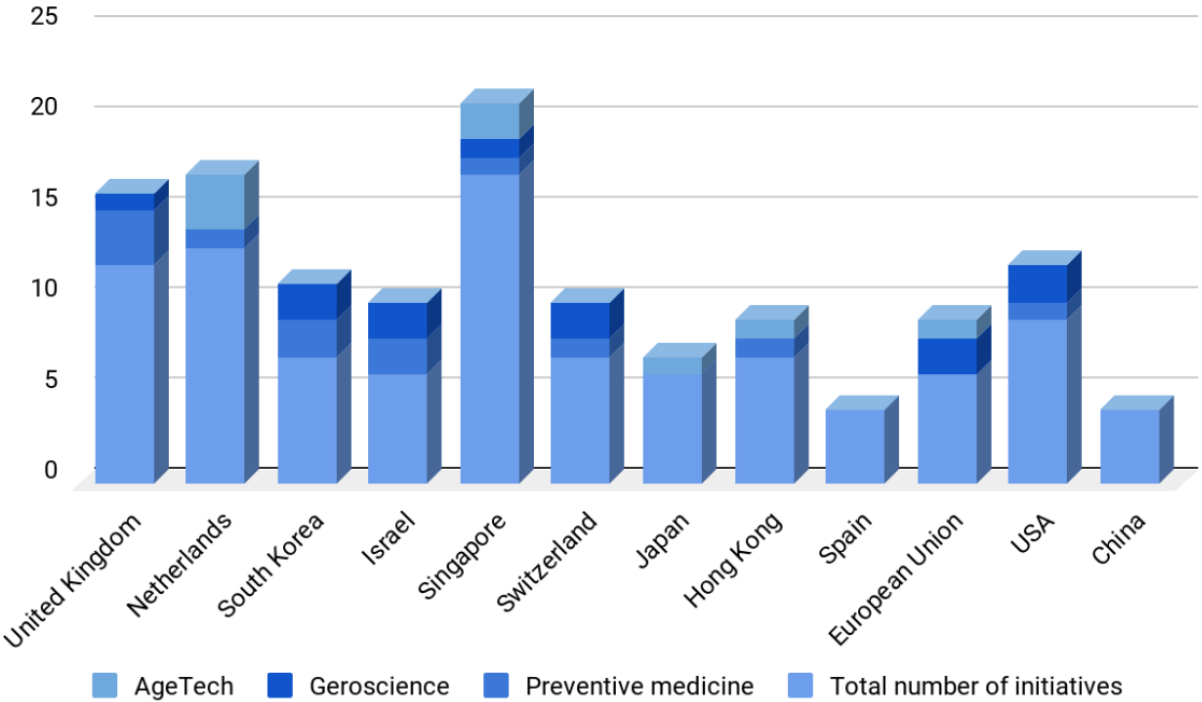
### Current State of the Longevity Governance / Achievements and Problems

Different governments have been offering a myriad of ad-hoc solutions for the demographic crisis. However, while each offers a step in the right direction, no true national-level Longevity development strategy currently exists.

Government programs range from financial innovations such as the Swiss city of St. Gallen’s “elderly bank” to lifestyle and fitness programs like Japan’s plans for an Ageless

Society, in which people aged 65 or older will not be regarded as seniors but encouraged to stay healthy and remain economically active.

These solutions also include AgeTech programs such as the Singapore government’s initiatives that focus on smart homes to improve the quality of life and well-being of the elderly and on increasing their digital literacy.

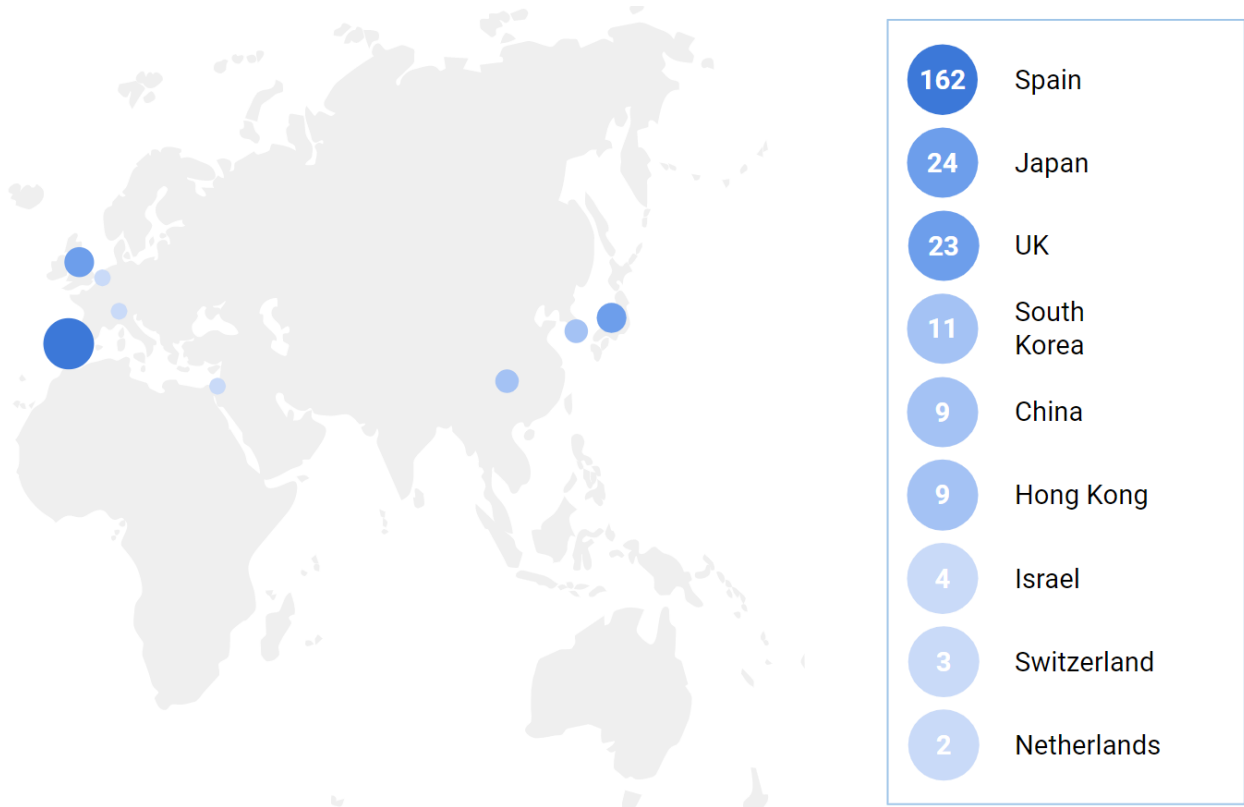


Represented here is the total number of relevant initiatives in the UK, the Netherlands, South Korea, Israel, Singapore, Switzerland, Japan, Hong Kong, Spain, the European Union, the USA and China.

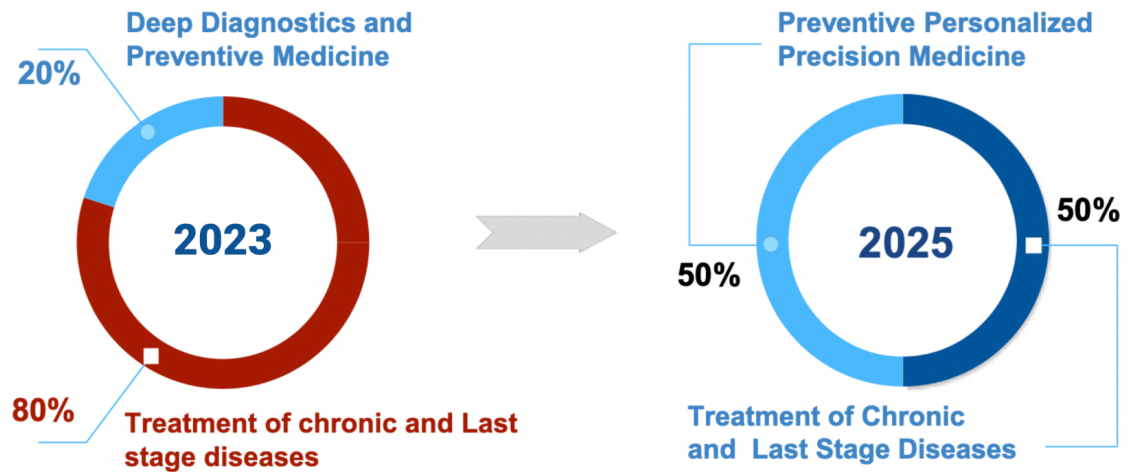
### Age-Friendly Cities and Communities

319 out of 833 of WHO age-friendly cities and communities are located in Europe. Among them, 162 are in Spain. Other countries, including ones located in Asia, contain significantly less number of WHO age-friendly cities/communities.

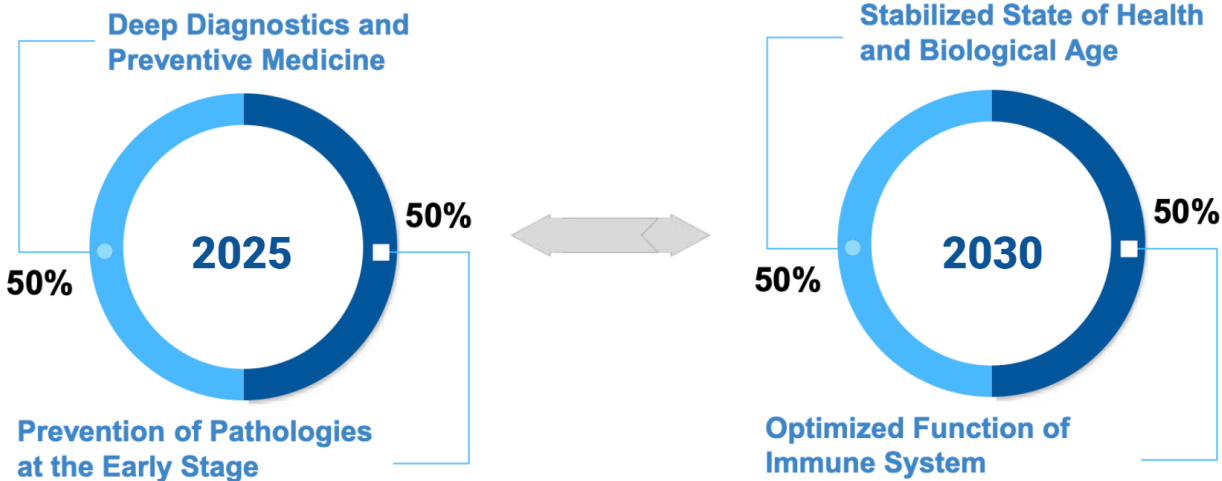
Some of these age-friendly, such as Seoul in South Korea or Akita in Japan, are the products of detailed government master plans. Such master plans are recorded as instances of government initiatives in this document.

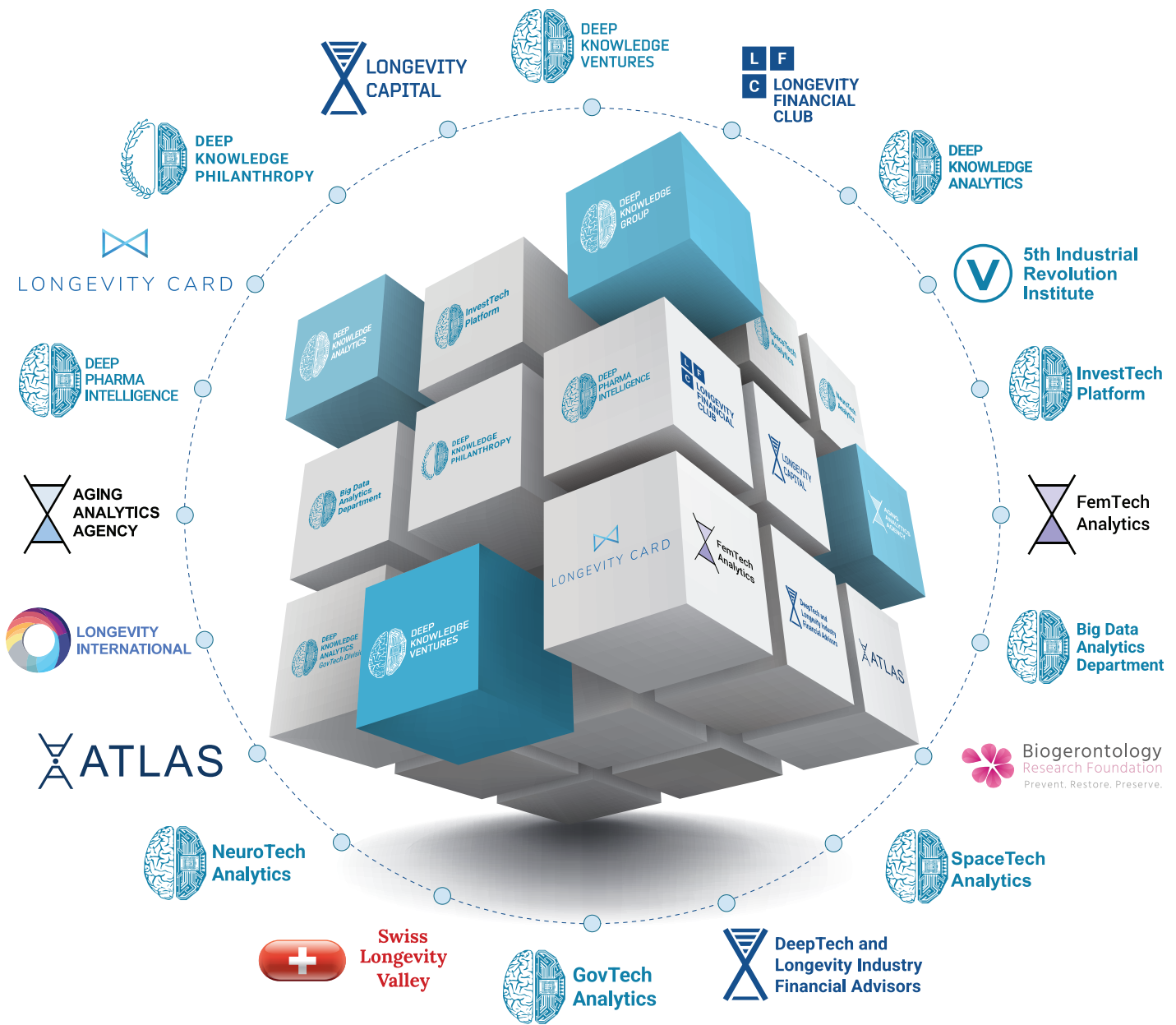


## Paradigm Shift from Treatment to Prevention



# The New Frontier - from Precision Medicine to Precision Health





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