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Healthy longevity

An analysis of the growth drivers of the Healthy Longevity megatrend and how it can generate added value for investors.

Customer version | Swiss edition





Foreword

The concept of “Healthy Longevity” can be summarised as staying physically and mentally fit for longer, in other words well into old age. This is a widespread objective and an ubiquitous aspect in the social debate.

Nurturing a more sustainable lifestyle at a young age, as well as medical and technological advances, are moving us closer and closer to this goal. The fact is that the average life expectancy has already increased. Today, 75-year-olds are as healthy as the 65-year-olds five decades ago¹.

This benefits primarily companies that offer products and services for preventive health enhancement, for the treatment of health problems or other products that have been developed specifically for the target group of older people. Furthermore, companies also create benefits that improve the working conditions for their employees by providing them with a work/life balance. This improves the productivity of employees and the competitiveness of the respective companies in the long term.

As fewer children are born and life expectancy rises, the population structure will change, albeit slowly at first. In the long term however, and in many cases, the changes will be significant. The trends associated with these structural changes represent opportunities on the one hand, but also risks and societal challenges on the other. Both sides are described below. It is also shown that the concept of “healthy longevity” can even contribute to overcoming these challenges.

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Regions analysed: Global
Sectors: Health, technology, foodstuffs, finance
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Sources: Internet sources, last accessed May 2024
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¹ Vaupel, James W. (2000): Biodemography of human ageing. Nature, 464(7288), 536-542.



Overview

According to the United Nations World Population Prospects 2022, average life expectancy has increased worldwide in recent decades. The figures speak for themselves. It is estimated that around 770 million people currently fall in the age group of 65 or over (as of 2022). At the same time, birth rates have fallen. This leads to an increase in the average age and a shift in the weighting of age groups in populations. Currently, the proportion of the global population aged 65 or over in the world's population is almost 10%. The relative proportion of this age group is forecast to rise to over 16% by 2050, assuming a world population of 9.7 billion. In absolute terms, this age group will therefore more than double². This demographic trend is commonly referred to as an "ageing population".

On a personal level, ageing in good health is usually seen as a gift. At the societal level, on the other hand, extending the length of retirement is a challenge. However, if the increase in the number of "healthy" years also leads to longer contributions to social security systems, this should improve the financing of these systems.

Ageing healthily for longer requires a healthy and sustainable lifestyle from an early age. In this context, the Healthy Longevity market covers both older and younger generations. It is anticipated that the market will grow organically over a number of decades and reach a notable size, including being driven by a strong innovative power in the industries concerned. The result is attractive investment opportunities. This analysis discusses the structural growth drivers, presents a comprehensive investment approach aligned with sustainability criteria and highlights the impacts generated by the investment approach.

It is clear that **"healthy longevity" is not just a cross-generational issue. In our opinion, the investment concept derived from this theme is interesting in the short and long term and is therefore relevant for investors of all ages.**

² United Nations, Department of Economic and Social Affairs (2022): World Populations Prospects 2022. PDF document, https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf (accessed on 3 May 2024).

1. Structural growth drivers of Healthy Longevity

Healthy Longevity benefits from several structural growth drivers. The most important are listed below:

1.1 Ageing population

According to the United Nations World Population Prospects 2022, there have never been so many older people living on our planet. As of 2022, there are around 770 million people in the 65+ age group, which corresponds to almost 10% of the world's population. By 2050, the relative share of this age group is expected to rise to over 16% of the world's population. In absolute figures, this age group will more than double³ (see table below).

Table 1: Populations of people 65+ in millions worldwide and by region

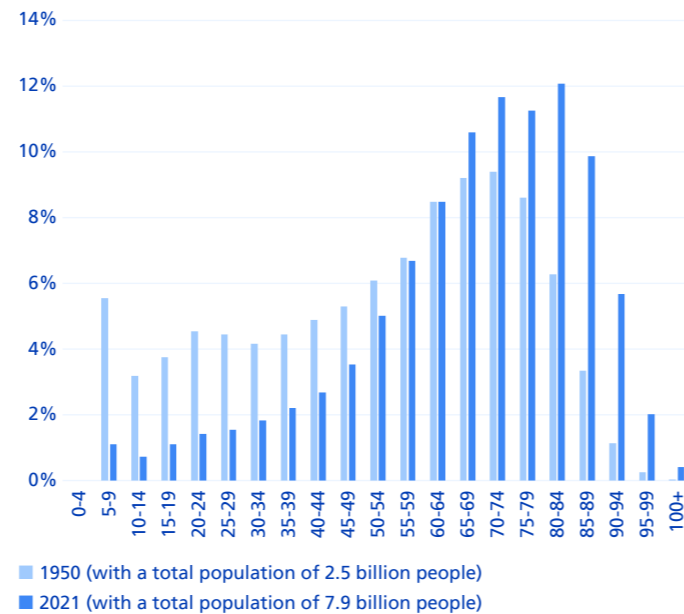
	2000	2010	2020	2030	2040	2050
World	423	533	737	1005	1321	1591
USA	35	40	54	71	81	87
China	87	115	178	255	356	389
EU	68	78	93	108	122	129
India	48	63	93	133	186	250

Source: United Nations, Department of Economic and Social Affairs, Population Division (2024). Data portal, <https://population.un.org/dataportal/home?df=29acbc2e-e2e7-4dfc-98a2-1061c423e2c6> (accessed on 24 April 2024)

Scientific studies⁴ have confirmed that there seems to be a maximum age: over the past 30 years, the additional life expectancy of a 100-year-old person has remained constant at between 100 and 110 years. The increased average life expectancy of the overall population has therefore been fully borne by people under the age of 100.

Although few people live to the age of 100 or more, **the improvements in life expectancy since 1950, even at a global level, are remarkable.** These improvements are primarily due to leading a more sustainable lifestyle at a young age, medical and technological advances (e.g. penicillin, vaccines, improved diagnostic procedures), better hygiene such as clean drinking water or the absence of major conflicts.

Figure 1: Distribution of deaths by age group between 1950 and 2021 (excluding age group 0-4) in percent of all deaths in the respective year



Source: United Nations, Department of Economic and Social Affairs (2022): World Populations Prospects 2022. PDF document, https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf (accessed on 24 April 2024).

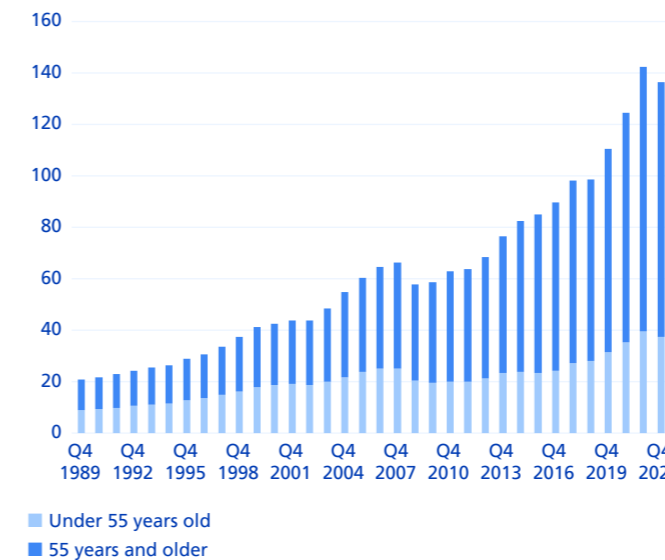
It was already documented in 1994 that the **start of humans' 'final' ageing process has been delayed by an average of around a decade**⁵. In other words, it seems that death is being delayed because people reach a higher age with better health and not because they are living longer with worse health.

1.2 Purchasing power of the silver economy⁶

Generally speaking, individual incomes and the associated tax and social security payments fall on retirement. Furthermore, the baby boomers now approaching retirement will be followed by a smaller cohort, bringing a host of macroeconomic risks for the wider economy. From a macroeconomic perspective, income and purchasing power, tax revenue and income from social security systems may decline (see section 4). On the other hand, the baby boomer generation in developed countries usually

owns the largest proportion of the world's wealth. As the chart below shows, for example, in the USA, 55-year-olds and above own almost three quarters of all assets (as at the end of 2023). This means that the baby boomer generation as a group is likely to have considerable resources at its disposal.

Figure 2: Net assets of the US population broken down by age group in USD trillion



Source: Federal Reserve (2024): Assets by age in 2024. <https://www.federalreserve.gov/releases/z1/dataviz/dfa/compare/chart/#quarter:138;series:Assets;demographic:age;population:all;units:levels> (accessed on 14 June 2024).

The growing demographic weight of baby boomers, their wealth and thus their purchasing power, **ensure that the market for products and services geared towards the needs of older people offers significant prospects for growth, which will also have a long-term impact.** Prospects for growth that are not found in many other economic sectors.

Certain products and services are marketed globally, others regionally or locally. Interestingly, the local opportunities in the market for healthy longevity are already recognised in some places, as this invitation in September 2023 to an event in Beverly Hills, California, shows:



Source: City of Beverly Hills (not dated): <https://www.beverlyhills.org>.

1.3 Increased health awareness An important explanation for good health in older age is how we live in younger years, i.e. how we look after our health in those years when we generally don't think about age.

³ Sara Johansson de Silva, Indhira Santos (2023): Productive Longevity. What Can Work in Low- and Middle-Income Countries? Policy Research Working Paper 10636, World Bank Group. PDF document, <https://documents1.worldbank.org/curated/en/099830412112315829/pdf/IDU05b2d75e70863c04d490a5f50fbb7cafcd7f3.pdf> (accessed on 3 May 2024).

⁴ Modig K. et al. (2017): How long do centenarians survive? Life expectancy and maximum lifespan. *Journal of International Medicine*, 282(2), 156-163.

⁵ Vaupel, James W. (2000): Biodemography of human ageing. *Nature*, 404(7288), 536-542.

⁶ European Union (2018). The silver economy. <https://op.europa.eu/en/publication-detail/-/publication/60a28362-3ec6-11e8-b5fe-01aa75ed71a1/language-en> (accessed on 24 April 2024). International Organization for Standardization (2017): The silver economy. ISO - The silver economy (accessed on 24 April 2024).

Studies⁷ show: The awareness of maintaining a healthier lifestyle at a young age has increased in recent years, although the coronavirus pandemic has certainly also contributed to this change in awareness.

It is generally known that a healthy and balanced diet and sufficient exercise are effective in preventing the typical diseases of civilization if practised in younger years and maintained in older years. Nevertheless, it is unfortunately worth noting that most people do not exercise enough and consume too much sugar and fat. There is therefore undoubtedly considerable potential for improvement in this area (see section 5).

1.4 Healthcare spending is on the rise

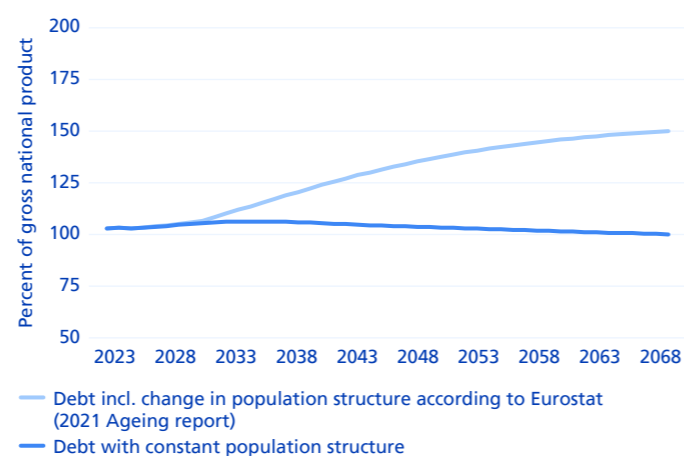
Spending on medical benefits and care is increasing at both the individual and state level.

In our opinion, the main **cost drivers** are:

- Demographic change and increasing life expectancy: The increasing proportion of older people need more medical and nursing care.
- The increase in chronic diseases: Diabetes, cardiovascular diseases and cancer are increasing.
- Technological advances: Innovative diagnostic and therapeutic methods and pharmaceutical research are usually costly.
- The expansion of healthcare: Broader population groups, especially in developing and emerging countries, will have access to medical benefits.
- Rising real wage costs: As the skilled staff required for medical and nursing services tend to become scarcer, the corresponding wage costs are also likely to increase.
- Rising expectations: The prosperity of the baby boomer generation in particular is likely to have increased expectations of the quality and availability of healthcare services.

The following chart illustrates, albeit indirectly, **the significant extent of the impending increases in expenditure on health and care**. The chart shows two scenarios calculated by the European Commission and Eurostat: The blue line illustrates the development of public debt of euro area countries forecast by the ECB in 2021, i.e. before the outbreak of the Ukraine conflict, until 2068. The turquoise line shows the development of sovereign debt, although age-related sovereign expenditure, such as grants and expenditure on nursing and health care for older citizens, is kept constant. The difference between these two simulations shows that the eurozone's public debt could increase by around 50% of GDP in the forecast period up to 2068. A recent study⁸ by the Swiss Federal Department of Finance (FDf) comes to similar results. The cost forecast prepared therein assumes that the debt ratio of the three state levels (municipality, canton and federal government) including social security will increase from 27% today to 48% of GDP in 2060 due to the increase in demographic-dependent expenditure alone – which primarily includes expenditure on health care and long-term care.

Figure 3: Simulation of total national debt in the euro area



Source: Bodnár K., Nerich C. (2022): The macroeconomic and fiscal impact of population ageing. European Central Bank, Occasional Paper Series No 296/June 2022, 29. PDF document, <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op296-aaf209ffe5.en.pdf> (accessed on 20 March 2024).

The reality will probably look different. For example, governments could decide to increase taxes and all mandatory payments by citizens to social security systems, reduce the benefits of these systems, reduce sovereign spending elsewhere and further raise the statutory retirement age. The level of public debt does not have to rise as simulated. Nevertheless, the challenges that ageing poses to our communities are immense financially.

On the other hand, **this increasing spending opens up prospects for growth for companies and investment opportunities for investors.**

1.5 Changes in consumer behaviour

The average income tends to decrease with age. This also changes the weighting of expenditure. While spending on non-essential services and goods can be reduced, this is difficult to do for life-saving services and goods. This includes:

- **Living** including rent and energy, as older people tend to stay in their houses or apartments as long as possible because they a) do not want to move out and b) cannot find affordable housing.
- Healthy **food and drink** and
- **Health-related products and services.**

In addition, **older consumers with more purchasing power tend to increase their spending, at least in relative terms, on:**

- **Products that make everyday life easier**, including electrical instruments and communication devices,
- Education, **fitness and leisure** products and services,
- Various pension and financial products and services, whereby pension savings are already profitable in younger years.

⁷ Monitor Ernährung und Bewegung (2021): Die Pandemie erhöht das Ernährungs- und Bewegungsbewusstsein. [The pandemic is increasing awareness of nutrition and exercise] <https://cockpit.gfsbern.ch/de/cockpit/monitor-ernaehrung-und-bewegung-2021/> (accessed on 3 May 2024). Globescan (2023): Consumers will not save the world: Why now is the time for a reset. PDF document, https://globescan.wpenginepowered.com/wp-content/uploads/2023/10/GlobeScan_Healthy_and_Sustainable_Living_Highlights_Report_2023-1.pdf (accessed on 25 March 2024). GlobalData (2023): Health and Wellness – Consumer TrendSights Analysis, 2023. <https://www.globaldata.com/store/report/health-and-wellness-consumer-trend-analysis/> (accessed on 25 March 2024).

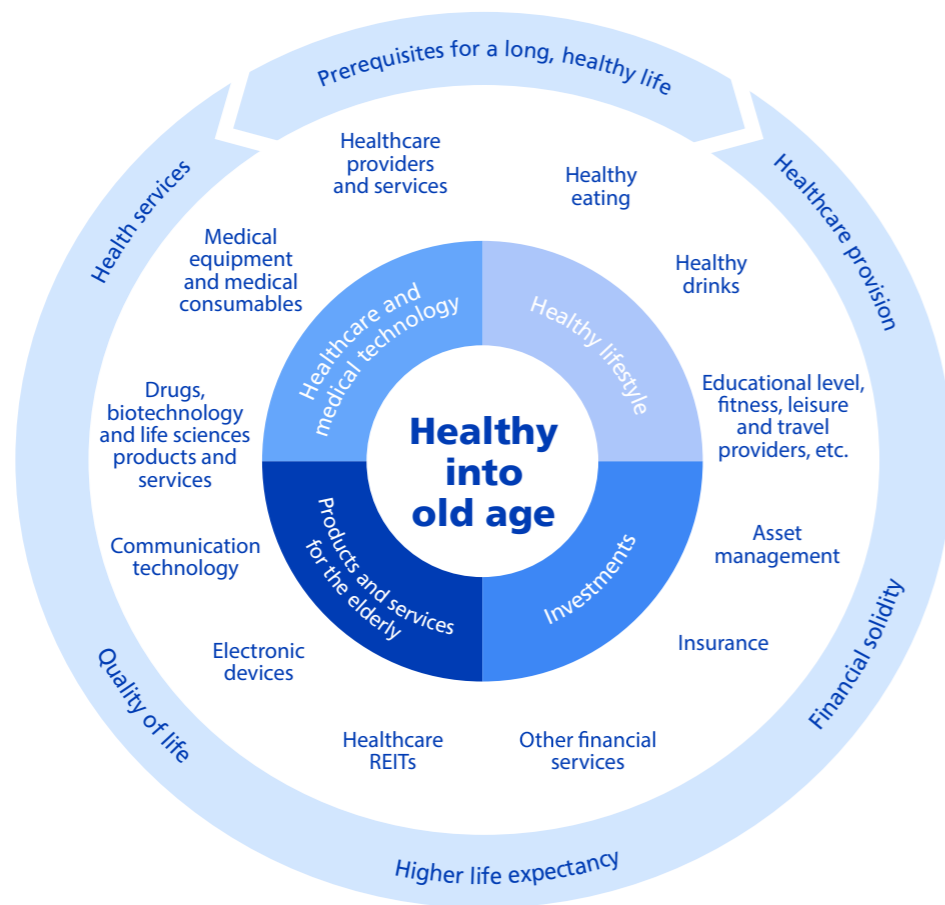
⁸ Swiss Federal Department of Finance FDF (2024): Langfristperspektiven der öffentlichen Finanzen der Schweiz 2024 [Long-term perspectives for Switzerland's public finances in 2024]. PDF document, <https://www.news.admin.ch/newsd/message/attachments/87125.pdf> (accessed on 3 May 2024).

2. Translating growth drivers for the investment concept

The growth drivers of the “healthy longevity” trend mentioned in the previous section must now be translated into an investment concept. The first step is to define which sectors can benefit from this trend. The following chart illustrates this at a general level:

In principle, sectors that benefit are those that produce services and products with the aim of restoring or maintaining the best possible physical and mental quality of life until old age (health treatment). These include private health care facilities (hospitals, retirement homes and nursing homes), pharmaceuticals, medical technology equipment or communication and electronic devices.

Figure 4: Focus areas

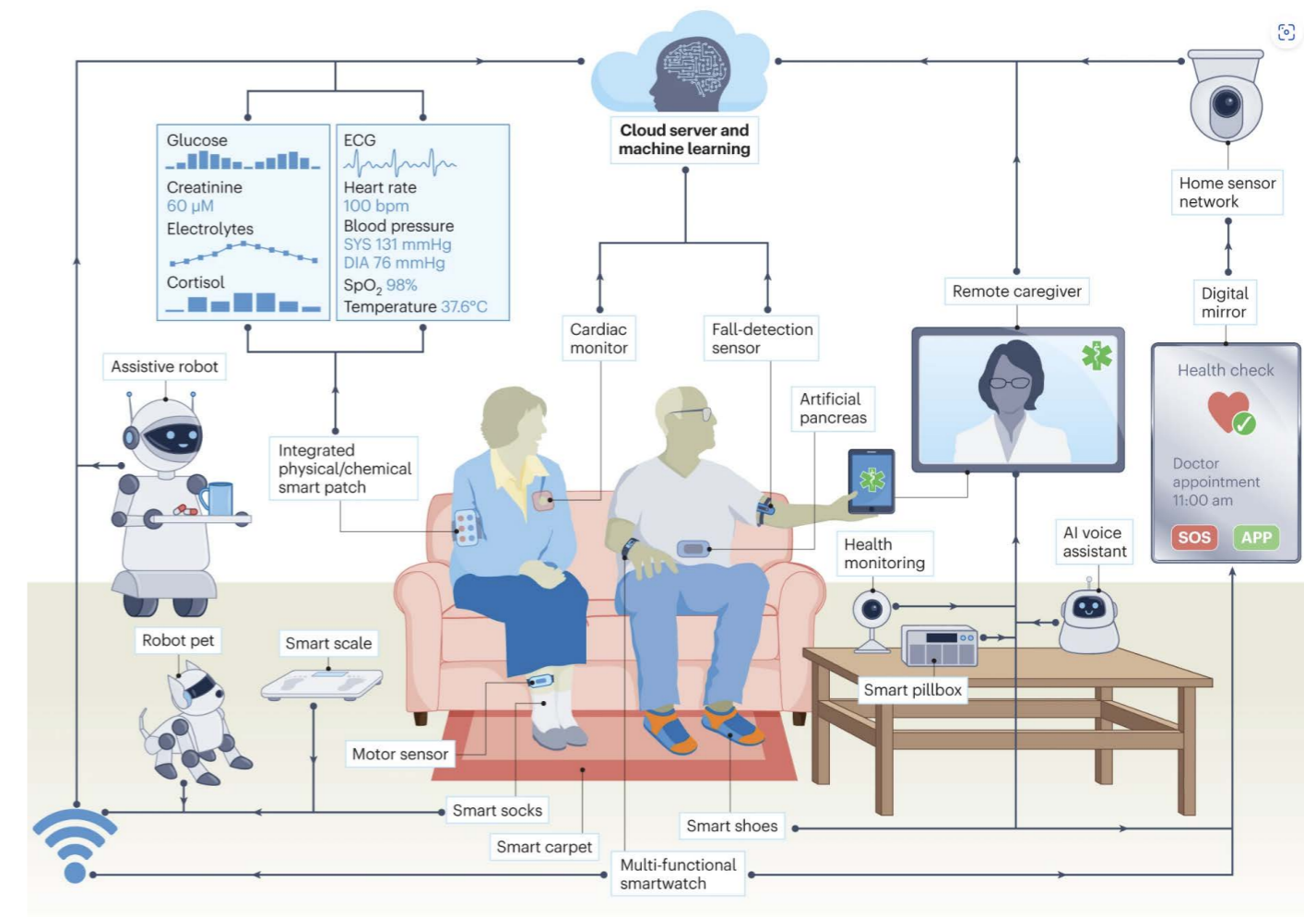


Source: Zürcher Kantonalbank

Figure 5 shows examples of the wide range of uses of communication and electronic devices adapted to the specific needs of older consumers (quality of life).

New communication devices and services adapted to the needs of older people could also help reduce loneliness in old age. This practical benefit was particularly evident during the pandemic.

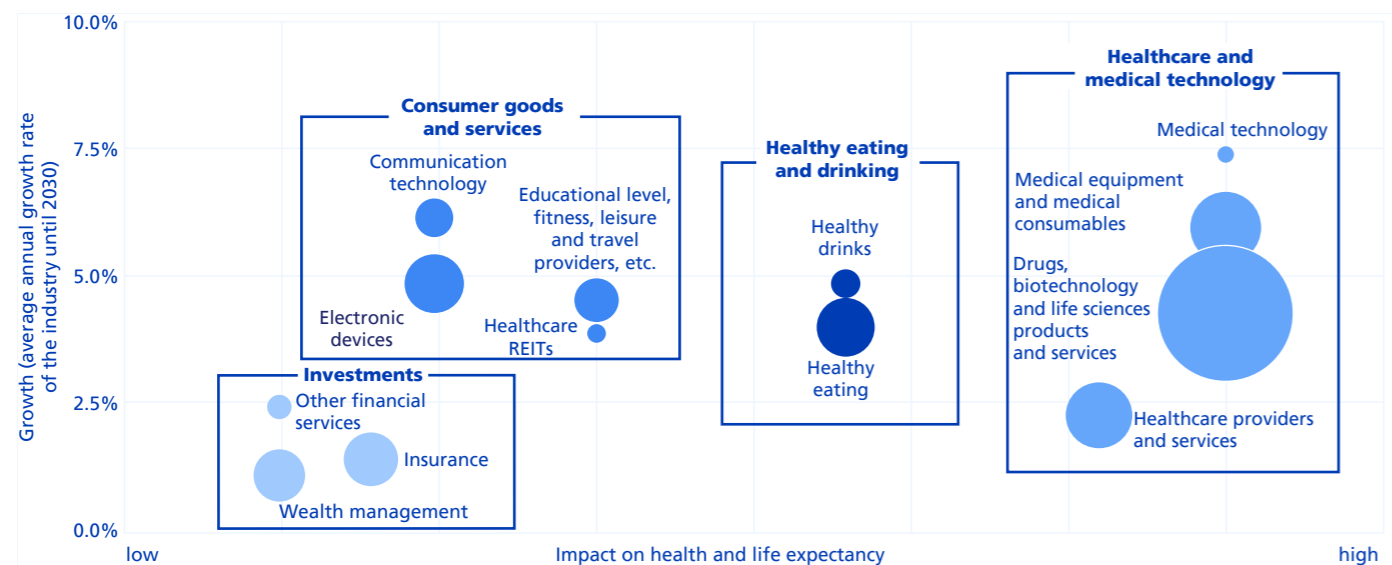
Figure 5: The future of geriatric care in the home environment



Source: Chen, C., Ding, S. & Wang (2023): Digital health for aging populations. *naturemedicine* (29),1623-1630. <https://www.nature.com/articles/s41591-023-02391-8> (accessed on 20 March 2024).

Figure 6: Growth and influence by sector

The size of the bubbles corresponds to the market value in USD billion



Note: The chart above illustrates our current estimates of the impact and revenue growth potential of the various products and services.

Source: Zürcher Kantonalbank

Sectors that serve health prevention also benefit. Health prevention encompasses measures and behaviours aimed at preventing or delaying diseases, strengthening health resilience and thereby improving quality of life. These include, for example, healthy foodstuffs, age-appropriate training methods and a range of products and services in the leisure and further education sector that are adapted to all generations. However, financial resilience is also important, as life in general and the promotion and restoration of health in old age are not free. Early savings are therefore important. This is where financial service providers such as insurers and asset managers come into play, preparing insurance and investment proposals and developing investment products. Financial service providers whose products enable sustainable excess returns taking into account diversification and ESG criteria can benefit here.

In addition to companies offering the corresponding products, there is another category of economic operators who benefit from the "healthy longevity" megatrend if they adapt to it in good time. These are companies that offer a solution (see chart in section 5). While the first category, the so-called "enablers", produce products and tools for restoring health, the second category, the "solution providers", focuses on products and services for health-conscious younger and/or older generations. It makes a significant contribution to longevity (e.g. through preventive measures, but also through specific products and services for the elderly).

Healthy longevity is therefore relevant for both young and older people. At the same time, this approach offers **structural solutions to the societal and economic challenges of ageing societies.**



3. “Healthy Longevity” and its SDGs

The Sustainable Development Goals (SDGs) comprise 17 goals with numerous sub-goals set by the United Nations to achieve sustainable development economically, socially and environmentally by 2030.

Healthy longevity products and services can be assigned to several UN Sustainable Development Goals (SDGs). The inevitable changes in the age structure of the population play an important role in several of the goals⁹. Goals 3, 8, 9 and 11 are particularly relevant.



SDG 3: Good health and well-being

To ensure a healthy life and promote the well-being of all people at all ages by reducing premature mortality (target 3.4), to achieve universal health coverage (target 3.8) and to strengthen the management of health risks (target 3.d).



SDG 8: Decent work and economic growth

Innovation in employment (8.2, 8.5 and 8.9), health at work (8.2 and 8.8) and access to finance (8.3 and 8.10) are particularly relevant targets to ensure age-appropriate jobs, products, inclusive employment and their respective financing.



SDG 9: Industry, innovation and infrastructure

Target 9.5 aims to improve research and innovation. Research-intensive companies, such as those in the pharmaceutical and biotechnology industries that develop medicines to treat diseases that occur more frequently with age, are contributing to achieving this sustainability goal.



SDG 11: Sustainable cities and communities

SDG 11 calls for the creation of environments that promote healthy ageing. Target 11.7 calls for universal access to safe, inclusive and accessible green and public spaces, in particular for women and children, the elderly and people with disabilities.

⁹ Source: World Health Organization (not dated): UN Decade of Healthy Ageing: Plan of Action 2021-2030. PDF document, https://cdn.who.int/media/docs/default-source/decade-of-healthy-ageing/decade-proposal-final-apr2020-en.pdf?sfvrsn=b4b75ebc_28#:~:text=The%20Decade%20builds%20on%20the,its%2017%20Sustainable%20Development%20Goals (accessed on 20 March 2024).

4. Risks

Future demographic trends can be estimated with comparative certainty. However, the future economic and financial conditions are difficult to assess, as they are primarily shaped by national and international policies.

Therefore, the main risk factor is definitely the future purchasing power of the elderly and the resources available to governments to support them.

In the past, the **average personal income of older people was almost always significantly lower than that of the working-age population**. Historically, a significant proportion of older people were even poor, especially when they were not supported by their children or wider family.

Between 1950 and 1980, the incomes of the elderly have increased significantly in both absolute and relative terms. These increases are due to the strong economic growth in the 30 years after the Second World War, when, among other things, the rates of innovation and productivity gains were higher and the relative share of the elderly in the total population was lower than today.

Unfortunately, the rate of macroeconomic productivity increase has declined in recent decades, despite the now extensive digitisation of our lives. In economic research, this is called the ‘productivity paradox’. Lower productivity growth is inevitably followed by lower economic and income growth. In turn, many governments, businesses and consumers have responded with increasing **debt**. **Debt levels have therefore become a risk for our economies, hanging over most economies in the developed world like the sword of Damocles.**

Against this backdrop and in order to prepare for the financial risks of age, savers **must save more and save earlier**. At the same time, investment risks increase as the growth potential of economies tends to fall. Future asset allocation and investment decisions must be adapted to this changed situation. This applies to wealth management for all age groups.

Political instability

Social unrest, crime and conflict can drive up spending on security and defence and, in the worst case, even destroy human lives, infrastructure and resources.

Environmental factors

Health and quality of life benefit from a healthy environment. Failure to take necessary measures to maintain a healthy environment in itself conflicts with the goal of healthy longevity.

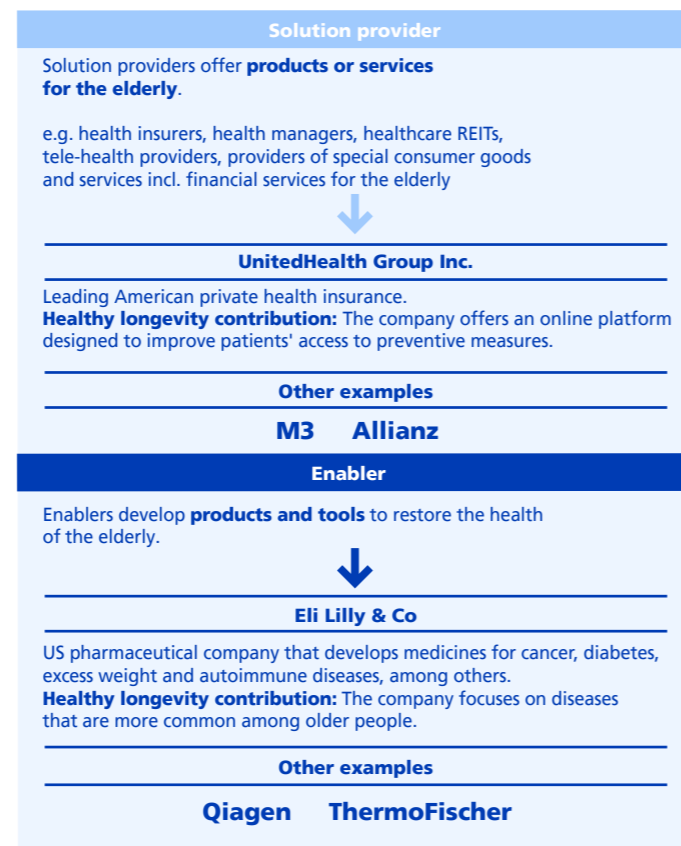
5. Healthy longevity as a contribution to solving the challenges

The increase in average life expectancy achieved in recent decades is a social achievement. Since birth rates have fallen at the same time, the overall population in almost all countries is structurally ageing despite immigration, evident, for example, by the increased median and average age. In concrete terms, this means that the baby boomer generation, which is now reaching retirement age, is being followed by smaller and smaller generations. This results in various challenges that first **require a change in individual awareness**, especially with regard to a healthier lifestyle.

However, there is still a lot to do in terms of implementation. For example, according to the WHO¹⁰ only 81% of adolescents and 27.5% of adults achieve the recommended level of physical activity. In addition, there is excessive consumption of fat and sugar, leading to many well-known health problems.

Companies offer many preventive or medical-therapeutic products and services with which they address both individual and societal needs in terms of healthy longevity, after a longer life in good health. The respective **companies are thus in a good position to generate not only added value for investors, but also genuinely positive effects for customers and in society, often referred to as 'sustainable purpose'**. Accordingly, companies can be classified as 'solution providers' not only based on their products ('enablers'), but also based on their solutions (see figure below).

Figure 7: The healthy longevity concept



Source: Company information

6. Conclusions

Demographic trends are the most important driver of the growing demand for products and services in the field of healthy longevity. Although demographics is a relatively slow but fundamentally strong driver, it will not lose speed and momentum in the coming decades and may even affect other countries, especially certain emerging markets such as China. Our first conclusion is therefore that **the opportunities in the market for healthy longevity are very attractive, especially when compared to other economic sectors.**

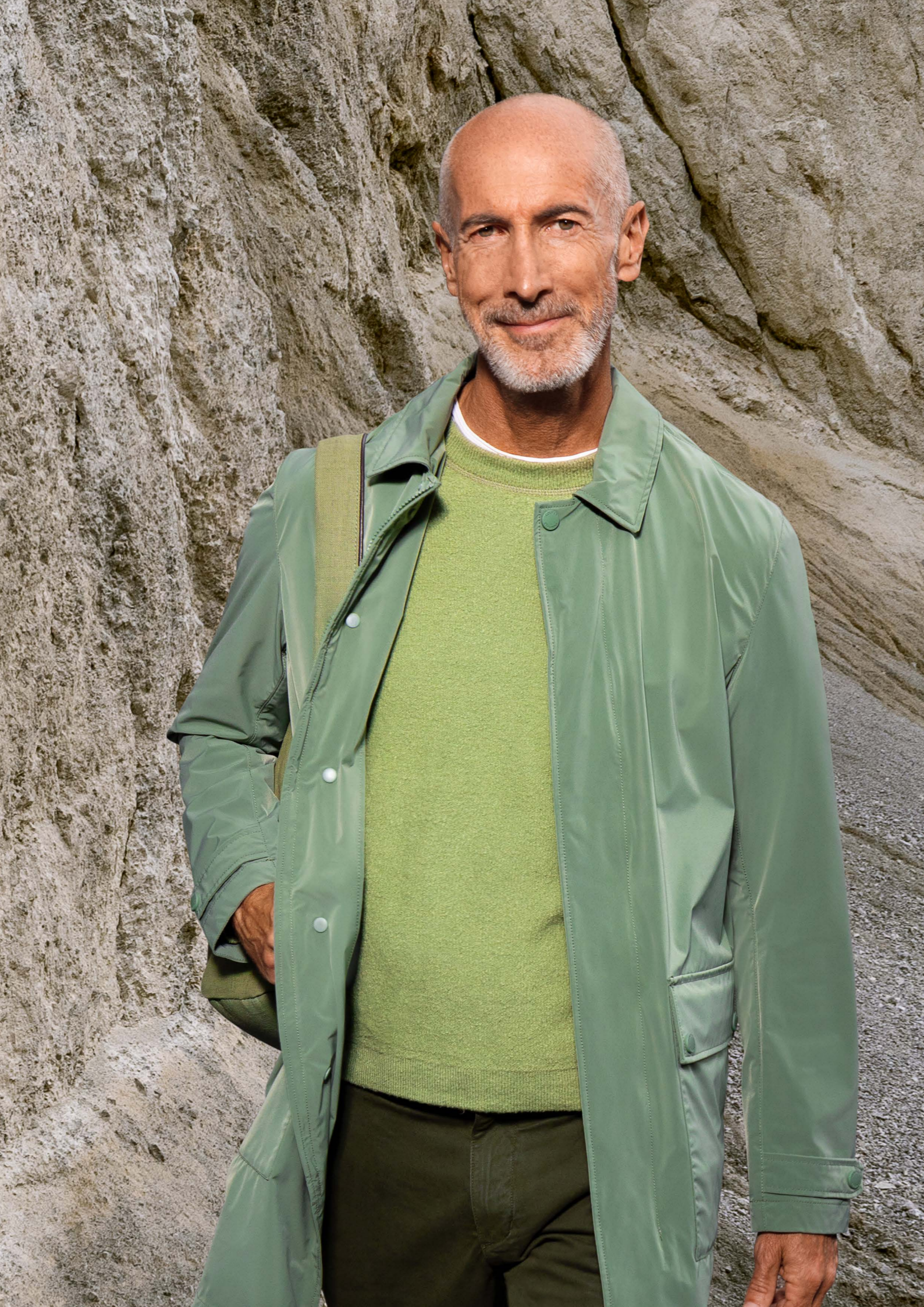
These opportunities are spread across different economic sectors, providing investors with sufficient **opportunities to diversify their investments accordingly.**

Companies and investors should not underestimate the effort and time required for the development and successful launch of new products and services. These typical product

development risks include macroeconomic risks, in particular the uncertain future purchasing power of the elderly population and the governments/taxpayers supporting the elderly.

We believe that the comprehensive approach described in this analysis demonstrates the appeal of this topic and at the same time helps to identify risks and exploit the numerous opportunities available.

¹⁰ World Health Organization (2022): Global status report on physical activity 2022. PDF document, <https://iris.who.int/bitstream/handle/10665/363607/9789240059153-eng.pdf?sequence=1j> (accessed on 3 May 2024).



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