The Retirement of the Baby Boomers: Consequences for the Economy and Equity Markets

Demography, Sector Winners and Equity Shares for Two Generations

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Abstract

This paper examines the consequences of the retirement of the baby-boom generation for the real economy and for capital markets in Austria, Switzerland, Germany, the United States and Japan and derives recommendations for two generations of investors. Building on the life-cycle hypothesis of Modigliani and Brumberg (1954), we trace how a shrinking labour force and the transition of the wealthiest cohort from accumulation to decumulation affect growth, public finances, inflation, interest rates and asset prices.

We review the asset-meltdown literature from Mankiw and Weil (1989) and Poterba (2001) to Auclert et al. (2021) and confront it with current data: according to the Federal Reserve, baby boomers hold 52.5 per cent of US household net worth and 54.5 per cent of equities and fund shares. The evidence points to lower growth, pressure on pension systems and a gradual shift in the demand for assets, but not to a collapse of equity prices. Studies by Goldman Sachs, UBS, HSBC, Merrill Lynch, Morgan Stanley, the OECD and the IMF are taken into account.

For investors we identify the sectors that benefit from ageing and labour scarcity, notably health care, robotics, automation and artificial intelligence, and propose age-dependent corridors for the equity share: 90 to 100 per cent of liquid financial

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wealth below the age of 35, 55 to 70 per cent at the transition to retirement and 35 to 50 per cent in advanced age. Given longer lives and lower pensions, women should hold no fewer equities than men, but rather more. The corridors are the author's own proposals.

Keywords: Baby boomers · Demographic change · Life-cycle hypothesis · Asset meltdown · Pension funds · Equity allocation · Sequence-of-returns risk · Sector allocation · Gender and investing.

JEL codes: D15, E21, G11, G12, G23, G51, H55, J11, J14, J26.

Non-Technical Summary

Between 1946 and 1964 in the United States, and about a decade later in German-speaking Europe, more children were born than ever before or since. These baby boomers have shaped schools, labour markets, housing markets and stock markets for six decades. They are now leaving working life: in the United States more than 11,000 people turn 65 every day, in Germany all baby boomers still alive, some 16.5 million people, will have reached retirement age by 2036, and in Japan, where the process began earlier, almost every third person is already 65 or older. This paper asks what the departure of this generation means for the economy and for the stock market, and what investors of different ages should do.

The economic consequences are gradual but far-reaching. Fewer people of working age have to produce the income for more pensioners, skilled workers become scarce, and the costs of pensions, health and long-term care rise. International organisations such as the IMF and the OECD expect lower economic growth for this reason, unless people work longer, more women and migrants are employed and productivity rises. This last point is the hopeful part of the story: ageing countries invest more in robots and automation, and artificial intelligence may relieve the shortage of labour.

For stock markets the widespread fear is that the boomers will sell their shares at the same time and that prices will collapse. We show why this is unlikely. Wealth is very unevenly distributed, and the households that own most of the shares do not need to sell them to finance their retirement; they pass them on to their heirs. Pensioners also reduce their savings far more slowly than theory predicts. What is likely is a slow change: less new money flows into shares, more is shifted into bonds and other interest-bearing investments, and some sectors gain while others lose. Health care, medical technology, robotics, automation, artificial intelligence and wealth management belong to the likely winners.

Our recommendations follow from this. Baby boomers should not abandon shares on the day they retire, because retirement can last thirty years; they should hold a reserve covering several years of withdrawals in safe investments and keep roughly half of their liquid financial wealth in equities. Younger investors cannot rely on public pensions to the same extent as their parents and should hold a high share of equities, save regularly and diversify globally. Women live longer and receive lower pensions on average; they should therefore invest at least as much in equities as men, start early and not leave investment decisions to others.

Contents

Non-Technical Summary 3
1 Introduction 6
2 The Baby-Boom Generation and the Demographic Turning Point 8
2.1 Baby-boom cohorts in five countries 8
2.2 From demographic dividend to demographic drag 9
2.3 The life-cycle framework 11
3 Consequences for the Real Economy 12
3.1 Labour market and skills shortages 12
3.2 Social security systems and public finances 13
3.3 Inflation and interest rates 14
3.4 Productivity and innovation 15
4 Country Profiles 16
4.1 Austria 16
4.2 Switzerland 17
4.3 Germany 18
4.4 United States 19
4.5 Japan 19
5 Pension Funds under Decumulation Pressure 20
5.1 Funded and pay-as-you-go systems 20
5.2 Liquidity and asset allocation 20
5.3 Redistribution between generations: the Swiss case 22
6 Capital Markets: Asset Meltdown or Gradual Adjustment? 22
6.1 The asset-meltdown hypothesis 22
6.2 The empirical evidence 23
6.3 Who owns the assets: concentration, bequests and the wealth transfer 24
6.4 Flows, the shift from equities to bonds and why a crash is unlikely 25
6.5 Real estate 26
7 Alternative Assets and Collectibles 27
8 Sector Winners and Losers 28
8.1 Demand: health care, longevity and the silver economy 28
8.2 Robotics, automation and artificial intelligence 30
8.3 Financial services and sectors facing headwinds 31
9 Implications for Investors 31
9.1 Life-cycle theory and the equity share 31
9.2 Baby boomers: decumulation and sequence-of-returns risk 32
9.3 The younger generation 34

9.4 Should women invest differently from men? 35
9.5 Recommended equity shares for both generations 36
10 Conclusion and Outlook 37
References 39

1 Introduction

The retirement of the baby-boom generation is the most predictable macroeconomic event of the first half of the twenty-first century. Those who will leave the labour force over the next ten years were born sixty years ago; their number is known, as is the far smaller number of those who will replace them. In the United States, the cohorts born between 1946 and 1964 have been reaching the age of 65 since 2011, and between 2024 and 2027 more than 4.1 million Americans do so each year, the highest figure on record (Fichtner 2024).[2] In Germany, where the baby boom occurred about a decade later, 12.9 million economically active persons will pass the statutory retirement age by 2036, almost 30 per cent of the labour force (Destatis 2022). Japan, whose first baby boomers were born between 1947 and 1949, is two decades ahead: 29.6 per cent of its population is aged 65 or over (Statistics Bureau of Japan 2026).

The economic significance of this transition lies in the double role of the generation. As workers, the baby boomers supplied the labour that carried the expansion of the advanced economies after 1970, a contribution that Bloom, Canning and Sevilla (2003) described as the demographic dividend. As savers, they accumulated the largest stock of private wealth in history. According to the Distributional Financial Accounts of the Federal Reserve (2026), US baby boomers held 52.5 per cent of household net worth and 54.5 per cent of corporate equities and mutual fund shares in the second quarter of 2026, although they account for roughly one fifth of the population. Both roles now reverse. The life-cycle hypothesis of Modigliani and Brumberg (1954) and Ando and Modigliani (1963) predicts that households save during working life and dissave in retirement; the overlapping-generations models of Samuelson (1958) and Diamond (1965) imply that the relative size of the saving and the dissaving cohorts affects the price of capital.

Two opposing narratives have grown out of these premises. The first, the asset-meltdown hypothesis, holds that the boomers bid up asset prices while they saved and will depress them when they sell to a smaller generation of buyers. It goes back to Mankiw and Weil (1989), who predicted a substantial fall in real house prices, and to Bakshi and Chen (1994) and Schieber and Shoven (1997) for financial assets; Siegel (2005) discussed it for a wide audience. The second narrative, formulated by Poterba (2001, 2004) and supported by the simulation studies of Börsch-Supan, Ludwig and Winter (2006) and Krueger and Ludwig (2007), holds that the effects on returns are modest, because retirees draw down their wealth slowly, because forward-looking markets anticipate a foreseeable event and because capital is internationally mobile.[3] A related debate concerns inflation and interest rates: Goodhart and Pradhan (2020) expect ageing to raise both, whereas Auclert et al.

[2] The Alliance for Lifetime Income refers to these years as “Peak 65”; the figure corresponds to more than 11,200 persons per day.

[3] Abel (2001, 2003) shows that neither a bequest motive nor rational expectations eliminate the predicted fall in the price of capital in a closed-economy model; the dispute is therefore empirical and not purely theoretical.

(2021) and the IMF (2025) expect the high savings of older households to keep real interest rates low.

The debate is of more than academic interest, for three reasons. First, the transition is no longer a forecast: the working-age population is shrinking in Japan and Germany, and the labour shortages described by the OECD (2025a) constrain firms. Second, the institutions through which the boomers saved, from Swiss pension funds and US 401(k) plans to public pension schemes, are turning from net buyers into net sellers of securities. Third, private investors of both generations must decide now how much equity risk to bear: the boomers at the point at which their capacity to recover from losses is lowest, their children in the knowledge that pay-as-you-go pensions will replace a smaller share of their income.

This paper makes four contributions. First, it brings together the demographic facts for Austria, Switzerland, Germany, the United States and Japan on a comparable basis, using the 2024 revision of the World Population Prospects of the United Nations (2024), and examines the consequences for labour markets, social security systems, inflation, interest rates and productivity. Second, it reviews the theoretical and empirical literature on demography and asset prices and confronts it with current data on the distribution of wealth, on pension funds and on the flow of funds, drawing on studies by the IMF and the OECD and by Goldman Sachs, UBS, HSBC, Merrill Lynch and Morgan Stanley. Third, it identifies the sectors that gain and lose from ageing and labour scarcity, including alternative assets and collectibles. Fourth, it derives recommendations for baby boomers and for the younger generation, proposes age-dependent corridors for the equity share and addresses the question of whether women should invest differently from men. The corridors of Table 8, the recommendations of Table 9 and the withdrawal example of Figure 8 are the author's own proposals and calculations; they are not empirical results and are marked as such in the text.[4]

The paper is structured as follows. Section 1 (the present section) serves as the introduction, frames the research question and surveys the prior literature. Section 2 describes the baby-boom generation and the demographic turning point and sets out the life-cycle framework. Section 3 analyses the consequences for the real economy. Section 4 presents country profiles for Austria, Switzerland, Germany, the United States and Japan. Section 5 examines pension funds under decumulation pressure. Section 6 discusses capital markets and the asset-meltdown hypothesis. Section 7 turns to alternative assets and collectibles, and Section 8 to the sectors that gain and lose. Section 9 derives the implications for investors, including recommended equity shares for both generations and for women, and Section 10 presents the conclusion and an outlook.

[4] The data and calculations underlying the figures, the withdrawal example and the savings example are documented in a separate workbook that accompanies this paper.

2 The Baby-Boom Generation and the Demographic Turning Point

2.1 Baby-boom cohorts in five countries

The term baby boom denotes the sustained rise in birth rates in the industrialised countries after the Second World War. Its timing differed. In the United States the boom began immediately after the war and lasted from 1946 to 1964, a period in which some 76 million children were born. Japan experienced a short and intense first boom between 1947 and 1949, with about 2.7 million births a year, followed by an echo boom from 1971 to 1974. In German-speaking Europe the boom came later, after reconstruction: in Germany the large cohorts were born between the mid-1950s and the end of the 1960s, with a peak of 1.36 million births in 1964; in Austria the peak was reached in 1963 and in Switzerland in 1964.[5] The fall in fertility that followed, to levels well below the replacement rate of 2.1 children per woman, turned a bulge into a lasting imbalance between generations.

Table 1: Baby-boom cohorts and demographic indicators in the five countries

Country	Baby-boom cohorts (peak birth year)	Share aged 65 and over, 2000 / 2025 / 2050 (per cent)	Old-age dependency ratio, 2025 / 2050	Working-age population: change 2025–2050 (per cent) / peak year
Austria	Mid-1950s to late 1960s (1963)	15.4 / 21.1 / 30.8	32.5 / 54.0	−15.8 / 2023
Switzerland	1946–1964 (1964)	15.3 / 20.4 / 30.2	31.5 / 53.1	−8.6 / 2024
Germany	Mid-1950s to 1969 (1964)	16.5 / 23.7 / 30.2	37.9 / 53.4	−15.5 / 1997
United States	1946–1964 (1957)	12.2 / 18.4 / 23.0	28.5 / 37.8	+3.7 / after 2050
Japan	1947–1949 (1949); echo 1971–1974	17.4 / 29.9 / 37.1	50.8 / 71.8	−25.0 / 1995
World	–	6.8 / 10.4 / 16.3	16.0 / 25.7	+14.0 / after 2050

Notes: Old-age dependency ratio: persons aged 65 and over per 100 persons aged 15 to 64. Working-age population: persons aged 15 to 64. Projections: medium variant.
Source: Own presentation and calculations based on United Nations (2024); cohorts as delimited by national statistical offices.

Table 1 summarises the position of the five countries. The differences in timing matter for investors. Japan's first boomers are now in their late seventies, and the country offers two decades of observable experience with a shrinking labour force. In the United States the youngest boomers turn 62 in 2026, so that the generation will have passed the conventional retirement age completely by 2031. In Germany, Austria and Switzerland the largest

[5] National statistical offices delimit the cohorts differently. Destatis (2022) uses the birth years 1957 to 1969, Deschermeier and Schäfer (2024) use 1954 to 1969; for the United States we follow the delimitation of the Federal Reserve (2026), 1946 to 1964.

cohorts, born around 1964, reach retirement age only between 2027 and 2031; the peak of the transition still lies ahead.

2.2 From demographic dividend to demographic drag

The economic literature describes the first phase of the demographic transition as a dividend. When fertility falls, the share of the population of working age rises for several decades, and income per head grows faster than output per worker; Bloom, Canning and Sevilla (2003) attribute a considerable part of the East Asian growth miracle to this effect, and Mason and Lee (2006) add a second dividend that arises when a population anticipating a longer retirement accumulates more capital. The dividend is a loan, however, not a gift.[6] Once the large cohorts retire, the arithmetic reverses, as Cutler et al. (1990) noted at an early stage. According to the OECD (2025a), the ratio of persons aged 65 and over to those of working age in its member countries rose from 19 per cent in 1980 to 31 per cent in 2023 and will reach 52 per cent by 2060, while the working-age population will shrink by 8 per cent, and by more than 30 per cent in a quarter of the member countries.

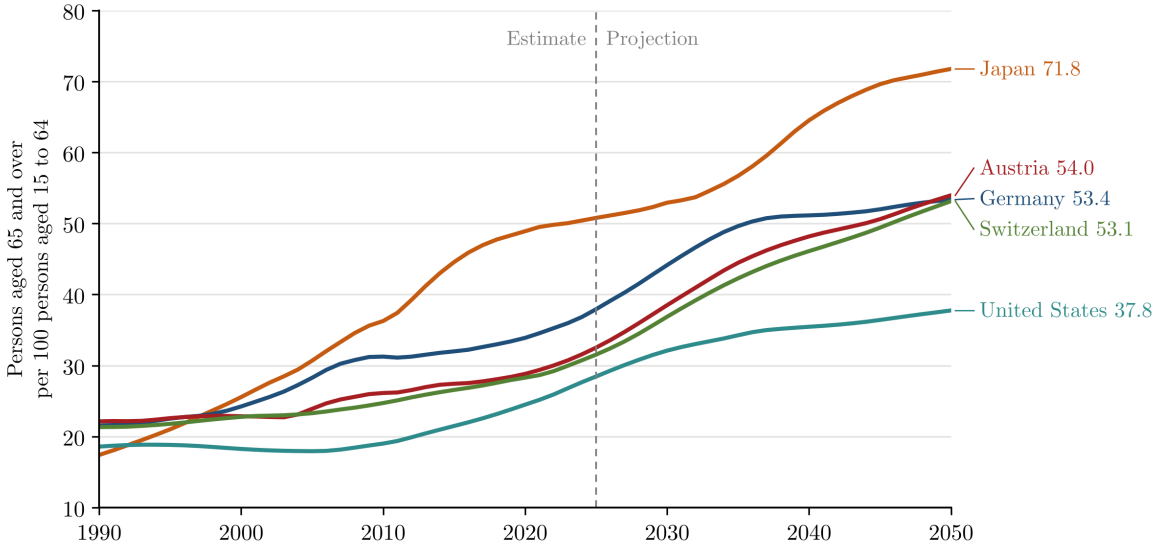


Figure 1: Old-age dependency ratio in Austria, Switzerland, Germany, the United States and Japan, 1990 to 2050
Source: Own illustration based on United Nations (2024), medium variant.

Figure 1 shows the old-age dependency ratio for the five countries. In Japan there are already 51 persons aged 65 and over for every 100 persons of working age, and the ratio is projected to reach 72 by 2050. Germany, Austria and Switzerland follow a common path, from between 32 and 38 today to 53 or 54 in 2050. The United States ages more slowly,

[6] Bloom, Canning and Sevilla (2003) stress that the dividend is not automatic; it requires that the growing population of working age finds productive employment.

from 29 to 38, owing to higher fertility in the past and sustained immigration.[7] Figure 2 complements the picture with the projected change in the population of working age between 2025 and 2050: a decline of 25 per cent in Japan, of almost 16 per cent in Austria and Germany and of 9 per cent in Switzerland, against a small increase in the United States. In South Korea, Italy and China the contraction is larger still, which matters for globally diversified portfolios.

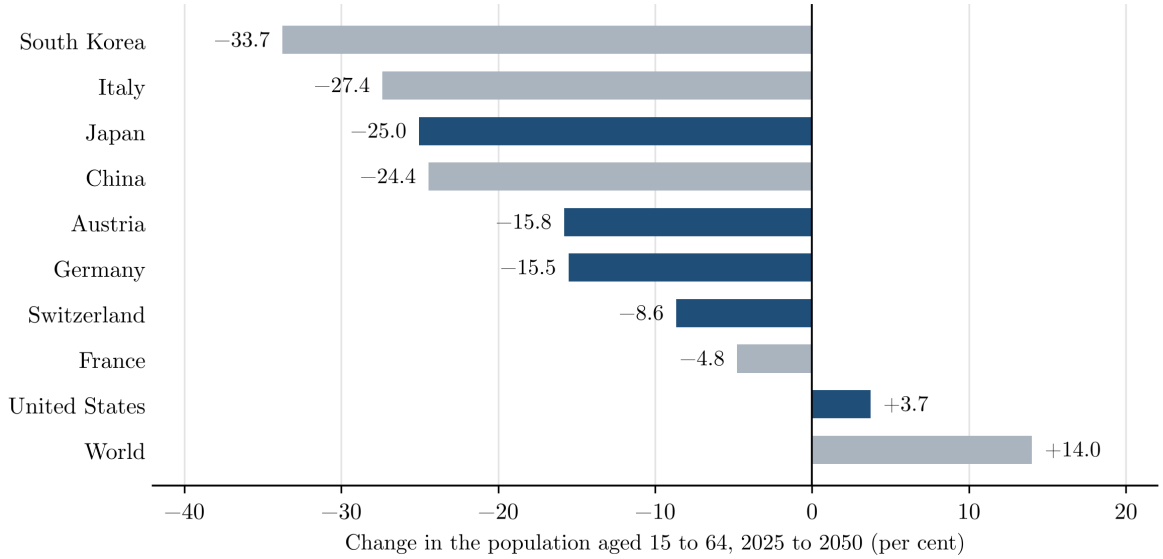


Figure 2: Projected change in the population of working age, 2025 to 2050
Source: Own illustration and calculations based on United Nations (2024), medium variant.

The macroeconomic consequence is slower growth. The IMF (2025) estimates that global growth between 2025 and 2050 will be 1.1 percentage points lower than the average of the years 2016 to 2018 and that demographic change accounts for about three quarters of this decline.[8] The McKinsey Global Institute (2025) calculates that ageing will reduce the growth of GDP per capita in the countries affected first by 0.4 percentage points a year until 2050 unless productivity growth or working time rises markedly. Maestas, Mullen and Powell (2023), using variation across US states, find that each 10 per cent increase in the share of the population aged 60 and over lowered GDP per capita by 5.5 per cent between 1980 and 2010, two thirds of which was due to slower growth of labour productivity and one third to slower employment growth.

[7] The projections are sensitive to the assumed level of net migration. In its scenarios, the Swiss Federal Statistical Office expects the labour force to grow by 12.5 per cent between 2024 and 2055 solely on account of immigration (BFS 2025a).

[8] According to the IMF (2025), all advanced economies and the largest emerging economies will have passed the demographic turning point, after which the share of the working-age population declines, by 2035.

2.3 The life-cycle framework

The link between demography and capital markets is the life-cycle hypothesis. In the formulation of Modigliani and Brumberg (1954), households smooth consumption over their lifetime: they save little when young, accumulate wealth in the middle years, when income is highest, and consume their wealth in retirement.[9] Figure 3 illustrates the stylised profile and marks the position of the baby boomers in 2026, who straddle the retirement threshold. In an overlapping-generations economy of the kind analysed by Samuelson (1958) and Diamond (1965), the middle-aged buy assets from the old; if a large generation is followed by a small one, sellers outnumber buyers, and the price of capital must fall to clear the market. Feldstein (1974) added that pay-as-you-go pensions reduce private saving, so that the size of the effect depends on the design of the pension system.

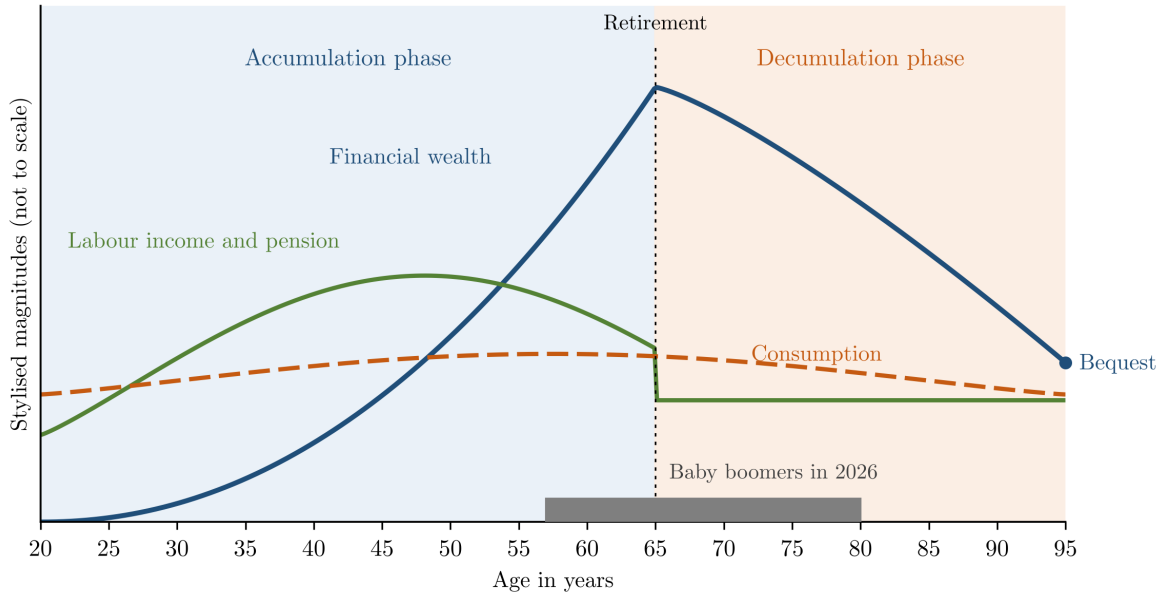


Figure 3: Stylised life-cycle profile of income, consumption and financial wealth
Notes: Schematic illustration; the curves are not estimated from data. The grey bar marks the age range of the baby-boom cohorts of the five countries in 2026.
Source: Own illustration, drawing on Modigliani and Brumberg (1954).

Three qualifications are important for what follows. First, households do not behave as the simple model predicts. Poterba, Venti and Wise (2011) show that US households tend to preserve their housing equity and retirement accounts well into old age and draw on them mainly after shocks such as the death of a spouse or entry into a nursing home; De Nardi, French and Jones (2010) explain the slow dissaving of the elderly by the risk of high medical expenses late in life, and Yaari (1965) had already shown that uncertainty about the length of life is a reason for caution in the absence of annuities.[10] Second, wealth is

[9] Ando and Modigliani (1963) derived the aggregate implication: the saving rate of an economy depends on the growth of population and productivity, not on the level of income.
[10] For Japan, Horioka (2010) finds that retired households do dissave and that the rate of dissaving has increased over time; the life-cycle model thus fits the Japanese data better than is often assumed.

concentrated: a large part of financial assets is held by households that will never need to sell them and that leave them to their heirs. Third, capital markets are global, whereas ageing is not synchronised across countries.[11] Figure 4 summarises the transmission from the retirement of the baby boomers to the questions that concern investors; it also provides the structure of the following sections.

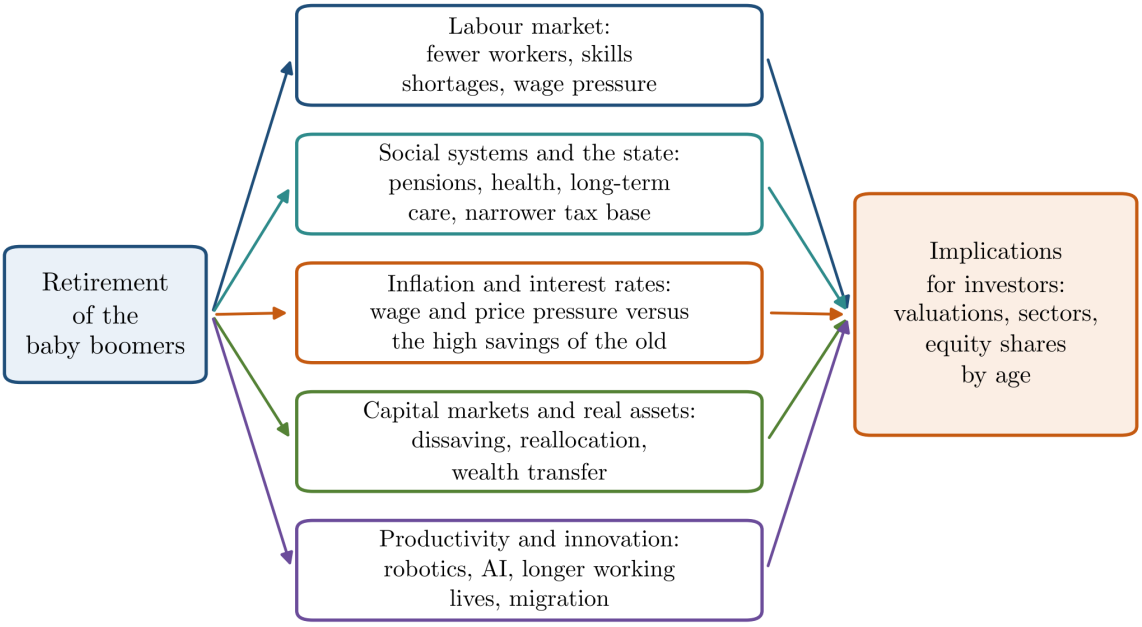


Figure 4: Transmission from the retirement of the baby boomers to the implications for investors
Source: Own illustration.

3 Consequences for the Real Economy

3.1 Labour market and skills shortages

The first and most direct consequence is a decline in the supply of labour. In Germany, Deschermeier and Schäfer (2024) count 19.5 million baby boomers in 2022; the roughly 16.5 million of them who will still be alive in 2036 will all have reached retirement age by then, while only about 12.5 million young people enter the labour market over the same period. In Austria the population aged 20 to 64 reached its maximum of 5.57 million in 2024 and will be 256,000 persons, or 4.6 per cent, smaller by 2040 (Statistik Austria 2025). In the United States the pandemic brought part of the adjustment forward: Montes, Smith and Dajon (2022) attribute a substantial share of the decline in labour force participation after 2020 to an excess of retirements over the previous trend. Börsch-Supan (2003) pointed

[11] Börsch-Supan, Ludwig and Winter (2006) show that ageing countries export capital at first and repatriate it later, when they dissave.

out that ageing is felt first in the labour market, where it changes relative wages, the demand for skills and the structure of production.

Scarcity of labour has three effects that are relevant for investors. It shifts bargaining power towards workers and raises the wage share, a point emphasised by Goodhart and Pradhan (2020). It lowers potential output where vacancies cannot be filled, above all in health care, long-term care, skilled trades and engineering. And it raises the return on any investment that saves labour, which is the starting point of the sector analysis in Section 8. The OECD (2025a) expects the growth of GDP per capita in its member countries to fall from 1.0 per cent a year in the period 2006 to 2019 to 0.6 per cent a year between 2024 and 2060 if policies remain unchanged.[12]

The decline is not a fate. Goldman Sachs (2025a), in a study led by Kevin Daly, documents that the average working life in developed economies has lengthened from 34 to 38 years since 2000, even in countries with minimal changes to pension laws. The authors summarise the improvement in the functional capacity of older people in the formula that 70 is the new 53, which echoes the finding of the IMF (2025) that a person aged 70 in 2022 had the same cognitive ability as a person aged 53 in 2000. Japan illustrates the potential: 9.4 million persons aged 65 and over were in employment in 2025, 13.8 per cent of the workforce, and more than half of those aged 65 to 69 work (Statistics Bureau of Japan 2026).

3.2 Social security systems and public finances

Pay-as-you-go pension systems, which dominate in Germany and Austria and form the first pillar in Switzerland, the United States and Japan, depend directly on the ratio of contributors to beneficiaries. Aaron (1966) showed that the implicit return of such a system equals the growth rate of the wage bill, that is, the sum of the growth rates of employment and of wages per worker. When employment shrinks, the implicit return falls, and the system can be balanced only by higher contributions, lower benefits, a higher retirement age or transfers from the general budget. Barr and Diamond (2008) stress that funded systems are not immune either: pensioners consume goods and services produced by the workers of the day, and a funded claim is worth only what the next generation is able and willing to pay for the assets.

The fiscal magnitudes are considerable. The OECD (2025a) expects spending on pensions and health to rise by about 3 per cent of GDP by 2060 in the average member country. In the United States, the Trustees project that the Old-Age and Survivors Insurance Trust Fund will be depleted in the fourth quarter of 2032, after which incoming contributions would cover 78 per cent of scheduled benefits (Social Security Administration 2026). In Austria, the Office of the Fiscal Advisory Council expects pension expenditure

[12] The OECD (2025a) identifies the mobilisation of older workers, of women and of migrants and higher productivity growth as the main sources of compensation; none of them alone offsets the demographic effect.

to rise by 1.6 to 1.7 percentage points of GDP between 2023 and 2030, depending on the population projection used (Fiskalrat 2026). In Germany the pension package adopted in December 2025 fixes the replacement level at 48 per cent until 2031, which shifts the burden of adjustment to contributors and to the federal budget.[13]

For investors, the fiscal pressure has two implications. First, the supply of government bonds will remain abundant in ageing economies, and the temptation to reduce the real value of public obligations through inflation or financial repression grows with the debt.[14] Second, the generosity of public pensions cannot be extrapolated. Novy-Marx and Rauh (2011) showed for US state pension plans that promises valued at market discount rates exceed reported liabilities by a wide margin; the same logic applies to the implicit liabilities of pay-as-you-go systems. Private provision gains in importance for the younger generation, which is the premise of Section 9.

3.3 Inflation and interest rates

The effect of ageing on inflation and interest rates is the most contested part of the debate. One school argues that ageing is disinflationary and lowers real interest rates. A population that expects a long retirement saves more, and slower growth of the labour force reduces the demand for investment; both lower the equilibrium real rate. Carvalho, Ferrero and Nechio (2016) attribute a decline in the equilibrium real interest rate of at least 1.5 percentage points between 1990 and 2014 to demographic factors, Gagnon, Johannsen and López-Salido (2021) a decline of a little more than one percentage point since the 1980s, and Eggertsson, Mehrotra and Robbins (2019) formalise the secular-stagnation hypothesis that Summers (2014) revived from Hansen (1939).[15] Japan appears to confirm this view: Anderson, Botman and Hunt (2014) find that ageing exerted substantial deflationary pressure there, and Shirakawa (2012), then Governor of the Bank of Japan, drew attention to the link between demographic change and weak growth at an early stage.

The opposing school, represented most prominently by Goodhart and Pradhan (2020), argues that the past is a poor guide. The disinflation of the three decades after 1990 reflected the entry of the baby boomers and of the workers of China and Eastern Europe into the global labour force. As both reverse, dependants who consume without producing become more numerous relative to workers, wages rise, and saving falls because the old dissave while spending on health and care is inelastic. Juselius and Takáts (2018), using data for 22 countries going back to 1870, find that a larger share of dependants, young or

[13] The package also extends the pension credit for child-rearing periods and, from January 2026, exempts earnings of up to EUR 2,000 a month from income tax for employees who work beyond the statutory retirement age ("Aktivrente").

[14] Financial repression denotes policies that hold interest rates below the rate of inflation, for instance through rules that oblige institutional investors to hold government bonds.

[15] Hansen (1939) feared in his presidential address to the American Economic Association that slower population growth would depress investment; the baby boom that followed refuted him for a generation.

old, is associated with higher inflation and a larger share of the working-age population with lower inflation. For the euro area, in contrast, Bobeica et al. (2017) find that ageing dampens inflation.[16]

The two views can be reconciled in part by distinguishing phases. While the boomers are in their fifties and early sixties, their saving is at its peak and depresses real rates; when they are in their seventies and eighties, the balance depends on how quickly they dissave. Auclert et al. (2021) project that, because the old hold far more wealth than the young, the changing age composition of the population will raise wealth-to-GDP ratios and lower rates of return for the remainder of the century; the IMF (2025) reaches a similar conclusion for the large economies. Mian, Straub and Sufi (2021) attribute the decline in the natural rate more to rising income inequality than to the boomers as such. Our reading of the evidence is that ageing by itself does not produce high inflation, but that tight labour markets and fiscal pressure make inflation more volatile than in the three decades before 2020. For portfolios, this argues for real assets and for bonds of moderate maturity, not for a bet on either extreme.

3.4 Productivity and innovation

Whether ageing lowers living standards depends on productivity. The pessimistic view rests on two observations. Feyrer (2007) finds that the share of workers aged 40 to 49 is associated with higher productivity growth, so that an ageing workforce passes its most productive years; Jones (2022) shows in a growth model that a declining population may bring the growth of knowledge itself to a halt, because ideas are produced by people. The optimistic view rests on the response of firms. Acemoglu and Restrepo (2017) find no negative relation between ageing and the growth of GDP per capita across countries and explain this by the faster adoption of automation in ageing societies; in Acemoglu and Restrepo (2022) they show that demographic change accounts for a large part of the international differences in the use of industrial robots. Graetz and Michaels (2018) estimate that robots raised annual labour productivity growth by 0.36 percentage points in 17 countries between 1993 and 2007.[17]

Artificial intelligence extends this logic from manual to cognitive tasks. Brynjolfsson, Li and Raymond (2025) document a productivity gain of 15 per cent on average for customer-service agents who were given a generative AI assistant, with the largest gains for inexperienced workers. Briggs and Kodnani (2023) of Goldman Sachs estimate that generative AI could raise annual labour productivity growth by about 1.5 percentage points over a ten-year period, whereas Acemoglu (2025) arrives at a gain in total factor productivity of less than 0.7 per cent over ten years. The range of estimates is wide, and

[16] Aksoy et al. (2019) estimate for 21 OECD countries that ageing reduces output growth, investment and real interest rates, and they relate demographic structure to innovation and growth in a theoretical model.

[17] Acemoglu and Restrepo (2022) measure ageing by the ratio of workers aged 56 and over to those aged 21 to 55.

Rupprechter (2026) has shown for asset management how far measurable benefit still lags behind adoption.[18] Table 2 summarises the five areas discussed in this section.

Table 2: Consequences of the retirement of the baby boomers for the real economy and for investors

Area	Mechanism	Evidence	Relevance for investors
Labour market	Fewer workers, skills shortages, higher wage share	OECD (2025a); Deschermeier and Schäfer (2024); Maestas, Mullen and Powell (2023)	Pressure on margins in labour-intensive industries; premium on labour-saving technology
Social security and public finances	Fewer contributors per pensioner; rising spending on pensions, health and care	Aaron (1966); Barr and Diamond (2008); OECD (2025a)	Abundant supply of government bonds; lower public pensions for the young
Inflation and interest rates	High saving before retirement; dissaving and wage pressure afterwards	Goodhart and Pradhan (2020); Auclert et al. (2021); Juselius and Takáts (2018)	More volatile inflation; real assets and bonds of moderate maturity
Capital markets and real assets	Transition from accumulation to decumulation; reallocation and bequests	Poterba (2001); Abel (2003); Kopecky and Taylor (2022)	Lower inflows and higher demand for income; no forced selling (Section 6)
Productivity and innovation	Automation, artificial intelligence, longer working lives, migration	Acemoglu and Restrepo (2022); Brynjolfsson, Li and Raymond (2025); IMF (2025)	Structural demand for robotics, automation and artificial intelligence (Section 8)

Source: Own presentation based on the cited studies.

4 Country Profiles

The five countries share the demographic direction but differ in timing, in the design of their pension systems and in the role that equities play in household wealth. Table 3 summarises the profiles, which are described in turn below.

4.1 Austria

Austria ages along the Central European path.[19] According to Statistik Austria (2025), the share of the population aged 65 and over will rise from 20.5 per cent in 2025 to 26.2 per cent in 2040 and 27.3 per cent in 2050. Old-age provision rests almost entirely on the public pay-as-you-go system, which offers high replacement rates and is co-financed from the federal budget; occupational and private funded pensions play a minor role. The reforms that took effect in 2026 raise, in steps, the age for the corridor pension from 62 to 63 years

[18] Longer working lives and migration complement technology. The IMF (2025) estimates that healthier ageing alone adds about 0.4 percentage points to annual global growth between 2025 and 2050, and that a package of measures that also narrows gender gaps in labour force participation adds 0.6 points.

[19] According to United Nations (2024), Austria's old-age dependency ratio rises from 32.5 in 2025 to 54.0 in 2050 (Table 1).

and the required insurance period from 40 to 42 years, introduce a partial pension and provide for a sustainability mechanism from 2030; the statutory retirement age of women is being raised from 60 to 65 years by 2033.[20]

For the capital market, the Austrian case is one of missed accumulation. Because the boomers saved little in securities, their retirement does not trigger sales of equities on any scale; the burden falls on the public budget instead. Only about 31 per cent of the population aged 16 and over hold securities, 24 per cent funds or exchange-traded funds and 18 per cent shares (Wiener Börse 2026).[21] The younger generation, whose public pensions will be subject to the sustainability mechanism, therefore has the most to gain from building equity wealth of its own.

Table 3: Old-age provision and the role of equities in the five countries

Country	Pension system	Recent reforms and prospects	Households and equities
Austria	Public pay-as-you-go system with high replacement rates; small funded pillars	Corridor pension at 63 after 42 insurance years; partial pension; sustainability mechanism from 2030; retirement age of women 65 by 2033	About 31 per cent hold securities; funds and ETFs 24 per cent, shares 18 per cent
Switzerland	Three pillars: AHV (pay-as-you-go), BVG (funded, mandatory), private saving	Thirteenth AHV pension from December 2026; BVG reform rejected in 2024; retirement age of women 65 by 2028	Coverage ratio 117.1 per cent; conversion rates around 5.2 per cent until 2031; half of retirement assets withdrawn as capital
Germany	Public pay-as-you-go system; occupational and private pensions as supplements	Replacement level of 48 per cent until 2031; "Aktivrente" from 2026; "Frühstart-Rente" planned	14.1 million holders of shares, funds or ETFs, of whom 4.9 million under 40
United States	Social Security (pay-as-you-go); funded 401(k) plans, individual retirement accounts and public pension plans	Trust funds projected to be depleted in 2032 (old-age and survivors) and 2034 (combined)	Retirement assets of USD 51.2 trillion; boomers hold 54.5 per cent of equities and fund shares
Japan	Public pay-as-you-go pension with a reserve fund (GPIF); corporate pensions	Employment to be secured up to 65, to be sought up to 70; expanded tax-exempt accounts (NISA) since 2024	Cash and deposits 47.2 per cent of household financial assets; target of 40 per cent securities by 2040

Source: Own presentation based on the sources cited in Section 4.

4.2 Switzerland

Switzerland combines a pay-as-you-go first pillar (AHV) with a mandatory funded second pillar (BVG) and tax-favoured private saving. The Federal Statistical Office expects the

[20] The gender gap in pensions is among the widest in the OECD: more than 35 per cent according to the OECD (2025b) and 39.4 per cent according to the national calculation for the Equal Pension Day 2026 (Sozialministerium 2026).

[21] The survey was conducted among 2,002 persons in January 2026.

number of persons aged 65 and over to rise from 1.8 million in 2025 to 2.2 million in 2035 and about 2.7 million in 2055, and the old-age dependency ratio to increase from 33.0 to 44.9 (BFS 2025a). Voters approved a thirteenth monthly AHV pension in March 2024, which is paid for the first time in December 2026 and costs more than CHF 4 billion a year, and rejected the reform of occupational pensions in September 2024. The second pillar is in sound financial condition, with an average coverage ratio of 117.1 per cent at the end of 2025 (OAK BV 2026), but the benefits it delivers have fallen: the conversion rates of the funds are expected to stabilise at around 5.2 per cent until 2031, far below the statutory minimum of 6.8 per cent in the mandatory part (Swisscanto 2026), and the VZ VermögensZentrum (2026) calculates that the pensions to be expected from the first and second pillars combined are 16 per cent lower than in 2002.

The Swiss case shows that funding shifts the demographic adjustment from the public budget to the capital market and to the insured. Half of the retirement assets are now withdrawn as capital and not as a pension (Swisscanto 2026), which transfers investment risk and longevity risk to households at the very moment at which their capacity to bear risk declines.[22]

4.3 Germany

Like Austria, Germany faces a decline of about 16 per cent in its population of working age by 2050 (Table 1). The 16th coordinated population projection expects the number of persons aged 67 and over to rise by 4 to 4.5 million, to between 20.5 and 21.3 million, by 2038 (Destatis 2025). The statutory pension is financed on a pay-as-you-go basis; the pension package of December 2025 stabilises the replacement level and thereby postpones the adjustment, while a commission is to make proposals for the period after 2031.[23]

Household wealth in Germany is dominated by real estate, bank deposits and insurance claims, so that, as in Austria, the direct effect of boomer retirement on the equity market is small. The equity culture is changing, however. In 2025 the number of persons holding shares, equity funds or exchange-traded funds reached a record 14.1 million, of whom 4.9 million were younger than 40 (Deutsches Aktieninstitut 2026). The demographic burden thus meets a generation that has begun to invest. The gender gap in old-age income was 27.1 per cent in 2023, and 39.4 per cent when survivors' pensions are excluded (Destatis 2024).

[22] New occupational pensions paid to women amounted to CHF 1,227 a month in 2024, against CHF 2,042 for men (BFS 2025b); the gap reflects part-time work and career interruptions.

[23] A state-subsidised savings plan for children and adolescents aged 6 to 17 ("Frühstart-Rente", EUR 10 a month) is planned as a first element of funded provision within the public system.

4.4 United States

The United States is the country in which boomer retirement and the equity market are most closely linked, because retirement provision is largely funded and invested in equities. Total retirement assets amounted to USD 51.2 trillion in mid-2026, of which USD 19.9 trillion was held in individual retirement accounts and USD 15.0 trillion in defined-contribution plans (ICI 2026). Morgan Stanley (2025b) estimates that Americans aged 55 and over control about USD 124 trillion, or 73 per cent of the wealth of US households. The public system is under strain at the same time: on the projections of the Trustees, the combined Social Security trust funds will be exhausted in 2034, when 83 per cent of scheduled benefits would be payable (Social Security Administration 2026).

Demographically, the United States is in a more favourable position than the other four countries. The population of working age is still growing slightly, and the old-age dependency ratio in 2050 will be no higher than Germany's today. The adjustment problem is one of distribution. HSBC (2026), in a survey of almost 10,000 affluent investors in ten markets, reports that respondents in the United States consider USD 2.6 million necessary for a comfortable retirement and that boomers have accumulated 74 per cent of their target, Generation X 55 per cent and Millennials 42 per cent.[24]

4.5 Japan

Japan is the laboratory of ageing. The population of working age peaked in 1995, and persons aged 65 and over account for 29.6 per cent of the population, a share that the national projections expect to rise to 36.3 per cent by 2045 (Statistics Bureau of Japan 2026; IPSS 2023). Three observations are instructive. First, the saving rate of households fell as the population aged, which Braun, Ikeda and Joines (2009) explain within a life-cycle model, yet the stock of financial assets continued to grow, to JPY 2,386 trillion in March 2026 (Bank of Japan 2026). Second, households did not sell equities, because they hardly owned any: cash and deposits make up 47.2 per cent of their financial assets, compared with 10.7 per cent in the United States and 31.1 per cent in the euro area. Third, the consequences of ageing were most visible in real estate outside the metropolitan areas: according to the Housing and Land Survey of 2023 (Statistics Bureau of Japan 2024), 9.0 million dwellings, 13.8 per cent of the housing stock, were vacant.

The Japanese stock market is often cited as evidence for the asset-meltdown hypothesis, since the Nikkei 225 took 34 years to regain its peak of December 1989. The inference is weak. The fall after 1989 was the bursting of a valuation bubble, and the recovery after 2012 took place while the population was shrinking. The policy response is of greater interest for European investors: with the expansion of tax-exempt investment accounts

[24] Across all markets the perceived cost of retirement rose by a fifth within a year to USD 1.26 million, of which respondents had accumulated 49 per cent; 77 per cent expect to leave working life gradually (HSBC 2026).

(NISA) in 2024 the government seeks to move household savings from deposits into securities.[25]

5 Pension Funds under Decumulation Pressure

5.1 Funded and pay-as-you-go systems

Pension funds are the institutions through which the saving of the baby boomers reached the capital market, and it is through them that decumulation becomes visible first. Scharfstein (2018) argues that policies which promote pension saving also promote the development of capital markets, and he presents facts that are broadly consistent with this view. Table 4 compares the systems of the five countries. In a pay-as-you-go system the retirement of a large cohort appears in the public budget and in contribution rates; in a funded system it appears in the cash flow of the funds. A fund with a young membership receives more in contributions than it pays out and is a net buyer of securities; a mature fund pays out more than it receives and must finance the difference from income, maturing bonds or sales.

Schieber and Shoven (1997) projected in the 1990s that the US private pension system would cease to be a source of national saving in the 2020s. Public pension plans have already reached this point. US public pension plans report negative net cash flows of about 2 per cent of assets a year (Center for Retirement Research 2025), and Milliman (2026) estimates the aggregate funded ratio of the 100 largest plans at 88.7 per cent in mid-2026.[26]

5.2 Liquidity and asset allocation

A fund in decumulation needs liquidity and, in principle, a shorter investment horizon, both of which argue for a higher share of bonds. Private defined-benefit plans in the United States and the United Kingdom have largely followed this logic by matching their assets to their liabilities, and Greenwood and Vissing-Jorgensen (2018) show that the demand of pension funds and insurers for long-dated bonds is large enough to flatten the yield curve in countries with large funded systems. Public plans in the United States have moved in the opposite direction. Andonov, Bauer and Cremers (2017) find that US public funds with higher underfunding per participant take more risk, because their accounting rules link the discount rate for liabilities to the expected return on assets. The board of CalPERS, the

[25] The government's financial strategy aims to raise the share of equities, investment trusts and bonds in household financial assets from 23 per cent in March 2025 to 40 per cent by 2040 (Jiji Press 2026). The Government Pension Investment Fund has held half of its portfolio in domestic and foreign equities since 2020.

[26] The Center for Retirement Research (2025), using a broader sample and actuarial asset values, reports a funded ratio of 77.7 per cent for the fiscal year 2025. Novy-Marx and Rauh (2011) show that the ratio is far lower when liabilities are discounted at market rates.

largest of these funds, has endorsed raising the allocation to private markets from 33 to 40 per cent (Van Bramer 2026).[27]

Table 4: Pension systems, the effect of boomer retirement and the consequences for capital markets

System	Financing and investment	Effect of boomer retirement	Consequence for capital markets
Switzerland: occupational pensions (BVG)	Funded; collective investment by pension funds; coverage ratio 117.1 per cent	More pensioners per active member; half of the assets withdrawn as capital; redistribution halted since 2022	Higher liquidity needs; capital moves from the funds to private portfolios
United States: 401(k) plans and individual retirement accounts	Funded; individual accounts; equity allocation of about 71 per cent	Rising withdrawals; mandatory distributions from the age of 73; target-date funds reduce equities	Steady reallocation from equities to bonds; demand for income products and advice
United States: public pension plans	Partly funded; funded ratio of 78 to 89 per cent; high share of risky assets	Negative net cash flow of about 2 per cent of assets a year	Sales of liquid assets; rising allocation to private markets; liquidity risk
Germany and Austria: statutory pension	Pay-as-you-go; no significant capital stock	Fewer contributors per pensioner; rising transfers from the federal budget	No direct sales of securities; higher public borrowing; more private saving by the young
Japan: public pension with reserve fund	Pay-as-you-go with a large reserve (GPIF), half of it in equities	Reserve to be drawn on gradually over decades	Rule-based rebalancing dampens market movements

Source: Own presentation based on OAK BV (2026), Swisscanto (2026), ICI (2026), Goldman Sachs (2025b), Milliman (2026) and Center for Retirement Research (2025).

In defined-contribution systems the reallocation is carried out by households or by default products. Target-date funds reduce the equity share according to a fixed schedule as the planned retirement year approaches; as the boomers pass this point, a steady flow from equities into bonds results that is independent of valuations. The magnitude is moderated by the fact that younger savers hold more equities than their predecessors: according to Goldman Sachs (2025b), the equity allocation in 401(k) plans rose from 66 per cent in 2013 to 71 per cent in 2022. In addition, withdrawals from tax-deferred accounts become mandatory in the United States from the age of 73,[28] regardless of the wishes of the owner. Morgan Stanley (2024) estimates that the shift from accumulation to decumulation opens up additional revenues of USD 400 billion for wealth and asset managers by 2028, since retirees require advice, income products and annuities.

[27] An illiquid portfolio combined with negative cash flow increases the risk of forced sales in a downturn; the Virginia Retirement System, for example, has raised its target allocation to cash from 1 to 2 per cent.
[28] The age was raised from 72 to 73 in 2023 and will rise to 75 in 2033 (SECURE 2.0 Act).

5.3 Redistribution between generations: the Swiss case

Funded systems are not free of redistribution between generations. In Switzerland the statutory minimum conversion rate of 6.8 per cent in the mandatory part of the second pillar exceeds the rate that would be actuarially fair given current life expectancy and interest rates. For years, pension funds financed the resulting pension losses from the returns earned on the capital of active members. The supervisory commission estimates this redistribution from active members to pensioners at CHF 44.8 billion for the years 2014 to 2023, an average of CHF 4.5 billion a year (OAK BV 2026 and earlier reports). With the rise in interest rates after 2021 and the reduction of conversion rates in the non-mandatory part, the redistribution came to a halt and has been slightly negative since 2022.[29]

The lesson reaches beyond Switzerland: where guaranteed benefits are fixed by law and adjusted with delay, the cost of longevity is borne by the active generation. Younger members of any collective scheme should therefore regard their entitlements as subject to political and demographic risk and complement them with individually owned assets.[30]

6 Capital Markets: Asset Meltdown or Gradual Adjustment?

6.1 The asset-meltdown hypothesis

The hypothesis that the retirement of the baby boomers will depress asset prices has a clear theoretical basis. Bakshi and Chen (1994) formulated two versions. According to the life-cycle investment hypothesis, households allocate more wealth to housing when young and more to financial assets as they age; according to the life-cycle risk-aversion hypothesis, risk aversion increases with age, so that an older population demands a higher equity risk premium. Both found support in US data. Yoo (1994) reported a negative relation between the share of the population aged 45 to 54 and the returns of financial assets, consistent with the price pressure exerted by the cohort that saves most. Abel (2003) derived in a rational-expectations model that a baby boom raises the price of capital and that the price subsequently reverts, and Brooks (2002) analysed how the baby boom and a reform of social security affect asset markets.

The most concrete prediction came from Geanakoplos, Magill and Quinzii (2004). In their overlapping-generations model, the ratio of middle-aged to young adults drives the price-earnings ratio in long cycles, and the authors showed that this ratio tracked the valuation of the US market in the twentieth century. Liu and Spiegel (2011) of the Federal

[29] In 2025 the funds credited an average of 4.33 per cent interest to the retirement capital of active members, after 3.76 per cent in the previous year (OAK BV 2026); Swisscanto (2026) reports 4.7 per cent for its sample.

[30] The same holds for benefits promised under the pay-as-you-go systems of Germany and Austria; there the burden falls on contributors and the federal budget (Section 3.2).

Reserve Bank of San Francisco used a related ratio, that of the population aged 40 to 49 to the population aged 60 to 69, and projected that the price-earnings ratio of the US market would fall from about 15 in 2010 to 8.3 in 2025. This forecast has failed by a wide margin: in 2025 the US market traded at well over twice the predicted multiple.[31]

6.2 The empirical evidence

Table 5 collects the principal studies. The first systematic test was that of Poterba (2001), who found no robust relation between the age structure of the US population and the returns on stocks, bonds or bills, and who showed with household survey data that asset holdings decline only gradually after retirement. His conclusion, restated in Poterba (2004), was that any effect of boomer retirement on returns is likely to be modest. The US Government Accountability Office reached the same judgement (GAO 2006). International evidence is somewhat more supportive of a demographic effect. Ang and Maddaloni (2005) found for a panel of countries that a faster-growing share of retirees is followed by lower excess returns; Goyal (2004) showed that outflows from the stock market rise with the share of the population aged 65 and over; Arnott and Chaves (2012), using data for 22 countries, found that a growing share of the middle-aged favours equity returns, whereas a growing share of retirees weighs on them.

Structural models with international capital mobility arrive at small numbers. Börsch-Supan, Ludwig and Winter (2006) find that the rate of return on capital declines only modestly when ageing countries can invest abroad, and Krueger and Ludwig (2007) quantify the decline in the return on capital for the United States as an open economy at about 0.9 percentage points between 2005 and 2080. Favero, Gozluklu and Tamoni (2011) show that the demographic variable of Geanakoplos, Magill and Quinzii (2004) helps to predict long-run returns through the dividend-price ratio, which implies that demography matters over decades, not years. The more recent literature shifts the question from the level of prices to the composition of demand. Kopecky and Taylor (2022) show in a life-cycle model that ageing lowers the safe rate and raises the equity risk premium, because older households prefer safe assets; Auclert et al. (2021) project that population ageing will lower returns to wealth but raise wealth-to-GDP ratios through the twenty-first century, which in our reading speaks against a collapse of asset values.[32]

[31] The failure of a point forecast does not refute the mechanism. It shows that demographic variables, which move slowly, are dominated over periods of ten to fifteen years by earnings growth, interest rates and the composition of the index.

[32] DellaVigna and Pollet (2007) show that changes in demand that can be forecast five to ten years ahead predict annual industry returns, although the information is public; they explain this by inattention to the distant future.

Table 5: Selected studies on demographic change and asset prices

Study	Data and approach	Main result
Mankiw and Weil (1989)	US census data on housing demand by age	Predicted a substantial fall in real house prices after 1990; not confirmed
Bakshi and Chen (1994)	US data; consumption-based model with average age	Rising average age raises the demand for financial assets and the risk premium
Poterba (2001)	US asset returns; household survey data	No robust link between age structure and returns; slow decumulation
Geanakoplos, Magill and Quinzii (2004)	Overlapping-generations model; US and international data	Ratio of middle-aged to young adults explains long valuation cycles
Ang and Maddaloni (2005)	Long-run data for five countries and a panel of fifteen countries	Faster growth in the share of retirees lowers excess returns
Krueger and Ludwig (2007)	Multi-country overlapping-generations model	Return on capital falls by about 0.9 percentage points by 2080
Liu and Spiegel (2011)	Ratio of ages 40–49 to 60–69, United States, 1954–2010	Projected a price-earnings ratio of 8.3 for 2025; not confirmed
Arnott and Chaves (2012)	22 countries, 60 years of data	Middle-aged cohorts favour equity returns; retirees weigh on them
Auclert et al. (2021)	Household survey data from 25 countries; projection to the end of the century	Ageing lowers returns to wealth and raises wealth-to-GDP ratios
Kopecky and Taylor (2022)	Life-cycle model with portfolio choice, United States	Ageing lowers the safe rate and raises the equity risk premium

Source: Own presentation based on the cited studies.

6.3 Who owns the assets: concentration, bequests and the wealth transfer

Why has the meltdown not occurred, although the first boomers retired fifteen years ago? The answer lies in the distribution of ownership. Figure 5 shows the shares of the generations and age groups in the net worth of US households and in their holdings of corporate equities and mutual fund shares.[33] Baby boomers hold 52.5 per cent of net worth, USD 97.4 trillion, and 54.5 per cent of equities and fund shares; households headed by persons aged 70 and over hold 40.5 per cent of all equities. The boomers' share of net worth has declined only moderately since its peak of 57.6 per cent in 2016. The decisive fact is concentration within the generation: the wealthiest 10 per cent of US households own 88.0 per cent of equities and fund shares (Federal Reserve 2026). For these households, equities are not a source of retirement income to be liquidated but a store of wealth to be passed on.

The slow decumulation documented by Poterba, Venti and Wise (2011) and De Nardi, French and Jones (2010) thus has a simple complement: much of the wealth of the boomers

[33] The Distributional Financial Accounts classify households by the birth year of the reference person: before 1946 (silent generation and earlier), 1946 to 1964 (baby boomers), 1965 to 1980 (Generation X), 1981 and later (Millennials and younger).

will not be consumed but inherited. UBS (2025a) estimates that more than USD 83 trillion will be transferred worldwide within the next 20 to 25 years, of which USD 9 trillion will pass between spouses and USD 74 trillion between generations; the United States alone accounts for more than USD 29 trillion. A transfer is not a sale. Whether inherited equities are sold depends on the preferences of the heirs, and here the evidence points to a change in composition, not to liquidation: according to the Bank of America Private Bank (2024), nearly three quarters of wealthy investors aged 21 to 43 doubt that above-average returns can be achieved with stocks and bonds alone and show greater interest in alternative investments.[34]

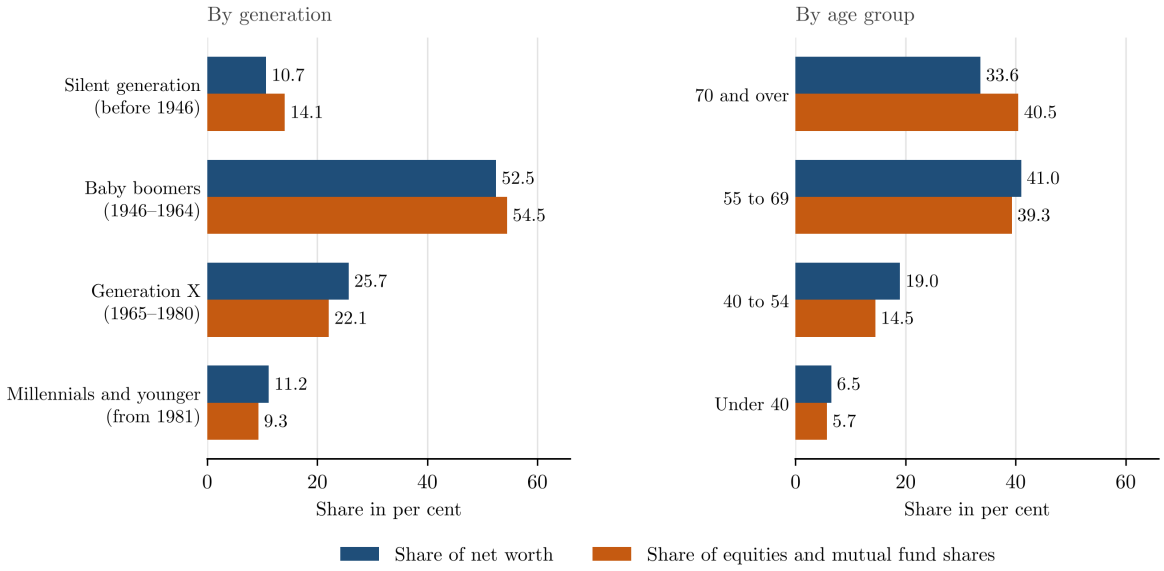


Figure 5: Shares of generations and age groups in the net worth and equity holdings of US households, second quarter of 2026
Source: Own illustration based on Federal Reserve (2026).

6.4 Flows, the shift from equities to bonds and why a crash is unlikely

What can be expected is a change in flows. Households are the largest owners of US equities, with direct holdings of 38 per cent of the market, and Goldman Sachs (2025b) expected them to buy shares worth USD 425 billion in 2025; the retirement of the boomers has evidently not turned households into net sellers so far. As the generation ages, three mechanisms reduce the net demand for equities: contributions to retirement plans cease, target-date funds and advisers shift portfolios towards bonds, and mandatory distributions force withdrawals. Fagereng, Gottlieb and Guiso (2017) document with Norwegian register data that households begin to reduce the equity share of their portfolios well before

[34] Because women outlive men, a large part of the wealth passes first to widows. This transfer between spouses is one reason why the investment decisions of women gain in weight (Section 9.4).

retirement and that many leave the stock market altogether afterwards.[35] The preference of older investors for regular income also changes the kind of equity that is demanded, in favour of dividend-paying companies with stable cash flows.

Five arguments speak against a sudden collapse. First, the event is foreseeable and extends over two decades; an efficient market does not wait for the sales to occur before adjusting prices. Second, ownership is concentrated among households that do not depend on the proceeds. Third, decumulation is slow and partly replaced by bequests. Fourth, buyers exist outside the ageing economies and outside the household sector: Siegel (2005) argued that investors from younger and faster-growing countries would absorb the assets of the boomers, and companies themselves have been retiring shares through buybacks on a large scale. Fifth, the price of an equity is the present value of the cash flows of the firm, which are earned globally and depend on productivity, not on the age of the shareholder. The realistic scenario is therefore one of lower inflows, a gradual shift from equities to bonds and somewhat lower expected returns, as in Krueger and Ludwig (2007), accompanied by shifts between sectors.[36]

6.5 Real estate

Housing is the asset for which the meltdown hypothesis was first formulated and the one for which it is most plausible locally. Mankiw and Weil (1989) predicted that real house prices in the United States would fall substantially as the smaller post-boom cohorts reached the age of household formation; the prediction failed, because income, credit conditions and the scarcity of land in growing regions outweighed the demographic effect. Takáts (2012) estimates from a panel of 22 advanced economies that ageing will reduce the growth of real house prices by about 0.8 percentage points a year over the following four decades, a headwind and not a collapse. Jordà et al. (2019) show that over the long run residential real estate has earned returns comparable to those of equities at lower volatility.

The demographic effect on real estate differs by location and type. Shrinking regions with an ageing population face falling prices and vacancies, as the Japanese countryside shows, whereas metropolitan areas continue to attract the young and the immigrants. The demand of older households shifts towards smaller, accessible dwellings close to medical services and towards assisted living and care properties. Boomers who hold a large share of their wealth in a family home that has become too large face a concentration risk; a

[35] Kopecky and Taylor (2022) regard this reallocation towards safe assets as the reason for a rising risk premium in ageing economies: equities must offer a higher expected return to be held by a population that has become more cautious.

[36] Risks to this scenario are a simultaneous need for liquidity on the part of pension funds and households in a severe downturn and a tax or pension reform that changes the incentive to hold assets until death.

timely move to a smaller home releases capital and lowers maintenance costs, although Poterba, Venti and Wise (2011) show that few households take this step voluntarily.[37]

7 Alternative Assets and Collectibles

The baby boomers are not only the largest holders of securities; they also own the bulk of the collectible assets that have come to be regarded as an asset class of their own: classic cars, art and antiques, watches, wine and jewellery. Dimson and Spaenjers (2014) call them emotional assets, since part of their return consists of the pleasure of ownership. The financial return is lower and less certain than index series suggest. Baumol (1986) calculated a real return on paintings of little more than half a per cent a year over three centuries; Renneboog and Spaenjers (2013) estimate a real return on art of about 4 per cent a year between 1957 and 2007, below that of equities, and Korteweg, Kräussl and Verwijmeren (2016) show that auction indices overstate returns because successful works are sold more often. For wine, Dimson, Rousseau and Spaenjers (2015) find a real return of 4.1 per cent a year between 1900 and 2012. Transaction, storage and insurance costs are high throughout.

Demography affects these markets more directly than it affects equities, because the circle of buyers is small and tastes are tied to generations. An estimate that circulates in the wealth-management industry puts the number of classic cars that will change hands in the United States within the next fifteen years at 12 million and their value at USD 570 billion (RBC Wealth Management 2026).[38] What the next generation wishes to own differs from what it inherits. Cars of the 1950s and 1960s and traditional antiques meet fewer buyers, whereas vehicles of the 1980s and 1990s, contemporary art, watches and new categories such as sneakers or trading cards attract younger collectors. According to the Bank of America Private Bank (2024), about 94 per cent of wealthy members of Generation Z and Millennials are interested in collectibles, compared with 57 per cent of the baby boomers. Table 6 contrasts the preferences of the generations.

Recent market data are consistent with a sober view. The Knight Frank Luxury Investment Index fell by 0.4 per cent in 2025 after two years of losses, although it remains 38.6 per cent higher than ten years earlier (Knight Frank 2026); global art sales rose by 4 per cent to USD 59.6 billion in 2025, with the growth coming from Old Masters and modern art and not from contemporary works (Art Basel and UBS 2026). For investors the conclusion is that collectibles are consumption with a residual value, not a substitute for a diversified portfolio. Boomers who intend to sell should not assume that demand for their

[37] Reverse mortgages and the sale of a home against a life annuity allow housing wealth to be consumed without moving; these markets have remained small in continental Europe.

[38] The estimate is often attributed to the insurer Hagerty, which puts the US stock of collectible vehicles at around 43 million with an insurable value of about USD 1 trillion (Hagerty 2023); we could not locate a primary publication for the transfer figure and cite the secondary source.

favourites will persist; heirs should verify provenance, condition and marketability before treating an inherited collection as wealth.[39]

Table 6: Collectibles: favourites of the baby boomers and trends among younger collectors

Segment	Favourites of the baby boomers	Trends among younger collectors	Assessment for investors
Classic cars	Pre-war cars and sports cars of the 1950s and 1960s	Vehicles of the 1980s and 1990s that can be used in everyday traffic	Large supply from estates to be expected; price pressure on models without younger admirers
Art and antiques	Old Masters, modern classics, period furniture, silver, porcelain	Contemporary art, design, photography, prints; purchases online	Selective; furniture and antiques structurally weak, works of the highest quality remain scarce
Watches, wine and new niches	Mechanical watches of established brands; Bordeaux and Burgundy	Independent watchmakers, whisky, sneakers, trading cards, handbags	High costs and dependence on fashion; indices overstate realisable returns

Source: Own presentation, drawing on Bank of America Private Bank (2024), Knight Frank (2026), Art Basel and UBS (2026) and Dimson and Spaenjers (2014).

8 Sector Winners and Losers

Demography is one of the few sources of forecastable change in demand. DellaVigna and Pollet (2007) showed that the age profile of consumption makes it possible to predict the demand for goods such as toys, cars or nursing homes years ahead and that these predictable changes are reflected in share prices only when they come close. This inattention is the rationale for taking demography into account in sector allocation. We distinguish sectors that benefit from the demand of an older population, sectors that benefit from the scarcity of labour, and sectors that face headwinds; Table 7 summarises the assessment.

8.1 Demand: health care, longevity and the silver economy

Health care is the most direct beneficiary. Spending on health rises steeply with age, and Hall and Jones (2007) show that the rising share of health in total expenditure is what a society that grows richer and values additional years of life should be expected to choose.[40] Goldman Sachs (2026), in its study of demographic demand, expects the number of retirees in developed economies to grow by 4 million a year and identifies health care, pharmaceuticals and biotechnology and medical technology as the sectors with the strongest demographic support; households aged 65 and over spend 1.54 times the average

[39] UBS (2025b) estimates the market for products and services related to longevity at USD 5.3 trillion in 2023 and USD 8 trillion in 2030; unlike the market for collectibles, it grows with the number of older people.

[40] Hall and Jones (2007) project that the share of health spending in US GDP could exceed 30 per cent by the middle of the century.

on health care and 1.92 times the average on home improvement, but only 0.82 times the average on vehicles and 0.24 times on education. The McKinsey Global Institute (2025) expects seniors to account for a quarter of global consumption by 2050, twice their share in 1997.

Table 7: Sectors and the retirement of the baby boomers: drivers and assessment

Sector	Demographic driver	Assessment
Health care, pharmaceuticals, biotechnology	Spending on health rises steeply with age	Strongest structural support; regulatory and pricing risk
Medical technology, care and assisted living	More people in advanced age; shortage of nursing staff	Growth with pressure on costs; technology replaces scarce labour
Robotics and automation	Shrinking labour force; rising wages	Structural demand in ageing industrial countries; cyclical
Artificial intelligence, software, semiconductors	Productivity gains in cognitive tasks	High potential, wide range of estimates, demanding valuations
Wealth management, insurance, asset management	Decumulation, need for advice, wealth transfer	Rising demand for income and annuity products
Leisure, travel, pet care, home improvement	Purchasing power and time of healthy retirees	Favourable as long as pensions and asset values hold
Utilities, food retailing, dividend stocks	Demand of older investors for stable income	Defensive part of a portfolio; sensitive to interest rates
Clothing, cars, education, consumer electronics	Lower spending per head in old age	Structural headwind in ageing markets
Residential property in shrinking regions	Fewer households; vacancies	To be avoided; preference for metropolitan areas and age-appropriate housing

Source: Own presentation, drawing on Goldman Sachs (2026), UBS (2025b), Morgan Stanley (2024, 2025a) and DellaVigna and Pollet (2007).

Beyond health care in the narrow sense, the list of beneficiaries includes providers of long-term care and assisted living, leisure and travel including cruise lines, pet care, home improvement and, as stable sources of income, utilities and food retailing (Goldman Sachs 2026). UBS (2025b) groups these under the heading of longevity and regards health care, selected consumer companies, financial services and specialised real estate as the main beneficiaries. Two caveats apply. Much of health care is financed by public budgets that are themselves under demographic pressure, so that growth in volume is accompanied by price regulation; and Baumol (1967) explained why labour-intensive services such as care suffer from rising relative costs, which limits margins unless technology raises productivity.[41]

[41] The valuation of the sector matters as much as its growth. A demographic advantage that is common knowledge is at least partly reflected in prices; the overweight should therefore be moderate and diversified across sub-sectors and regions.

8.2 Robotics, automation and artificial intelligence

The second group of beneficiaries supplies what ageing economies lack: labour. Figure 6 shows the density of industrial robots in manufacturing. South Korea, Singapore, Germany and Japan, all of them rapidly ageing, lead the ranking, with 1,066, 873, 469 and 452 robots per 10,000 employees, against a world average of 152 (IFR 2026).[42] This is the pattern identified by Acemoglu and Restrepo (2022): where middle-aged workers become scarce, firms automate, and the countries concerned develop an export industry in automation technology. Global installations of industrial robots rose by 11 per cent to 603,307 units in 2025, and the operational stock exceeded 5 million units.

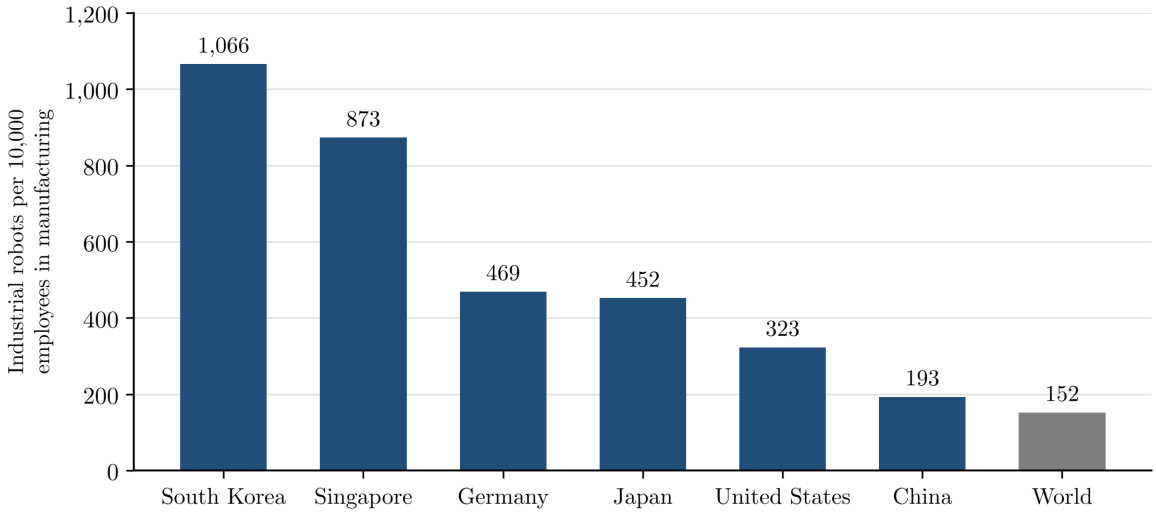


Figure 6: Robot density in manufacturing, 2025
Source: Own illustration based on IFR (2026).

The frontier is moving from the factory to services. Morgan Stanley (2025a) estimates that the market for humanoid robots could reach USD 5 trillion by 2050, with more than one billion units in use, most of them in industrial and commercial applications; such long-range estimates are highly uncertain, but they indicate where the shortage of workers in logistics, care and construction creates demand. Artificial intelligence complements robotics in cognitive tasks, as discussed in Section 3.4. For investors, the relevant universe comprises manufacturers of robots and automation equipment, industrial software, semiconductors, providers of AI infrastructure and applications, and medical technology that substitutes capital for scarce nursing staff. The whole value chain is concerned, from sensors and drives to the integrators who install the systems.[43]

[42] Robot density is the number of operational industrial robots per 10,000 employees in manufacturing.
[43] The sector is cyclical, and its valuations reflect high expectations; the size of positions should take this into account.

8.3 Financial services and sectors facing headwinds

A third group benefits from the financial side of the transition. Wealth managers, private banks, insurers and asset managers with decumulation products gain from the need of retirees for advice, income and protection against longevity risk, and from the transfer of wealth between generations (Morgan Stanley 2024; UBS 2025a).[44] On the other side, Goldman Sachs (2026) identifies clothing and footwear, cars, education, consumer electronics and eating out as sectors whose demand weakens as the population ages. Residential construction in shrinking regions and retailers that depend on young families belong to the same group. The assessment in Table 7 describes directions of demand, not price targets: the sectors that gain from ageing are known, and the investor is rewarded only where growth exceeds what is already expected.

9 Implications for Investors

9.1 Life-cycle theory and the equity share

How large the share of equities should be at different ages is one of the oldest questions of financial economics. Markowitz (1952) derived the efficient combination of risky assets for a single period; Samuelson (1969) and Merton (1969) extended the analysis to many periods and reached a result that contradicts popular advice: an investor with constant relative risk aversion who faces returns that are independent over time should hold the same share of equities at every age. Age matters only through human capital. Bodie, Merton and Samuelson (1992) showed that the present value of future labour income is an asset that resembles a bond for most employees and that the young, who own much of it and can adjust their labour supply after losses, should therefore hold more equities in their financial portfolio. Jagannathan and Kocherlakota (1996) concluded that this is the only sound reason for reducing the equity share with age.[45]

The quantitative life-cycle models of Viceira (2001), Campbell and Viceira (2002) and Cocco, Gomes and Maenhout (2005) confirm that the optimal equity share is high when young and declines towards retirement, as human capital is converted into financial wealth. Target-date funds implement this result. The glide path of the Vanguard funds, for instance, holds 90 per cent in equities until about the age of 40, reduces the share to 50 per cent at 65 and reaches 30 per cent at 72 (Vanguard 2026). Figure 7 compares this path

[44] Morgan Stanley (2024) notes that products for the withdrawal phase are far less developed than those for the accumulation phase.

[45] Mean reversion in equity returns, as discussed by Campbell and Viceira (2002), is a further argument: it makes equities less risky over long investment horizons and thus strengthens the case for a high equity share of the young.

with the traditional rule of thumb of holding 100 minus one's age in equities and with the corridor proposed in this paper.[46]

Recent research questions whether conventional glide paths are too cautious. Arnott, Sherrerd and Wu (2013) and Estrada (2014) show with US and international data that a path that begins with bonds and ends with equities would have produced higher terminal wealth than the conventional one, because the equity share is then highest when the portfolio is largest. Anarkulova, Cederburg and O'Doherty (2024), using return data for 39 developed countries since 1890, find that a constant allocation of one third to domestic and two thirds to international equities dominates target-date strategies in the accumulation of wealth and in the probability of ruin, at the price of larger interim losses. Ayres and Nalebuff (2010) even recommend that the young borrow to invest. We do not go that far, but the direction of the evidence is clear: long-lived investors with secure pension income are more often under-invested than over-invested in equities.

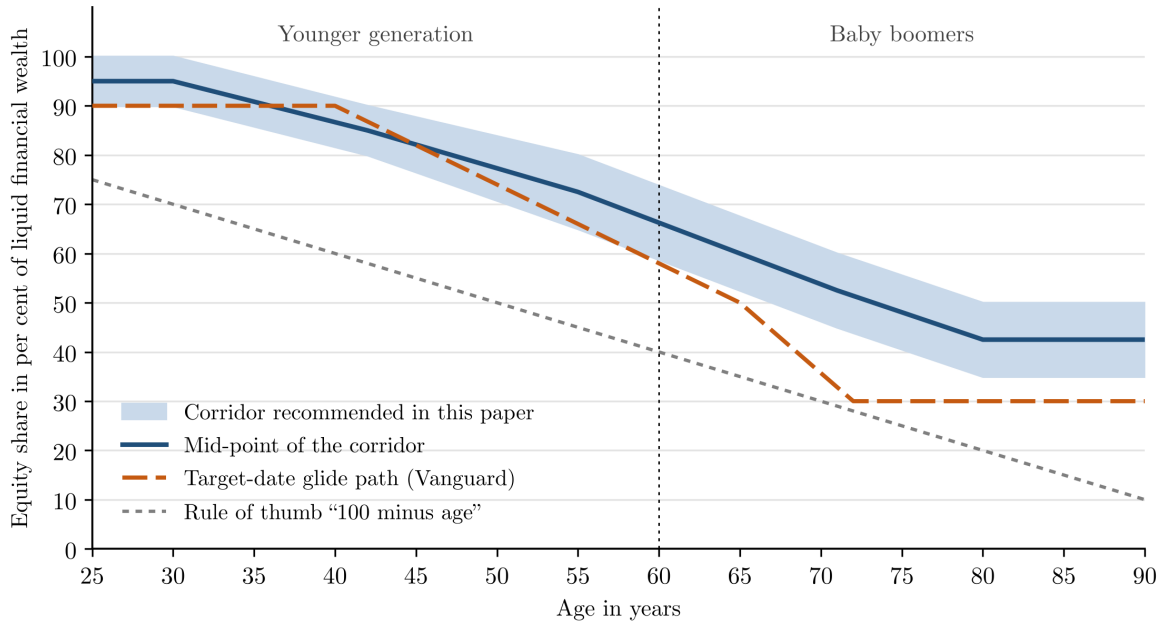


Figure 7: Equity share by age: conventional rules and the corridor proposed in this paper
Notes: Share of liquid financial wealth. Target-date path stylised after Vanguard (2026). The corridor is the author's own proposal and connects the values of Table 8 at the mid-points of the age groups.
Source: Own illustration.

9.2 Baby boomers: decumulation and sequence-of-returns risk

For the baby boomers the task has changed from accumulating to drawing down wealth. The classic reference is Bengen (1994), who found with US data since 1926 that an initial withdrawal of about 4 per cent of the portfolio, adjusted for inflation thereafter, would have lasted at least thirty years in every historical period, provided that the portfolio held

[46] Ameriks and Zeldes (2004) find that actual households hardly change their equity share with age; many hold either no equities at all or a constant share. Advice and default products thus matter more than the theory of optimal behaviour suggests.

between 50 and 75 per cent in equities; Cooley, Hubbard and Walz (1998) confirmed the result.[47] Two points are often overlooked. The rule presupposes a substantial equity share, not a bond portfolio, and it was derived from US returns, which were among the highest in the world in the twentieth century. Anarkulova, Cederburg and O'Doherty (2024) report a considerable probability of ruin for the 4 per cent rule when it is evaluated with international data. In our judgement an initial withdrawal of 3 to 3.5 per cent is the more prudent planning assumption for European investors.

The principal danger in the first years of retirement is sequence-of-returns risk: losses at the beginning of the withdrawal period weigh far more heavily than losses at the end, because withdrawals are then made from a depleted portfolio. Figure 8 shows our own calculation for a portfolio of EUR 500,000 from which EUR 20,000 a year is withdrawn in real terms. The three paths have the same average return over thirty years and differ only in the timing of three loss years of 25, 15 and 10 per cent. If the losses occur at the beginning, the portfolio is exhausted in the twenty-first year; if they occur at the end, EUR 373,000 remain; with a constant return equal to the geometric mean of 2.57 per cent, EUR 160,000 remain.[48]

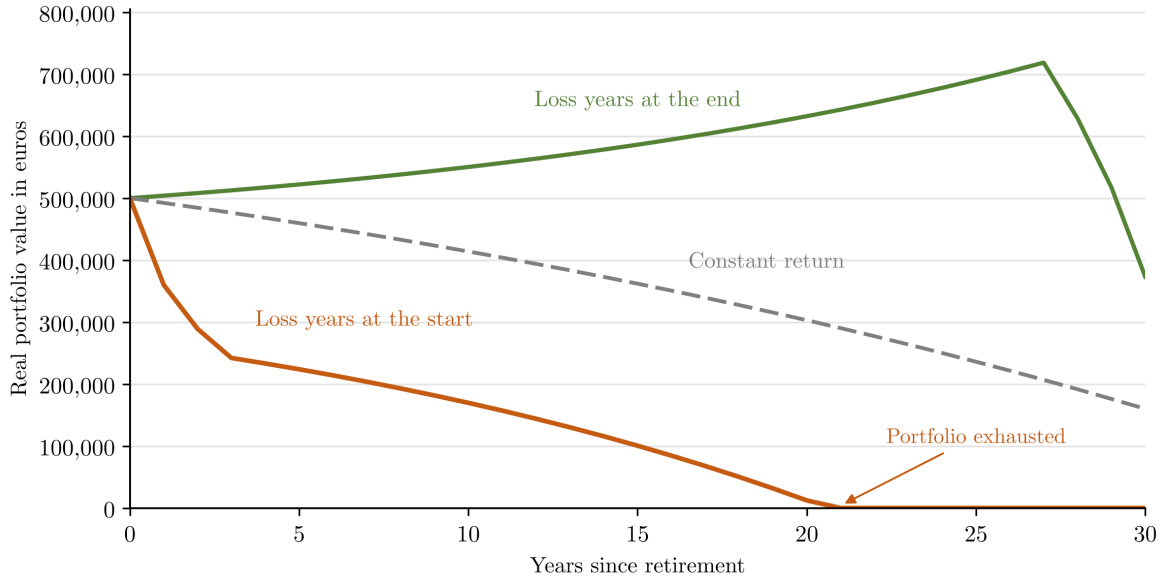


Figure 8: Sequence-of-returns risk: real value of a retirement portfolio with identical average returns and different timing of losses
Source: Own calculations.

Three practical rules follow. First, a liquidity reserve covering three to five years of withdrawals should be held in money-market instruments and short-dated bonds of high quality, so that equities need not be sold after a fall in prices.[49] Second, the equity share

[47] Their study, often called the Trinity study, covers the years 1926 to 1995 and withdrawal periods of 15 to 30 years.
[48] The calculation assumes a real return of 5 per cent in each of the 27 remaining years and withdrawals at the beginning of the year. It illustrates the mechanism and is not a forecast of returns.
[49] With withdrawals of 3.5 per cent a year, a reserve for four years amounts to 14 per cent of the portfolio.

should be reduced before retirement, not on the day of retirement, and it need not fall further afterwards: Pfau and Kitces (2014) show that an equity share that is lowest at the start of retirement and rises again later can reduce the probability of running out of money. Third, longevity risk should be insured to the extent that public and occupational pensions do not cover basic expenditure; Yaari (1965) showed that annuities are the efficient instrument for this purpose, and the widespread preference for lump sums noted in Section 4.2 is difficult to reconcile with his result. Within equities, boomers should favour quality and reliable dividends over concentration in single stocks or in their home market, and they should plan the transfer of wealth while they can still shape it.

9.3 The younger generation

The position of the younger generation is the mirror image. Its human capital is large, its financial wealth small, and its investment horizon extends over several decades; all three argue for a high share of equities. The demographic transition adds a fourth argument. Pay-as-you-go pensions will replace a smaller share of income, and the adjustment mechanisms that are being introduced in Austria and discussed in Germany and Switzerland place the residual risk on the active generation. HSBC (2026) finds that Millennials in the United States have accumulated 42 per cent of what they consider necessary for retirement; the young are aware of the gap but have not yet closed it. Over the long run, equities have been the asset class with the highest real return, about 5 per cent a year worldwide since 1900 against less than 2 per cent for government bonds (Dimson, Marsh and Staunton 2025).[50]

The demographic headwind may lower future returns somewhat, as the models of Section 6 suggest, but it does not change the ranking of the asset classes, and it affects bonds and pay-as-you-go entitlements at least as much as equities. For investors under the age of 35 we therefore regard an equity share of 90 to 100 per cent of liquid financial wealth as appropriate, provided that a cash reserve for emergencies exists and that the money is not needed for the purchase of a home within a few years. The rules are simple and well documented: begin early, invest regularly, diversify globally and not only in the ageing home market, keep costs low and remain invested during downturns. Thematic positions in the sectors of Section 8 can complement a global core but should not replace it.[51]

A part of the younger generation will inherit. The transfer described in Section 6.3 is large in aggregate but very unequally distributed, and it typically arrives when the heirs

[50] Annualised real returns of the world index for 1900 to 2024: equities 5.2 per cent, bonds 1.7 per cent. The United States achieved a higher return than the world average, which is one reason for caution in extrapolating US experience to other markets.

[51] An investor who saves EUR 300 a month for 40 years at a real return of 4 per cent a year accumulates about EUR 348,000 in today's purchasing power; starting ten years later reduces the result to about EUR 206,000 (own calculation).

are themselves in their fifties or sixties; it is not a substitute for saving. Heirs should examine inherited portfolios for concentration in single stocks and in the home market.

9.4 Should women invest differently from men?

The question of whether women should invest differently from men has an empirical and a normative part. Empirically, women hold less risky portfolios on average. Jianakoplos and Bernasek (1998) and Sundén and Surette (1998) documented this for US household and pension-plan data, and Croson and Gneezy (2009) conclude from the experimental literature that women are more risk-averse than men. Part of the difference is due to knowledge and confidence, not to preferences. Lusardi and Mitchell (2008) found that older women in the United States display lower financial literacy and are less likely to plan for retirement; Almenberg and Dreber (2015) show that the gender gap in stock-market participation shrinks markedly once financial literacy is taken into account, and Bucher-Koenen et al. (2025) attribute about one third of the measured gap in financial literacy to lower confidence, not to lower knowledge.

When women invest, their results are no worse than those of men. Barber and Odean (2001) showed with the accounts of a US discount broker that men trade 45 per cent more than women and thereby reduce their net returns by 2.65 percentage points a year, compared with 1.72 points for women.[52] Fidelity Investments (2021), analysing 5.2 million accounts over the years 2011 to 2020, found that women achieved returns that were 0.4 percentage points a year higher than those of men. The deficit lies in participation, not in ability. Merrill Lynch and Age Wave (2018) report that only 52 per cent of the women surveyed feel confident in managing investments, compared with 68 per cent of the men, that 41 per cent regret not having invested more, and that a woman may reach retirement age with a cumulative financial shortfall of more than USD 1 million relative to a man.

Normatively, the circumstances of women argue for more equity exposure, not less. Women live longer, so that their investment horizon in retirement is longer and their longevity risk greater; they receive lower pensions, with gender gaps of 23 per cent on average in the OECD, more than 35 per cent in Austria and 47 per cent in Japan (OECD 2025b); and they are more likely to spend the last years of life alone and to administer the wealth of a couple as widows. A lower pension means less bond-like income, and a longer life means more years over which inflation erodes nominal assets. Our answer is therefore that women should follow the same principles as men but should apply them more resolutely. Five recommendations follow: to begin investing early and to continue during career breaks, where possible with contributions from the partner; to choose the equity share in the upper half of the corridors of Table 8; to hold a liquidity reserve of their own; to take part in all financial decisions of the household and to know the assets, contracts

[52] The sample comprises about 35,000 households with accounts at a large discount broker between 1991 and 1997.

and entitlements of both partners; and to secure pension entitlements and wealth by contract for the event of separation or death.[53]

9.5 Recommended equity shares for both generations

Table 8 presents the corridors for the equity share that we consider appropriate. They are the author's own proposal and combine three considerations: the theoretical argument for a declining share as human capital is consumed, the evidence that conventional glide paths are too conservative for investors with long lives and secure pension income, and the need to limit sequence-of-returns risk around the date of retirement. The shares refer to liquid financial wealth, that is, to securities and deposits including the liquidity reserve but excluding owner-occupied property and pension entitlements. Within each corridor, the upper half is suitable for investors with secure pension income, a high tolerance for fluctuations and the intention to bequeath; the lower half for investors who depend on their portfolio for basic expenditure.

Compared with a typical target-date path, the corridors are similar until the mid-fifties and higher thereafter, for three reasons that follow from this paper: retirement lasts longer than it did when the conventional rules were formulated, public pensions provide a bond-like base income, and the inflation risk of the coming decades argues against large holdings of nominal assets.[54] The corridors are lower than the constant all-equity allocation of Anarkulova, Cederburg and O'Doherty (2024), because few investors tolerate interim losses of nearly half of their wealth in retirement.

Table 8: Recommended corridors for the equity share by age (share of liquid financial wealth)

Age	Phase	Equity share	Rationale
Under 35	Early accumulation	90 to 100 per cent	Large human capital; decades until retirement; losses can be made up by saving
35 to 49	Accumulation	80 to 90 per cent	High capacity to save; obligations for family and home call for some stability
50 to 59	Late accumulation	65 to 80 per cent	Wealth is large relative to the remaining contributions; risk is reduced gradually
60 to 66	Transition to retirement	55 to 70 per cent	Highest sequence-of-returns risk; a liquidity reserve is built up
67 to 75	Early retirement	45 to 60 per cent	Retirement may last 25 to 30 years; protection against inflation is needed
76 and over	Advanced age	35 to 50 per cent	Shorter remaining investment horizon; higher share where wealth is intended for heirs

[53] The gap in pensions reflects part-time work, career interruptions and lower pay. Equalising retirement ages, as in Austria by 2033, narrows it only slowly; private provision remains decisive for the cohorts concerned.

[54] Example: an investor aged 62 with liquid financial wealth of EUR 600,000 who plans to withdraw EUR 24,000 a year would hold EUR 96,000 as a reserve for four years, between EUR 330,000 and EUR 420,000 in equities and the remainder in bonds.

Notes: Women: upper half of each corridor; from the age of 60 about five percentage points above the value chosen by a man with the same wealth and pension income. The corridors are the author's own proposal and do not replace individual advice.
Source: Own presentation.

10 Conclusion and Outlook

This paper set out to examine what the retirement of the baby boomers means for the economy and for capital markets and what investors of two generations should conclude from it. The demographic facts are not in dispute. In all five countries the ratio of the old to those of working age will rise steeply until 2050, and in four of them the population of working age will shrink, by between 9 and 25 per cent.[55] The consequences for the real economy are slower growth, scarce labour and rising spending on pensions, health and care; the OECD (2025a) and the IMF (2025) put the loss in the annual growth of GDP per capita at 0.4 and 0.6 percentage points respectively in the absence of a policy response. The effect on inflation and interest rates is ambiguous in sign, but the evidence of Auclert et al. (2021) and others suggests that the high wealth of older households keeps real interest rates low while tight labour markets make inflation more volatile.

For capital markets the central result is that the evidence does not support the expectation of an asset meltdown. The forecasts of Mankiw and Weil (1989) for housing and of Liu and Spiegel (2011) for equity valuations have not materialised; the empirical work from Poterba (2001) to Arnott and Chaves (2012) finds effects that are modest and slow; and the data of the Federal Reserve (2026) show that the equities of the boomers are concentrated in the hands of households that will bequeath and not sell them.[56] What is under way is a gradual change in the composition of demand: lower net inflows into equities, a shift towards bonds and income, liquidity needs of pension funds whose cash flow has turned negative, and a transfer of more than USD 80 trillion to heirs with different preferences (UBS 2025a).

For investors we draw four conclusions. First, demography is a reason to give greater weight to the sectors that serve an older population or replace scarce labour, that is, health care, medical technology, robotics, automation, artificial intelligence and wealth management, but not a reason to leave the equity market. Second, baby boomers should manage sequence-of-returns risk with a liquidity reserve and a moderate reduction of the equity share before retirement, and should then maintain 45 to 60 per cent in equities, since retirement may last three decades. Third, the younger generation, whose public pensions will be less generous, should hold 80 to 100 per cent in globally diversified equities and save regularly. Fourth, women should not invest more cautiously than men; longer

[55] Switzerland 8.6 per cent, Germany 15.5 per cent, Austria 15.8 per cent and Japan 25.0 per cent between 2025 and 2050; in the United States the population of working age grows by 3.7 per cent (Table 1).
[56] The statement refers to the market as a whole. Individual assets with a narrow circle of buyers may well fall in price, as the examples of housing in shrinking regions and of some collectibles show.

lives and lower pensions argue for the upper half of each corridor and for an active role in all financial decisions. Table 9 places the recommendations for the two generations side by side.

Table 9: Recommendations for baby boomers and for the younger generation

Dimension	Baby boomers	Younger generation
Objective	Secure income for 25 to 30 years; preserve purchasing power; plan the transfer of wealth	Build wealth; close the pension gap
Equity share	55 to 70 per cent at the transition to retirement, 45 to 60 per cent afterwards, 35 to 50 per cent in advanced age	80 to 100 per cent, depending on age
Liquidity	Reserve covering three to five years of withdrawals	Emergency reserve covering three to six months of expenditure
Bonds and annuities	High-quality bonds of short to medium maturity; annuity for basic needs	Minor role until about the age of 50
Selection of equities	Quality, reliable dividends, global diversification; no concentration in single stocks	Global core; complementary positions in health care, robotics, automation and artificial intelligence
Real estate and collectibles	Reduce concentration in the family home; value collections realistically	Home ownership as a consumption decision; collectibles are not retirement provision
Behaviour	Fixed withdrawal plan; no sales after a fall in prices; estate planning	Regular saving; low costs; remain invested in downturns
Women	Own reserve; knowledge of all assets of the household; upper half of the corridor	Continue to invest during career breaks; upper half of the corridor

Source: Own presentation.

The outlook has three dimensions. Demographically, the coming five years bring the peak of the transition in German-speaking Europe, as the cohorts born around 1964 retire, while Japan and, later, China and South Korea show how societies with a shrinking population function. Technologically, the decisive question is whether robotics and artificial intelligence raise productivity by enough to offset the decline in hours worked, as the optimistic estimates of Briggs and Kodnani (2023) imply and those of Acemoglu (2025) do not. Politically, pension reforms will determine how the burden is divided between generations; the sustainability mechanism in Austria, the financing of the thirteenth AHV pension in Switzerland, the work of the pension commission in Germany and the approaching depletion of the US trust funds will all require decisions before 2035.[57] For the investor, the appropriate response to an event that is certain in its direction and uncertain in its consequences is neither alarm nor complacency, but a portfolio that is diversified across regions and technologies, an equity share that fits one's age and pension income, and the patience to hold it.

[57] Three questions remain open for further research: the saving and portfolio behaviour of heirs, the liquidity management of mature pension funds in a prolonged downturn, and the measurable contribution of AI to productivity in ageing economies.

References

Aaron, H. (1966). The social insurance paradox. *Canadian Journal of Economics and Political Science*, 32(3), 371–374.

Abel, A.B. (2001). Will bequests attenuate the predicted meltdown in stock prices when baby boomers retire? *Review of Economics and Statistics*, 83(4), 589–595.

Abel, A.B. (2003). The effects of a baby boom on stock prices and capital accumulation in the presence of social security. *Econometrica*, 71(2), 551–578.

Acemoglu, D. (2025). The simple macroeconomics of AI. *Economic Policy*, 40(121), 13–58.

Acemoglu, D., & Restrepo, P. (2017). Secular stagnation? The effect of aging on economic growth in the age of automation. *American Economic Review*, 107(5), 174–179.

Acemoglu, D., & Restrepo, P. (2022). Demographics and automation. *Review of Economic Studies*, 89(1), 1–44.

Aksoy, Y., Basso, H.S., Smith, R.P., & Grasl, T. (2019). Demographic structure and macroeconomic trends. *American Economic Journal: Macroeconomics*, 11(1), 193–222.

Almenberg, J., & Dreber, A. (2015). Gender, stock market participation and financial literacy. *Economics Letters*, 137, 140–142.

Ameriks, J., & Zeldes, S.P. (2004). How do household portfolio shares vary with age? Working Paper, Columbia University.

Anarkulova, A., Cederburg, S., & O'Doherty, M.S. (2024). Beyond the status quo: A critical assessment of lifecycle investment advice. Working Paper, SSRN, December 2024.

Anderson, D., Botman, D., & Hunt, B. (2014). Is Japan's population aging deflationary? IMF Working Paper 14/139.

Ando, A., & Modigliani, F. (1963). The "life cycle" hypothesis of saving: Aggregate implications and tests. *American Economic Review*, 53(1), 55–84.

Andonov, A., Bauer, R.M.M.J., & Cremers, K.J.M. (2017). Pension fund asset allocation and liability discount rates. *Review of Financial Studies*, 30(8), 2555–2595.

Ang, A., & Maddaloni, A. (2005). Do demographic changes affect risk premiums? Evidence from international data. *Journal of Business*, 78(1), 341–380.

Arnott, R.D., & Chaves, D.B. (2012). Demographic changes, financial markets, and the economy. *Financial Analysts Journal*, 68(1), 23–46.

Arnott, R.D., Sherrerd, K.F., & Wu, L. (2013). The glidepath illusion ... and potential solutions. *Journal of Retirement*, 1(2), 13–28.

Art Basel and UBS (2026). The Art Basel and UBS Global Art Market Report 2026. Basel and Zurich.

Auclert, A., Malmberg, H., Martenet, F., & Rognlie, M. (2021). Demographics, wealth, and global imbalances in the twenty-first century. NBER Working Paper 29161.

Ayres, I., & Nalebuff, B. (2010). *Lifecycle Investing: A New, Safe, and Audacious Way to Improve the Performance of Your Retirement Portfolio*. Basic Books, New York.

Bakshi, G.S., & Chen, Z. (1994). Baby boom, population aging, and capital markets. *Journal of Business*, 67(2), 165–202.

Bank of America Private Bank (2024). 2024 Bank of America Private Bank Study of Wealthy Americans. Bank of America Corporation, June 2024.

Bank of Japan (2026). Flow of funds: Overview of Japan, the United States, and the euro area. Research and Statistics Department, Tokyo, August 2026.

Barber, B.M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292.

Barr, N., & Diamond, P. (2008). *Reforming Pensions: Principles and Policy Choices*. Oxford University Press, Oxford.

Baumol, W.J. (1967). Macroeconomics of unbalanced growth: The anatomy of urban crisis. *American Economic Review*, 57(3), 415–426.

Baumol, W.J. (1986). Unnatural value: Or art investment as floating crap game. *American Economic Review*, 76(2), 10–14.

Bengen, W.P. (1994). Determining withdrawal rates using historical data. *Journal of Financial Planning*, 7(4), 171–180.

BFS (2025a). Szenarien zur Bevölkerungsentwicklung der Schweiz und der Kantone 2025–2055. Bundesamt für Statistik, Neuchâtel, April 2025.

BFS (2025b). Neurentenstatistik 2024. Bundesamt für Statistik, Neuchâtel.

Bloom, D.E., Canning, D., & Sevilla, J. (2003). *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change*. RAND, Santa Monica.

Bobeica, E., Lis, E., Nickel, C., & Sun, Y. (2017). Demographics and inflation. ECB Working Paper 2006.

Bodie, Z., Merton, R.C., & Samuelson, W.F. (1992). Labor supply flexibility and portfolio choice in a life cycle model. *Journal of Economic Dynamics and Control*, 16(3–4), 427–449.

Börsch-Supan, A. (2003). Labor market effects of population aging. *Labour*, 17(s1), 5–44.

Börsch-Supan, A., Ludwig, A., & Winter, J. (2006). Ageing, pension reform and capital flows: A multi-country simulation model. *Economica*, 73(292), 625–658.

Braun, R.A., Ikeda, D., & Joines, D.H. (2009). The saving rate in Japan: Why it has fallen and why it will remain low. *International Economic Review*, 50(1), 291–321.

Briggs, J., & Kodnani, D. (2023). The potentially large effects of artificial intelligence on economic growth. Global Economics Analyst, Goldman Sachs, 26 March 2023.

Brooks, R. (2002). Asset-market effects of the baby boom and social-security reform. *American Economic Review*, 92(2), 402–406.

Brynjolfsson, E., Li, D., & Raymond, L. (2025). Generative AI at work. *Quarterly Journal of Economics*, 140(2), 889–942.

Bucher-Koenen, T., Alessie, R., Lusardi, A., & van Rooij, M. (2025). Fearless woman: Financial literacy, confidence, and stock market participation. *Management Science*, 71(9), 7414–7430.

Campbell, J.Y., & Viceira, L.M. (2002). *Strategic Asset Allocation: Portfolio Choice for Long-Term Investors*. Oxford University Press, Oxford.

Carvalho, C., Ferrero, A., & Nechio, F. (2016). Demographics and real interest rates: Inspecting the mechanism. *European Economic Review*, 88, 208–226.

Center for Retirement Research (2025). The funded status of public plans keeps improving – albeit modestly (J.-P. Aubry & A.H. Munnell). Issue in Brief 25-15, Center for Retirement Research at Boston College, Chestnut Hill, 22 July 2025.

Cocco, J.F., Gomes, F.J., & Maenhout, P.J. (2005). Consumption and portfolio choice over the life cycle. *Review of Financial Studies*, 18(2), 491–533.

Cooley, P.L., Hubbard, C.M., & Walz, D.T. (1998). Retirement savings: Choosing a withdrawal rate that is sustainable. *AAII Journal*, 20(2), 16–21.

Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448–474.

Cutler, D.M., Poterba, J.M., Sheiner, L.M., & Summers, L.H. (1990). An aging society: Opportunity or challenge? *Brookings Papers on Economic Activity*, 1990(1), 1–73.

DellaVigna, S., & Pollet, J.M. (2007). Demographics and industry returns. *American Economic Review*, 97(5), 1667–1702.

De Nardi, M., French, E., & Jones, J.B. (2010). Why do the elderly save? The role of medical expenses. *Journal of Political Economy*, 118(1), 39–75.

Deschermeier, P., & Schäfer, H. (2024). Die Babyboomer gehen in Rente. IW-Kurzbericht 78/2024, Institut der deutschen Wirtschaft, Köln, 14 October 2024.

Destatis (2022). 12,9 Millionen Erwerbspersonen erreichen in den nächsten 15 Jahren das gesetzliche Rentenalter. Press release No. 330, Statistisches Bundesamt, Wiesbaden, 4 August 2022.

Destatis (2024). Gender Pension Gap 2023. Press release, Statistisches Bundesamt, Wiesbaden, 24 April 2024.

Destatis (2025). 16. koordinierte Bevölkerungsvorausberechnung. Statistisches Bundesamt, Wiesbaden, 11 December 2025.

Deutsches Aktieninstitut (2026). Aktionärszahlen 2025: Aktienanlage weiter im Aufwind. Press release, Frankfurt am Main, 13 January 2026.

Diamond, P.A. (1965). National debt in a neoclassical growth model. *American Economic Review*, 55(5), 1126–1150.

Dimson, E., Marsh, P., & Staunton, M. (2025). UBS Global Investment Returns Yearbook 2025. UBS, Zurich.

Dimson, E., Rousseau, P.L., & Spaenjers, C. (2015). The price of wine. *Journal of Financial Economics*, 118(2), 431–449.

Dimson, E., & Spaenjers, C. (2014). Investing in emotional assets. *Financial Analysts Journal*, 70(2), 20–25.

Eggertsson, G.B., Mehrotra, N.R., & Robbins, J.A. (2019). A model of secular stagnation: Theory and quantitative evaluation. *American Economic Journal: Macroeconomics*, 11(1), 1–48.

Estrada, J. (2014). The glidepath illusion: An international perspective. *Journal of Portfolio Management*, 40(4), 52–64.

Fagereng, A., Gottlieb, C., & Guiso, L. (2017). Asset market participation and portfolio choice over the life-cycle. *Journal of Finance*, 72(2), 705–750.

Favero, C.A., Gozluklu, A.E., & Tamoni, A. (2011). Demographic trends, the dividend-price ratio, and the predictability of long-run stock market returns. *Journal of Financial and Quantitative Analysis*, 46(5), 1493–1520.

Federal Reserve (2026). Distributional Financial Accounts of the United States, 2026:Q2. Board of Governors of the Federal Reserve System, Washington, DC.

Feldstein, M. (1974). Social security, induced retirement, and aggregate capital accumulation. *Journal of Political Economy*, 82(5), 905–926.

Feyrer, J. (2007). Demographics and productivity. *Review of Economics and Statistics*, 89(1), 100–109.

Fichtner, J.J. (2024). The Peak 65 zone is here: Creating a new framework for America's retirement security. Retirement Income Institute, Alliance for Lifetime Income, January 2024.

Fidelity Investments (2021). 2021 Women and Investing Study. Fidelity Investments, Boston.

Fiskalrat (2026). Deutlich revidierte Einschätzung der demografischen Entwicklung Österreichs durch die Bevölkerungsprognose 2025 von Statistik Austria. Information des Büros des Fiskalrates (P. Schuster), Wien, 11 February 2026.

Gagnon, E., Johannsen, B.K., & López-Salido, D. (2021). Understanding the new normal: The role of demographics. *IMF Economic Review*, 69(2), 357–390.

GAO (2006). Baby boom generation: Retirement of baby boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security. GAO-06-718, US Government Accountability Office, Washington, DC.

Geanakoplos, J., Magill, M., & Quinzii, M. (2004). Demography and the long-run predictability of the stock market. *Brookings Papers on Economic Activity*, 2004(1), 241–325.

Goldman Sachs (2025a). The path to 2075: The positive story of global aging. Goldman Sachs Global Investment Research, 27 May 2025.

Goldman Sachs (2025b). US equity demand outlook of the portfolio strategy team (D. Kostin), as reported by MarketWatch, 16 June 2025.

Goldman Sachs (2026). GS SUSTAIN: Demographics to demand. Goldman Sachs Global Investment Research, 22 June 2026.

Goodhart, C., & Pradhan, M. (2020). *The Great Demographic Reversal: Ageing Societies, Waning Inequality, and an Inflation Revival*. Palgrave Macmillan, Cham.

Goyal, A. (2004). Demographics, stock market flows, and stock returns. *Journal of Financial and Quantitative Analysis*, 39(1), 115–142.

Graetz, G., & Michaels, G. (2018). Robots at work. *Review of Economics and Statistics*, 100(5), 753–768.

Greenwood, R., & Vissing-Jorgensen, A. (2018). The impact of pensions and insurance on global yield curves. Working Paper 18-109, Harvard Business School.

Hagerty (2023). The collector car market: By the numbers. Hagerty Insights, Traverse City, 30 June 2023.

Hall, R.E., & Jones, C.I. (2007). The value of life and the rise in health spending. *Quarterly Journal of Economics*, 122(1), 39–72.

Hansen, A.H. (1939). Economic progress and declining population growth. *American Economic Review*, 29(1), 1–15.

Horioka, C.Y. (2010). The (dis)saving behavior of the aged in Japan. *Japan and the World Economy*, 22(3), 151–158.

HSBC (2026). Quality of Life Report 2026: Retirement targets jump 20% as affluent individuals plan for several futures at once. Media release, HSBC Holdings, London, October 2026.

ICI (2026). Quarterly retirement market data, second quarter 2026. Investment Company Institute, Washington, DC.

IFR (2026). World Robotics 2026: Industrial Robots. International Federation of Robotics, Frankfurt am Main.

IMF (2025). The rise of the silver economy: Global implications of population aging. *World Economic Outlook*, April 2025, Chapter 2. International Monetary Fund, Washington, DC.

IPSS (2023). Population projections for Japan (2023 revision): 2021 to 2070. National Institute of Population and Social Security Research, Tokyo.

Jagannathan, R., & Kocherlakota, N.R. (1996). Why should older people invest less in stocks than younger people? *Federal Reserve Bank of Minneapolis Quarterly Review*, 20(3), 11–23.

Jianakoplos, N.A., & Bernasek, A. (1998). Are women more risk averse? *Economic Inquiry*, 36(4), 620–630.

Jiji Press (2026). Japan aims to boost stocks, bonds in household assets. Jiji Press, Tokyo, 21 July 2026; English edition via Adnkronos.

Jones, C.I. (2022). The end of economic growth? Unintended consequences of a declining population. *American Economic Review*, 112(11), 3489–3527.

Jordà, Ò., Knoll, K., Kuvshinov, D., Schularick, M., & Taylor, A.M. (2019). The rate of return on everything, 1870–2015. *Quarterly Journal of Economics*, 134(3), 1225–1298.

Juselius, M., & Takáts, E. (2018). The enduring link between demography and inflation. BIS Working Papers 722.

Knight Frank (2026). Knight Frank Luxury Investment Index. In *The Wealth Report 2026*. Knight Frank, London.

Kopecky, J., & Taylor, A.M. (2022). The savings glut of the old: Population aging, the risk premium, and the murder-suicide of the rentier. NBER Working Paper 29944.

Korteweg, A., Kräussl, R., & Verwijmeren, P. (2016). Does it pay to invest in art? A selection-corrected returns perspective. *Review of Financial Studies*, 29(4), 1007–1038.

Krueger, D., & Ludwig, A. (2007). On the consequences of demographic change for rates of returns to capital, and the distribution of wealth and welfare. *Journal of Monetary Economics*, 54(1), 49–87.

Liu, Z., & Spiegel, M.M. (2011). Boomer retirement: Headwinds for U.S. equity markets? FRBSF Economic Letter 2011-26, Federal Reserve Bank of San Francisco.

Lusardi, A., & Mitchell, O.S. (2008). Planning and financial literacy: How do women fare? *American Economic Review*, 98(2), 413–417.

Maestas, N., Mullen, K.J., & Powell, D. (2023). The effect of population aging on economic growth, the labor force, and productivity. *American Economic Journal: Macroeconomics*, 15(2), 306–332.

Mankiw, N.G., & Weil, D.N. (1989). The baby boom, the baby bust, and the housing market. *Regional Science and Urban Economics*, 19(2), 235–258.

Markowitz, H. (1952). Portfolio selection. *Journal of Finance*, 7(1), 77–91.

Mason, A., & Lee, R. (2006). Reform and support systems for the elderly in developing countries: Capturing the second demographic dividend. *Genus*, 62(2), 11–35.

McKinsey Global Institute (2025). Dependency and depopulation? Confronting the consequences of a new demographic reality. McKinsey & Company, January 2025.

Merrill Lynch and Age Wave (2018). Women and financial wellness: Beyond the bottom line. Bank of America Corporation.

Merton, R.C. (1969). Lifetime portfolio selection under uncertainty: The continuous-time case. *Review of Economics and Statistics*, 51(3), 247–257.

Mian, A., Straub, L., & Sufi, A. (2021). What explains the decline in r*? Rising income inequality versus demographic shifts. Proceedings of the Jackson Hole Economic Policy Symposium, Federal Reserve Bank of Kansas City.*

Milliman (2026). Milliman 100 Public Pension Funding Index, July 2026. Milliman, Seattle.

Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K.K. Kurihara (Ed.), *Post-Keynesian Economics* (pp. 388–436). Rutgers University Press, New Brunswick.

Montes, J., Smith, C., & Dajon, J. (2022). "The Great Retirement Boom": The pandemic-era surge in retirements and implications for future labor force participation. Finance and Economics Discussion Series 2022-081, Board of Governors of the Federal Reserve System.

Morgan Stanley (2024). Retiring in the age of aging. Morgan Stanley Research and Oliver Wyman, 8 October 2024.

Morgan Stanley (2025a). Humanoids: A $5 trillion market. Morgan Stanley Research, 14 May 2025.

Morgan Stanley (2025b). The longevity effect. Morgan Stanley, 26 November 2025.

Novy-Marx, R., & Rauh, J. (2011). Public pension promises: How big are they and what are they worth? *Journal of Finance*, 66(4), 1211–1249.

OAK BV (2026). Bericht zur finanziellen Lage der Vorsorgeeinrichtungen 2025. Oberaufsichtskommission Berufliche Vorsorge, Bern, May 2026.

OECD (2025a). *OECD Employment Outlook 2025: Can We Get Through the Demographic Crunch?* OECD Publishing, Paris.

OECD (2025b). *Pensions at a Glance 2025: OECD and G20 Indicators*. OECD Publishing, Paris.

Pfau, W.D., & Kitces, M.E. (2014). Reducing retirement risk with a rising equity glide path. *Journal of Financial Planning*, 27(1), 38–45.

Poterba, J.M. (2001). Demographic structure and asset returns. *Review of Economics and Statistics*, 83(4), 565–584.

Poterba, J.M. (2004). The impact of population aging on financial markets. NBER Working Paper 10851.

Poterba, J.M., Venti, S.F., & Wise, D.A. (2011). The composition and drawdown of wealth in retirement. *Journal of Economic Perspectives*, 25(4), 95–118.

RBC Wealth Management (2026). The great wealth transfer includes $570 billion in classic cars. As reported by The Wealth Advisor, 26 May 2026.

Renneboog, L., & Spaenjers, C. (2013). Buying beauty: On prices and returns in the art market. *Management Science*, 59(1), 36–53.

Rupprechter, R. (2026). Artificial intelligence and generative AI in asset management: Large language models, autonomous agents and the information efficiency of equity markets. Working Paper 35, R&B Wealth Management, Dornbirn, October 2026.

Samuelson, P.A. (1958). An exact consumption-loan model of interest with or without the social contrivance of money. *Journal of Political Economy*, 66(6), 467–482.

Samuelson, P.A. (1969). Lifetime portfolio selection by dynamic stochastic programming. *Review of Economics and Statistics*, 51(3), 239–246.

Scharfstein, D.S. (2018). Presidential address: Pension policy and the financial system. *Journal of Finance*, 73(4), 1463–1512.

Schieber, S.J., & Shoven, J.B. (1997). The consequences of population aging for private pension fund saving and asset markets. In M.D. Hurd & N. Yashiro (Eds.), *The Economic Effects of Aging in the United States and Japan* (pp. 111–130). University of Chicago Press, Chicago.

Shirakawa, M. (2012). Demographic changes and macroeconomic performance: Japanese experiences. Opening remark at the 2012 BOJ-IMES Conference, Bank of Japan, Tokyo, 30 May 2012.

Siegel, J.J. (2005). *The Future for Investors: Why the Tried and the True Triumph over the Bold and the New*. Crown Business, New York.

Social Security Administration (2026). The 2026 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Washington, DC, June 2026.

Sozialministerium (2026). Equal Pension Day 2026. Bundesministerium für Arbeit, Soziales, Gesundheit, Pflege und Konsumentenschutz, Wien, August 2026.

Statistics Bureau of Japan (2024). 2023 Housing and Land Survey: Basic Tabulation. Ministry of Internal Affairs and Communications, Tokyo, 25 September 2024.

Statistics Bureau of Japan (2026). Statistical topics on the population aged 65 and over, released for Respect for the Aged Day. Ministry of Internal Affairs and Communications, Tokyo, September 2026.

Statistik Austria (2025). Bevölkerungsprognose 2025. Bundesanstalt Statistik Österreich, Wien, 12 November 2025.

Summers, L.H. (2014). U.S. economic prospects: Secular stagnation, hysteresis, and the zero lower bound. *Business Economics*, 49(2), 65–73.

Sundén, A.E., & Surette, B.J. (1998). Gender differences in the allocation of assets in retirement savings plans. *American Economic Review*, 88(2), 207–211.

Swisscanto (2026). Schweizer Pensionskassenstudie 2026. Zürcher Kantonalbank, Zürich, June 2026.

Takáts, E. (2012). Aging and house prices. *Journal of Housing Economics*, 21(2), 131–141.

UBS (2025a). Global Wealth Report 2025. UBS, Zurich, June 2025.

UBS (2025b). Investing in longevity. UBS Chief Investment Office, 28 March 2025.

United Nations (2024). World Population Prospects 2024. Department of Economic and Social Affairs, Population Division, New York.

Van Bramer, J. (2026). Public pension funds are getting healthier. Their new problem: Paying the bills. *Chief Investment Officer*, 4 March 2026.

Vanguard (2026). Vanguard target-date solutions: Your options. The Vanguard Group, Valley Forge (accessed 19 November 2026).

Viceira, L.M. (2001). Optimal portfolio choice for long-horizon investors with nontradable labor income. *Journal of Finance*, 56(2), 433–470.

VZ VermögensZentrum (2026). VZ Pensionierungs-Barometer 2026. VZ VermögensZentrum, Zürich.

Wiener Börse (2026). Aktienbarometer 2026. Survey commissioned by Aktienforum, Industriellenvereinigung and Wiener Börse, Wien.

Yaari, M.E. (1965). Uncertain lifetime, life insurance, and the theory of the consumer. *Review of Economic Studies*, 32(2), 137–150.

Yoo, P.S. (1994). Age distributions and returns of financial assets. Working Paper 1994-002, Federal Reserve Bank of St. Louis.