

Longevity

Transformational Innovation Opportunities (TRIO): Longevity

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- The UBS Chief Investment Office believes there are three transformational innovation opportunities (TRIOs) that will drive equity markets in the coming decade: Artificial intelligence, Power and resources, and Longevity.
- Longevity as a thematic topic covers opportunities that capitalize on a longer lifespan. The combination of ever-increasing lifespans and a demographic shift toward an older population creates a range of investment opportunities across various sectors, such as health care, consumer, financial services, and real estate.
- We believe the total market opportunity could reach around USD 8 trillion by the end of this decade. For our stock picks, investors should see our new Longevity Equity List, which highlights companies we believe are best positioned to capitalize on the aforementioned tailwinds.



Source: GettyImages

CIO last year introduced its Global Equity Framework, which uses a combination of three principal perspectives to identify investment opportunities: macroeconomic, structural, and company-specific. The structural element enhances the traditional equity research process by focusing on what we call transformational innovation opportunities (TRIOs)—three trends we expect to have an outsized influence on equity markets in the coming years. These include Artificial intelligence, Power and resources, and Longevity.

Longevity encompasses diverse themes emerging from extended lifespans. As people live longer and the share of the elderly in the population grows amid demographic shifts, the customer base across various sectors is evolving. This transformation is reshaping demand and fueling

growth in new economic segments. The health care sector will be a primary driver of longevity, which we favor in the near term owing to its importance in meeting the needs of an aging population. Meanwhile, segments like consumer markets, financial services, and real estate should also benefit, although some may still be in the early stages of adapting their business models to cater to this growing demographic. Our long-term investment ideas identify opportunities within these sectors, which could help companies achieve revenue growth that exceeds GDP rates.

Our 10 predictions about longevity

- 1.** Longevity is set to unlock around a USD 8 trillion market opportunity by 2030 across the health care, consumer, financial services, and real estate sectors.
- 2.** Pharma innovation targeting metabolic diseases (obesity) and cancer treatment is poised to enhance longevity and drive substantial market growth over the next decade.
- 3.** The global obesity epidemic has significantly expanded the metabolic disorders market, with GLP-1 drugs emerging as transformative treatments, driving a projected increase in the obesity market to USD 200 billion annually.
- 4.** Cancer remains a leading cause of death globally, but advancements in treatments such as next generation immuno-oncology drugs and antibody-drug conjugates are driving growth in the oncology market.
- 5.** The aging population is set to drive sustained growth in the medical device industry, particularly in orthopedic implants, ophthalmology, hearing aids, and cardiovascular devices, as demand rises for treatments prevalent among the elderly.
- 6.** Innovations in early disease detection and personalized treatment technologies should drive diagnostics market growth, significantly contributing to increased longevity.
- 7.** The aging population will drive significant growth in demand for health services among seniors, benefiting managed-care firms with exposure to the Medicare Advantage program.
- 8.** Consumer companies targeting healthy aging through nutrition or consumer health care are set to capitalize on increasing demand from an aging population.
- 9.** The move toward defined contribution pension systems and increasing reliance on personal savings will drive substantial opportunities for life insurers as the global pension gap widens.
- 10.** The real estate sector will likely see a significant increase in the development and investment in senior living communities and health care facilities. This includes independent living, assisted living, nursing homes, and specialized health care centers.

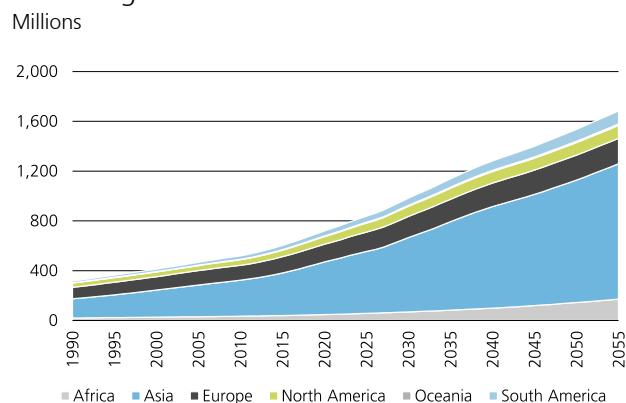
Global aging trends explained

The global population is aging

There were 830 million people aged 65 years and over in 2024, which accounted for 10% of the global population. According to UN estimates (World Population Prospects 2024), this is forecast to grow to 1 billion by 2030 (12%) and 1.6 billion by 2050 (16%). See Figure 1.

The majority of countries in the world are seeing growth in the proportion of their elderly population. North America and Europe are leading this shift, with almost 20% of their populations aged 65 and older. Projections indicate that by 2050, one in every four Europeans and North Americans could be aged 65 years and up. Outside developed economies, aging has been the fastest in Asia, Latin America, and the Caribbean.

Figure 1 - Number of people over 65 years old is increasing



Source: United Nations, World Population Prospects 2024: Summary of Results, UBS

This rapid aging across global populations can be attributed to falling fertility rates and rising life expectancies.

Fertility rate in decline

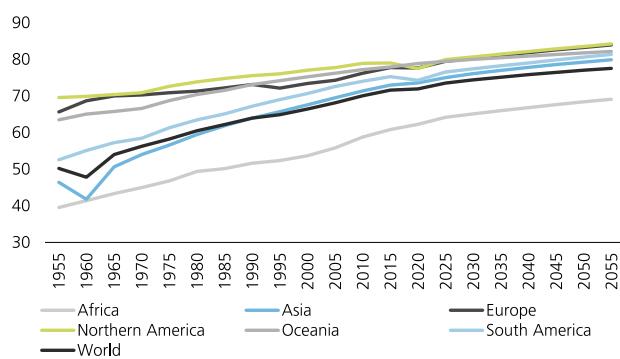
The global fertility rate has halved since 1950, with an average of 2.25 births per woman over a lifetime in 2023. This is projected to decline further to 2.1 births by the late 2040s. Fertility rates vary by country and are influenced by multiple factors, including employment, education, economic prosperity, and government policy. Fertility rates in developed countries particularly have fallen as these societies have become wealthier. As a result, people aged 65 and over are projected to outnumber children under the age of five twice over by 2050.

Life expectancy is rising

Global life expectancy has also continued to rise and is expected to reach 77.4 years by 2050, up from 73.3 years in 2024 (see Figure 2). However, the gap in life expectancy at birth between certain groups of countries remains wide. Life expectancy in the least developed countries was seven years lower than the global average in 2021, driven by high levels of child and maternal mortality. Violence/conflicts and the HIV epidemic also have a significant impact.

Figure 2 - Increasing longevity

Life expectancy at birth for both males and females. Age in years, per geographical area



Source: United Nations, World Population Prospects 2024: Summary of Results, UBS

Key drivers of longevity

Multiple interrelated factors are driving the increase in life expectancy. This ranges from advances in medicine, access to health care services, and broader societal changes. We look here at some of the drivers that are contributing to an increase in life expectancy.

Medical advancements

Breakthroughs in medical science, including the development of antibiotics, vaccines, and advanced surgical techniques, have had a profound impact on longevity (see Figure 3 with largest breakthroughs in history). Infectious diseases (such as tuberculosis, pneumonia, and polio) that once claimed countless lives are now preventable or treatable, reducing mortality rates. Significant medical advancements driven by improvements in diagnostic tools, enhancing preventive care, and drug innovation mean chronic diseases can now be adequately managed. Looking forward, we expect medical advances, from cutting-edge treatments to personalized health care to continue to drive an increase in lifespan.

Health care access

Access to quality health care is also a key determinant of longevity, leading to earlier disease detection, timely treatment, and preventative care. In developed economies with robust health care systems, better access to medical services reduces mortality risk.

Figure 3 - The biggest medical breakthroughs in history

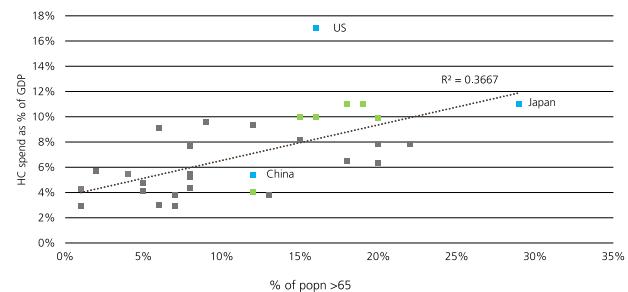
Year invented	Technology	Number of lives saved
1850	Anesthesia	50 million
1913	Blood transfusion	1 billion
1922	Insulin	15 million
1928	Antibiotics	200 million
1935	Antimalarial drugs	50 million
1950	Vaccines	1 billion
1965	Bifurcated needle	130 million
1970	Radiology	25 million
1976	Angioplasty	15 million
1985	HIV treatment & prevention	15 million

Source: Aperion, UBS, as of January 2025

As a result, countries with higher health care spending have a higher share of the population over 65 years of age (see Figure 4). In contrast, countries with insufficient health care infrastructure or limited coverage may face higher mortality rates due to delays or lack of necessary treatments.

Figure 4 - Clear correlation between age of population and health care spend

Share of population over 65 and health care spend as a % of GDP, 2019



Source: World Bank data, UBS analysis, as of March 2023

Public health initiatives

Public health initiatives also play a critical role in driving longevity. The implementation of sanitation measures (clean water, waste disposal) has greatly reduced the spread of infectious diseases (for more information, please refer to our Long Term Investment Theme report "Water Scarcity"). In addition, vaccination campaigns have also contributed to longevity by preventing outbreaks of deadly

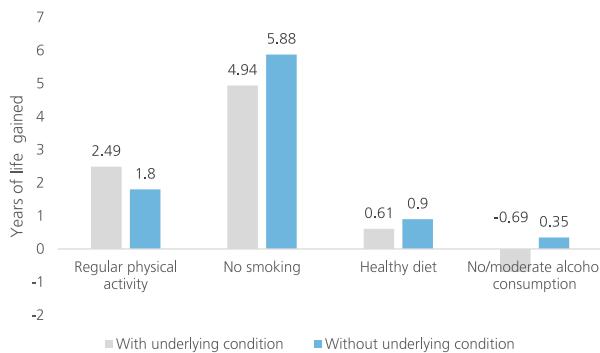
diseases. Vaccines have saved one billion lives by protecting individuals from diseases such as smallpox, measles, and more recently, COVID-19. By preventing widespread illness, public health measures have lowered mortality rates and increased life expectancy.

Lifestyle choices

Personal lifestyle choices have become increasingly recognized as crucial determinants of longevity. Trying to achieve a healthy diet, regular physical activity, and mental well-being are an increasingly important part of our lifestyles. Balanced diets combined with reduced intake of processed foods and excessive sugars have contributed to the prevention of many chronic diseases such as heart disease, diabetes, and obesity. Conversely, unhealthy habits such as smoking or excessive alcohol consumption can increase the risk of chronic diseases and shorten life expectancy. A UK Biobank study found that adopting a healthier lifestyle, regardless of existing health conditions, leads to longer life expectancy, with quitting smoking offering the greatest survival advantage (see Figure 5).

Figure 5 - A healthier lifestyle results in a higher life expectancy

Data from men who are 45 years old



Source: UK Biobank study 2020, UBS

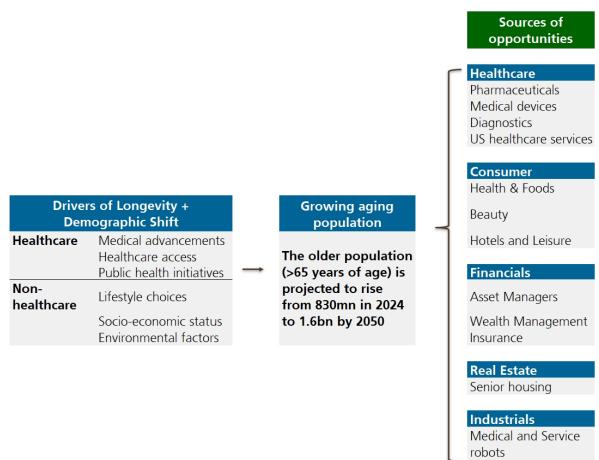
Socioeconomic status

Another driver of increased longevity is the improvement in living conditions brought about by economic development. Higher standards of living, better nutrition, and access to education have all contributed to longevity. Studies have shown that individuals with higher incomes have better access to health care and lead healthier lives. Conversely, individuals from lower socioeconomic backgrounds face a reduced lifespan because of limited resources and reduced access to quality health care. Analysis of US data from the 1997-2014 National Health Interview Survey (NHIS) revealed significant disparities in life expectancy, with adults in the most advantaged socioeconomic group living 17.5 years longer than those in the most disadvantaged group.

Environmental factors

Environmental factors (air quality, climate, toxins) also play an important role in longevity. Cleaner air and water contribute to lower rates of respiratory diseases, cancers, and other health issues that can shorten life expectancy. Additionally, efforts to promote sustainability and combat climate change are becoming increasingly important. Multiple nations have implemented regulations to reduce pollution and improve air quality, which has led to significant improvements in public health.

Figure 6 - Longevity drivers and sources of opportunities



Source: UBS, United Nations (World Prospectus 2024); Note: There is an enlarged picture of this figure at the end of this document

Implications of longevity

Longer lifespans have significant financial implications, requiring consumers to save more for extended retirement periods. Some degree of financial security, good health, and comfortable living conditions are prerequisites for many people to enjoy a comfortable retirement.

Many will need larger pensions, annuities, and other financial products to ensure long-term stability, while some may choose to work longer. Rising health care costs will also be a major concern, with increased spending on medical treatments, long-term care, and insurance. The key motivation for many will be to maintain a high quality of life for as long as possible. As a result, we see a greater emphasis on preventative health care, wellness programs, and medical advancements tailored to an aging population.

Housing and lifestyle choices will also evolve as people live longer. Many will likely seek to age in place, leading to demand for home modifications and smart technologies that enhance accessibility. Multi-generational living arrangements may become more common, while the market for senior-friendly communities and assisted-living facilities is set to expand. We think consumers will also prioritize wellness, travel, and lifelong learning, shifting spending away from material possessions and toward experiences that enhance their quality of life.

At a broader level, governments and businesses will need to adapt to the economic and social changes brought by aging populations. Pension systems may require reforms, health care policies will need adjustments, and industries catering to older generations look set for major growth. As society adapts, intergenerational relationships, urban planning, and workforce dynamics will all be influenced by the increasing number of people living longer, in our view.

All these segments will be examined in further detail in the following chapters.

Framing the longevity opportunity

Prediction: We project that the longevity market, driven by sectors extending life expectancy and catering to an aging population, will grow from USD 5.3 trillion in 2023 to around USD 8 trillion by 2030, unlocking significant investment opportunities.

In this section, we highlight the key investment opportunities we see arising from the longevity theme and emphasize the segments where we see the biggest sources of opportunities.

Our framework considers two categories of positioning: Sectors positioned as either **drivers**—those actively extending healthy life expectancy—or **beneficiaries**—those that cater to the evolving needs of an aging population.

Drivers of longevity

These sectors directly contribute to extending healthy life expectancy and are at the forefront of longevity investment opportunities.

- **Pharma, medtech, and health services:** Pharma, medtech, and health services companies play a fundamental role in reducing the prevalence of age-

related diseases through advanced treatments, in our view.

Beneficiaries of longevity

These sectors benefit from shifting demographics though some may still be in the early stages of adapting business models to meet the needs of an aging population.

- **Pharma, medtech, and health services:** Aside from extending life expectancy, health care companies can simultaneously benefit from an aging population, driven by an increase in demand.
- **Consumer:** Multiple companies within the consumer staples and retail sectors have begun adapting their businesses to cater to an aging customer base, focusing on wellness, nutrition, and anti-aging products. Furthermore, the hotels and leisure market is expected to grow rapidly, as the elderly become an increasingly dominant force in leisure spending.
- **Financial services:** Financial services is affected by longevity by helping individuals plan for extended lifespans. Diversified financials, insurers, and banks are driving innovation in retirement planning and financial resilience.
- **Real estate:** The rising demand for retirement communities, care homes, and age-friendly housing creates opportunities within the homebuilding and real estate space. Although policy shifts will likely shape the care home market, there are near-term challenges around funding.

We have framed the total addressable market for longevity by taking a structured, bottom-up approach that aims to capture both the immediate market potential and its long-term growth trajectory across the industries mentioned above.

CIO projects that the annual longevity market opportunity was USD 5.3 trillion in 2023 and will grow by an incremental USD 2.5 trillion to reach total annual revenues of around USD 8 trillion by 2030 (see Figure 7).

To summarize, we forecast a total health care market opportunity of USD 2.2 trillion by 2030. However, within this segment we see the biggest opportunities in pharma (metabolic, oncology), medtech (diabetes devices and surgical devices), and Medicare Advantage for US health care services in the near term. We also identify select opportunities in the real estate, insurance, and consumer end-markets. Some of these sectors have already adapted business models around the longevity theme, such as

retirement living, which we see growing at a 4% CAGR until 2030 from a market size of USD 923 billion in 2023. Other sectors will also benefit from the longevity trend, in our view, even if at a more incremental pace. For example, life insurance firms with USD 551 billion sales exposure, growing at a 4% CAGR, are already well positioned. We also see consumer companies targeting healthy aging through consumer health products as early beneficiaries of this trend. In the future, additional opportunities may arise and accelerate across the financials space and other consumer sectors ranging from beauty to leisure. However, we think the sales exposure to the longevity theme in these areas is less relevant as yet, though we anticipate a higher contribution in the future.

Figure 7 - The longevity market opportunity

Industry	2023 sales (USD bn)	2030E sales (USD bn)	23-30 CAGR
Pharma*	625	1,157	9.2%
Medical Devices	139	189	4.5%
Diagnostics	110	170	6.4%
US Healthcare Services	457	678	5.8%
Healthcare	1,331	2,194	7.4%
Active Nutrition	37	60	7.0%
Medical Nutrition	15	22	6.0%
Vitamins, Minerals & Supplements	166	234	5.0%
Consumer Health (excl. VMS)	134	182	4.5%
Beauty	284	387	4.5%
Hotels	259	412	6.9%
Cruise	214	288	4.3%
Casino & Gambling	313	479	6.3%
Consumer	1,422	2,064	5.5%
Asset Managers	520	800	6.3%
Wealth management	560	790	5.0%
Insurance	551	720	3.9%
Financials	1,631	2,310	5.1%
Senior Living	923	1,224	4.1%
Real Estate	923	1,224	4.1%
Total	5,307	7,792	5.6%

Source: Company data, UBS estimates, *includes cancer, metabolic disorders, neuroscience, cardiovascular sales; Note: VMS = Vitamins, minerals, and supplements

We believe the longevity investment opportunity will evolve from now and over the next decade. Initially, we believe that therapeutic innovation within the biopharmaceutical and medical device sectors will enable increases in lifespans and healthspans. Specifically, we expect advances in metabolic disease therapy and oncology to drive larger increases in lifespan. We think payers—governments, employers, and individuals—will spend on therapies that extend lifespans and improve the quality of life. Innovation with favorable reimbursement from payers should drive revenue and earnings growth that should result in superior stock appreciation for these longevity enablers.

We think that innovation in metabolic disease (e.g., obesity and diabetes) and advances in oncology will drive the most

significant positive shifts in longevity through 2030, with accompanying addressable market increases. We estimate that metabolic disease revenue will see about 12% CAGR through 2030, and that oncology revenue will grow at an around 8% CAGR over the same period. Given the expected revenue growth from these two therapeutic categories, we expect metabolic disease and oncology leaders to benefit from significant market value increases.

Within the medical device sector, we also see the potential to impact lifespan. We see that impact coming primarily from diabetes management devices and cardiology devices. We expect diabetes management devices to grow at a 13% CAGR through 2030, and cardiac devices to grow at a 5% CAGR through 2030.

We also believe that companies currently managing the care for the elderly are well positioned to help drive increased longevity by providing better access to care, and leveraging data and analytics to identify at-risk population segments to better manage the care received by patients. We think US managed-care organizations (MCO) are best positioned to manage patient access, as well as accumulate and analyze aggregated patient data to improve the quality of overall care. We expect the US Medicare Advantage segment, in which MCOs manage the delivery of and access to health care services, to grow at a 5.8% CAGR through 2030.

Over time, extended lifespans have the potential to drive greater demand from older cohorts for a variety of products and services. We see certain health care companies also benefiting from this trend, as a growing older demographic will require treatment for various conditions that will inevitably impact them, including those that require orthopedic, cardiac, and ophthalmological procedures and implants. We estimate these segments will see continued strong growth through 2030, and accelerating growth into the next decade as these demographic trends tilt ever more toward older cohorts. Specifically, we estimate the surgical device CAGR will be 5% through 2030, and we expect surgical device growth to accelerate beyond 2030 as demand from an aging population increases.

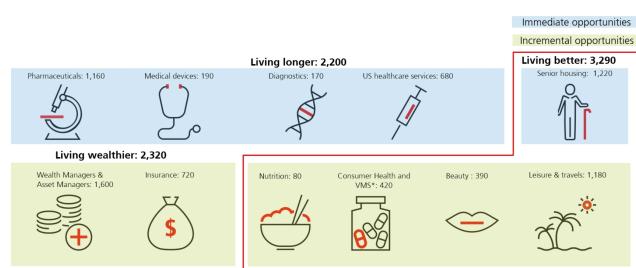
Beyond health care, as the elderly demographic group grows and lives longer, we see revenue and earnings growth accelerating for certain sectors that address the broader needs of an aging population. Initially, we see the real estate sector as a major beneficiary, as well as some financials and consumer segments. We see the impact as relatively gradual in the near term, before picking up over time. We estimate that the longevity-driven demographic shift fueling this demand will accelerate during the 2030s and beyond, boosting growth for various consumer, financial, and real estate companies as a result. Estimating the extent

of this growth ramp over an extended timeframe can be challenging. However, we anticipate that the impact on these sectors will be significantly positive.

Our Longevity Equity List is currently dominated by the health care sector, with the companies we expect to drive the longevity curve inflection carrying the largest weights. Medical device companies that both enable greater lifespans and benefit from growth in the elderly demographic also have significant weight in our Longevity Equity List. Lastly, we have identified consumer, real estate, and financial companies that already have a significant exposure to the theme, while others might be added over time as they will benefit from growth in the elderly demographic through 2030 and beyond.

We expect the composition of the Longevity Equity List to shift over time, moving gradually from the dominance of the health care sector over the near and medium term into the other sectors discussed over the long term as a growing elderly cohort increasingly drives economic activity toward its specific needs.

Figure 8 - The longevity value chain



Source: UBS estimates, as of March 2025 *Vitamins, minerals, and supplements; Note: There is an enlarged picture of this figure at the end of this document

In the following sections, we discuss in more detail the implications of longevity across the various sectors.

Pharma and Biotech

Prediction: Pharma innovation targeting metabolic diseases (obesity) and cancer treatment is poised to enhance longevity and drive substantial market growth over the next decade, in our view.

Pharmaceutical innovation plays an important role in driving longevity, with potential breakthroughs in drug development prolonging the life and mitigating diseases. As we evaluate the opportunities within the pharmaceutical

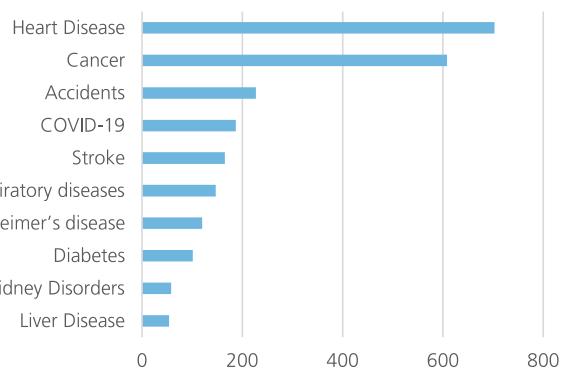
space that is attached to the longevity theme, we consider two different sets of opportunities:

1. pharma companies with approved innovative drugs or pipeline drugs that could meaningfully drive an increase in life expectancy, and
2. pharma companies with approved innovative drugs or pipeline drugs that target diseases that are more prevalent in the elderly population.

What are the leading causes of mortality

Figure 9 shows the top 10 leading causes of death in the US with heart disease, cancer, and stroke in the top five (alongside accidents and COVID-19). Metabolic diseases such as obesity significantly contribute to heart attacks and strokes (see later for more details). Additionally, obesity raises the risk of cancer, liver and kidney disorders, mental health issues, and potentially dementia (Alzheimer's disease)—also among the leading causes of death in the US.

Figure 9 - Top 10 leading causes of death in the US in 2022
(Unit: thousands)



Source: CDC, UBS, as of October 2024

Key areas of pharma innovation and growth

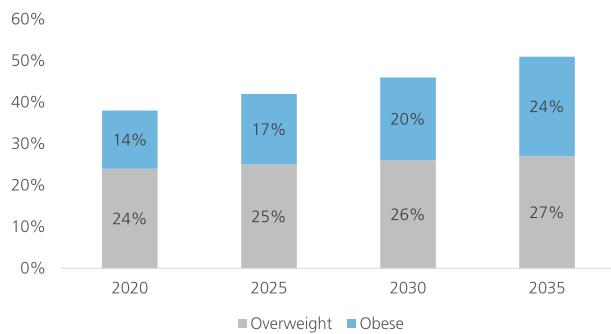
With this in mind, we highlight two therapeutic areas where we currently see the highest level of pharmaceutical innovation, but that also provide the largest revenue growth opportunity over the next decade—including drugs for managing metabolic-driven diseases (obesity and diabetes) and cancer. Furthermore, we have also seen pockets of breakthrough for managing diseases in the field of neuroscience and mental health, particularly for the treatment of Alzheimer's disease, although further research and development is still required to bring more effective treatments to the market.

Metabolic disorders (obesity)

Prediction: The global obesity epidemic has significantly expanded the metabolic disorders market, with GLP-1 drugs emerging as transformative treatments, driving a projected increase in the obesity market to USD 200 billion annually.

The global obesity epidemic has positioned the metabolic disorders treatment market as a rapidly growing sector in health care. According to the WHO, around 800 million adults worldwide are classified as obese, and these figures continue to rise, driven by adverse lifestyle changes in both developed and developing nations. In addition, obesity represents a significant upstream cause of major diseases that impact mortality, including diabetes, heart disease, stroke, kidney disease and certain cancers. As a result, the medical and economic burden of obesity is immense. A WHO report in 2022 estimates that the current annual cost of obesity to health services is at USD 990 billion, which is set to rise if treatment and prevention measures do not improve.

Figure 10 - Global obesity prevalence is rising
Projected percentage of the world population that is overweight and obese



Source: World Atlas 2024, UBS

Injectable GLP-1 receptor agonists (Novo Nordisk's Ozempic/Wegovy and Eli Lilly's Mounjaro/Zepbound) have emerged as transformative treatments for obesity. These drugs, which were initially developed for managing type 2 diabetes, have also demonstrated significant benefits in reducing 15-20% of body weight. Novo's SELECT study for Wegovy has also shown that GLP-1-driven weight loss can reduce cardiac event risk by as much as 20%. Such datasets and further readouts from comorbidity trials should strengthen the case for expanded reimbursement in the US.

However, even with limited reimbursement, patient demand for GLP-1 drugs has been immense, resulting in supply shortages. These are being addressed with Novo Nordisk

and Eli Lilly deploying USD 50 billion in capital expenditure in 2022-28 to support the supply chain.

Obesity market opportunity

Global sales of GLP-1 drugs came in at USD 51 billion in 2024 and consensus forecasts the obesity market reaching USD 200 billion annually by 2030. Novo Nordisk and Eli Lilly are poised to dominate this market, driven by the strength and depth of their pipelines and supply chain investments, which creates high barriers to entry. However, the scale of the obesity epidemic has also attracted other large-cap pharma and biotech companies with cardio-metabolic disease platforms. Newer anti-obesity drugs have the potential to offer better efficacy and greater convenience, but we await the completion of larger-scale clinical trials to confirm their profiles over the coming years (see Figure 11 for snapshot of pipeline assets).

While we acknowledge the obesity market's very large potential, we also believe cost, reimbursement, and access are rate-limiting factors that are not easily resolved. Payors may not easily absorb additional annual costs in the USD 100-200 billion range, given already stretched health care budgets. The offsetting health care cost savings from reduced obesity rates have not yet been demonstrated in long-term clinical outcomes studies. We also note that the eventual availability of GLP-1 generics (semaglutide loss of exclusivity in 2031 in the EU and 2032 in US) may also pressure prices.

Figure 11 - Approved and pipeline obesity drugs

Company	Drug	Phase
Injection		
Novo Nordisk	Saxenda (Liraglutide)	Approved
Novo Nordisk	Wegovy (semaglutide 2.4mg)	Approved
Eli Lilly	Zepbound (tirzepatide)	Approved
Novo Nordisk	CagliSema (Cagrilintide & Semaglutide)	Phase 3
Eli Lilly	Retatrutide / Triple G	Phase 3
Zealand / BI	Survotudotide	Phase 3
Zealand	Petrelintide	Phase 2
Amgen	MariTide	Phase 2
AstraZeneca	AZD6234	Phase 2
Roche	RG6640	Phase 2
Novo Nordisk	OW GIP/GLP-1 (NN9542)	Phase 2
Viking	VK2735	Phase 1/2
Zealand	Dapaglutide	Phase 1
Novo Nordisk	SubQ Amyretin (NN9487)	Phase 1
Oral		
Peptide		
Novo Nordisk	Oral Semaglutide 50mg/25mg	Phase 3
Novo Nordisk	Oral Amyretin (NN9487)	Phase 2
Viking	VK2735	Phase 2
Small molecule		
Eli Lilly / Chugai	Orforglipron (LY3502970)	Phase 3
AstraZeneca	AZD5004 (ECC5004)	Phase 2
Structure	Aleniglipron (GSBR-1290)	Phase 2
Pfizer	Danuglipron (PF-06882961)	Phase 2
Novo Nordisk	Monlunabant (INV-202)	Phase 2

Source: Company data, UBS research

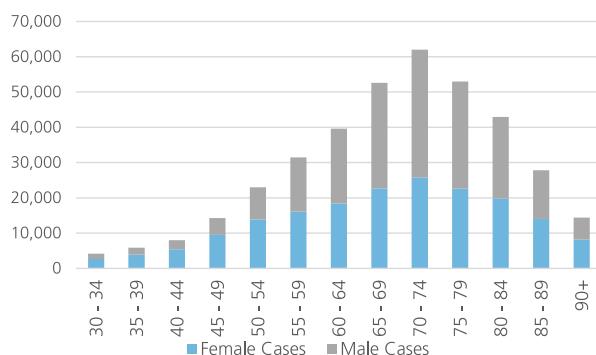
Cancer

Prediction: Cancer remains a leading cause of death globally, but advancements in treatments such as next generation immuno-oncology drugs and antibody-drug conjugates are driving growth in the oncology market.

Cancer is a leading cause of death globally, despite great strides made in diagnosis and treatment. As the population ages, we see global cancer incidence rising in the coming decades (see Figure 12). The WHO estimates that cancer incidence will rise from 18 million in 2018 to 35 million in 2050. With the five-year survival rate being only 69%, there is still a clear need for new cancer treatments.

Figure 12 - Cancer incidence rises with age

Cancer incidence rates by age, UK, 2017-19



Source: Cancer Research UK, UBS

A deeper understanding of the molecular basis of cancer and the human immune system has resulted in the development of a broad pipeline of anti-cancer drugs over the past two decades. The most revolutionary cancer treatment to have emerged is the development of immuno-oncology drugs (also known as checkpoint inhibitors), which offer durable responses, reduced side effects compared to conventional chemotherapy, and broad applicability across different cancer types.

From PD-L1/PD-1 success to newer targets

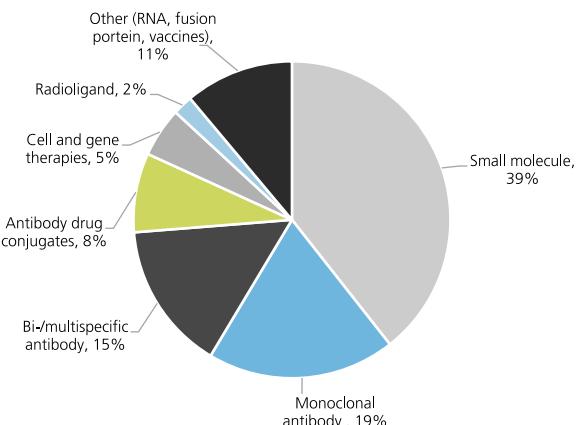
The first wave of immuno-oncology drugs, known as PD-L1/PD-1 inhibitors (which work by blocking the pathways that allow cancer cells to evade immune detection, thus allowing the immune system to identify and eliminate cancer), have been the biggest commercial success, but have now matured after nearly a decade in the market and will begin to face biosimilar competition around 2028. Sales of these drugs amounted to USD 47 billion in 2024, and may peak close to USD 57 billion before losing exclusivity, based on consensus estimates. Current market expectations

for next-generation immuno-oncology targets, including LAG-3, TIM-3 and TIGIT, are a fraction of this size.

Multiple other approaches have been successfully developed and the cancer pipeline is now incredibly broad in terms of targets and modalities (see Figure 13).

Figure 13 - Oncology R&D pipeline by modality in 2023

Total number of Phase 1-3 trials as of 2023 (n=1924)



Source: IQVIA, UBS, as of 2023

Beyond immuno-oncology, progress has been made with antibody drug conjugates (ADCs), bispecific antibodies, and radiopharmaceuticals, among others. Personalized cell therapies such as CAR-T, which involves modifying a patient's T-cells to fight cancer, have already shown success, though treatment is limited to blood cancers like leukemia and lymphoma. We highlight a number of approaches that will likely be in focus over the medium term:

- **Antibody-drug conjugates** (ADCs) combine a cytotoxic chemotherapy that aims to kill cancer cells with an antibody designed to target key proteins in the cancer cell of interest. This allows the drug to be precisely delivered to where it is needed, reducing unwanted exposure of the drug to normal cells. Since 2000, 15 ADCs have been approved across a range of blood cancers and solid tumors. Drug development of ADCs has exploded with close to 200 new trial starts in 2023 alone. We expect future drug development to focus on new targets with a combination of different cytotoxic agents to improve patient outcomes over chemotherapy.
- **Bispecific antibodies** are antibodies that are engineered to simultaneously bind to two proteins. By binding to two sites and pulling them together, bispecifics can improve the immune system's ability to fight tumors. A number

of bispecific antibodies are approved across therapeutic areas including blood cancers and solid tumors. Since 2022, the FDA has approved six new bispecific antibodies for oncology applications, particularly myeloma and lymphoma. Multiple bispecifics are in development primarily for solid tumors. As bispecific development has advanced, novel multi-specific antibody modalities have also emerged.

- **Radiopharmaceuticals** build on the long-established principle of treating cancer with radiation. Having to handle radioactive products with short half-lives creates challenges in supply chains and distribution, however Novartis has demonstrated the commercial feasibility of the class with the approval of two therapies incorporating the beta-emitting radioisotope 177-lutetium. Treatments in the pipeline include a range of radiotracers, including alpha-emitters such as 225-actinium, which may offer more potent and targeted radiation delivery compared to beta-emitters. We expect to see more interest in the space from large-cap pharma companies in the coming years.

Cancer market opportunity

Oncology represents the biggest market opportunity within the global pharma market, in our view, and we continue to expect sales growth driven by continued adoption of cancer drugs and approval of newer drugs with new modalities over the coming decade. According to IQVIA, sales of oncology drugs grew at a 12% annual rate from USD 155 billion in 2020 to around USD 216 billion in 2023. We expect oncology sales to continue to outpace the broader pharma market and reach USD 400 billion by 2030, although the impact of biosimilar competition to several of today's blockbuster oncology drugs introduces some uncertainty toward the end of the forecast period. However, according to IQVIA, cancer drugs make up 44% of new clinical trial starts, and 29% of the 69 new drugs launched globally in 2023. This suggests that oncology will become an even larger share of launched drugs in the future. These growth sources should partially offset erosion of older drugs by generics and biosimilars.

Neuroscience/Mental health (Alzheimer's disease)

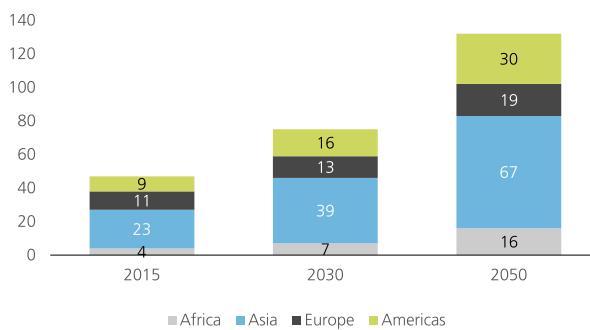
Alzheimer's disease is a significant health care burden that predominantly affects the elderly. Globally, over 47 million people were affected by dementia in 2015, with Alzheimer's accounting for 60-70% of these cases. This figure is expected to rise to 132 million by 2050, according to the World Alzheimer Report (see Figure 14).

Recent years have seen notable progress in Alzheimer's treatment, with the approval of two disease-modifying

drugs such as Biogen Idec/Eisai's Leqembi (lecanemab) in early 2023 and Eli Lilly's Kisunla (donanemab) in mid-2024. Both drugs target amyloid-beta plaques in the brain, a hallmark of Alzheimer's pathology, and are indicated for patients with mild cognitive impairment or mild dementia stages of the disease. These drugs are designed to slow cognitive and functional decline in early-stage Alzheimer's patients, although the efficacy benefits have been modest and often come with significant side effects.

Figure 14 - Dementia (Alzheimer's) prevalence is rising

Number of people with dementia (millions)



Source: World Alzheimer Report 2015, UBS

Alzheimer's market opportunity

Despite these approvals, market penetration of these therapies has been challenging. For instance, Leqembi's US sales ramp has been slower than expected with 2024 sales of USD 130 million. Factors contributing to this modest uptake include the high costs of treatment (USD 26,500 annually) and the need for regular intravenous infusions coupled with monitoring for potential side effects (amyloid-related imaging abnormalities). These logistical and financial hurdles have limited widespread adoption. In addition, the EU recently rejected Eisai's Leqembi, citing an unfavorable efficacy/safety balance, before later reversing the decision. Consensus forecasts see a global Alzheimer's disease sales opportunity of USD 5 billion annually by 2030.

There is still a substantial unmet need in Alzheimer's care as current therapies offer limited benefits. The development pipeline for Alzheimer's treatment is broad, with ongoing research exploring various therapeutic targets beyond amyloid-beta. Interestingly, Novo Nordisk's GLP-1 receptor agonist is also under investigation for its potential neuroprotective effects. Novo Nordisk's oral semaglutide (Rybelsus) is currently in Phase 3 trials to assess its efficacy in slowing Alzheimer's progression. Other approaches, including targeting tau proteins and neuroinflammation, are also under development.

Application of artificial intelligence (AI) in mental health treatment

AI is poised to revolutionize mental health care by leveraging its ability to collect and analyse vast datasets, significantly impacting neuroscience and mental health treatment. For instance, AI-powered tools can diagnose behavioral health conditions such as attention deficit hyperactivity disorder (ADHD) and Autism Spectrum Disorder using hand-held devices, offering a more accessible and efficient diagnostic process. Furthermore, AI can facilitate therapy through mobile devices, providing personalized treatment plans and continuous support. This innovative approach promises to enhance the accuracy of diagnoses and the effectiveness of treatments, paving the way for improved mental health care outcomes. We think complex and nuanced therapeutic areas such as neuroscience and behavioral health are particularly well suited to AI/machine learning (ML)-driven diagnostic and therapeutic treatment approaches, although they are early in their clinical development.

Application of AI in drug discovery

We see continued AI spending within the health care sector, including by biopharma companies deploying machine learning and AI in an effort to identify attractive drug targets and drug candidates. We also believe the progress toward faster and more efficient drug discovery will be gradual for the foreseeable future, in part because these tools have been widely deployed for many years with limited impact on R&D efficiency, and in part because of the inherent challenges in the drug discovery and clinical development processes. As long as the drug approval process requires large clinical trials in human populations, we think AI's ability to materially accelerate drug development timeframes will be limited, although we also see AI playing a meaningful role in improving clinical trial administrative efficiency, including trial protocol adherence and data communication with regulators, which we think can incrementally improve the overall odds of clinical trial success.

Conclusion

To summarise, the pharma industry plays a role in enhancing longevity through innovative treatments targeting metabolic diseases and cancer. With the global obesity epidemic driving demand for effective weight management solutions, GLP-1 receptor agonists have emerged as transformative treatments, offering significant market potential. Meanwhile, the oncology sector continues to expand with advancements in next-generation cancer treatments that promise to address the rising incidence of cancer among the aging population. As these therapeutic areas evolve, they present substantial opportunities for growth and innovation, in our view, ultimately contributing to increased longevity.

Key risks from investing in pharma include clinical trial failures, new drug competition impacting drug uptake, reimbursement and pricing challenges, legal threats including product liability cases and any changes in the political and regulatory environment.

*Diana Na (Equity strategist), Eric Potoker (Equity strategist),
Carl Berrisford (Equity strategist)*

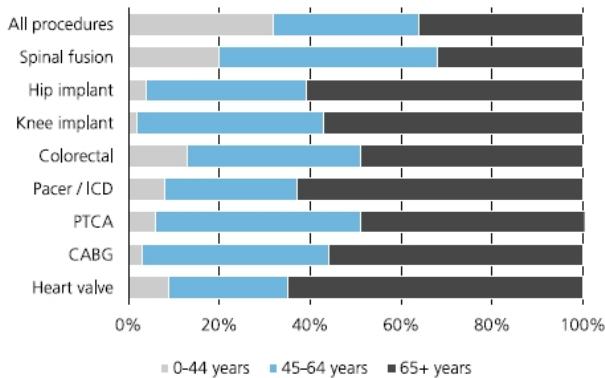
Medical Devices and Services

Prediction: The aging population is set to drive sustained growth in the medical device industry, particularly in orthopaedic implants, ophthalmology, hearing aids, and cardiovascular devices, as demand rises for treatments prevalent among the elderly. In addition, various devices also aim to help patients avoid, treat, and manage diseases such as diabetes, sleep apnea, and cardiovascular disease, all of which drive mortality either directly or indirectly. We think medical devices will both boost lifespans and see increased demand.

Like the pharmaceutical industry, an aging population is a key growth driver for most medical device makers and health care services providers. Many of the conditions that are treated with medical devices are more prevalent among the elderly. For example, two-thirds of hip implant patients are over 65, while most cardiovascular surgery patients are in their late 60s. In addition, the average age of a first-time hearing aid user is near 70 (see Figure 15).

Figure 15 - Medical devices are predominantly used by the elderly

Share of each procedure type by age group, US



Source: CDC, UBS, Morgan Stanley, as of June 2017; Note: ICD= implantable cardioverter defibrillator, PTCA= percutaneous transluminal coronary angioplasty, CABG= coronary artery bypass graft

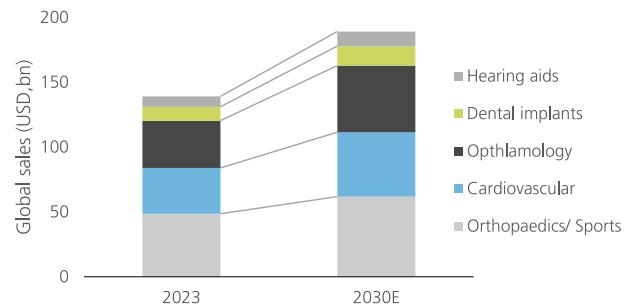
Evaluating the opportunities within the medical devices industry relating to the longevity theme, we have chosen to focus on four different opportunity sets: (1) companies with devices that prevent and treat various life-threatening conditions, (2) companies that target the health needs of the elderly, (3) companies with diagnostics/tools for early disease detection or patient monitoring, and (4) US health care services companies that manage and provide care for the elderly. With this in mind, we highlight the most significant beneficiaries below.

Consumer medical devices

The growing population of those aged 65 and older in developed markets is expected to drive future medical device volumes, as aging individuals increasingly require medical devices, as well as replacements, repairs, and augmentations. And in emerging markets, the rising affordability, infrastructure investment, and shifting demographics should underpin greater spending on medical devices for years to come.

We estimate the total size of the consumer medical device market was around USD 139 billion in 2023 and expect it to grow by mid-single digits over the long term. We summarize below the medical device categories that should benefit from the structural tailwind of an aging population.

Figure 16 - Global medical devices market to grow by mid-single digits to USD 189 billion in 2030
Total sales (USD, billion)



Source: Company data, UBS estimates, as of January 2025

- Orthopaedic implants:** This segment includes replacement joints, spinal fusion, plates used to repair injured bones, and surgical equipment for sports medicine. The core orthopaedic market is mature in developed markets, with mid-single-digit percentage volume growth in the major categories of large joint reconstruction, trauma, and traditional spinal fusion procedures. Robotic assisted surgery (RAS) and minimally invasive approaches are gaining traction across various specialties in orthopaedics, driving higher growth rates. The orthopaedics market size was USD 49 billion in 2023 and is seeing low- to mid-single-digit trend growth.

- Ophthalmology:** The ophthalmology device market covers surgical procedures for correcting vision. Surgical procedures are often required to correct more serious eye conditions such as cataracts, which is a leading cause of visual impairment in old age. This consists of implanting an intra-ocular lens into the patient's eye to enhance vision. The ophthalmology market totaled USD 37 billion in 2023 (including contact lenses) and enjoys mid-single-digit trend growth.

- Hearing aids:** Hearing loss disproportionately affects older people. Hearing ability naturally deteriorates with age as sensory cells in the ears degenerate, and one-third of people over 65 years old have hearing difficulties. The hearing aids market size was USD 8 billion in 2023 with mid-single-digit trend growth. Recent studies have also linked hearing loss to cognitive decline. We believe that hearing aid growth is likely to accelerate as the population ages, and as the importance of hearing preservation for elderly patients is increasingly recognized.

- Cardiovascular devices:** The cardiovascular device market covers a wide range of products used to treat

conditions in the heart and circulatory system, such as abnormal heart rhythms, vascular disease, and valve disease. The incidence of these problems tends to rise with age. The cardiovascular market is a mix of larger, mature product groups and newer, high-growth products that drive the overall category's growth. We estimate the cardiovascular device market was USD 35 billion in 2023 with mid-single-digit long-term growth potential, since the more mature categories face modest pricing pressure, while new technologies such as transaortic valve replacement (TAVR) and, potentially, mitral valve replacement can expand addressable markets.

- **Continuous glucose monitors (CGMs):** Diabetes patients use CGMs to monitor their blood glucose levels in real time, better enabling diabetics to avoid fluctuations in their glucose levels and maintain lower overall HbA1C levels, potentially avoiding various acute health episodes caused by diabetes, and in some cases avoiding deterioration into more insulin-dependent stages of diabetes. The progression of diabetes leads to increased cardiovascular risk, which CGM use can help avoid. The CGM market was USD 8 billion in 2023 growing at a midteens annual percentage rate.

Diagnostics

Prediction: Innovations in early disease detection and personalized treatment technologies will drive diagnostics market growth, significantly contributing to increased longevity.

Early detection of age-related diseases is crucial for driving longevity. Diagnostic tests are medical devices designed to identify and determine the presence or absence of specific diseases, conditions, or other health markers in patients. These tests play an important role by aiding in the early detection, diagnosis, and tailoring personalized treatment plans for patients.

The increasing prevalence of chronic diseases is a major driving force behind the growth of the diagnostic tests market. The need for accurate, timely, and personalized diagnostics to manage chronic conditions effectively should fuel innovation in diagnostic technologies and promote the expansion of the diagnostic tests market to meet evolving health care demands.

Innovations within the diagnostics industry include **next-generation sequencing** (comprehensive genomic profiling enables more precise and personalized treatment approaches) and **liquid biopsy** (enables non-invasive early cancer detection). In addition, the shift toward decentralized health care has led to the rise of home health tests and point-of-care devices, which is reducing the need for hospital visits and improving patient outcomes. Wearable health monitors such as CGMs (see above) and cardiac tracking devices are also aiding with chronic disease management. In addition, the integration of artificial intelligence in diagnostic tools enhances the accuracy and efficiency of disease detection, contributing to the overall market expansion.

We estimate the clinical diagnostics market at USD 110 billion in 2023, and we expect it to grow at a mid- to high-single-digit CAGR, reaching USD 170 billion by 2030, driven by advancements in diagnostic technologies and growing demand for early disease detection and prevention.

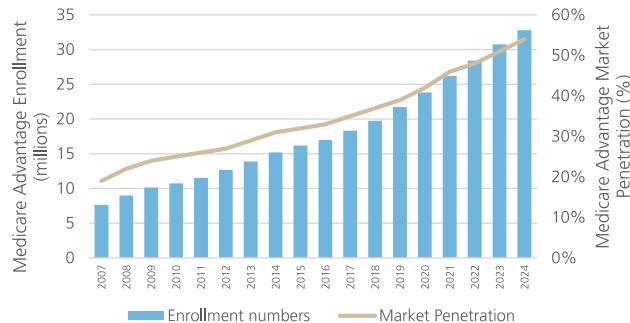
Health care services

Prediction: The aging population will drive significant growth in the demand for health services among seniors, benefiting managed-care firms with exposure to the Medicare Advantage program.

US managed-care organizations (MCOs) provide health insurance to individuals, the government, and employers. We believe MCOs with significant exposure to the federal government's Medicare Advantage (MA) program are particularly well positioned to increase lifespans and benefit from a larger elderly population. MCOs administer MA and receive fixed payments from the US federal government to cover Medicare (elderly) beneficiaries. MA plans coordinate patient care within a dedicated network of providers (physicians and hospitals mainly), and through that coordination can lower both health care utilization and unit price paid to providers. By reducing the overall cost of care, MA plans can also provide additional ancillary services (dental, hearing, vision, etc.), that traditional fee-for-service Medicare does not offer, making it a popular choice among seniors. Currently, the MA population has grown to over 50% of the total Medicare market. We expect the number of eligible members and MA enrollments to grow. As per KFF, 54% of eligible Medicare beneficiaries (33 million out of 61 million) were enrolled in Medicare Advantage plans in 2024 (see Figure 17). This is expected to rise to 64% by 2034 as per the Congressional Budget Office's projections. As a result, MCOs with significant MA exposure are well positioned to benefit from a larger elderly population. We estimate the Medicare Advantage market at USD 457 billion in 2023 and expect mid- to high-single-digit CAGR, reaching USD 678 billion by 2030, predominantly driven by the aging baby boomer generation.

Figure 17 - Medicare Advantage enrolments are growing

54% of eligible Medicare beneficiaries were enrolled in 2024



Source: KFF, UBS, as of 2024

MCOs are also evolving to better manage the needs of an aging population, with data collection playing a crucial role. These companies are leveraging vast amounts of health data to identify high-risk patients earlier and intervene more effectively with preventative care. This shift toward data-driven health care allows for more personalized treatments, earlier disease detection, and optimized resource allocation.

As a result, payors are increasingly partnering with health care providers to implement proactive care models that focus on preventing chronic conditions rather than just treating them.

Separately, among **health care providers**, companies offering senior housing, hospice care, and home care should also see increased demand from a larger elderly population. Senior housing, including assisted living and skilled nursing facilities, provide environments for both medical support and lifestyle amenities (see the real estate section for more detail). Furthermore, an increase in elderly patients with terminal illnesses fuels a need for expansion in hospice care providers and home care services as patients prioritize comfort and quality of life.

Conclusion

The aging population is driving growth in the medical device, diagnostics, and health care services industries. Use of orthopaedic implants, ophthalmology, hearing aids, and cardiovascular devices markets is expanding owing to age-related conditions. Innovations in diagnostics, such as next-generation sequencing and liquid biopsy, enhance early disease detection and personalized treatment, boosting longevity. Health care services, especially Medicare Advantage, are benefiting from demographic shifts, with increased demand for senior housing, hospice, and home care.

Key risks from investing in medical devices, diagnostics, and health care services include failure of pipeline products; new or tougher competition; legal threats including product liability cases; access, reimbursement, and pricing challenges; and a shifting political and regulatory environment.

*Eric Potoker (Equity strategist), Diana Na (Equity strategist),
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Consumer (health, foods, and beauty)

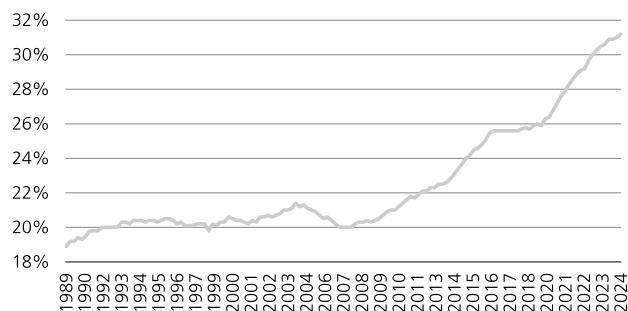
Prediction: Consumer companies targeting healthy aging through nutrition or consumer health care are set to capitalize on increasing demand from an aging population.

Seniors: An attractive target group for consumer companies

The consumer industry plays a key role in the global demographic shift toward an older population, offering products that promote healthier and longer lives. At the

same time, we believe that consumer companies targeting healthy and beautiful longevity through active nutrition, medical foods, vitamins, minerals and supplements, over-the-counter medicines, and cosmetics are well positioned to capitalize on increasing demand from an aging population. Importantly, the senior cohort increasingly controls a larger part of household wallets, reflecting the accumulation of wealth over the course of life. In the US, for example, people aged 70+ now collectively own a record 31% of the nation's wealth, while accounting for only 13% of the US population—the highest share since records began in 1989 (see Figure 18).

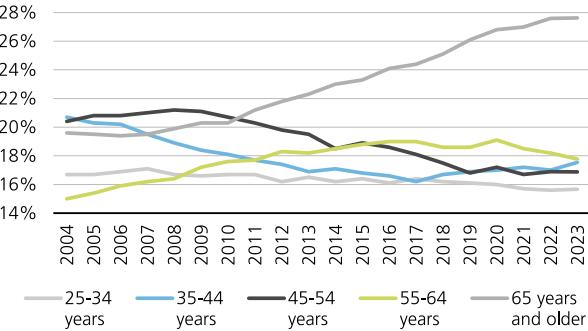
Figure 18 - Living longer, healthier, and wealthier
Share of household wealth held by people age 70+, US



Source: Federal Reserve Board of Governors, UBS. Last data point: 3Q24, last update December 2024

What's more, seniors are the fastest-growing consumer group, and now account for the highest share of total spending (see Figure 19). This makes the elderly an important and growing target group with significant spending power.

Figure 19 - The aging consumer: A spending force to be reckoned with
Share of consumer spending by age group



Source: US Labor Department survey of consumer expenditures, UBS. Last data point: 2023, last update December 2024

"Let thy food be thy medicine..." – Healthy nutrition

A growing body of research points to the importance of nutrition in regulating aging processes and the development of age-related diseases. This is also reflected in an ever more health-conscious consumer and interventions by policymakers (e.g., health warnings or marketing restrictions). A balanced diet is a key component of a long and healthy life, and most food companies have been successfully adjusting their offerings to cater to an aging consumer base.

- **Improving the health of the portfolio:** To suit health-conscious consumers, food producers and retailers have been expanding their product offerings into healthier categories, such as fresh and organic foods. Food companies have also been reformulating the nutritional profile of their products, reducing their sugar and sodium contents, and eliminating industrially produced trans fats.
- **Active nutrition:** We also see opportunities for companies that offer active nutrition. This includes more science-based products tailored specifically for older consumers who may have digestive issues or nutritional deficiencies. The need for protein, for instance, increases with age, making this category particularly well-placed to benefit from the longevity theme. The gut microbiome, and how its composition changes with age, is another key topic. We believe that probiotic supplements as well as probiotic-rich, fermented foods such as yogurt, kombucha, or kimchi are set to benefit from the health-conscious consumer. The active nutrition category is currently worth around CHF 33 billion (USD 37 billion), and is expected to grow at a 7% CAGR in the medium term, ahead of many other consumer categories (Source: Euromonitor, IQVIA, Nestlé estimates).
- **Medical nutrition:** There is a strong correlation between age and malnutrition. This is driven by a spectrum of reasons, including illness, lack of appetite, or an inability to chew or absorb nutrients. Medical nutrition can address these issues. It is grounded in clinical research and formulated to meet specific nutritional needs that cannot be met through regular food alone. We view medical nutrition as a fundamentally attractive category with high barriers to entry and an appealing margin profile. The global market is estimated at around CHF 13 billion (USD 15 billion) currently, growing at a mid- to high-single-digit rate (Source: Euromonitor, IQVIA, Nestlé estimates).
- **Vitamins, minerals, and supplements:** We also see substantial market potential for vitamins, minerals, and dietary supplements (VMS). Most people do not get enough nutrition from the food they eat. That deficit can become even more pronounced with age. VMS can help close those nutrient gaps by supplementing

diets and providing a simple solution to deliver the nutrients needed for healthy aging. According to industry estimates, the VMS market currently generates roughly CHF 150 billion (USD 166 billion) annually and is expected to grow at a 5% CAGR over the next few years (Source: Euromonitor, IQVIA, Nestlé estimates), driven by an aging population and increased health-consciousness.

Self-care time – consumer health care

An aging population goes hand in hand with higher spending on health care, straining global health systems and budgets. Against this background, the self-care movement is gaining momentum, with people increasingly taking health into their own hands. We believe that this creates strong tailwinds for the consumer health care market, which focuses on over-the-counter (OTC) medicines, offering consumers affordable, accessible solutions while easing the burden on health care providers. In the US alone, spending on OTC medicines is estimated to save the health care system USD 167 billion annually by reducing drug costs and unnecessary doctor visits, according to the Consumer Healthcare Products Association. Consumer health firm Haleon estimated the global consumer health market at more than GBP 100 billion (USD 134 billion), and we expect it to be worth GBP 143 billion (USD 182 billion) by 2030.

Cosmetics: Aging beautifully

As the population ages, demand for cosmetics and wellness products tailored to addressing specific concerns such as age spots, wrinkles, or thinning hair increases. Older consumers are some of the most enthusiastic beauty spenders. In fact, according to L'Oréal, the average boomer spends over USD 400 per year on beauty. This is almost twice as much as a Gen Y and 2.5 times as much as a Gen Z. L'Oréal estimates the global beauty market to be worth roughly EUR 270 billion (USD 284 billion) and we expect it to grow to EUR 370 billion (USD 387 billion) by 2030.

Conclusion

Longevity presents new opportunities for the consumer sector. A healthier diet is a key factor supporting longer lifespans. So, we view companies with exposure to healthy nutrition categories—such as active nutrition, medical nutrition, or VMS—as well positioned to capitalize on the growing demand for healthy aging. Similarly, we believe the consumer health as well as beauty categories are poised to benefit from an aging population.

Key risks include a rotation out of defensive equity sectors, higher interest rates, consumer preference changes, increasing competition from local and global players, consumer sentiment deteriorating in key markets, higher-

than-expected input cost inflation, and unfavorable currency movements.

Seraina Hold (Equity analyst), Wen-Ching Lee (Equity strategist), Sunny Mehra (Equity strategist)

Consumer (hotels and leisure)

An opportunity for the hotels and leisure industry

The longevity economy is becoming an increasingly powerful force—encompassing both the economic activity serving the needs and desires of the 55-plus segment, as well as partly directed purchased products and services along with the knock-on economic activity that this generates. We see opportunities in hotels and leisure segments coming from an aging population. We narrow down to the segments where we see the biggest upside potential: hotels, cruises, and casinos.

Consumer companies targeting the aging population are anticipated to outpace their peers in growth due to the rising percentage of elderly individuals globally. Cruise businesses, with the elderly making up a substantial portion of their clientele, stand to gain from this demographic shift. As the population aged 55 and above increases at a rate of 2.4%, compared to 0.8% for all ages, this could result in a 0.3% annual increase in the proportion of individuals aged 55 and older within the total population. As a result, the cruise industry, being oriented toward this demographic, is likely to expand its total addressable market by attracting more passengers.

As individuals enjoy longer, healthier lives, travel has become a significant leisure priority for those aged 60 and over. In 2024, adults in this age group accounted for nearly 37% of travelers globally, while a study from the AARP (American Association of Retired Persons) showed that in 2023, 52% of seniors aged 50 and older rank travel and vacation as their number one priority for discretionary income, while entertainment came in third just after home improvements.

Hotels are the forefront of the opportunity

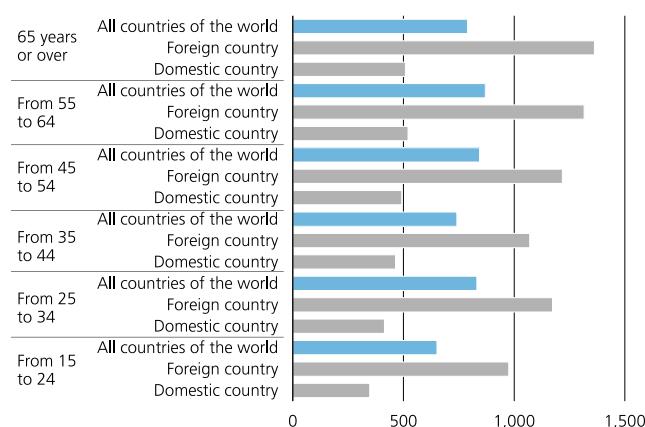
Hotels should be another beneficiary of the trend. We see the hotel industry for the silver economy reaching USD 412 billion by 2030 from USD 259 billion in 2023. An aging society should not only support volumes but also margins. The elderly usually spend more while traveling and the hotel sector has moved toward the luxury segment, where most customers are aged 50 and older.

Aging populations around the world represent a significant market opportunity for the travel industry, in our view,

impacting the type of tourists, where they travel, and the kinds of accommodation they require. Holidays remain one of the leisure interest priorities for the 55-plus age group, as they enjoy both purchasing power and free time, which is estimated at around six hours per day (leisure and sport) by the US Labor Bureau of Statistics. This free time, combined with a willingness to spend as the 55-plus group on average uses bigger travel budgets than other age categories (see Figure 20), bodes well for the leisure industry. Tour operators and travel agencies are also likely to benefit from the increased propensity of older groups to travel.

Figure 20 - Expenditure by tourist age group

Average spending per trip in EUR for the EU (all countries, 4+ days trip, private travel (excluding business))

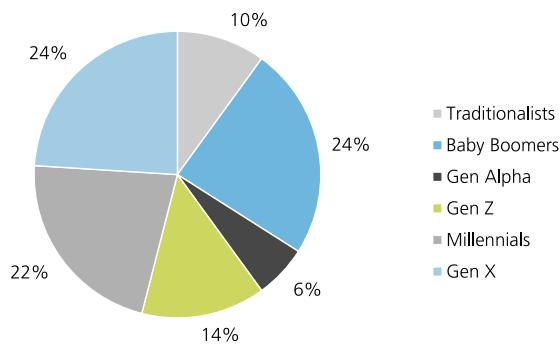


Source: Eurostat, UBS, 2025

Cruises should benefit from elderly spending

As the global population ages, and given the willingness and ability of the elderly to spend more, the cruise industry is well positioned to benefit from this trend, in our view. Seniors, particularly those aged 60 and above, represent a lucrative segment for cruise lines. According to the CLIA (Cruise Lines International Association), the average age of cruise passengers is 50-plus, with senior travelers among the fastest-growing customer groups. Older travelers often book longer cruises, with more upgraded accommodations, and use onboard experiences (specialty dining, spa treatments, and excursions), which boost the revenue per passenger. We also see more opportunities for luxury and niche cruises, for example medical and wellness-focused voyages or themed and enrichment cruises. With CLIA expecting around 39.7 million cruise passengers this year and those aged 60 and older (Baby Boomers and traditionalists) making up more than a third (see Figure 21), we see the cruise industry growing to around USD 288 billion in 2030 from USD 214 billion in 2023.

Figure 21 - 34% of cruise travelers are 60+
Cruise travelers by age category



Source: Cruise Lines International Association, UBS, 2025

Casinos stand to benefit significantly from this trend as well. Historically, older generations have been the primary clientele for casinos, and this trend has only intensified in recent years. Seniors are increasingly engaging in casino activities, driven by targeted marketing efforts such as bus tours, day trips, and entertainment offerings. There is an ongoing ethical debate regarding gambling addiction, particularly among the elderly. It is advisable to closely monitor gambling behavior, as the connection between problem gambling and the elderly remains a subject of active discussion.

Revenue opportunities

The global silver economy is growing fast, and we see some sectors such as hotels, cruises, and casinos benefiting from an aging population. We see the current market opportunity for those three segments at USD 1.2 trillion by 2030, up from USD 786 billion in 2023, for an annual growth rate of 6%.

Conclusion

The aging population should boost the leisure and tourism business as a meaningful part of global travelers are 50+. This should lead to revenue and profitability increases across a various range of sectors from hotels to cruises.

Thomas Parmentier (Equity strategist), Wen-Ching Lee (Equity strategist), Sunny Mehra (Equity strategist)

Financials (asset and wealth management)

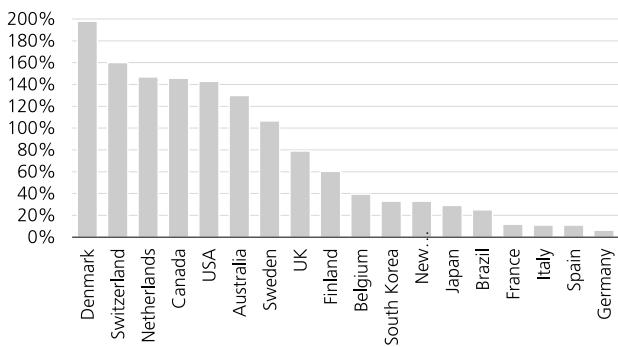
Asset and wealth management

An aging population globally is leading to a significant strain on established pension systems and could see a huge savings shortfall. In the US alone, the largest cohort of Americans in history (born from 1959 to 1964)—the peak of the baby boomer generation—will retire in 2024-2030, accounting for about 30 million people, according to the Retirement Income Institute. However, with fewer workers and insufficient savings, traditional pay-as-you-go pension and health care systems are becoming increasingly unsustainable. We see the asset accumulation required to bridge this gap as a long-term growth opportunity for private pension providers such as 1) asset managers, especially those with exposure to private markets, and 2) wealth managers.

Addressing (new) retirement needs

In many developed countries, the traditional retirement model, characterized by stable pension payments from defined benefit (DB) plans and public pensions, is undergoing a significant transformation—shifting the burden of risk from employers to individuals through defined contribution (DC) plans. Unfavorable demographic trends as well as high government debt levels make it difficult for many countries to sustain pension systems in their current form (see Figure 22). The World Economic Forum projects that the global gap between retirement savings and retirement income needs will reach USD 400 trillion in three decades—more than five times the size of the global economy. As a result, individuals will need to depend more on personal retirement plans for their post-retirement income.

Figure 22 - Assets earmarked for retirement in selected jurisdictions
in % of GDP



Source: OECD (Pensions Outlook 2024), UBS as of February 2025

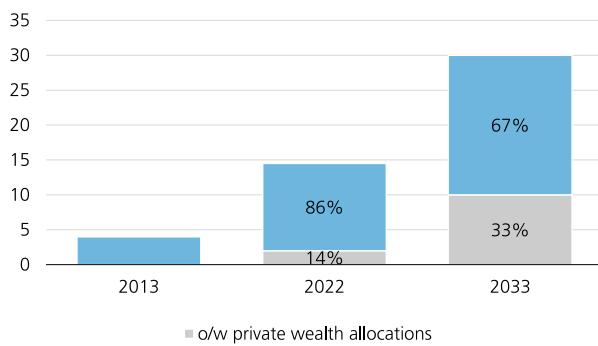
Asset managers

Asset managers are poised to benefit from the increasing demand for private pension plans. We believe the private market sector (including private equity, private

credit, infrastructure, real estate) especially has structural strength within the asset management industry. As global demographics expand the total savings pool, private individuals are likely to seek enhanced returns through diversification. Furthermore, private market investments typically require longer holding periods, which align well with the extended time horizons of retirement planning. This trend is further supported by a global shift toward easing the regulatory landscape governing pension assets and private market investments.

According to Partners Group, the private wealth channel currently allocates only about 2% to private markets, compared to an institutional allocation in the high 20s. So, many of the largest alternative asset managers have introduced products for private individuals, such as private market funds with liquid and semi-liquid structures, allowing for periodic redemptions. For instance, BlackRock announced a partnership with Partners Group in 2024 to develop model portfolios for wealth management clients. Companies in the industry anticipate significant growth over the next decade, as illustrated in Figure 23. Partners Group, for example, projects that around half of the private market growth, or a ~15% compound annual growth rate (CAGR), will come from the wealth channel, which is seen as a USD 6-8 trillion investment opportunity by 2033. Within private markets, private credit is expected to be the fastest-growing segment, driven by high capital requirements for banks in riskier client segments and a natural demand for investors to match longer-term liability durations.

Figure 23 - Private wealth channels are a USD 6-8 trillion investment opportunity for private markets
Asset under management in USD trillion



Source: Partners Group, Preqin, UBS as of February 2025

Wealth managers

We expect global wealth to grow at a compound annual growth rate (CAGR) of 6-7% by 2030, based on data from Oliver Wyman, with the ultra-high net worth (UHNW)

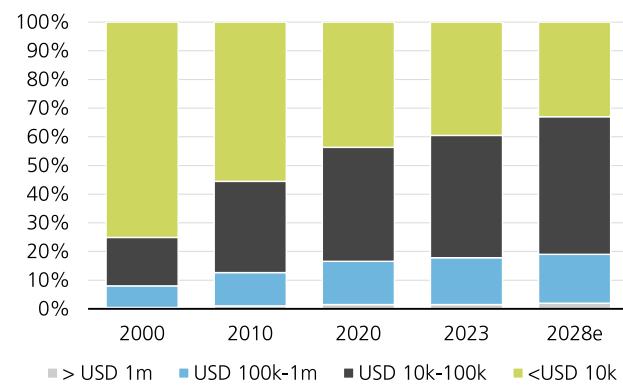
segment continuing to expand the fastest. However, the mass affluent segment, defined as those with net wealth of USD 100,000 to 1 million, will become increasingly more important (see Figure 24) as the average adult lifespan extends, allowing more time for wealth accumulation. Longevity presents an attractive opportunity for wealth managers, in our view. For UHNW clients, the challenge lies in maintaining their lifestyle while navigating complex wealth transfer dynamics. For affluent clients, the focus will be on providing stable financial guidance for retirement, as the shift of retirement responsibilities to individuals increases the demand for advice and tailored retirement solutions.

As a result, we expect wealth managers to broaden their product offerings to include private markets and insurance products, and to evolve their service delivery models to capitalize on the wealth transfer opportunities to younger generations. We see several ways for wealth managers to broaden their integrated retirements solutions: They can

1. build partnerships across the ecosystem,
2. better integrate across business silos if they possess the necessary in-house expertise, or
3. pursue a technology-led platform strategy.

Figure 24 - Percentage of adults by global wealth bands

Wealth per adult is growing – wealth band of USD 10-100k tripled in three decades



Source: UBS (Global Wealth Report 2024); Note: > USD 1mn represents only a very small amount

Revenue opportunities

Longevity will affect both asset and wealth managers as individuals will have to cope with changing pension models that put the burden to provide financially for their retirement phase on their own shoulders. This poses an attractive opportunity for the asset gatherers as both products and distribution channels currently do not cater to these varying

needs across the life cycle (accumulation, decumulation, longevity protection, and wealth transfer), especially in lower wealth bands.

Asset gatherers can tap into a huge and growing revenue pool. We see this as a USD 500 billion-plus revenue opportunity driven by increased private market allocations from retail investors, expanding products and advice, and shifting deposits sitting on the sidelines into retirement-focused accounts. Close to 50% of total euro area household financial assets was parked in currency investments and cash deposits in 2023, excluding life insurance and pension assets, according to the European Central Bank. This compares to an average wealth management client whose cash and money-market instruments account for about a fifth of their portfolio.

Conclusion

We see tremendous opportunities for asset gatherers. Asset managers are likely to see the biggest opportunities in private markets, which stand to benefit from growing allocations in accumulation and from income demand in an extended decumulation phases. On the wealth manager side, the opportunity is most prominent in the mass affluent segment as the retirement burden shifting to the individual drives a greater need for advice and retirement solutions targeted for that segment.

Sacha Holderegger (Equity strategist)

Financials (insurance)

Prediction: The move toward defined contribution pension systems and increasing reliance on personal savings will drive substantial opportunities for life insurers as the global pension gap widens.

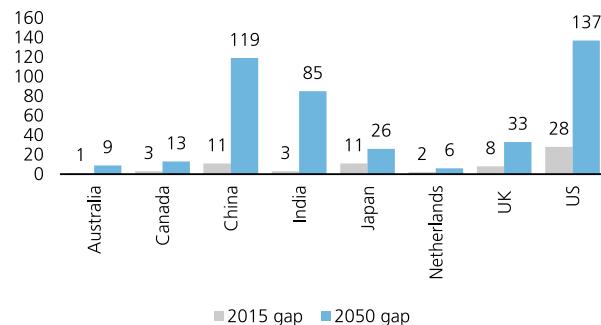
A widening funding gap

According to the World Economic Forum, the retirement savings gap keeps rising across most countries, led by the US, where it is estimated to reach more than USD 137 trillion by 2050, and China, at almost USD 120 trillion by the same date (see Figure 25). Meanwhile, the net replacement rate (defined as the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners) is at 61% (see Figure 26). Old-age dependency ratios are increasing across the globe, which, together with strained public finances, implies that individuals need to save for themselves rather than rely on governments to provide for them in old age. As populations

grow older, the "pay-as-you-go" social security model will be tested, and most models—at least in their current forms—are likely to struggle to survive. As a result, individuals will have to consider other sources of income for retirement.

Figure 25 - Retirement savings gap is growing

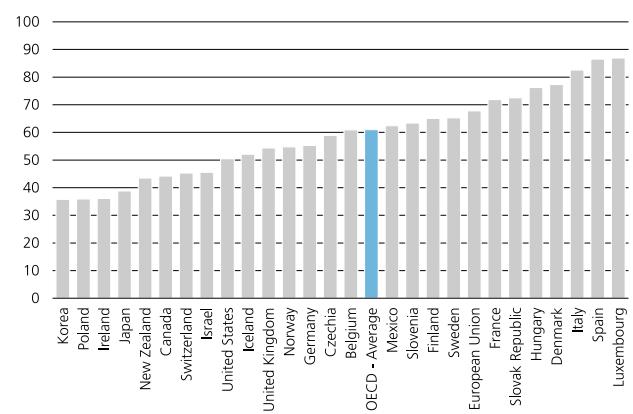
Retirement savings gap by 2025, in value, USD trillions



Source: World Economic Forum, UBS, as of June 2019

Figure 26 - The net pension replacement rate at a normal retirement age averages 61%

Net replacement rate from mandatory pension schemes at the normal retirement age averages



Source: OECD, Pensions at glance 2023, UBS

The move toward Defined Contribution is an opportunity for life insurers

The increasing trend of individuals living longer than anticipated—called longevity risk—poses significant challenges for retirement systems worldwide. For those without guaranteed lifelong income, there are mounting concerns about depleting their savings during the decumulation phase (at retirement). Pension funds and annuity providers face the financial strain of payments over longer periods than initially projected. Recent data underscore the gravity of the issues. Despite huge growth, the exposure to longevity risk remains substantial.

These challenges are driving a shift in retirement planning paradigms. Companies facing large pension-related longevity risk will increasingly look to move toward defined contribution retirement plans that put the onus on the individual to supplement pensions with personal savings.

Study case

The Netherlands has been a pioneer in overhauling its pension system, transitioning from traditional defined benefit (DB) schemes to defined contribution (DC). These significant reforms aim to address the financial sustainability of the system and adapt to demographic changes. The new system is expected to be fully implemented by 2027, shifting investment risks from employers to employees, aligning pension outcomes more closely with individual contributions. This shift represents significant growth for Dutch life insurers, as this reform will expand the DC pension market.

According to the "UBS International Pension Gap Index," private savings are a necessity to maintain an accustomed lifestyle in most retirement systems. Furthermore, even in systems that don't require savings, the uncertainty related to benefit outcomes, or questions about the sustainability of schemes suggest additional savings are prudent. Personal savings and investments will be key for sustaining a better life, especially as public support will likely be lower in the future.

Individuals will be more responsible for the decumulation phase

With the growing shift toward individual responsibility for retirement planning, life insurers and other financial institutions (wealth managers and asset managers) that offer products to manage wealth accumulation and mitigate risks in the decumulation phase are well positioned to tap into the increasing need for people to manage their money and not outlive their assets. The insurance sector offers a diverse suite of products aimed at supporting individuals throughout their retirement journey and beyond, seeking both financial security and better quality of life.

- Life insurance policies that provide financial protection for dependents in case of premature death, particularly during the wealth-building phase.
- Annuities and structured drawdown products that safeguard against longevity risk, ensuring a steady stream of income for the decumulation phase.
- Pension savings plans (group and individual) to help people build financial reserves for retirement.

As insurers take on a greater role in providing annuities and end-of-life care, they will also shoulder significant longevity risk, posing challenges in pricing and risk management. Traditionally, insurers have managed this on their balance sheets while transferring some exposure to reinsurers. A balanced approach, combining mortality products with annuities, helps mitigate longevity risk. We expect the market for longevity risk transfer (longevity swaps, buy-ins, and buy-outs) to develop rapidly in the coming years.

We anticipate growth opportunities for insurers in the savings and protection sectors across certain emerging markets, particularly in Asia, as economic development progresses and people want to protect their wealth. Beyond rising income and expanding middle-class populations, two key drivers are the limited pension and health care coverage provided by employers and governments, along with generally low life insurance products penetration rates. As individuals transition from low to middle incomes, their spending patterns evolve, initially prioritizing basic protection before gradually incorporating savings and retirement products as financial security and wealth improve.

Revenue opportunities

Longevity is reshaping the life insurance industry, creating new revenue streams as people live longer and require more financial protection. For example, longevity risk products such as retirement and annuities, hybrid life and long-term care insurance, and extended policy laps.

According to the United Nations, the number of people aged 65 and above should increase meaningfully and we see an opportunity up to USD 720 billion coming from an aging population for life insurers.

Conclusion

We see tremendous opportunities for life insurance thanks to the aging population. The move toward managing personal finances due to the growing pension gap, state disengagement, and longer lifespans will be a source of opportunities and risks for life insurers. By addressing both wealth accumulation and post-retirement financial stability, insurers play a crucial role in enabling individuals to navigate the complexity of longer life expectancy.

Longevity risk exposes life insurers to financial strain as policyholders outlive expectations, increasing annuity and pension liabilities. It could lead to higher-than-expected payouts, asset-liability mismatches, and underreserved capital. Lower interest rates and economic growth could also be a drag, as well as changes in the regulatory framework.

Thomas Parmentier (Equity strategist)

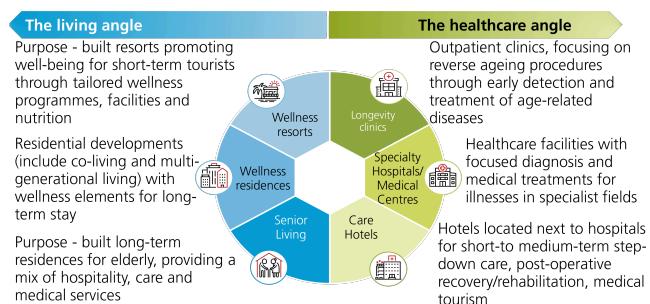
Real estate

Prediction: The real estate sector will see a significant increase in the development of and investment in senior living communities and health-care facilities. This includes independent living, assisted living, nursing homes, and specialized health care centers.

Greater longevity and aging populations have meaningful implications for the real estate market. Most older people prefer to live as long as possible in their own homes despite potential care needs. Aging in place requires the structure and location of houses to meet high standards. Barrier-free homes with age-specific interior designs and easy access to local amenities are in demand. But with rising care needs—particularly when continuous care and monitoring are required—specialized nursing care facilities will become a necessity supporting demand for health care real estate.

Figure 27 - Living and health care real assets

Health care property assets can be categorized into health care, which focus on medical services, and living, which focuses on wellness and care

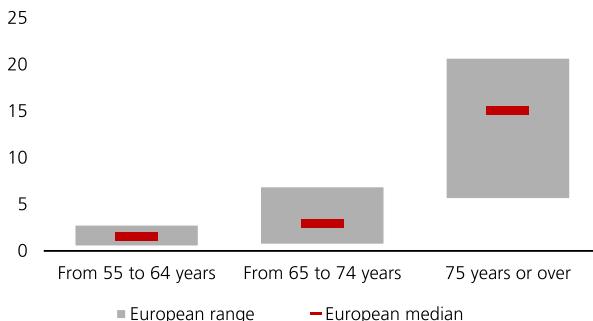


Source: CLG Group Research, UBS

Even more importantly, the high-wealth share of the elderly population should support demand for wellness-related real estate. As loneliness becomes a major issue for some in old age, independent and assisted living facilities will likely become more popular. Investments in wellness-related real estate have already been growing strongly. During 2019-2023, average transaction volumes grew 32% in Asia Pacific, 29% in the Americas, and 23% in Europe, the Middle East, and Africa, compared to the preceding five years, demonstrating structural growth opportunities in this segment.

Figure 28 - Need for care rises sharply with age

Percentage of households with severe difficulties in personal care activities or household activities, European countries 2019



Source: Eurostat, as of 2019

Revenue opportunities

"The key drivers of long-term organic growth for the senior living industry are incredibly strong. New construction remains historically low, and even if macro factors improve rapidly, it can still take up to three years to open a new community after construction begins. Meanwhile, the demand for senior housing is poised to surge, driven by robust demographic trends. Combining low supply exposure with age-driven demand highlights the positive industry fundamentals that will fuel significant growth for us and our industry." - Brookdale 2023 annual report.

Greater longevity could fuel demand for senior living facilities, including assisted living and nursing homes in the coming years. By 2030, the number of people over the age of 85 in the US is projected to rise by nearly 30%, according to the World Bank. Moreover, the cohort born between 1940 and 1949 has significantly greater wealth than previous generations. This presents real estate developers and real estate investment trusts (REITs) with a structurally growing market with robust occupancy levels and stable cash flows. According to Grand View Research, the US senior living market alone was valued at about USD 923 billion in 2023, and is projected to grow at a CAGR of around 4.1% to reach USD 1.2 trillion by 2030. The retirement home sector has low sensitivity to the business cycle over the long term and offers potential for diversification when included in a real estate portfolio.

Overall, the market offers opportunities for privately financed facilities in the upper price segment, where better medical services and a higher quality of life (e.g., apartments open for shared living with a partner) can be provided. Building complexes with a broad mix of offers are particularly attractive, in our view.

Health care REITs may also stand to benefit from a larger asset base as more health care facilities get developed. The global health care REIT sector is estimated to have a total market capitalization of about USD 120 billion by UBS estimates, and is expected to grow as aging populations call for more investment in this sector.

The global wellness retreat market was valued at USD 181 billion in 2022 and is projected to reach USD 364 billion by 2032, registering a CAGR of 7.4%, according to Allied Market Research. This presents growth opportunities for real estate catering to wellness resorts, in our view. Demand for wellness services has been driven by increased stress levels, the desire for digital detoxification, and a growing focus on holistic health and wellness.

Conclusion

A demographic shift and greater longevity present the global real estate market with significant growth and transformational opportunities, in our view. These include wellness, independent living, assisted living, nursing homes, and specialized health care centers.

Key risks to our thesis include those facing the broader real estate sector. For example, high interest rates may adversely affect asset valuations, and cyclical oversupply could introduce periods of volatility in rents.

Wen-Ching Lee (Equity strategist), Matthias Holzey (Equity strategist), Jonathan Woloshin (Equity strategist)

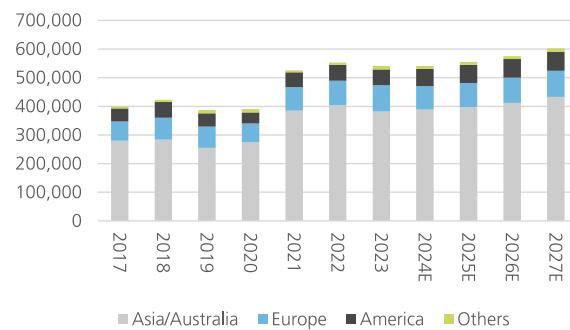
Industrials

Service and medical robots: Supporting an aging population

When people think about automation, most envision an industrial robot assembling a car. In reality, that is only one part of the automation value chain. In our automation and robotics theme, we focus on industrial applications in factory or process automation, both of which play an important role for an aging population in both emerging and developed markets. In particular, we believe factory automation will be a significant topic and an attractive investment opportunity (see Figure 29).

However, in the context of longevity, we think more about medical and service robots, which the International Organization for Standardization defines as a "robot in personal or professional use that performs useful tasks for humans or equipment" and a medical robot as "intended to be used as medical electrical equipment or medical electrical systems" (ISO 8373).

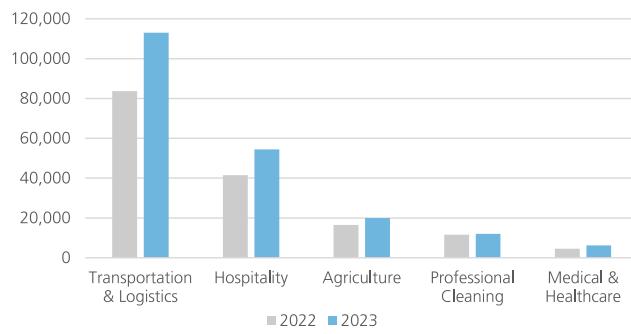
Figure 29 - Each of the following years is expected to hit a fresh all-time-high in new installations
Annual installations of industrial robots



Source: IFR International Federation of Robotics (World Robotics 2024), UBS

The International Federation of Robotics (IFR) provides annual sample data to offer insights into market dynamics. The market for service and medical robots has been growing dynamically in recent years. Based on their sample of firms, the market for new professional service robots reached 205,000 units in 2023, growing 30% year over year. Most of the robots were registered in Asia (79%), followed by Europe (17%) and the Americas (4%). This number includes all kinds of service robots, ranging from cleaning to hospitality and other sectors (see Figure 30).

Figure 30 - Strong growth in the demand for service and medical robots in 2023
Top 5 application areas of professional service and medical robots



Source: IFR International Federation of Robotics (World Robotics 2024), UBS

The market for new medical robots, based on their sample of firms, reached 6,200 units and grew even faster, with a 36% year-over-year increase. Rehabilitation and non-invasive therapy robots grew fastest at 128% year over year, followed by diagnostic robots (+25% y/y) and surgical

robots (+4% y/y). (Source: IFR World Robotics 2024 – Service Robots).

Lastly, a category where we often encounter them in our daily life is consumer service robots (e.g., vacuum cleaners, robot lawn mowers, and others). This category grew by just 1% to 4.1 million units, based on their sample of firms.

The International Federation of Robotics counts 921 service and medical robot manufacturers globally. They characterize the market as very dynamic, with a lot of M&A activity. Most firms are located in Europe (405 service robot firms), followed by Asia (268 firms), and the Americas (233 firms), with almost all based in North America. From a country perspective, most are located in the US (199 service robot firms, of which 12% represent medical robots), China (107 firms, 5% medical robots), and Germany (83 firms, 12% medical robots).

As an equity investor, it is not easy to find pure-play firms, as most are not publicly listed or represent smaller business segments within larger corporations. Many classical industrial or medtech firms also have an offering of service or medical robots. The private equity market offers some investment opportunities for the industry.

The growth prospects are attractive, in our view, as demographic changes drive demand and the application of generative AI improves technological functions and performance.

Automation and robotics capital expenditure is influenced by the economic cycle. The risk for these firms have become evident over the past two years. A global manufacturing recession, coupled with high inventories following the COVID-19 rebound, resulted in weaker demand for automation equipment. This indicates that the sector has a cyclical element, meaning it is sensitive to any manufacturing downturns. Specifically, demand for service and medical robots will depend on the respective end-markets, as consumer and medical equipment may have different investment cycles. However, we believe that growth is more protected as technological advancements for these products provide access to more applications.

Alexander Stiehler (Equity strategist)

Conclusion

The longevity market is poised for significant growth. Health care, with its focus on meeting the needs of an aging population, is a primary driver, while innovations in pharma, particularly in metabolic diseases and cancer treatment, are set to enhance longevity and boost market expansion. The medical device industry, diagnostics, and managed-care firms should benefit from increased demand for elderly-focused treatments and services. Additionally, consumer companies targeting healthy aging, the leisure market, and real estate developments in senior living could capitalize on the growing needs of seniors. As individuals increase their allocations to private markets and life insurers address the widening global pension gap, these sectors are well positioned to target revenue growth exceeding GDP rates.

Longer-Term Investment themes

How do we define the investment opportunity today? We believe the Longevity TRIO aligns well with several of our Longer-Term Investment (LTI) themes, including *Obesity*, *Oncology*, *Medical Devices*, *Aging in Comfort*, and *The digital consumer* (only the hotels & leisure part). In our view, these long-term trends either directly enable increased longevity or benefit from increasing lifespans.

Over time, we also think our *Genetic therapies* and *HealthTech* LTIs will drive and benefit from longer lifespans through developments such as improved access to capital, which would allow both gene therapy and healthtech companies to better fund clinical development. We also see further technological advances for gene therapies, leading to the proof-of-concept and regulatory authorizations of additional products. Finally, a continued movement towards value-based care should increase demand for data/digitization and data-driven health solutions.

Themes that are not currently part of our investment universe but still influence longevity or benefit from the trend include our *Food revolution* theme (see section further below: "Healthier diets can increase lifespans, but food access and affordability matter"), our *Water scarcity* theme, which covers investment opportunities in water infrastructure that provides access to clean water and sewage systems, and our *Automation and robotics* theme, given demand for automation equipment across many industries will increase as workforces age. The *Diversity and Equality* theme also covers companies positioning to capture the shifting preferences of female consumers and employees, who are both underserved in terms of health care research and delivery. This demographic is expected to control over 75% of discretionary spending by 2028

(sources: Nielsen, BCG) and inherit USD 9 trillion of wealth in the next decade (UBS).

Sustainability across sectors

Increased life expectancy can in large part be attributed to reduced child and infant mortality, cleaner water, better hygiene, and improved health care access—all of which tie in closely with sustainability issues. However, life expectancy can also dial back, as seen when COVID-19 led global life expectancy to drop by nearly two years to 2012 levels (at 71.4 years), according to the WHO. It is therefore crucial to consider how sustainability topics beyond access to health care impact longevity. Importantly, healthy longevity—having good physical, cognitive, and social functioning throughout life, as defined by the WHO—is not increasing at the same rate as total life expectancy, potentially leading to burdens in later life stages and affecting demographics, health care systems, and long-term financial planning.

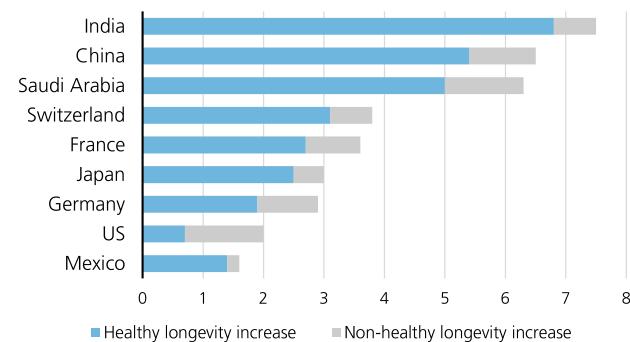
Sustainability implications are therefore intertwined with aging and longevity. Demographic shifts can present sustainability gaps, and addressing these risks and opportunities—specifically across food and agriculture, health care, workforce, and gender equality—can benefit healthy aging and longer lifespans.

Healthier diets can increase lifespans, but food access and affordability matter

The aging population may need fewer calories, but nutritional needs remain the same and can even increase. Various studies support the notion that balancing caloric and nutritional needs can help extend longevity or at least facilitate good health and enhance quality of life. In other words, longevity gains may plateau if food isn't considered part of the issue. However, the critical issue of food affordability persists, as a healthy diet can cost up to four times more than a calorie-sufficient one, according to the World Bank. About one in three people globally could not afford a healthy diet in 2022, with the number jumping to two-thirds in low- and lower-middle-income countries, according to the World Bank and FAO. On top of this, rising global populations and climate change are expected to exacerbate food security challenges. For food and agriculture to truly benefit longevity, we believe the increase in the supply and production of healthy food requires a multi-faceted approach. This includes transforming toward regenerative food systems, improving nutritional information, and investing in transport and storage to improve the resilience of existing food systems. For more details, see our Longer Term Investment theme *Food revolution*.

Figure 31 - Increase in healthy and non-healthy life expectancy differs across countries

Increase in life expectancy from 2000 to 2019: For Germany, life expectancy increased by 2.9 years between 2010 and 2019, of which 1.9 years is driven by the "Healthy" and 1 year by the "Non-Healthy"



Source: World Health Organization, UBS

Resilient health care systems needed; spotlight on meeting women's needs

Front and center to the demographic shift and increased longevity is having a resilient health care system. Poor health conditions create a cycle of economic inefficiency, reducing economic productivity and government tax revenue, which leads to poorer quality of life. Improving health care infrastructure and access for all—especially the most vulnerable—ensures quality care and addresses critical disparities across gender, race, and socioeconomic status.

Women tend to live longer, but with a poorer quality of life. While women globally tend to outlive men generally by 5-7 years, they often face a disproportionate burden of health conditions, compounded by systemic gender biases in health care—including underrepresentation in clinical trials, delayed diagnosis, and unequal access to therapies—leading to poorer quality of life in later years. The opportunity lies in innovations in gender-inclusive medical research, accessible health care delivery models, and preventative care solutions, catering to unmet needs and progressing toward health equality.

Beyond health care, investors should consider how longevity itself will change consumer and workforce dynamics for all companies. As women live longer, and as they become wealthier, they control a larger share of global wealth and spending power. According to Nielsen, women are expected to control 74% of global discretionary spending in the next five years. Women are also increasingly closing the education gaps with men across regions. When we layer longer-living populations into this analysis, it becomes clear investors need to calibrate portfolios across sectors to capture women's rising economic force.

Women and older people are key to mitigate labor shortage driven by an aging population

Living longer requires continued labor and productivity to support the economy and particularly the older population, but the labor force may face shortages due to global aging and lower fertility rates. We believe human capital management matters, and enhancing employee wellbeing and health could generate USD 11.7 trillion in global economic value, according to McKinsey. This necessitates rethinking the future of working and adapting to an aging workforce. A recent Allianz report found 30% of the global workforce will be aged 50 and older by 2050. Policymakers have reacted by delaying retirement ages, as seen recently in France and China. Forming an age-inclusive workforce means offering flexible working arrangements and career development opportunities for all ages. But a shrinking labor force means preparing the workforce with effective skillsets and knowledge to enhance productivity, enabled by technology and AI.

Longevity and the aging population will play out differently across regions. Developing countries will be vital for global growth as they take a rising share of both labor supply and consumption. Government policymaking is likely to explore friendly immigration policies and incentives to attract younger talent and balance labor market demand. However, this often reflects inequality issues—an International Labor Organization study shows that migrants earn nearly 13% less than national workers, with the gap as high as 42% in some countries (see our Diversity and equality Longer Term Investment theme).

Female labor force participation has also risen in recent decades, but barriers persist—from caregiving responsibilities to workplace inequalities. In addition, over half of the female health burden affects women during their working years, as reported by McKinsey. Continued female contribution to the labor force is crucial for partly mitigating the effects of a rising demographic change, companies should therefore consider providing family-friendly employee benefits, childcare, and targeted women's health solutions (e.g., egg-freezing) to improve employee retention and promote gender equity in the workplace.

Integrate sustainability considerations in your portfolio

Achieving sustainable and healthy longevity requires a holistic change to food, agriculture, health care, and workforce management. Investors can prioritize solutions that bridge these sustainability gaps, and we also see continued engagement opportunities with companies on issues like transforming sustainable and responsible food

production, and improving workplace health and well-being. To prepare the workforce for an aging population, ESG Leaders companies that are superior at human capital management—via the promotion of workspace diversity, employee safety, pay equality, and training and upskilling—will strive to extract long-term value from improved labor productivity.

Amantia Muhedini (Sustainable & Impact Investing strategist), Amanda Gu (Sustainable Investing analyst)

Risk Considerations

There are several risks to consider when investing in this theme. The aging population significantly affects economic productivity, health care systems, and social support structures, requiring governments to adapt through policies that promote lifelong learning, workforce participation for older individuals, and technological advancements. Countries with slower aging populations or declining birthrates may experience uneven market opportunities, limiting growth potential. External forces such as global conflict, environmental damage or a rise in any global infections can also increase mortality rates. Additionally, changing consumer behavior among seniors adds uncertainty, as companies must constantly adjust to evolving preferences in technology adoption and product demand. For insurers, the risk of policyholders living longer than expected (longevity risk), can have significant implications for products such as annuities or pensions.

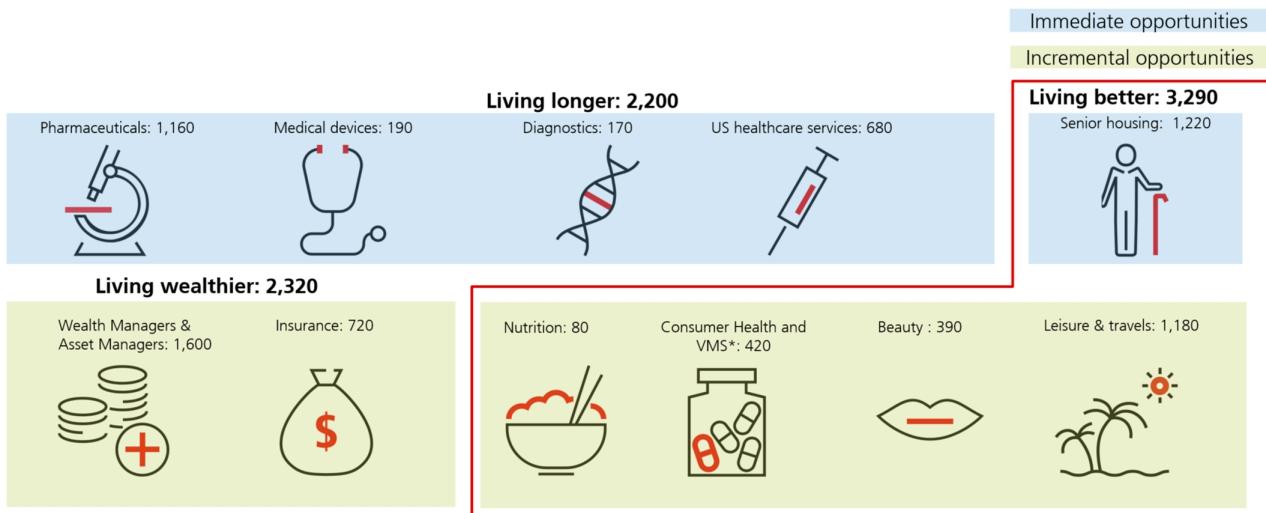
Economic and health care-related risks also pose significant challenges to the longevity theme. Many older individuals rely on fixed incomes or pensions, which can limit their spending power and restrict growth in industries catering to them. At the same time, rising health care costs place a burden on both public systems and private providers, potentially straining profitability in the sector. Policymakers and insurers must collaborate on sustainable reimbursement models that balance affordability and accessibility, ensuring that businesses can thrive while managing cost pressures. Without proper planning, these financial constraints could slow innovation and limit the sector's expansion.

Furthermore, the outcomes of pharmaceutical clinical trials present a significant risk to share price performance. Unfavorable trial results, delays in drug approval or any legal threats including product liability cases can lead to substantial financial losses for companies, affecting investor confidence and market valuations. As the pharmaceutical industry is heavily reliant on successful drug development,

Transformational Innovation Opportunities (TRIO): Longevity

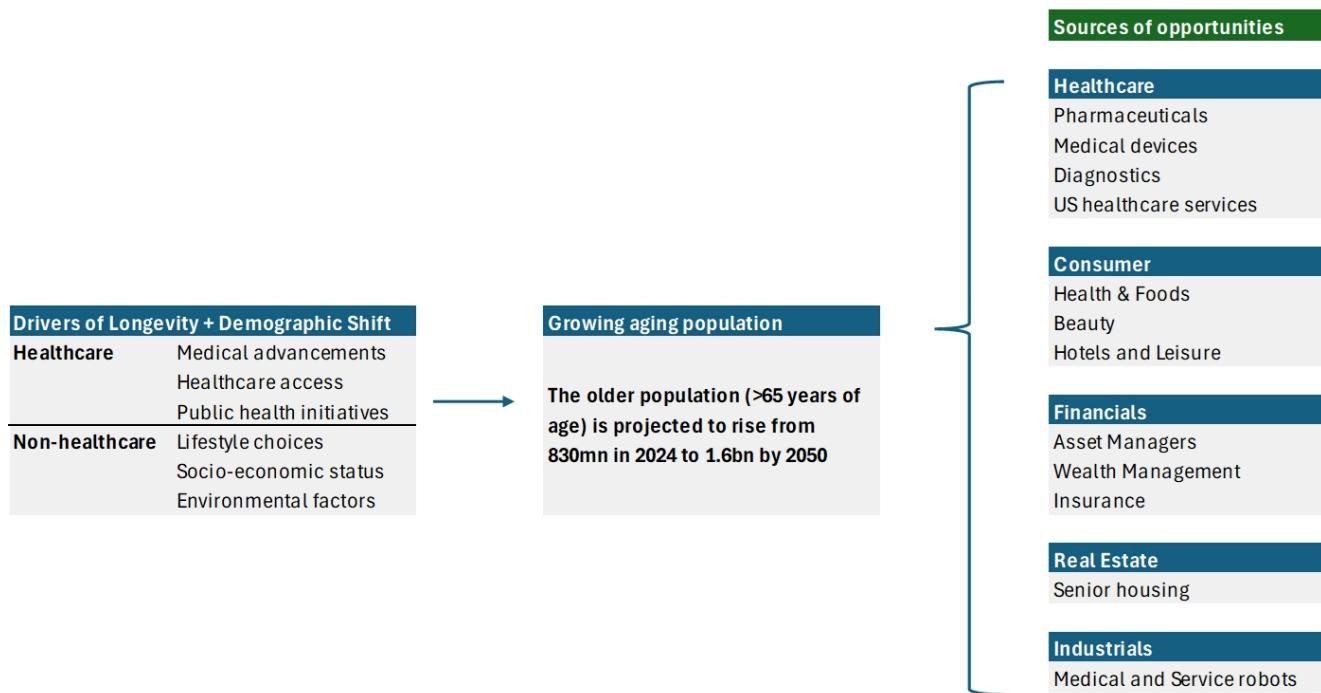
any setbacks in clinical trials can result in share price underperformance.

The longevity value chain



Source: UBS estimates, as of March 2025 *Vitamins, minerals, and supplements; Note: There is an enlarged picture of this figure at the end of this document

Longevity drivers and sources of opportunities



Source: UBS, United Nations (World Prospectus 2024)

Appendix

Risk information

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