Swiss Re Institute

No 2/2024

sigma

Life insurance in the higher interest rate era: asset-savvy is the new asset-light

Executive summary

Higher interest rates return the life and annuity industry to profitability.

The surge in interest rates to 15-year highs dramatically improves the outlook for life and annuity insurance. After more than a decade of weak demand driven by low interest rates, profitability is recovering as rises in government bond yields improve investment returns and margins on life insurance products. We expect the operating result for insurers in the largest eight life markets to rise by more than 60% in the five years to 2027, as investment income rises by 40%. In contrast, the sector missed its cost of capital by nearly 5ppts per year on average in the post-global financial crisis decade. Life insurance stock market indices, a forward-looking proxy for profitability expectations, are now outperforming wider markets as investors recognise the benefit of higher rates. Long-duration business should see the greatest profitability gain in the long term, given compound interest.

Higher interest rates improve the attractiveness of saving products.

Low interest rates made life savings products less attractive. Real premium growth for saving business fell below global economic growth in the decade after the global financial crisis, to just 1.1% annually on average. Today, consumers are moving quickly to buy life products that will secure them higher retirement incomes. We anticipate strong, annuity-driven growth in the life savings market as the interest rate reset makes savings products more attractive.[1] US fixed annuity sales will likely reach a new record again this year, after sales in 2023 were more than twice as high as in any other year before 2022. The demand boost should help to mobilise the huge private savings needed to narrow the retirement savings gap between current pension assets and the amount populations need to securely fund retirements. We estimate the retirement savings gap for six advanced economies, China and India, at USD 106 trillion in 2022 values. After less than USD 300 billion of premium growth in the entire decade 2010–2019, we predict life insurers will gain USD 1.5 trillion of savings premiums in the 10 years from 2025, to reach USD 4 trillion savings premiums by 2034.

The life industry is shifting from a capital optimisation focus to a sustainable growth mode.

Rising interest rates transformed the competitive and operational environment for life insurers from a low growth, low profitability business to one of higher growth and higher returns, especially for asset-intensive business. As a result, the life industry is shifting from returning excess capital to shareholders to a mode of needing sustainable capital growth to support the growth in asset and biometric risks. In the low-interest rate years from 2009 until rapid monetary tightening in 2022, stock insurers pivoted into capital-light products and used reinsurance transactions to divest their legacy liabilities. Private equity (PE) firms acquired many of these legacy annuity book assets, recognising that low interest rates created an opening for asset managers to generate outperformance from life and annuity portfolios by investing in higher-yielding illiquid and private assets.

Life and annuity insurers are adding asset management as a core competency.

PE-owned insurers' acquisitions gave them stable funding to develop their investment operations and grow their assets under management (AUM) and earnings. For some, insurance assets are now a large share of their total AUM. We estimate that more than USD 1 trillion of life assets have transferred to PE-owned insurers globally since 2009. They own roughly 25% of US individual annuity liabilities and are growing in markets such as Japan. However, PE-owned insurers face increasing competition from insurer-owned asset managers, as insurers expand their own asset management capabilities, which have benefited from the rise in unit-linked business. We expect further expansion and competition in asset management, with more hybrid product launches.

Rising interest rates transformed life insurance to higher profitability but also increased risks.

Rising interest rates tend to raise policyholder lapse rates at the same time as asset prices come under pressure. In extreme scenarios this can cause liquidity or solvency issues for insurers. Lapse rates have risen in key markets since 2020 but our modelling suggests that the peak lapse risk has now passed. We find a 100-basis point (bps) rise in policy rate correlates with about a 30–35bps average increase in lapse rate, all else held equal, but about 50% of the lapse risks associated with rate rises materialise within the first three to four hiking periods, which is well behind us in advanced economies. Rising rates have also increased credit risks in pockets such as commercial real estate but exposures of life insurers are viewed as manageable, on average.

[1] We refer to "annuity" as a life product with both accumulation and distribution phases, as is typical in the US, but we recognise that outside the US, "annuity" generally refers only to the distribution phase.

Key takeaways

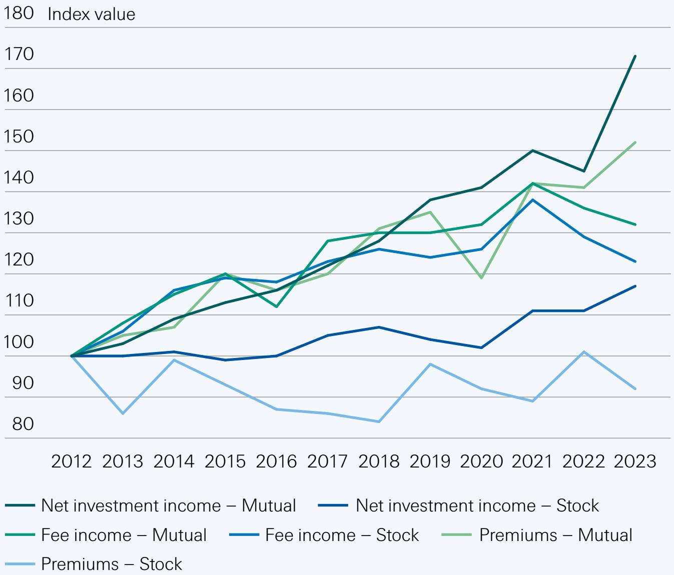
Low interest rates handicapped the life insurance business model

The environment prompted stock insurers to shift from traditional business to capital-light, fee-based strategies to meet investor return expectations. Private equity firms absorbed the legacy assets divested via reinsurance. Mutual insurers pursued traditional business.

Publicly traded life insurers' performance under low interest rates in the post-global financial crisis decade 2010–19

	2010–2019 post-financial crisis decade	
Average ROE	**All**	**8.4%**
	North America	8.8%
	Europe	7.5%
	Asia Pacific	8.2%
Cost of equity capital	**All**	**13.1%**
	North America	12.9%
	Europe	12.3%
	Asia Pacific	13.6%
Investor value creation (ROE – CoC)	**All**	**–4.7%**
	North America	–4.1%
	Europe	–4.8%
	Asia Pacific	–5.4%

US stock and mutual insurers' growth in net premiums, net investment income and fee earnings, indexed, 2012=100

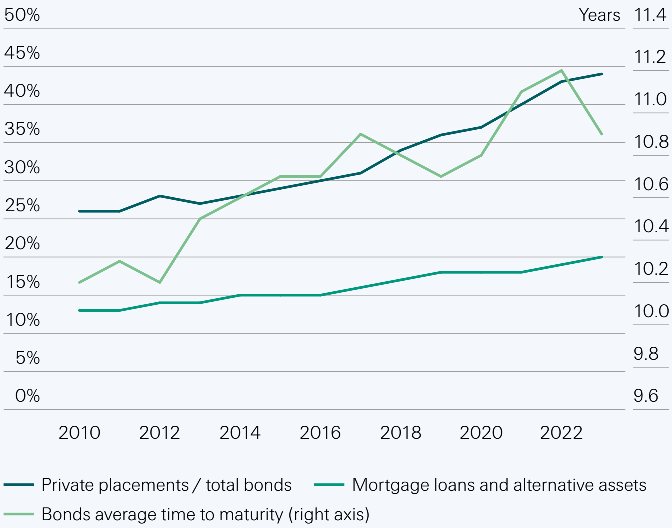


Source: Bloomberg, National Association of Insurance Commissioners, AM Best, Swiss Re Institute

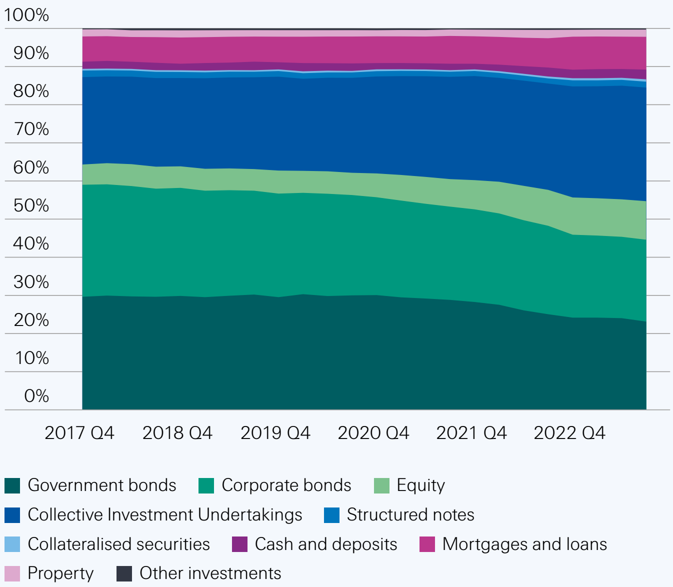
Life insurers joined the global search for yield

Worldwide, insurers shifted into higher-yielding illiquid and alternative assets and extended the duration of fixed income portfolios.

US life insurance industry portfolio allocations, 2010–2023

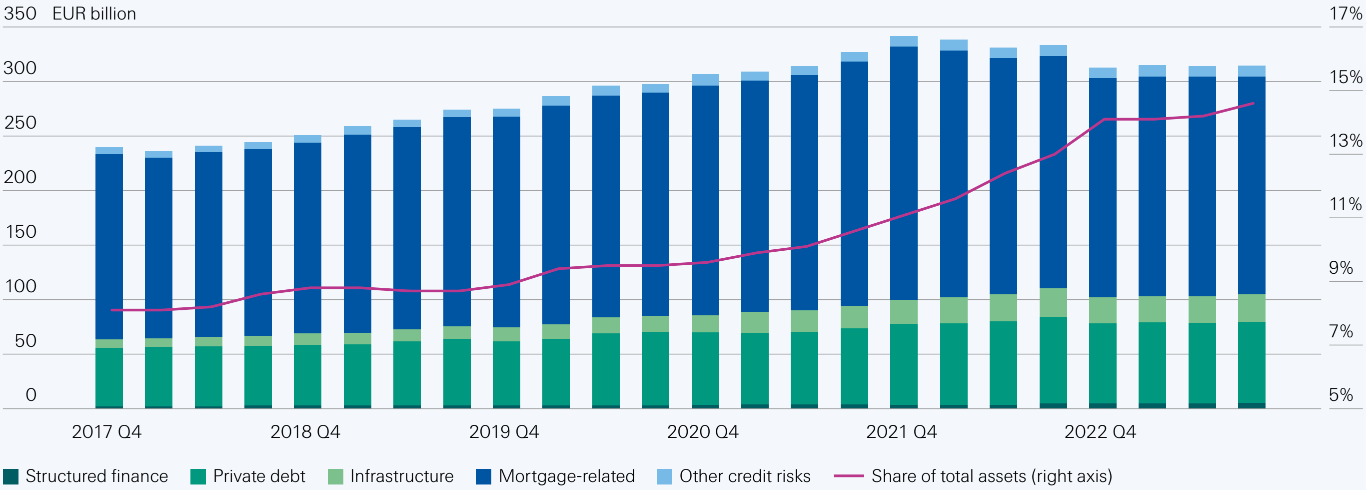


European life insurance industry portfolio allocations, 2017–2023



Note (right): Excludes unit-linked and insurance-linked securities. Source: NAIC, S&P Global Capital IQ, EIOPA, Swiss Re Institute

Estimated illiquid and potentially risky investments of European life insurers, 2017–2023



Note: Illiquid and potentially risky investments comprise exposures to real estate, PE and infrastructure funds, risky credit and real estate, as well as mortgage-neutralised loans. Excludes unit-linked and insurance-linked securities. Source: EIOPA, Swiss Re Institute

The return to higher rates improves prospects for life insurers but also brings new risks

Higher interest rates strengthen demand for life saving products and insurer profitability. Rising interest rates can also heighten liability and asset stress, but our modelling suggests that peak lapse risk has passed.

Sensitivity of life insurance products to rising interest rates

	Higher			Lower
Demand	▪ Fixed annuities	▪ Whole life ▪ Guarantee products	▪ Universal life ▪ Indexed annuities	▪ Term life ▪ Long-term care
New business margins	▪ Long-term care	▪ Whole life ▪ Universal life	▪ Fixed annuities ▪ Guarantee products	▪ Indexed annuities ▪ Term life
Lapse risk	▪ Fixed annuities	▪ Whole life ▪ Guarantee products	▪ Universal life	▪ Variable UL ▪ Term life ▪ Long-term care

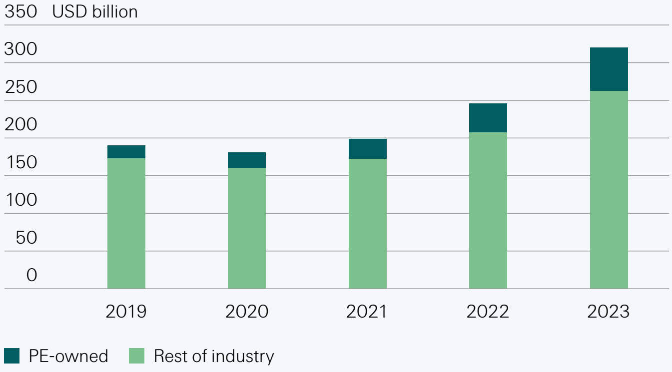
Change in lapse risks in monetary policy loosening environments

Note (left): green and pink colours indicate whether greater sensitivity is a benefit or drawback when interest rates are higher. Source: Swiss Re Institute

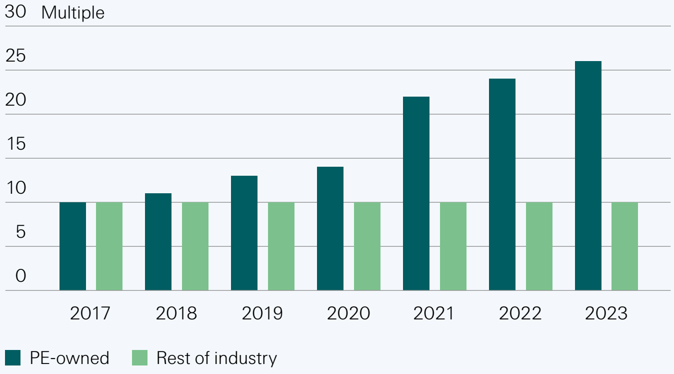
Competition to tap into today's USD 2.5 trillion global savings market is rising

Today, listed insurers are retaining more of the assets that brought private equity entrants to the life insurance sector, sometimes by establishing "sidecars" to manage assets offshore. Private equity-owned insurers are ramping up direct retail sales of key life products.

US individual annuities direct business, first year and single premiums



US domestic asset leverage for PE-owned and all other US insurance entities, relative to statutory surplus

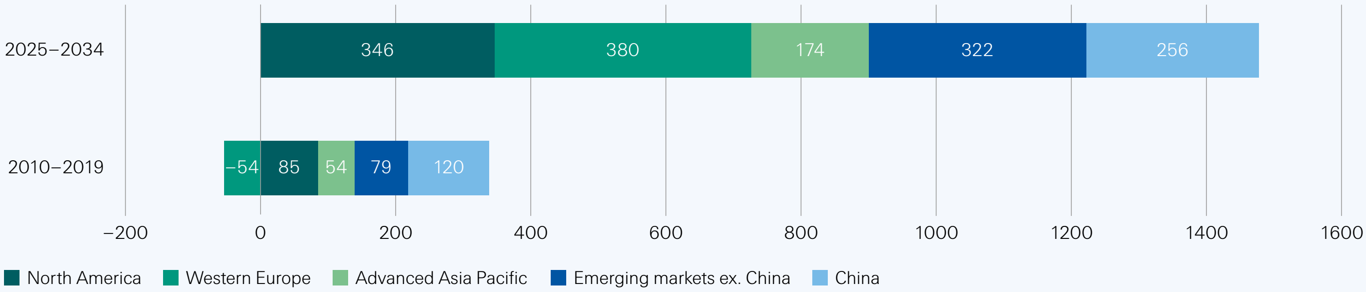


Source: NAIC, S&P Global Capital IQ, Swiss Re Institute

Consumers stand to benefit from higher interest rates and greater competition

Strong forecast growth in saving premiums by 2034 should help to address protection gaps and improve retirement security globally.

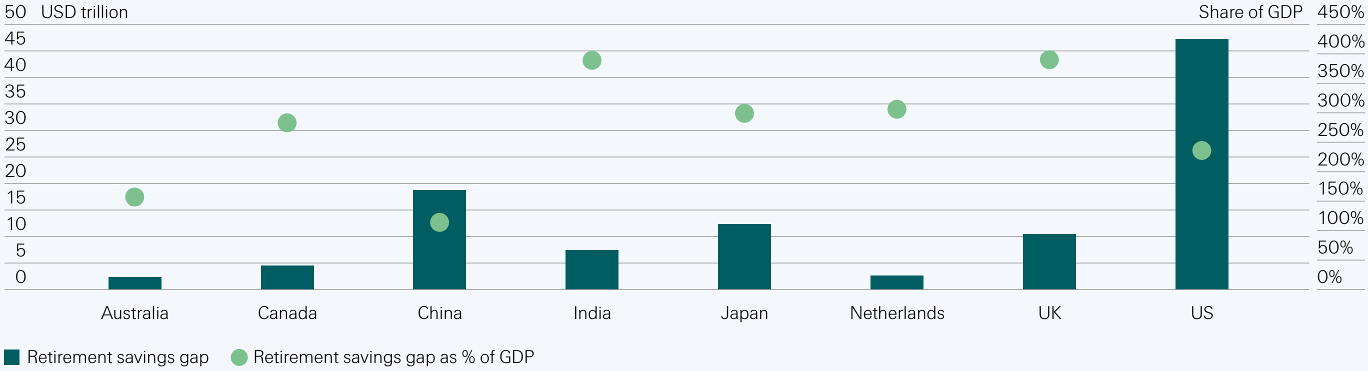
Life and annuity savings business: forecast additional premiums 2025–34, compared to post-global financial crisis decade 2010–19, USD billion



Source: Swiss Re Institute

Life insurance retirement income will be a key part of the solution to the retirement savings gap

We estimate the retirement savings gap for eight major global markets at a total USD 106 trillion in 2022 values.



Source: World Economic Forum, Swiss Re Institute

Life in the low interest rate era

The life insurance industry today looks very different to 15 years ago. Low interest rates from 2008 until the inflation surge after 2021 put huge strain on the traditional life insurance business model of using balance sheet leverage and investment income to deliver contractual promises to policyholders. Publicly traded life insurers missed return targets by nearly five percentage points per year on average between 2010 and 2019. Product mix and investment strategies evolved rapidly as a result. Insurers' ownership structure was a key determinant of the industry's responses. Low public market valuations for "capital intensive" business incentivised stock (publicly listed) life insurers to exit core lines of business and divest assets. Mutuals continued to offer traditional products, but with crediting rates and guarantees in line with the low-yield environment. Private equity firms entered the sector, acquiring legacy book assets from stock insurers via reinsurance transactions, to fund and expand their private credit operations. Asset management diversified into private assets, longer duration and overseas markets, becoming a key component of insurers' hunt for yield above low risk-free rates. European insurers' illiquid asset allocations have risen by 5–7 ppts on average.

Listed insurers shift to capital light

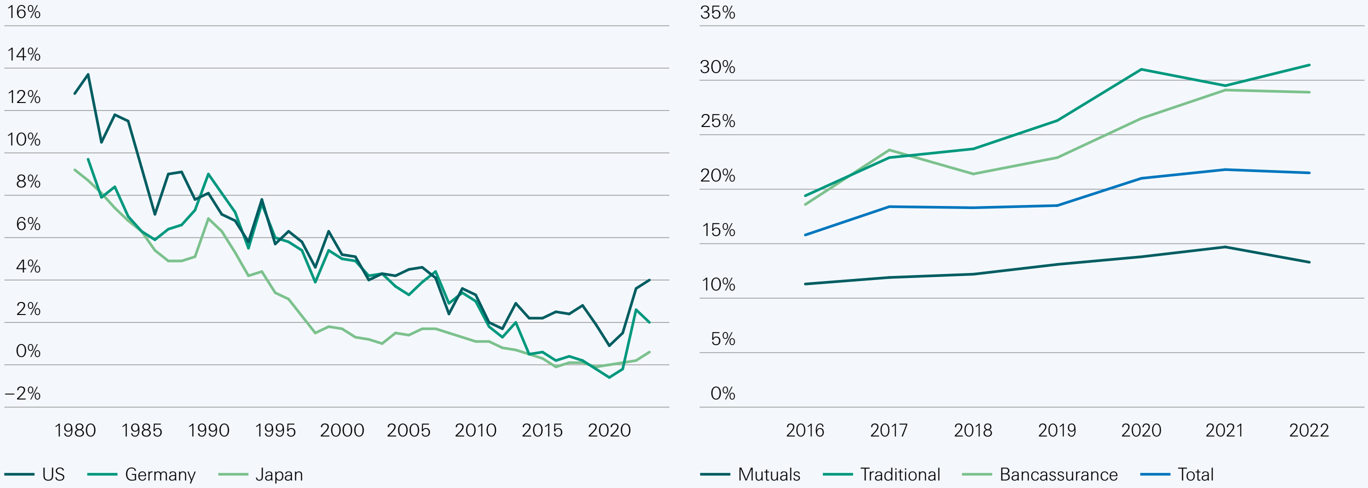
Life insurance is highly sensitive to interest rates.

The life insurance industry is undergoing its most significant evolution since the wave of de-mutualisation in the late 1990s and early 2000s. The extremely low interest rates that persisted from the global financial crisis in 2008–09 until after 2021 (see Figure 1 left) led to an evolution in new business products, the types of business insurers hold, and their asset management strategies.

The low interest rate era highlighted shortcomings in product design.

Shortcomings in product design became apparent as interest rates hovered near zero in the US and Europe. For example, high minimum interest rate guarantees, which were commonly offered in the years when yields were higher, became unaffordable promises to policyholders. Assumptions underlying certain lapse-supported products were overly optimistic, eventually resulting in substantial reserve charges. Insurers updated products and liability assumptions in response, reducing guarantees for new business and strengthening reserves for in-force contracts. These actions reduced the attractiveness of products and stalled demand for new business.

Figure 1
Left: 10-year government bond yields, 1980–2023. Right: Portfolio share of unit-linked (capital-light) business, per type of life insurer in France



Source (left): Macrobond. Source (right): France Assureurs, Base économique et financière

Low interest rates led to profitability well below cost of capital on the asset-intensive traditional life insurance business model.

The traditional life insurance business model embeds significant leverage, with assets roughly 10 times equity, as insurers accumulate and invest funds to meet future obligations to policyholders. As a result, low interest rates reduce the contribution of net investment income to return on equity (ROE) by far more than the corresponding reduction in cost of capital, which generally moves in step with the risk-free rate. Over the long run, life insurance portfolio yields are closely tied to interest rates, with material impacts on industry and policyholder returns.

Public markets award higher valuations to capital-light business when interest rates are lower.

Publicly traded life insurers missed return targets throughout the low interest rate years 2010–19 (see Table 1). Public markets investors favoured maximising capital efficiency to support profitability in the near term rather than use capital for growth and scale at lower margins. In practice, investors placed a stronger focus on cash-based metrics and shareholder distributions, with a valuation premium on fee-based over spread-related earnings. For example, a review of models and reports from sell-side analysts shows that fee-related earnings are assigned a higher price-to-earnings multiple compared to spread-related earnings. Since public markets value a dollar from asset-light lines of business higher than a dollar from asset-intensive lines of business, stock insurers that shift their business mix to asset-light earnings stand to benefit from a higher stock price in the near term.[2] However, the benefits of asset-intensive business in a higher interest rate environment – which we describe later – might shift this calculation.

Table 1
Publicly traded life insurers' earnings relative to cost of capital, 2010–2019

	Post-global financial crisis decade 2010–19	
Average ROE	**All**	**8.4%**
	North America	8.8%
	Europe	7.5%
	Asia Pacific	8.2%
Cost of equity capital	**All**	**13.1%**
	North America	12.9%
	Europe	12.3%
	Asia Pacific	13.6%
Investor value creation (ROE – CoC)	**All**	**–4.7%**
	North America	–4.1%
	Europe	–4.8%
	Asia Pacific	–5.4%

Source: Bloomberg, Swiss Re Institute

Low interest rates led stock insurers to pivot toward capital-light strategies.

This led many large, publicly traded insurance groups in Europe, North America and Asia to shift their business models, selling blocks of asset-intensive business – which are generally accompanied by capital requirements and thus considered "capital-intensive" – and competing for "capital-light" revenue streams. Capital-intensive business typically relies on earning a spread between general account investment yields and guaranteed crediting rates or other commitments. Capital-light business refers to fee-based income including, for example, earnings from unit-linked products in which investment risk is borne by policyholders.[3]

2 This point is described nicely in M. Levine, "Money Stuff", Bloomberg, 12 March 2024.
3 *"At a Tipping Point – The State of European Insurance Asset Management"*, Oliver Wyman, 2021.

The pivot to capital-light seemed to be justified by higher fee income as interest rates declined.

Justification for the strategic pivot to capital-light business appeared to be reinforced as interest rates declined. A lower discount rate increases the present value of fee-related earnings and is associated with an increase in AUM, the basis for determining fees. Public insurers' fee income growth outpaced net investment income during the low interest rate period, but these trends have reversed since 2021, with fee income shrinking. Overall growth has been muted. The public US life insurance industry's net investment income increased by 17% and fee income increased by 23% from 2012 to 2023 – less than 2% compound annual growth rates (see Figure 2).[4] Stock insurers' net premiums declined 8% over the same period, partly reflecting offshore reinsurance transactions for legacy business.

Private equity capital provided the demand for assets that public companies divested.

Many of the reinsurance transactions were struck with PE-owned reinsurers. These firms focused on annuities, which have a higher component of investment risk relative to biometric risk than traditional life insurance products. PE firms were motivated to accumulate assets for their ability to earn management fees and potential for spread-related earnings. These transactions relied on differences in (1) capital requirements, (2) tax rates, (3) investment rules and (4) valuation philosophy between private investors and public shareholders, to offer pricing that cedents found attractive. PE firms were also motivated to accumulate assets in part because post-financial crisis regulations had resulted in certain types of lending being more capital-efficient for non-bank institutions. The PE shift is described in further detail at the end of this chapter.

In Europe, unit-linked products and supervisory pushes for customer centricity emerged hand in hand.

In Europe, supervisory oversight to offer value for money to customers strengthened with the emergence of unit-linked offerings. In 2021, the European Insurance and Occupational Pensions Authority (EIOPA) emphasised the need to establish a common framework for addressing value for money risks with respect to unit-linked products, in areas such as pricing, complexity and testing.[5] Customer-centricity in product design, sales and performance is also taking hold in the UK with the introduction last year of new consumer duty rules by the Financial Conduct Authority, which requires that insurers show fair value to customers.

Mutual insurers continued to grow despite lower returns

Mutual insurers continued to offer traditional protection and savings products despite low interest rates.

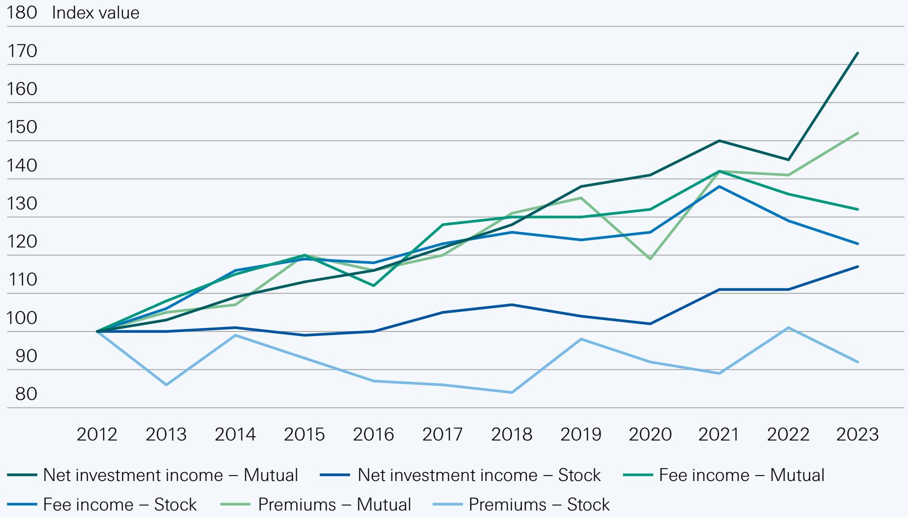
In contrast to public insurers' drive to minimise balance sheets and pursue fee revenues, mutual insurers continued to offer traditional protection and savings products despite the constraints of low interest rates. With their policyholder ownership, mutual insurers' primary purpose is to provide attractive returns and useful products to members over time, rather than meet short-term profit expectations or provide a return on capital for external investors.[6] Their decision-making is typically based on a longer timeframe and is less affected by the leveraged impact of risk-free rates on return on equity.

This resulted in stronger organic growth and net investment income.

This approach resulted in stronger organic growth and net investment income (see Figure 2). Between 2012 and 2023, US mutual insurers' net investment income increased by 73% and their investment portfolios roughly doubled in size. Gains in net premiums also supported mutuals' strong growth in net investment income. For mutuals, fee income has increased by roughly 32%, compared to 23% for stock insurers, pointing to potential benefits of scale. If rates remain higher, insurers with large balance sheets backing general account liabilities have a basis for greater earnings relative to cost of capital over time.

[4] We use AM Best's categorisation of Mutual and Stock companies for estimating these trends.
[5] *Supervisory statement on assessment of value for money of unit-linked insurance products under product oversight and governance*, EIOPA, 30 November 2021.
[6] *sigma* 4/2016: Mutual insurance in the 21st century: back to the future?, Swiss Re Institute, 2 August 2016.

Figure 2
Growth in net premiums, net investment income and fee earnings for stock and mutual insurers, indexed, 2012 = 100



Source: NAIC, AM Best, Swiss Re Institute

Asset allocation – the hunt for yield

Life insurers invested in illiquid and private assets offering a premium over public markets in response to low interest rates.

The decline in interest rates also changed life insurance asset management. To offset low interest rates after the financial crisis, life insurers, like many other investors, grew their exposures to higher yielding asset classes. The hunt for yield turned insurers in Europe, North America, and Asia to assets such as structured and private credit, floating rate loans, longer duration securities and looking abroad for markets with higher-yield investment opportunities. Private assets typically reward investors with a premium over similar publicly traded securities in recognition of their illiquidity, or lack of trading opportunities. Companies that tap the private credit market also tend to be smaller and carry more debt relative to earnings than counterparts with publicly traded bonds.[7] Private credit tends to be floating rate, while public debt is usually fixed rate. When interest rates rise, floating-rate debt provides a benefit from higher portfolio yields, but it can also introduce risks, with higher payment burdens potentially increasing covenant breaches and defaults. In the current cycle, however, borrowers have been resilient.

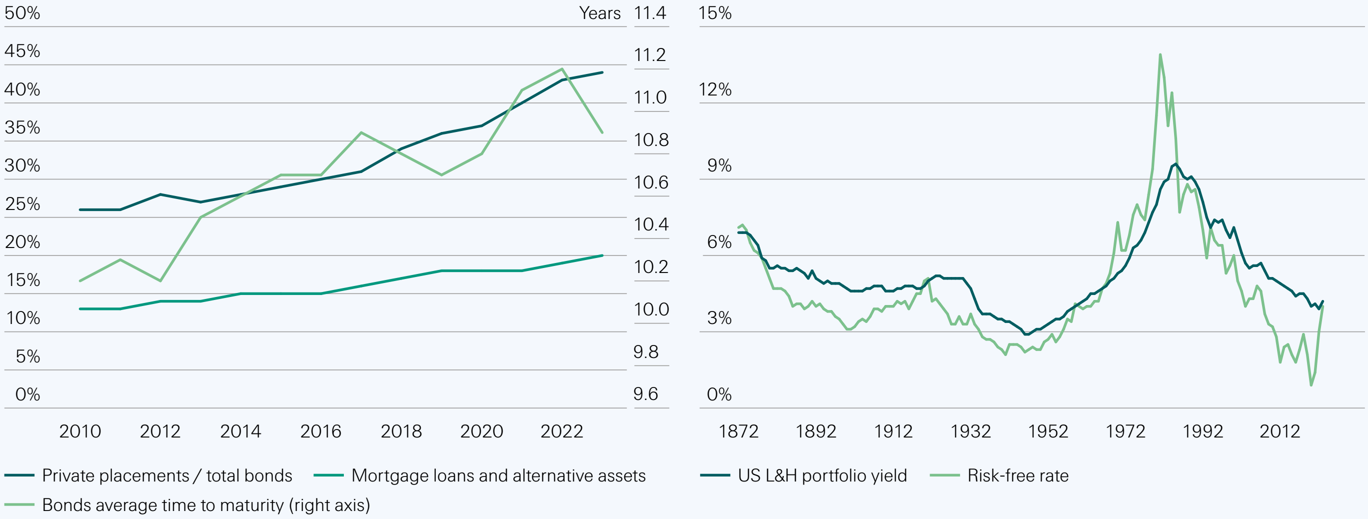
US life insurers' exposure to liquid credit declined while alternative investments rose.

Illiquidity is an integral part of the life business model, with its multi-decade liabilities naturally allowing for illiquid and long-dated investments in insurers' asset allocation. US life insurers' direct holdings of corporate debt declined between 2017 and 2023, offset by increases in real estate and alternative investments. Securitisations, real estate, and other alternative investments accounted for 39% of the investment portfolio at the end of 2023, compared to 34% at the end of 2017. The duration of bond portfolios has also expanded, to an 11-year average time to maturity in 2022 from nine years in 2008. Allocation to private placement securities has also risen over the period to 43% of fixed income investments from 24% (see Figure 3 left). This trend towards greater private placement is not unprecedented and we expect it has further room to grow.[8]

[7] *"Fast-Growing $2 Trillion Private Credit Market Warrants Closer Watch"*, IMF, 8 April 2024.
[8] For example, 62% of corporate bonds held by life insurers in 1951 were acquired by direct placement. See C. Shanks, "Trends and Problems of Life Insurance Investments", The Commercial and Financial Chronicle, 18 December 1952.

Figure 3

Left: US life insurance industry portfolio allocations, 2010–2023. Right: US interest rates and L&H insurance industry portfolio yield, 1872–2022



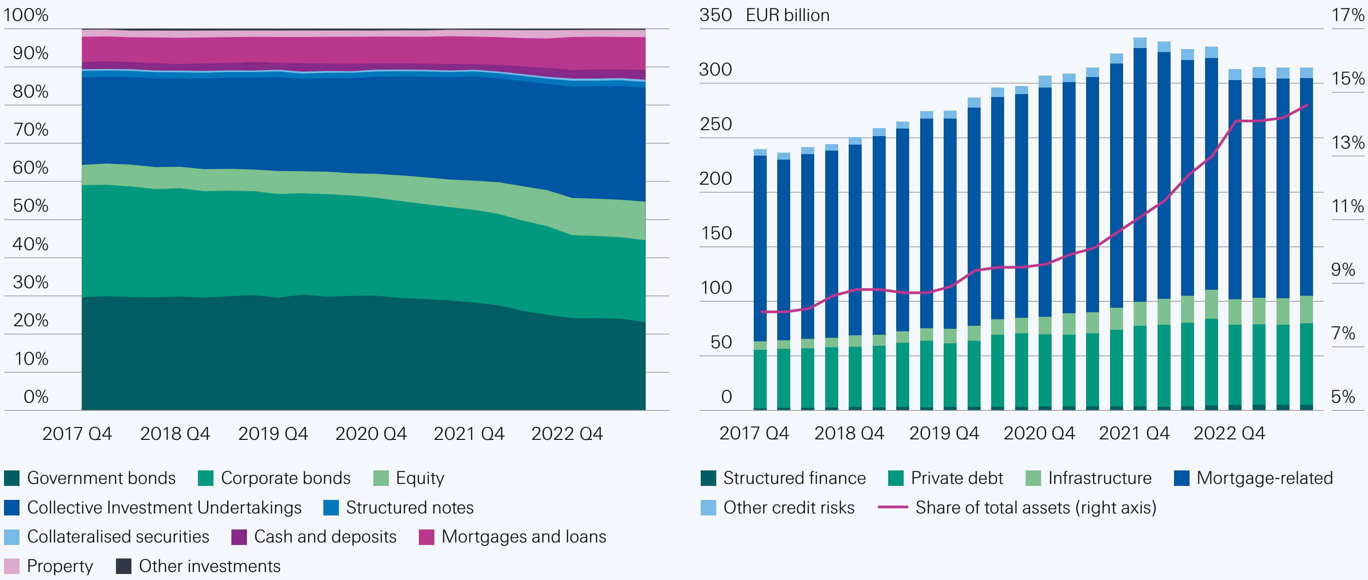
Source left: NAIC, S&P Capital IQ, Swiss Re Institute calculations. Source right: US Treasury Department, US Census Bureau, NAIC, Swiss Re Institute

In Europe, life insurers' exposures to illiquid credits and investments has been rising.

European life insurers have also allocated more to higher yielding private and illiquid assets. We estimate that about 15% of European insurers' portfolios backing traditional saving product liabilities were invested in illiquid assets and potentially risky exposures in 2023 (see Figure 4), up from 8% in 2017. About a third (30%) of assets were allocated to pooled third-party private assets funds including real estate, infrastructure, and PE in 2023, up from 23% in 2017. In the UK, life insurers hold about a 25% allocation to illiquid credit, primarily in commercial mortgages, infrastructure debt and private debt.[9] Meanwhile, capital quality has remained relatively stable since 2017, according to data published by the Bank of England.[10]

Figure 4

Left: European life insurance industry portfolio allocations. Right: European life insurers' estimated illiquid and risky investments



Note: Illiquid and potentially risky investments comprise exposures to real estate, PE and infrastructure funds, risky credit and real estate, as well as mortgage-neutralised loans. Asset allocations exclude unit-linked and insurance-linked securities. Source: EIOPA, Swiss Re Institute estimations

[9] "UK Life Insurance", J.P. Morgan, 19 January 2024.
[10] *"Insurance aggregate data quarterly report – 2023 Q4". Bank of England.*

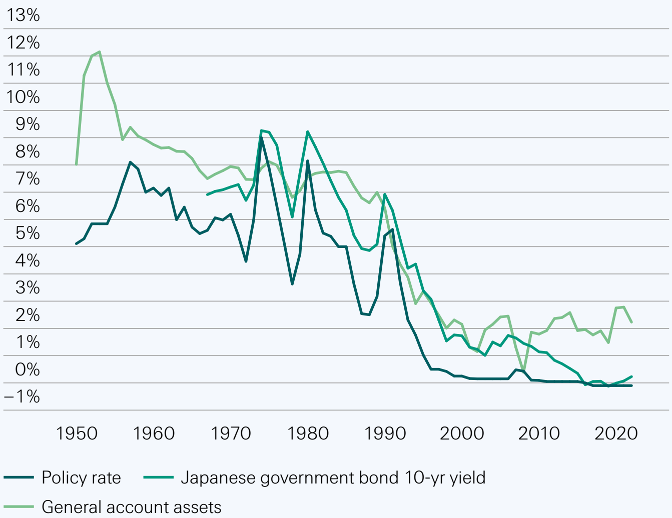
After its asset bubble burst in the early-90s, Japanese life insurers turned overseas in search for yield.

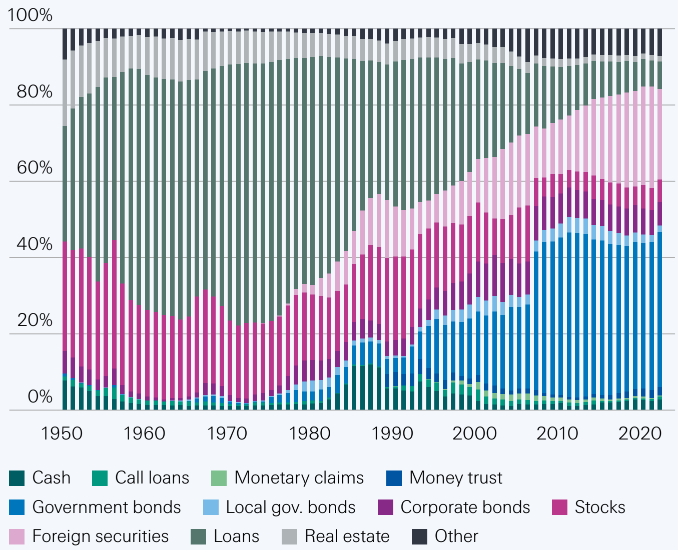
Going abroad for returns: the case of Japan's insurers
For Japan's life insurance sector, the hunt for yield began far earlier than 2009. Rates had started falling sharply in the early 1990s and the Bank of Japan introduced zero interest policy in 1999 (see Figure 5 left), and first adopted quantitative easing in 2002. In response, life insurers started to turn to foreign securities for better returns. These have grown steadily from 2.5% in 1980 to an average of about 25% of portfolios (of which two-thirds are bonds, see Figure 5 right).

Negative spread was a legacy of promises made during high yield years.

Savings products with fixed guarantee returns became popular in Japan in the high yield environment of the late-1980s. Large unrealised profits generated by asset price bubbles of that period gave life insurers room to increase expected interest rates and dividend payouts. After the economic bust that followed, in the early 1990s insurers faced a perfect storm of higher lapses and surrenders, downsizing of coverages, deeply negative returns on investments, increases in bad loans, and extremely low interest rates. Actual investment returns fell below expected standard interest rates used for guarantees fixed during the high-yield period, leading to a long-lasting "negative spread" problem. Dividend rates were reduced, and insurers found higher yields in foreign securities.

Figure 5
Left: Japanese life insurers' asset portfolio yields, 1950–2022. Right: Japanese life insurers' asset holdings by type, 1950–2022





Source: Life Insurance Association of Japan, Swiss Re Institute

We see several trends emerging in Japan as inflation, stocks and rates rise.

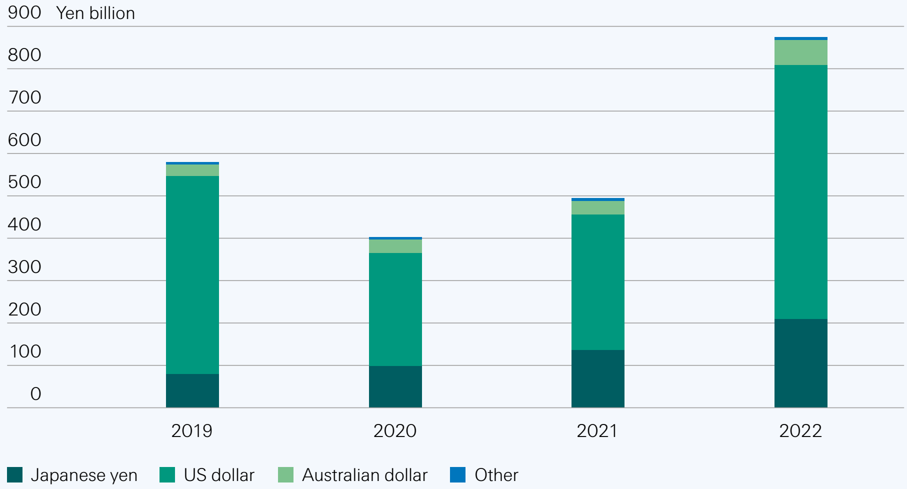
We expect several trends to emerge now that Japan has exited negative interest rates, returned to inflation and seen its flagship Nikkei 225 stock index recapture a peak last seen in 1989. First, competition is likely to intensify. Higher inflation on average lowers the real value of whole life insurance, and returns on non-insurance financial products should rise, especially time deposits and tax-efficient individual savings accounts. Second, risks and product mix will change. Rising surrender ratios could follow, and as the BOJ exits yield curve control, greater interest rate variance may mean a shift to variable interest rate annuities (new sales of which have doubled in the last two years).

Life insurers may return to domestic assets, but we see this as a gradual rebalancing.

Third, life insurers may repatriate their substantial foreign assets back towards domestic assets (and some have already started reducing hedge foreign assets due to increased hedging costs due to the depreciation of the yen[11]), though we see this as unlikely in the short term since US Treasury yields have risen more than JGBs in the post-pandemic period, meaning the current spread remains historically high. The elevated US-Japan spread has not narrowed even as the Bank of Japan raised interest rates for the first time in 17 years, which also contributed to yen depreciation to multi-decade lows. This has increased demand for foreign currency-denominated products (especially USD) in recent years (see Figure 6), in which policyholders pay premiums in yen, insurers invest in foreign currency-denominated assets, and finally policyholders look to benefit from both higher foreign interest rates and FX gains at the time of the insurance payout.

[11] *"Japan insurers to halve bond purchases, awaiting next BOJ hike", Nikkei, 25 April 2024.*

Figure 6
Annualised premiums for FX-denominated products, 2019–2022



Source: Life Insurance Association of Japan, Swiss Re Institute

Other Asian countries also use foreign investments as an alternative source of returns.

Japan's experience is not unique in Asia Pacific, where insurance has long been a key channel for household savings. With its deep capital markets, the US and US dollar assets provide an alternative source of returns for insurers and their customers in many countries when domestic yields fall. Local bond issuance typically cannot supply enough long-duration assets at sufficient yields to match insurers' long-duration/high-guarantee liabilities. For example, in South Korea, life insurers' share of foreign securities in invested assets typically rises as the spread between US and domestic interest rates widens. This peaks at typically about 15% of assets for the industry as a whole, and higher for larger insurers. In prior low interest rate periods, low investment returns and profitability were a factor in regulators relaxing limits on foreign investments (though many emerging markets retain broad capital controls).

Drivers for the rise of private equity

Private equity firms have expanded rapidly into insurance since the global financial crisis.

Private equity players met the demand of stock insurers seeking to pivot away from their legacy business. Regulatory changes after the global financial crisis, which accelerated non-bank lending as a new asset class, supported the move. These companies seized an opportunity to establish a foothold in the life segment, expand their asset base and grow private lending operations in a hunt for yield that was impacting the broader asset management industry.

Private equity firms have generally acted as reinsurers or insurance asset managers.

Private equity firms have generally followed one of three strategies in the insurance industry, acting as (1) pure reinsurers and liability originators, (2) run-off reinsurers and liability consolidators or (3) insurance asset managers.[12] Both liability originators and consolidators focus on accumulating annuity liabilities, typically using affiliated offshore reinsurance to lighten capital requirements. Originators focus on reinsurance business (flow or closed block) and have manufacturing and distribution capabilities, while consolidators focus on reinsuring runoff business.[13] Companies following the insurance asset management strategy primarily rely on insurers' desire for higher investment returns and demand for increased direct origination / private credit capabilities to grow through investment management agreements.[14]

We estimate that private equity firms have acquired over USD 1 trillion in life insurance assets since 2009, mostly in the US.

We estimate that private equity-affiliated reinsurance vehicles have accumulated more than USD 1 trillion in global life insurance assets since 2009.[15] Although most have been acquired from US carriers, a significant amount are from Europe. The private equity industry overall is US-centric as well, with US companies accounting for more than 70% of global assets under management, and seven of the top 10 global PE firms based in the

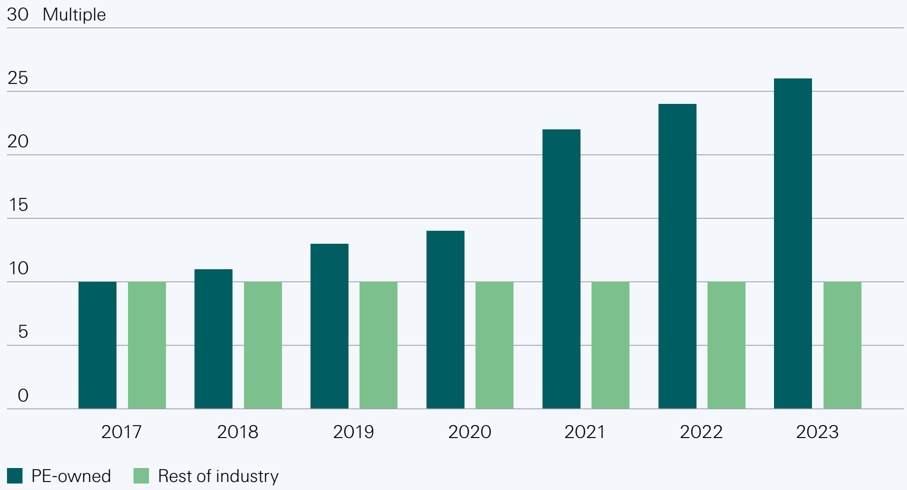
[12] The categorisation is based on strategies outlined in S. Hawkins and T. Martin, "The Annuity (Re)insurer Restructuring Tsunami?", Conning, 2021.
[13] S. Hawkins and T. Martin, "The New Annuity (Re)insurer Landscape", Conning, 2021.
[14] These insurers are sometimes referred to as PE-influenced. In this report we classify all PE insurance strategies as PE-owned insurers.
[15] Swiss Re estimates based on company filings and data on S&P Capital IQ.

US.[16] Growth in PE-owned life insurers has been particularly high for the last six years with 11 of the top 18 vehicles formed since 2018. Listed life insurers have ceded these assets as blocks of business to enable a strategic realignment of their business and/or to de-risk their balance sheets.[17]

Lower capital requirements, higher investment return targets and lower taxes facilitated transactions.

Private equity affiliated vehicles seek to generate greater value from these assets than the cedent generally in three ways: capital efficiency, improved investment return, and tax advantage. Capital efficiency is typically obtained by moving blocks of business to jurisdictions with lower capital and tax requirements for a given risk. Bermuda has been the primary destination where a scenario-based approach allows for discounting reserves using a rate closer to the investment portfolio yield (achieving an impact similar to the Solvency II Matching Adjustment), although the Bermuda Monetary Authority has recently increased controls and requirements for market participants in an effort to mitigate concerns.

Figure 7
US domestic asset leverage for PE-owned and all other US insurance entities, relative to statutory policyholder surplus



Source: NAIC, S&P Capital IQ, Swiss Re Institute

PE owned portfolios typically target higher investment returns.

Higher investment returns can be generated – in a benign macroeconomic environment – by taking greater risk and investing in less liquid instruments than traditional life insurers. Illiquid instruments include those for which the private equity firm has proprietary sourcing. Lower tax locations also provide a benefit. As a result, we estimate that a block of fixed deferred annuities can be more than twice as valuable to a private equity affiliated vehicle than a US on-shore primary carrier, with more than half of that additional value coming from lower capital requirements, a third from investment uplift, and the remainder from lower taxes.

There is still room to grow, but regulatory headwinds and competition are rising.

The private equity industry is estimated to have ample capital available to deploy. In spite of a high volume of transactions to date, there remains ample supply of blocks of business (possibly as much as USD 20 trillion globally) that could be transferred to PE affiliated vehicles. These insurers now own roughly 25% of US individual annuity liabilities and are expanding into other regions, but varying regulatory perspective affect the potential for success of the business model. The potential for a slowdown is higher in Europe as regulators remain sceptical of the offshore jurisdictions associated with this business model and question transactions more strongly on policyholder protection concerns. Deals may also become more challenging as higher interest rates improve the economics of retaining certain blocks of business and reinforce competition for assets.

[16] *Private Equity and Life Insurers*, Global Financial Stability Note 2023/001, IMF, 2023.
[17] IMF, ibid.

Regulators have raised concerns regarding PE-owned insurers' capital levels and investment allocations.

The combination of tightly managed capital, investment in illiquid assets and limited excess liquidity has raised concerns among regulators. A recent Bermuda Monetary Authority report cites potential risks to the PE insurance model, including conflict of interest, excessive risk-taking on the asset side, and heightened exposure to liquidity, investment concentration and asset valuation issues.[18] The resilience of these vehicles is unlikely to be confirmed until they successfully go through a credit cycle.

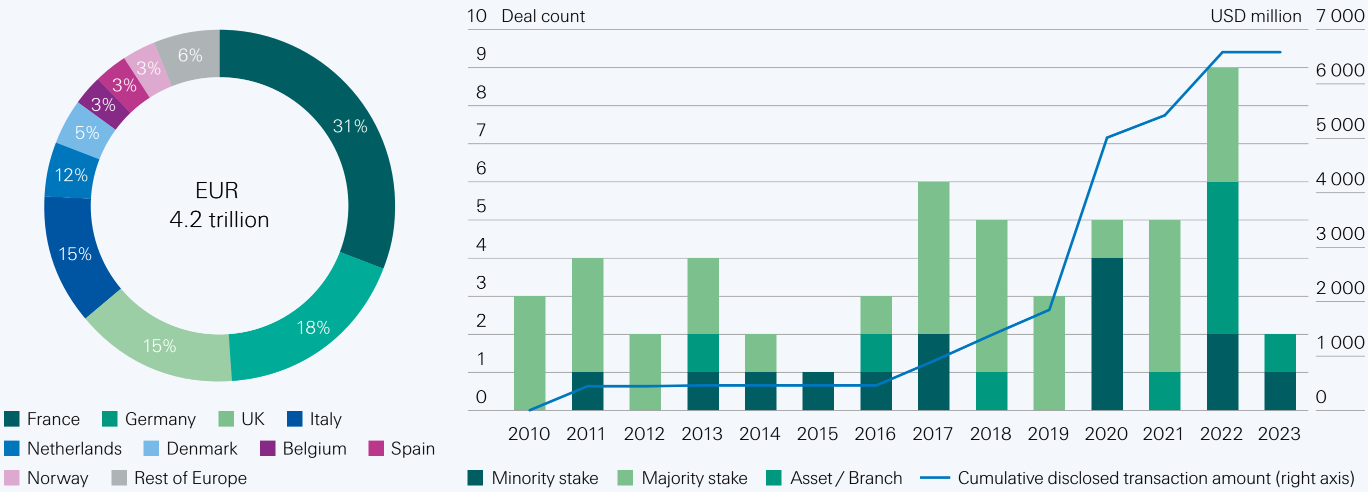
Private equity in Europe: opportunity and barriers to entry

Potential for consolidation is high in Europe, with more fragmented markets and distribution networks.

With over EUR 4 trillion of liabilities to tap (see Figure 8 left), the European life sector offers significant potential for consolidation due to its fragmented markets and distribution networks. PE vehicles have entered the European life market in small numbers. Since 2010, we estimate that there have been 54 transactions with PE influence, accounting for 7% of all reported M&A activity. Initially dominated by majority stake acquisitions, the activity has evolved towards minority and asset/branch consolidations. Transaction value has surged since 2019 after a series of landmark deals in the Netherlands, the UK, Germany and Italy (see Figure 8 right).

Figure 8

Left: Life insurance liabilities in Europe, 2022 (excl. health and linked business). Right: Number of PE-influenced deals in Western Europe



Source (left): AM Best, Swiss Re Institute computations; (right) S&P Capital IQ, Swiss Re Institute estimations. As reported in January 2024.

Market barriers have slowed the pace of PE dealmaking in Europe.

Establishing a foothold in the European life space can be challenging due to barriers to entry. For instance, the French market is dominated by large bancassurance and insurance groups, operating through established broker networks and work-based arrangements. Local employment laws are additional hurdles, especially for non-domestic entrants.[19] In Germany, life companies have been looking to dispose of legacy portfolios heavy in capital, creating a market for consolidators but also requiring their compliance with conservative reserving rules. The Italian market has consolidated considerably in recent years, including by some PE-influenced players.

The next phase of consolidation will likely take place in the Netherlands and the UK.

We expect to see significant growth in the UK and Netherlands in the next decade. New supply of portfolio-level deals and bulk annuities from corporates and pension funds seeking to de-risk liabilities is encouraging consolidation.[20] In the UK, higher interest rates have improved funding levels in defined benefit pension schemes and activated record new buyouts of GBP 49 billion in 2023, a 73% yoy increase, based on Association of British Insurers (ABI) data. De-risking volumes are expected to peak in 2026–27.[21] In the Netherlands, pension reform in 2023 opened the door to an estimated EUR 1.5 trillion of pension risk transfer (PRT) transactions, with three taking place already.

[18] *Supervision and Regulation of PE Insurers in Bermuda*, Bermuda Monetary Authority, 18 December 2023.
[19] *European Life Insurance Mergers, Acquisitions and Restructuring Outlook 2023*, PwC, 2024.
[20] Ibid.
[21] *UK Insurance – Waiting for re-rating*, Bank of America Global Research, 18 January 2024.

The impact of higher interest rates

Higher interest rates dramatically improve the outlook for life insurers. Demand for savings-related products is surging, with US fixed annuity sales in 2023 more than twice as high as in any other year other than 2022. We expect record sales in 2024 too. Profitability is improving as well, with greater room for margins in new spread-based products and opportunity to reinvest assets backing legacy liabilities at a higher rate. This is possible when the duration of assets is shorter than liabilities, as is the case for the industry in general. Higher rates also raise risks, by creating incentives for policyholders to shop around for new policies at the same time that rising rates reduce the asset values. The combination of lapse risk and asset risk can create liquidity or solvency concerns. With a few exceptions, these risks are contained. On net, life insurers materially benefit from the current rate environment as demand and profitability rise in tandem. Ultimately, consumers stand to receive the majority of the benefits through higher crediting rates and more generous guarantees.

Monetary tightening has transformed the competitive and operational environment.

The monetary policy tightening cycle initiated in 2022 has transformed the competitive and operational environment for life insurers from low yield and low return to one of higher yields and returns particularly for asset-intensive business. Higher yields boost demand for savings-related products and improve the potential profitability of both savings- and protection-related products (see Figure 9).

Insurers are benefiting from rising sales and profits but must prepare for risks to emerge.

Insurers are benefiting from rising sales and profits but must prepare for risks to emerge. Rising rates heighten liability and asset risks and also raise the regulatory solvency capital requirements to mitigate lapse and capital stresses. New regulatory frameworks such as IFRS17 are better at accounting for interest rate volatility and allowing insurers to capture the long-term benefits of holding illiquid assets, to improve profit recognition patterns.

Figure 9
Sensitivity of life insurance products to rising interest rates

Demand	■ Fixed annuities	■ Whole life ■ Guarantee products	■ Universal life ■ Indexed annuities	■ Term life ■ Long-term care
New business margins	■ Long-term care	■ Whole life ■ Universal life	■ Fixed annuities ■ Guarantee products	■ Indexed annuities ■ Term life
Lapse risk	■ Fixed annuities	■ Whole life ■ Guarantee products	■ Universal life	■ Variable UL ■ Term life ■ Long-term care

Higher ⟵⟶ Lower

Note: Green and pink colours indicate whether greater sensitivity is a benefit or drawback when interest rates are higher. Source: Swiss Re Institute

Higher interest rates boost demand for savings products...

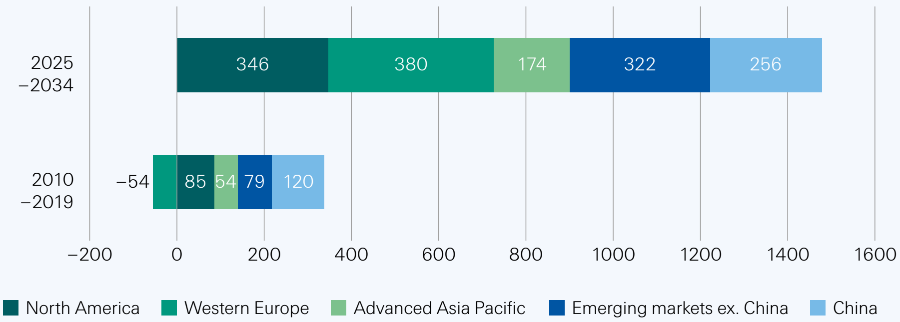
We expect strong annuity driven growth in the life savings market.

We expect strong, annuity-driven growth in the life savings market as the interest rate reset makes savings products more attractive, a growing global middle class adopts retirement planning and incomes rise in emerging markets. Demographic shifts increase the need for life insurance savings products as well, with a historically large, and growing, share of the population in many countries above the age of 65. We forecast significantly higher global life insurance premium growth in the coming decade (2.3% average annual real-terms growth 2025–2034), with upside risk potential.

We forecast USD 1.5 trillion additional savings premiums in the next decade.

Based on these baseline forecasts, global savings premiums will reach USD 4.0 trillion by 2034. Starting from USD 2.5 trillion of savings premiums in 2024, this translates into USD 1.5 trillion of additional savings premiums over the next decade (2025–2034), compared to less than USD 300 billion in the post-global financial crisis decade (2010–2019). Advanced markets will generate about 60% of all additional premiums in absolute terms in the next decade; 40% from emerging markets (Figure 10).

Figure 10
Life and annuity savings business: forecast additional premiums 2025–34, compared to post-global financial crisis decade 2010–19, USD billion



Source: Swiss Re Institute

Fixed-rate business is the first and most noticeable beneficiary of higher interest rates.

Fixed-rate business is the first and most noticeable beneficiary of higher interest rates. Sales of fixed-rate products increase, and net spreads widen above guaranteed crediting rates. In the US, the impact has been immediate and significant: individual fixed-rate annuity sales jumped 63% in 2022 and 36% in 2023 as interest rates rose. US individual annuity sales in 2023 reached USD 385 billion, 23% above the record set in 2022.[22]

Besides the US, the boost to individual annuity sales was also strong in Spain and the UK.

In Europe, the boost to annuity sales from higher rates was most visible in Spain, where annuities and traditional (rather than unit-linked) saving products dominate the life market.[23] Premiums for individual life annuity increased by close to 70% in Spain in 2023, primarily due to higher rates, as well as other factors including employment growth, improvement in job stability prospects and slow pass-through on deposit rates by banks. In the UK, individual annuity sales increased 46% by value in 2023 to GBP 5.2 billion, according to the ABI.

Protection products faced a negative demand impact due to the lower visibility of embedded returns and loan issuances.

Demand for protection products is less responsive to higher rates because the assumed investment return embedded in pricing for a fixed rate annuity is more transparent to the consumer than the implicit impact of investment returns on the (slower to react) price of a protection product. There are also more substitutes for savings products such as mutual funds and bank certificates of deposit. Demand for protection products such as credit-related insurance is also impaired when higher interest rates lower mortgage and loan issuance. This is more prevalent in European markets where bancassurance dominates distribution networks, such as in France.

[22] LIMRA, Preliminary U.S. Individual Annuity Sales Survey, 4Q23.
[23] Fitch Ratings, "Spanish Life Sector to Benefit from Sales Growth Driven by High Rates", 9 February 2024.

Supply and demand for protection products show different sensitivities to interest rate changes.

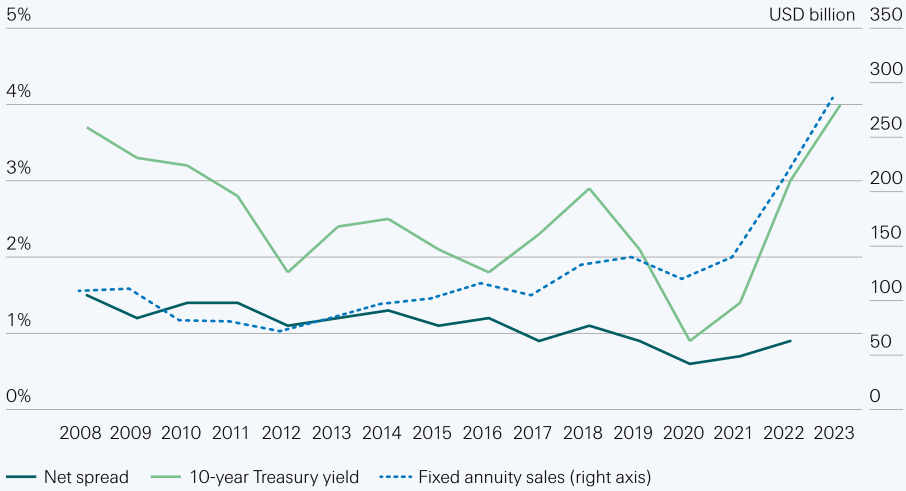
On the supply side, pricing for traditional products such as life insurance and long-term care is slower to react because of the nature of the liabilities, which are more uncertain, and premium characteristics. Unlike premiums for savings products, which are often collected up front, premiums for protection products are typically received on an instalment basis, so the prospective investment return is less certain. As a result, insurers typically wait for confidence that rates will remain higher before adjusting pricing.

...improve product margins...

Higher interest rates improve life insurers' sales and profits through strong demand for savings products.

Industry-wide net spreads moved up in 2022, reversing a decline over most of the post-financial crisis period (see Figure 11).[24] We expect further widening in net spreads if rates remain high. This is strongly positive for life industry profitability, even as consumers receive the majority of the benefit of higher interest rates. A simple regression of net spreads on 10-year Treasury yields indicates that a 100bps increase in the 10-year yield is associated with nearly 30 basis points (bps) higher net spreads. At a 10x leverage ratio, this suggests 300bps improvement in life insurers' return on equity (ROE) for each 100bps increase in yields. This implies that the increase in insurer profitability on liabilities with guaranteed rates of payout easily outpaced the corresponding rise in cost of capital, which moves roughly in line with yields, from 2020.[25]

Figure 11
US fixed annuity sales, net spread (net portfolio yield less guaranteed interest rate in %), and 10-year Treasury yield, 2008–2023



Source: NAIC Center for Insurance Policy Research, LIMRA, U.S. Department of Treasury, Swiss Re Institute

...and boost profitability for protection and savings products

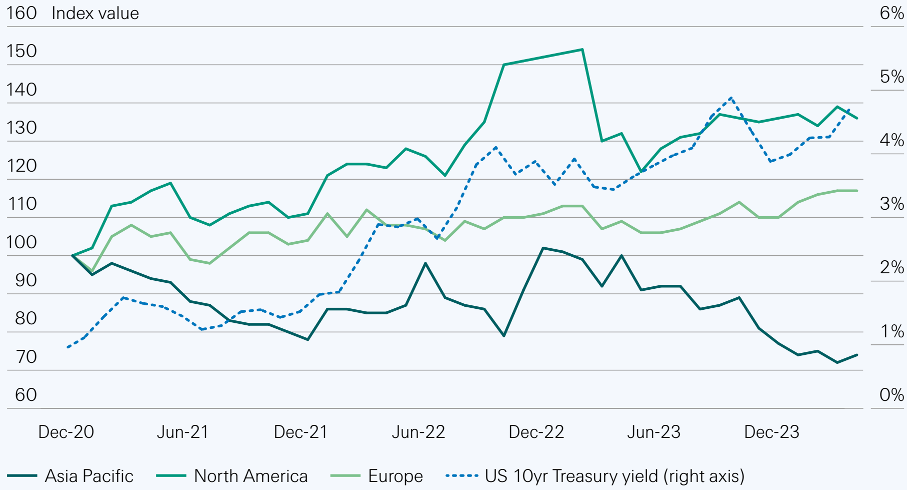
Valuations of public life insurers reflect expectations of rising profitability.

Stock market performance data can be read as a forward-looking proxy for profitability expectations (see Figure 12). Life insurers in Europe and US are ahead of booming market indices in early 2024, showing market awareness of the strong long-term benefits of higher interest rates. This outperformance can be read as a signal of strong optimism for future insurance earnings.

[24] Our source for net spread data is the NAIC's *Center for Insurance Policy and Research*. The NAIC's CIPR calculates the net investment spread as the net portfolio yield less the guaranteed credited rate of interest. The weighted average valuation interest rate (the minimum interest rate used in valuing reserves for policies issued in a given calendar year) is used as a proxy for the guaranteed credited rate.

[25] Note that this statistical relationship is derived from a period when interest rates were generally moving down; it might differ in a period when interest rates are moving up.

Figure 12
Life insurance sector total shareholder returns relative to broader market index and US 10-year Treasury yield, indexed, December 2020 = 100



Note indices: US = Dow Jones US Life Insurance Index, Europe = STOXX Europe Life Insurance Index, UK = FTSE 350 Life Insurance Index, APAC = BI APAC Life Insurance Valuation Peers.
Source: Bloomberg, Federal Reserve Bank of St. Louis, Swiss Re Institute

The impact on profits is larger for longer-duration business.

In the long term, we expect long-duration business to see the greatest profitability benefit from higher interest rates as long as competition remains rational. Higher rates benefit new business margins and in-force products with in-the-money guarantees and negative duration gaps. Higher interest rates reduce the risk of reserve charges on legacy portfolios. Companies that offer long-duration products can benefit materially from the greater accrual of investment income if interest rates stay higher for longer, as we now expect.

Long-term care insurance has a high interest rate sensitivity.

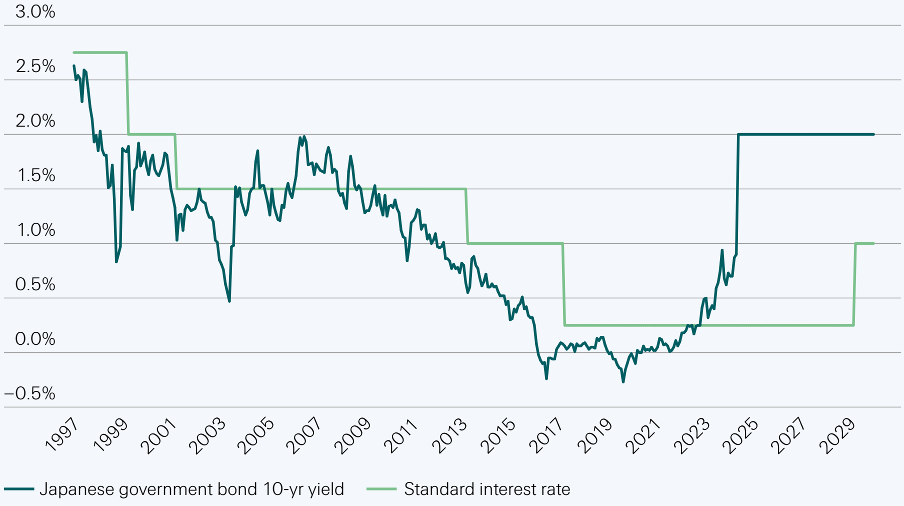
The long-term care line of business became synonymous with legacy liability issues during the low interest rate period. The line severely underperformed after the late 1990s as all major determinants of profitability went in the wrong direction. Most companies selling these policies in the early 2000s eventually exited the market as lapse, morbidity and mortality rates they experienced were worse than assumed. However, in a sensitivity testing, the impact of unexpectedly low interest rates outweighed the negative impact of the other assumptions combined.[26] Conversely, the strong increase in yields will have a strong positive impact on future profitability. Today, AM Best still maintains a negative outlook on the segment, citing increased utilisation exceeding pre-pandemic levels and pressure on reserves from medical inflation.[27]

Japan's insurers are set to benefit in multiple ways from the now-rising rate environment.

The now-rising rate environment should expand the choices available to Japanese insurers. First, since their liability duration is longer than that of their assets, the positive investment spread is set to widen as domestic interest rates rise. Investment results should improve as newly issued bonds with higher yields replace maturing low-yielding bonds. Second, standard interest rates, which insurers use for guarantees, is calculated as the *lower* of 1) the 3-year average and 2) 10-year average of the 10-year JGB yield. This ensures that sensitivity to rising yields is lower than the sensitivity to falling yields.[28] If JGB yields jump significantly, the positive investment spread for insurers will last for several years (see Figure 13). Alternatively, insurers can try to compete and increase guaranteed returns, which would now be more affordable for insurers to offer (at the cost of higher reserving burden).

[26] "*Exiting the Market: Understanding the Factors behind Carriers' Decision to Leave the Long-Term Care Insurance Market*", US Department of Health and Human Services, July 2013.
[27] "Market Segment Outlook: US Long-Term Care Insurance", AM Best, 5 April 2024.
[28] In Japan, the interest margin of the major insurers had turned positive around 10 years ago due to better investment yields on foreign securities, products with high guarantees from 1980–90s having matured, and gains from higher-than-expected increase in longevity.

Figure 13
Standard interest rate simulation under rising 10-year Japanese government bond yield



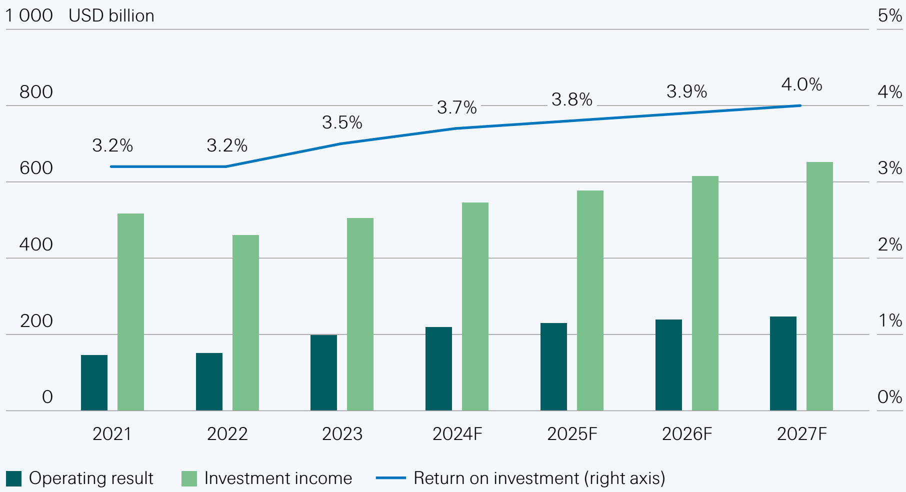
Source: Macrobond, Swiss Re Institute

Higher interest rates transform life insurers' product offerings as well as the sustainability of their traditional asset-intensive business.

Strong, profitable growth benefits insurers and consumers

We see higher demand for more attractive savings products and higher margins to result in strong profitable growth for the industry. For a sample of the largest eight markets together,[29] we expect this to convert to steady improvement in investment returns and operating results, further aided by a reduction of in-the-money guarantees. The impact is not immediately apparent in industry returns on equity due to factors such as asset-liability matching, variable investment income headwinds and the large proportion of legacy business. But the interaction of higher interest rates and leverage provides a strong boost to the traditional life insurance business model over time. Between 2022 and 2027 we expect the operating result for insurers in these countries to rise by more than 60% as investment income rises by 40% (Figure 14).

Figure 14
Life insurer operating results and investment return, eight key markets, 2021–2027F



Source: Swiss Re Institute

[29] Australia, Canada, France, Germany, Italy, Japan, the UK, the US.

Liability risks: higher rates lead to lapse stresses

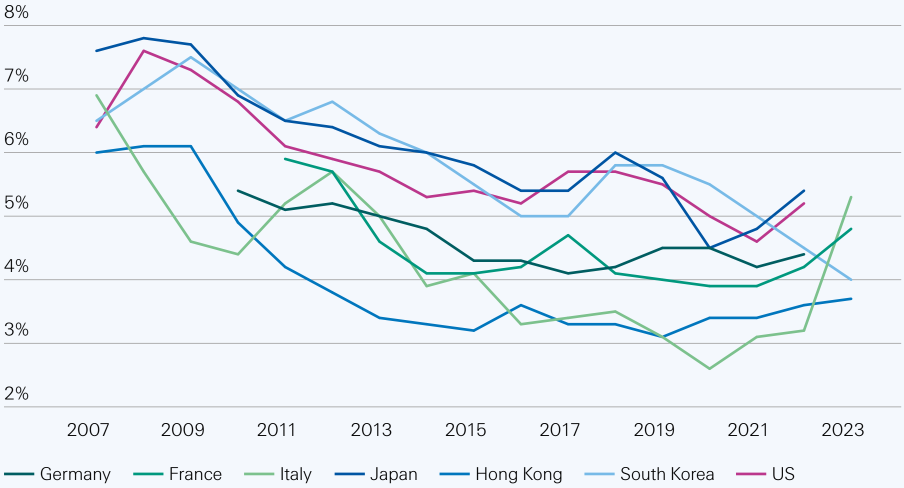
A surge in voluntary policy terminations is the closest thing insurers face to a bank run.

A surge in policy terminations for their cash value is one of the biggest risks of any liability-driven investment strategy.[30] Life insurers' investment strategy relies on the assumption that multidecade contracts lock-in assets and thus allow for long-term investments. Rising rates test this assumption, since the environment potentially incentivises policyholders to surrender existing contracts and invest in higher-yielding alternatives. At the same time, rising rates can bring risks such as credit cycle downturns, liquidity crunches and valuation mismatches – each of which can jeopardise the ability of life insurers to deliver on their liabilities.

Economic environments that produce a surge in lapses are often also those that lower the value of assets.

Lapse risk is interlinked with asset risks such as interest rate, credit, and liquidity risk. Economic environments that produce a surge in lapses are associated with those that lower the value of assets. For example, a rapid move in interest rates can lead to an increase in policyholder withdrawals as customers cash in old contracts to reinvest proceeds in new higher-yielding products. In parallel, higher rates reduce the market value of the backing assets and can lead to the formation of net hidden liabilities. The lapse event would in turn put a strain on liquidity and capital buffers when insurers are forced to liquidate these very same assets.[31] Concerns over lapse events have mounted since major central banks started to tighten in 2022.

Figure 15
Lapse rates in selected countries



Note: We show lapse rates that correspond to the average ratio of surrenders to total life provisions (France, Italy) or in % of the in-force business balance (Germany, Japan). Source: LIMRA, FFA, ACPR, ANIA, GDV, The Life Insurance Association of Japan, HKYA, FSS, APRA, Swiss Re Institute estimations

Redemption activity has increased since 2021 in major life insurance markets.

Policyholder redemption activity has risen since 2021 in many countries, (see Figure 15). In Italy, lapses rose sharply as customers cashed in old savings contracts to seek better returns or to bear living costs. In France and Germany, surrenders have been contained due to fiscal incentives in place and a relatively high level of profit-sharing reserves supporting back-book crediting rates. In Japan, the cancellation of foreign currency-denominated policies caused an uptick in lapses as customers locked-in profits after large exchange rate movements. Despite higher guarantees on yen-denominated policies, lapse risks remain elevated due to market competition and future termination of COVID-19 financial support.[32] In Hong Kong, exit from premium financing practices (common in the low-rate era), likely contributed to the uptick in lapses as interest rates rose.[33]

[30] Surrender generally implies policyholder redemption or termination for cash value, while lapse implies redemption or termination for no cash value. Rules and definitions for policyholder redemption, voluntary policy termination, surrender, and lapse vary by jurisdiction.
[31] *Life insurers: when interest rates rise*, BaFin, 16 June 2023.
[32] *Japan Insurers: Scandals and Expansion in Focus*, S&P Global Ratings, 8 February 2024.
[33] Premium financing is a practice whereby policyholders purchase singe premium saving products offering annual bonuses that are above the interest rate paid when borrowing the premium amounts from banks.

In the US, the reinvestment of surrendered assets reduced risks in the near-term.

US redemption activity has been manageable so far. Many policyholders already voluntarily terminated their policies and reinvested surrendered assets into higher-yielding policies. At the end of 2022 about a third of US individual annuity reserves either did not allow discretionary withdrawal or had a surrender charge of 5% or more, a level relatively stable in recent years. On average, a fifth of policy reserves subject to a surrender charge move out of that category each year and become much less "permanent", but they are typically replaced by new policies with surrender charges.

Past the peak of lapse risks

We find that the peak lapse risk associated to rate hikes has passed in 2024.

Our empirical analysis of the risk of lapses associated with monetary policy changes suggests that we have passed peak lapse risks in 2024, with major central banks (except Japan) at the end of their tightening cycle. We find that a 100bps increase in policy rate correlates with about a 30 to 35bps mean increase in lapse rate, all other things equal. Our findings hold when controlling for the COVID-19 years and unobservable market-specific factors that influence lapse behaviours, such as regulation and competition.

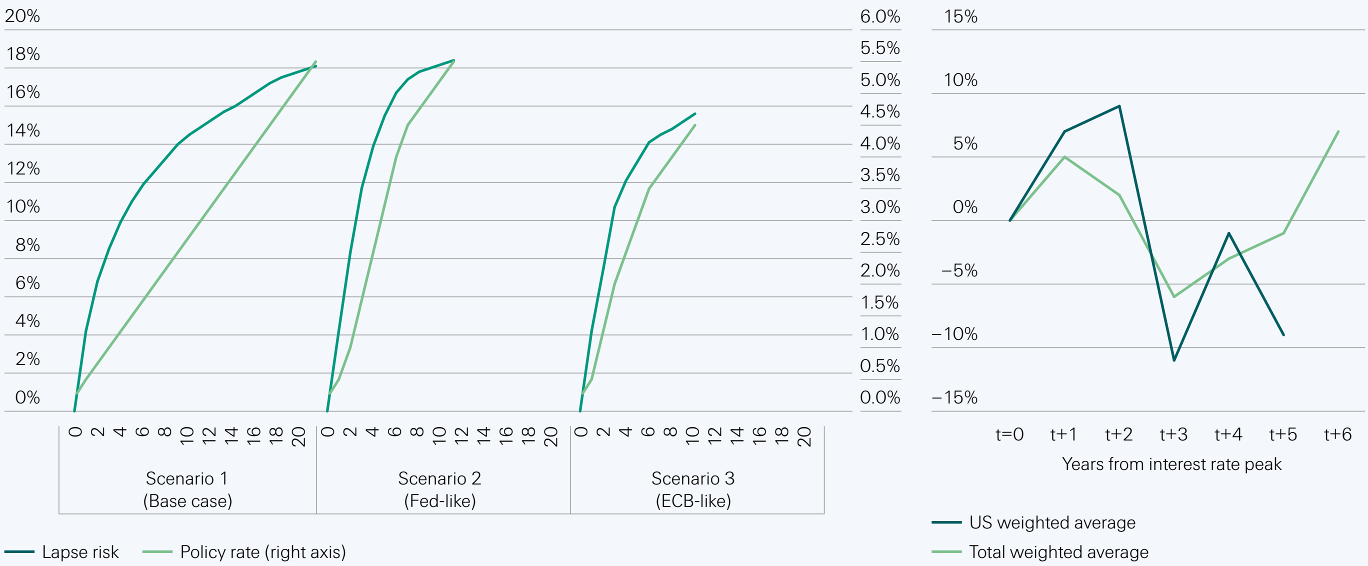
Lapse risks have increased the most in the early stages of the tightening cycles.

Lapse risks typically increase the most in the early stages of the tightening cycle and are most sensitive to larger (positive) interest rate shocks. We consider three scenarios reflecting three different policy tightening cycles (see Figure 16 left). In each case, more than 50% of the lapse risks associated to interest rate hikes materialises within the first 3–4 hiking periods, independently of the form of the tightening cycle.

Residual lapse risks are still possible in the 1–2 years after reaching peak policy rate.

As major central banks start their loosening cycles, residual lapse risks could still possibly materialise in the first 1–2 years after peak policy rate is reached (see Figure 16 right). Going forward, the sensitivity of lapses to interest rate shocks would be minimised when policy rates reach a neutral stance close to 2%. According to our Swiss Re Institute forecasts, policy rates in the US and Europe should fall to 3.9% and 2.3% respectively in 2025. This implies that the lapse sensitivity should decrease but will not be fully minimised in the near-term.

Figure 16
Change in lapse risks in monetary policy tightening (left) and loosening (right) environments



Source: Swiss Re Institute estimations.
Note LHS: Margin analysis of our non-parametric model controlling for unemployment and inflation surprises. Our three independent scenarios simulate the changes in lapse ratio associated with three hypothetical monetary policy cycles, all starting from a policy rate equilibrium of 0.25%. Scenario 1 reaches a terminal rate of 5.5% in consecutive increments of 25bps. Scenario 2 reaches a terminal rate of 5.5%, with consecutive increments reflecting the Federal Reserve's hiking choices. Scenario 3 reaches a terminal rate of 4.5%, with consecutive increments reflecting the ECB's hiking choices.
Note RHS: Lapse developments following negative interest rate shocks in historical perspectives. "Total" corresponds to time series for the US, Japan, and South Korea. Average lapse responses shown, with weights corresponding to cumulated rate shocks over the loosening cycle.

Regulatory and market-specific factors also matter when assessing lapse risks.

Factors other than interest rates influence lapse behaviours. For instance, when redemption charges are low, fiscal incentives weak or decreasing over time, or liquidity needs by policyholders rise (see Table 2). Market competition and access to high-yielding saving alternatives can also influence redemptions. This pressure point is stronger when there are large differences between in-force crediting rates and long-term risk-free yields. Hence, solid regulatory oversight and incentives can offset some of these pressure points and prevent lapse activity. Yet, when a mass lapse scenario materialises, it can force insurers to liquidate securities below their par value, require fresh capital injection or dent into reserves.

Table 2
Factors influencing lapses and solvency rules for selected markets

	Factors influencing lapse behaviours by policyholders				Solvency rules	
	Redemption charges	**Fiscal advantages / maturity bonuses**	**10yr yield and avg crediting rate differential**	**Short-term liquidity needs in 2022/23 [A]**	**Capital charges for lapse risks**	**Stress tests**
General impact	▼	▼	▲	▲		
US	Yes, decreasing over time	Tax advantages based on meeting certain criteria (eg, Section 7702 tests)	93bps	High	No explicit charges	n.a.
France	Indirectly, through fiscal rules	Tax advantages (higher rate for contracts > 8yrs)	98bps	High	Yes (SII)	Mass lapses and trend lapses tests, maximum value
Italy	Yes, decreasing over time	Tax advantages and bonuses contingent on investment returns	53bps	Very high	Yes (SII)	Mass lapses and trend lapses tests, maximum value
Germany	Indirectly, through fiscal and policy rules.	Tax advantages and maturity bonuses	(15bps)	Very high	Yes (SII)	Mass lapses and trend lapses tests, maximum value
Japan	Yes, decreasing over time, typically up to 10yrs	Tax deduction benefit based on annual premiums if specified conditions are met	(16bps)	Medium	Yes (ESR/FT)	Mass lapses and trend lapses tests, difference by product types and off/onshore business
Hong Kong	Yes, decreasing over time and differing between product types	Tax deduction on qualifying products (eg, deferred annuities, voluntary health insurance)	n.a.	Low	Yes (HKRBC)	Mass lapses and trend lapses, differences between group and individual business
South Korea	Yes, decreasing over time	Tax exempt returns if policies are in-force for 10yrs or longer	(139bps)	Medium [B]	Yes (K-ICS)	Mass lapses and trend lapses, difference between protection and saving/annuity products
Australia [C]	n.a.	Tax advantages upon insurance payouts (excl. super fund)	n.a.	High	Yes, the insurance risk capital charge accounts for lapse events	Portfolio-specific stresses

Notes:
(A) Defined as the difference between the average annual inflation in 2022–23 and the long-term average annual inflation. When the difference is > 4%, we assess liquidity needs as "Very high"; between 3% and 4% it is "High"; between 2% and 3% it is "Medium"; and below 2% it is "Low".
(B) In case of short-term liquidity issues, policyholders can obtain a loan from the insurer by using their cash surrender value (CSV) as collateral.
(C) Australia covers life protection policies only. Savings premium are part of the superannuation fund.
Source: Swiss Re, FitchRatings, S&P, Banque de France, ANIA, PostaVita, PwC, AM Best

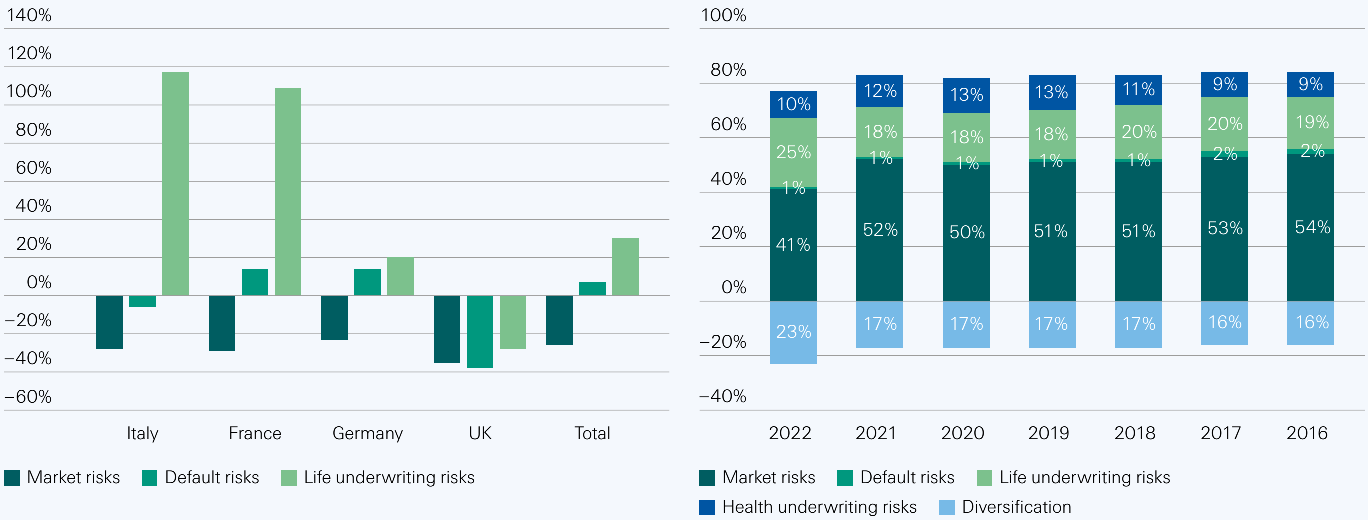
Economic risk-based capital regimes in Europe and Asia require insurers to hold capital against lapse risks.

Capital buffers against lapse risks when market stresses hit
To protect against lapse risks, most economic risk-based capital (RBC) regimes require life insurers to hold adequate capital buffers (see Table 2). Solvency II introduced this in Europe in 2016, and Asian markets are largely implementing similar RBC regimes. The amount of capital to hold against lapses is typically determined by running stress tests on the underlying portfolios. In Japan, for instance, separate stress tests are run on portfolios in domestic and foreign currencies. In the US, there are no explicit risk-based capital charges for lapse scenarios.

Higher rates rebalanced SII capital requirements away from market risks toward life underwriting risks.

In Europe, the solvency capital requirement (SCR) associated with lapse risks increased in most markets, while market risks capital decreased with higher interest rates. Under Solvency II, lapse risk is a sub-module of the life underwriting SCR. In Italy and France, the life underwriting risk SCR increased by over 100% between 2021 and 2022. As a result, mass lapse reinsurance to manage life underwriting SCR has gained popularity and regulatory approval in some countries, including Italy and the Nordics. Simultaneously, the market risk SCR decreased in all countries in both relative and absolute terms. This was driven by the interest risk sub-module, which captures the risk that fluctuations in the nominal rate curve create a mismatch between asset and liabilities. Higher interest rates reduced ALM risks, particularly when liabilities are of longer duration than assets, and thus lowered market risk SCR.

Figure 17
Left: Variation in selected SCR components in 2021/22. Right: Aggregate SCR composition of selected European life markets.



Sources: AMBest Global Insurance Database, Swiss Re Institute estimations. Based on aggregated life insurers' data for Germany, France, Italy and the UK.

Insurance companies have failed from the liquidity and capital stress arising from a lapse event.

Saving policies more subject to lapse risks
Although the industry remains resilient, certain insurance companies have failed from the liquidity and capital stress arising from a lapse event in the context of rising interest rates. The Italian insurer Eurovita failed to raise sufficient capital to meet mass policyholders' redemptions in 2023. Its weak capital position forced the company to sell assets below par value and realise losses on long-term investment positions. A EUR 100m injection from its owner fell short of the EUR 400m required. The event prompted the national regulator to place Eurovita under special administration and temporarily suspend redemptions on financial stability grounds until a rescue plan was finalised. Eurovita's initial level of capitalisation (solvency ratio of 134% at end-2021, well below the average for Italian life insurers, 230%), and reserves skewed to traditional savings products, created a higher exposure to risk of early redemptions than in peers.

In the US, the fixed-annuity sales surge points to a much higher proportion of reserves available for withdrawal in a few years.

In the US, the current sales surge in fixed rate annuity policies means the proportion of reserves that can be withdrawn at book value will go up sharply in a few years when these exit their surrender charge periods.[34] Savings products tend to be generally more

[34] C. Tuohy, "The Coming Tsunami of Fixed-Rate Surrenders", Life Annuity Specialist, 6 November 2023.

negatively impacted by early withdrawals than protection products. Savings products also have more volatile written premiums, partially due to a lower share of renewal premiums. In the US, for instance, over half of individual annuity sales in 2022 and 2023 were single premium policies compared to 10–15% for life insurance and less for Accident & Health. Premium growth for renewal products generally fluctuates within a narrow range, while premiums for single-premium products have grown or shrunk by more than 10% y-o-y in over half of the past 15 years. As a result, annuity growth rates react more swiftly to market and economic conditions and can cause stress when a sales decline coincides with a spike in surrenders.

Redemptions and failures can also occur when credit quality concerns arise.

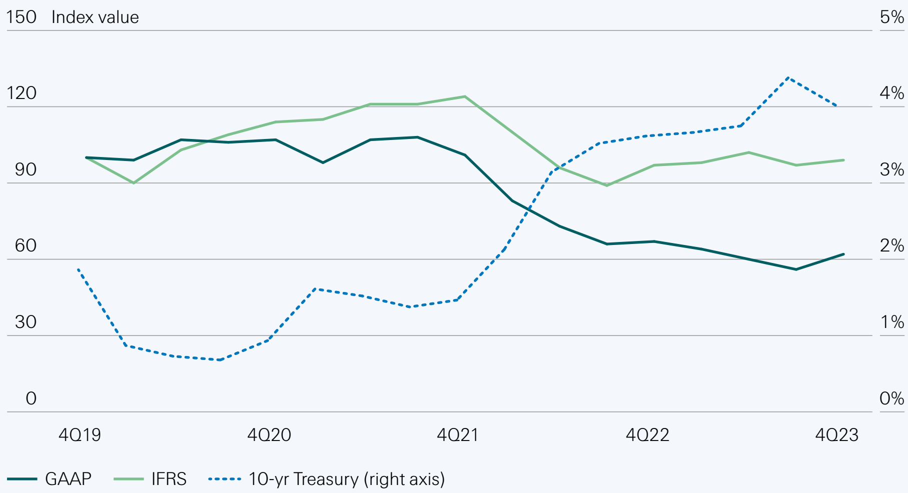
Redemptions can also increase when a deterioration in broader credit conditions highlights risks with particular investment strategies, especially when policyholders have concerns about the solvency of individual institutions. Historically, insurance company failures have included a combination of (1) rapid growth, (2) a focus on savings products, (3) reliance on novel or opaque investment strategies, and (4) a relatively high share of affiliated investments. In the US, the last major policyholder runs happened to Executive Life, which experienced USD 4bn of withdrawals in 1990 because of increasing public awareness of the risks and losses associated with its high-yield debt holdings,[35] and Mutual Benefit Life, which faced a run in 1991 because of CRE losses. A few years earlier, Baldwin-United Corporation failed after expanding rapidly and placing a relatively large share of investments in affiliates.

New rules better capture rate and illiquidity effects

Life insurers' negative duration gap increases equity when interest rates rise gradually...

Interest rate movements lead to volatile economic valuations for life insurer equity when the durations of assets and liabilities are unmatched. Asset durations are typically shorter than liability durations in the life industry globally, on aggregate, known as the negative duration gap. For example, the US industry has had a negative duration gap since 2010.[36] A negative duration gap means that assets decrease less in value than liabilities when interest rates rise, which explains why some insurers saw a positive impact on their solvency positions when interest rates were rising.[37] However, the increase in interest rates led to a decline in equity for insurers filing under US GAAP since prior to the implementation of Long-Duration Target Improvements (effective 1/1/2023), GAAP rules generally did not reflect the impact of rate changes on liabilities (see Figure 18).

Figure 18
Book value of equity for GAAP and IFRS filers compared to US 10-year Treasury yield, indexed, Q4 2019=100



Note: we selected GAAP and IFRS filers with at least USD 10 billion of assets as of year-end 2023. The cohorts include 347 filers under GAAP and 120 under IFRS.
Source: S&P Global Capital IQ, Swiss Re Institute

[35] R. Fogel, "The Failures of Four Large Life Insurers", Testimony before the US Senate Committee on Banking, Housing, and Urban Affairs, 18 February 1992.
[36] M. Huber, "Regulation-Induced Interest Rate Risk Exposure", 15 January 2022.
[37] *Global Insurance Market Report (GIMAR)*, International Association of Insurance Supervisors, 2023.

… but the benefits are distorted by accounting rules and can be offset by rising asset risks.

In Europe, new IFRS17 accounting rules help to neutralise some of the economic volatility in equity created by rising interest rates. IFRS17 offers three mitigators: 1) the Other Comprehensive Income (OCI) option to report unrealised fair value movements; 2) a new focus on IFRS17 adjusted shareholder's equity, which includes the contractual service margin (CSM), a relatively stable component showing discounted future profits; and 3) the possibility to include an illiquidity premium into the discounting of insurance liabilities that reflects the liquidity of the insurance contracts. This can improve profit recognition patterns (see *IFRS17 illiquidity assumptions can impact profit recognition patterns*). The inclusion of net finance income or expenses (IFIE) in the decomposition of the IFRS net financial results also brings more transparency to the assessment of investment performance and its split between OCI and P&L.[38] In parallel, S2 rules also disincentivise asset risks-overtaking by requiring additional capital buffers for riskier asset positions. In Asian markets, most regulatory frameworks are evolving towards IFRS17 and have been adopting S2-like capital regimes.

IFRS17 illiquidity assumptions support better profit recognition patterns

Discounting and liquidity assumptions influence IFRS17 profit recognition patterns.

IFRS17 accounting rules provide some leeway in determining the discounting approach and liquidity assumptions used to estimate the present value of future cashflows. Yet, these are key factors that eventually influence the level of technical provisions and the timing and volatility of profit recognition. Under the bottom-up approach, the discount rate is determined as the (liquid) risk-free yield, adjusted to reflect the illiquidity of the underlying insurance liabilities.

Liquidity is typically considered from a policyholder view and focuses on predictability of cashflows.

The liquidity of insurance liabilities is typically considered from a policyholder standpoint and focuses on the predictability of cash flows. A liability can be considered illiquid when cash flows are highly predictable (e.g., annuities, term life, disability) and its backing assets are thus held to maturity. Examples of illiquid contracts include annuities in payment phase, term life and disability insurance. On the other hand, if a liability is liquid, the cash flows are less predictable, and the insurer would not be disposed to hold to maturity the assets backing this liability (e.g., unit-linked contracts).[39]

Higher illiquidity premiums result in faster CSM releases and a lower net financial result…

In the case of an annuity portfolio, a higher illiquidity premium would first give a higher CSM and higher projected insurance service results (the net compensation for insurance services provided in the period) as CSM is released. The likelihood of a contract being recognised as "onerous" would also decrease. Yet the liabilities would also unwind faster at each period with a higher discount rate, lowering the net financial result (with the investment income on assets and the finance expense on liabilities offsetting each other). Over the lifetime of the contract, the P&L will be identical regardless of the discount rate, but its initial level would impact the timing of profit emergence and its allocation between the insurance service result and the net financial result.[40]

…with lower volatility as the silver lining.

A higher illiquidity premium would also lower the volatility of the net financial results. Since more of the potential credit spread on assets is included in the liability discount rate, it would neutralise some of the spread movements. This effect is stronger when the cashflow profiles of assets and liabilities are strongly matched.[41] So, while IFRS 17 provides discretion to influence the pattern of profit recognition, it also requires that insurers disclose their assumptions to investors. This is expected to add significant transparency to the industry over time.

[38] *Navigating the early days of IFRS17 management reporting*, Oliver Wyman.
[39] *Should insurers leverage Solvency 2 discount rate techniques when valuing insurance liabilities under IFRS 17?*, Deloitte, July 2020.
[40] *Profit emergence under IFRS 9 and IFRS 17: the impact of choice of liability discount rate*, Moody's Analytics,
[41] Ibid.

Private and illiquid debt still to pass the higher rate test

Illiquid exposures are part of the life insurance business model...

While life insurers' exposures to illiquid assets have been rising, it does not necessarily lead to unmeasured risks. Private and illiquid credit cannot be traded or sold and the lender is primarily exposed to default risk. As private loans are typically valued relatively infrequently, there can be higher risk that a loan becomes impaired if they are not monitored closely. Higher interest rates put additional strain on borrowers' ability to repay loans, and default rates on corporate debt in the US and Europe, though low, are beginning to rise. Corporate insolvencies are also increasing. It is essential that private credit investors monitor loans closely and are well protected by covenants and other loan clauses that give them recourse to take action should a borrower default on the debt.

...a natural holder of long-dated liabilities.

However, illiquidity is not of itself a risk for hold-to-maturity investors such as life insurers which do not require high levels of portfolio liquidity given their long-dated liabilities. For long-dated illiquid asset classes such as infrastructure debt, life insurance capital can be an excellent fit with investment needs. IFRS17's illiquidity assumptions illustrate how illiquidity is a recognised part of the life business model.

Commercial real estate: limited risk for life insurers

Exposure to CRE credit is a pocket of risk in the financial system.

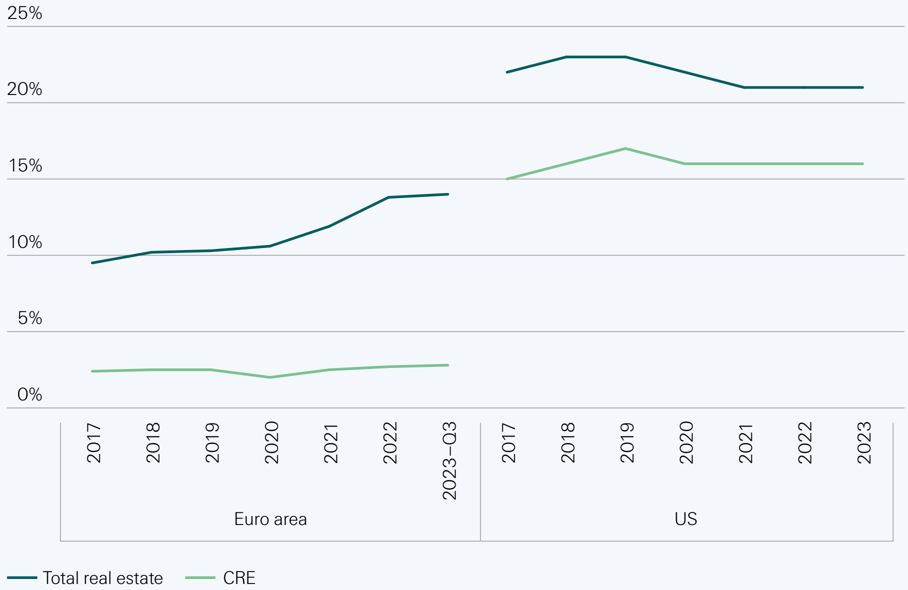
The corporate real estate (CRE) sector is a specific pocket of credit risk globally. Concerns are focused on steep valuation declines in the retail and office sectors as increasing home working and online shopping reduce demand for physical space. Coupled with higher refinancing rates due to the rise in interest rates, this is reducing some property owners' ability to refinance maturing loans, so leading to higher default risk. In the US, over USD 900 billion of commercial mortgage loans – including 25% of all outstanding US office commercial mortgage loans – are due in 2024, according to Goldman Sachs. The extent of the refinancing risk will depend on when interest rates begin to decline again. We see lower risk in Europe, where we expect interest rate cuts to begin earlier than in the US and peak debt maturity is only in 2026 with the maturity of about EUR 40 billion of loans.[42]

Despite higher exposures in the US, risks are seen as manageable.

US life insurers hold more than 20% of their portfolios in real estate assets, primarily mortgage loans (see Figure 19). About a third of those mortgage books were in the office and retail sectors as of the end of 2022.[43] Despite the relatively high exposure of US insurers to real estate, risks are viewed as manageable given the characteristics of these investments, such as low loan-to-value ratios, high debt service coverage ratios, low overdue/foreclosed loans on the whole loan side, and highly rated tranches of CMBS.[44] In Europe, direct and indirect exposures to CRE credit is stable at 2–3%, with below-average asset exposures in the largest life markets. In the UK, we estimate CRE exposure to be close to 7%. In South Korea, overseas CRE exposure is about 3% of the insurance sector's total invested assets, concentrated in the US and mainly indirect via alternative investments.[45]

[42] *State of CRE: Constructive outlook with select tail risks*, Goldman Sachs, 11 March 2024.
[43] Source: SRI calculations based on Schedule B data in statutory filings.
[44] B. Gibson and A. Stassis, "Commercial Real Estate Overview", JPMorgan, 24 March 2023.
[45] *Korean Insurers Will Be Resilient to Overseas Commercial Real Estate Deterioration*, FitchRatings, 22 April 2024.

Figure 19
Life insurers' total exposure to real estate assets, and of which CRE assets as a share of invested assets



Note: euro area exposure is shown on a solo insurer basis. It excludes unit- and insurance-linked assets and CRE exposure excludes own use. For the US, CRE exposure includes CMBS and mortgage loans (excluding residential). US exposures are based on NAIC statutory filings. CRE is defined as non-residential mortgage loans plus CMBS; total real estate exposure is CRE plus residential mortgage loans and RMBS. We use net admitted cash and invested assets for the denominator. Source: EIOPA, S&P Global Capital IQ, Swiss Re Institute stimations

Comprehensive capital requirements limit risky CRE exposures.

For life insurers in Europe, CRE loans are subject to capital charges under Solvency II for the spread, currency and interest rate risks they carry, with higher charges for lower quality loans. Capital requirements are also higher for unrated loans, especially when the risk-adjusted value of collateral is smaller than the risk-adjusted value of the loan.[46] Altogether, this limits risky exposures. According to Fitch, a 50% write-down of all direct and indirect CRE exposures would erode less than 10% of European life insurers' capital base.[47] In the US, industry analysts consider life insurer portfolios to be relatively secure, benefiting from conservative underwriting on mortgage loans and spaced-out maturities.[48]

[46] *Commercial Real Estate Debt: An Insurance Perspective*, DWS, June 2020.
[47] *European insurance sector's CRE exposure is low at about 4% of assets*, Fitch Ratings, 4 March 2024.
[48] J. Bhullar, "Life Insurance 2024 Preview", J.P. Morgan, 3 January 2024.

The return of risk appetite

Life insurers' risk appetite is returning rapidly as interest rates remain higher for longer. Stock insurers are regaining appetite for asset-intensive business and we expect them to increasingly manage their legacy liabilities in sidecars rather than divesting them. Mutual insurers are pursuing ambitious organic growth, while PE-owned insurers are entering direct sales for the first time. The three business models are converging once again, and we see the competitive environment intensifying, to the benefit of consumers who should see more attractive crediting rates and new offerings in saving product ranges. PE-owned insurers are also facing growing competition in reinsurance deals, as more new entrants seek to acquire assets. All insurers are expanding their asset management capabilities, often to capitalise on their investment expertise in private credit. The asset management skills developed in the low yield environment are now part of core offerings, shaping product innovation and the emphasis on investment capabilities.

Expanding risk appetite for the next wave of growth

Business strategies have started to converge with higher rates.

The growing expectation that interest rates will remain higher for longer gifts the life insurance industry a far more favourable balance of risk and return for taking interest rate risks. It also reduces the pressure to seek yield enhancement through credit and illiquidity risks. All types of insurers are regaining risk appetite for holding assets and writing more asset-intensive business. This is making business models increasingly converge. From being largely complementary in the low interest rate era, as stock insurers willingly transferred assets to PE-owned insurers for reinsurance and US mutual insurers accepted lower margin growth, competition in the life insurance industry will likely intensify.

Insurance assets are becoming more sought after

Stock insurers are retaining more of the types of assets that they previously ceded to PE.

Stock insurers are keen to benefit from the higher yield environment, but still face unfavourable public valuations for traditional business that generates investment return. In response, they are increasingly using captive insurers to attain more economic reserve requirements, and raising institutional capital in sidecars to fund sales growth, lower capital requirements and potentially assume third-party blocks.[49] Higher retentions in affiliated vehicles such as these will likely reduce demand for the types of transactions that brought PE into the life industry.

Institutional capital is increasingly being raised in sidecars.

Sidecars are special purpose vehicles established by an insurer to transfer a portion of risk to third-party investors. These typically have a fixed term and predetermined risk-sharing arrangements between a sponsoring company and investors. Their stated purpose is generally to allow insurers to access additional capacity, reduce earnings volatility, and diversify risk exposure. They also help insurers to access beneficial offshore regulatory and tax treatments. Sidecars often have one or more investors with asset management capabilities.[50] Sidecars provide more flexibility compared to traditional on-balance-sheet capital and therefore support larger block transactions without burdening the existing capital base. Their use by life and annuity re/insurers has become more common for the first time since the mid-2000s when third-party capital was raised in the form of debt financing to support a portion of the term/UL block's required statutory reserve (reserve financing under NAIC Regulations XXX/AXXX). Bermuda has been a common jurisdiction for the formation of life and annuity sidecars.[51]

PE-owned insurers also face more competition from PE peers.

PE-owned insurers also face greater competition from within their own sector, as more PE firms have herded to insurance ownership models. A trend of PE companies buying life insurers, which received a boost from the post-global financial crisis banking regulation, accelerated from 2020 as more funds sought control of a supply of stable long-term assets to manage and earn fee income. Insurance has become core to many PE firms' business

[49] S. Kamath, "2024 AIFA Recap: Not Sure Life is Beautiful but Commentary was Positive", Jefferies, 5 March 2024.
[50] *The Growing Side: The Rise Of Offshore Reinsurance Vehicles In U.S. Life Insurance*, Standard & Poor's, 6 September 2023.
[51] P. Chaudhury, "*Life & Annuity Reinsurance Sidecars: From Sidebar to Headline Topic*", Milliman, 23 February 2024.

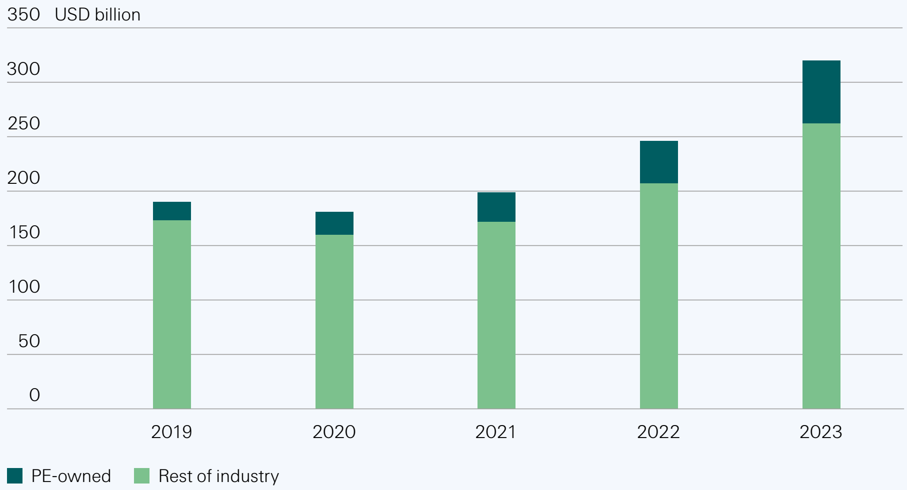
models. When banks reduced their funding of leveraged buyouts from late 2022, private credit funds stepped in, either with direct funding or by purchasing bank-originated buyout debt.[52] Life insurance assets also support PE firms that own business development corporations and other direct lending origination platforms.

Converging business models point to intensifying competition

Many simpler blocks of business have been reinsured, so risk appetite is expanding.

With the low-hanging fruit picked, it is now considerably more expensive for PE firms to accumulate life insurance assets by reinsuring US fixed rate and indexed annuity blocks. In response, PE-owned insurers are expanding their risk appetite into non-US risks and more complex products. They are increasingly acquiring blocks of variable annuities, universal life with secondary guarantees, and long-term care. PE-owned insurers are at present still complementary to traditional reinsurers – typically assuming investment risks and reinsuring mortality or morbidity risks – but there is potential for more direct competition.

Figure 20
US individual annuities direct business, first year and single premiums, 2019–2023



Source: NAIC, S&P Global Capital IQ, Swiss Re Institute

PE firms have expanded retail sales – historically the domain of traditional insurers.

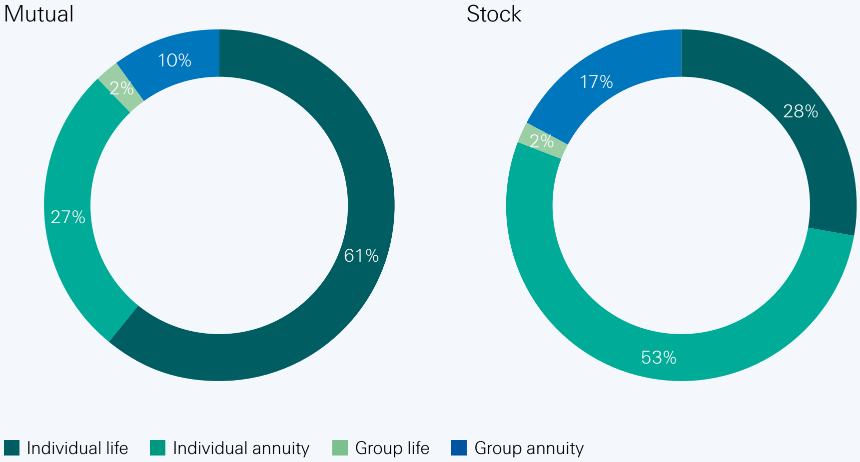
Some PE-affiliated insurers are beginning to write new retail business, especially fixed annuities. In 2023, these insurers issued USD 58bn of individual annuities (first year + single premiums), or roughly 18% of the total USD 320bn industry issuance (see Figure 20). By contrast, they wrote only USD 0.8 billion out of USD 47 billion of new life business issued in 2023. In 2023, the biggest PE-owned insurer led the US in individual annuity sales with USD 36bn in direct business, USD 11 bn more than the number two carrier. Stock insurers that benefited from reinsurance to PE players in past years may face new competition in their traditional lines of business in future years.

Mutual insurers face the prospect of greater competition from stock and PE-owned insurers in traditional life business.

Mutual insurers are partially shielded from the elevated competition at present, but we expect this to change as interest rates normalise and retail competition increases. PE-owned insurers will likely expand into new products, mimicking developments in reinsurance. Mutuals place a relatively large emphasis on individual life sales (see Figure 21). The individual annuities at the centre of the current growth in competition comprise more than half of stock insurers' life and annuity reserves, but only a quarter of mutual insurers' reserves.

[52] "Private Equity and Life Insurers", IMF, December 2023.

Figure 21
US insurers' net reserve split by line of business, year end 2023



Source: AM Best, Swiss Re Institute

Caution may limit re-risking for some life insurers

Most insurers are well-positioned to be on offense in the current market environment.

The insurance industry is well positioned to be proactive in the current environment, which could include a pivot back to more traditional business lines. Insurers are in general well capitalised with higher liquidity buffers and less risky liability profiles than in the past. By the same mechanism that incentivised stock insurers to pivot to capital-light business when interest rates were low, capital-intensive business is relatively more attractive in a higher interest rate environment. According to LIMRA, insurers that had stopped writing fixed annuity business are re-entering the space.[53]

Higher interest rates support a rotation from variable to fixed rate savings products.

However, impacts on supply and demand vary by line of business. Higher interest rates support a rotation from variable to fixed rate savings products, but most of this is likely now past. For annuities, fixed rate products will likely maintain the market share gained in the last two years at the expense of variable accumulation products, while products that combine fixed and variable aspects (e.g., Registered Index Linked Annuities in the US) will continue to grow steadily. Traditional accumulation life products will likely maintain market share, while sales of variable and indexed products will depend on regulations such as illustration requirements. The resurgence of growth has been focused on savings products, which primarily contain investment risk but also include biometric risk – both mortality and longevity.

Companies are not rushing to re-introduce products that performed poorly during the very low interest rate era.

Higher interest rates may encourage companies to incorporate additional benefits in products, such as re-introducing variable annuity guarantees and increasing competition in long-term care pricing by incorporating more optimistic interest rate forecasts in pricing assumptions. However, after a long period of underperformance in the low interest rate years, companies are being patient before taking steps to "re-risk" product portfolios, despite the profits that might accrue if interest rates stay at or above current levels. We do not expect companies to assume more risk in variable annuity lines. However, there is evidence of a cautious return to traditional product lines. For example, in early 2024 a large US long-term care insurer announced plans to restart selling new policies by the end of the year.[54]

Hybrid products should gain market share in Europe in the medium term.

In European markets, the new saving business mix should feature gradually more hybrid products with lower capital requirements. Hybrid products typically offer reduced guarantees and investment performance-linked benefits and can also cover biometric risks. They are less sensitive to stock-market movements than pure unit-linked products, while offering more upside risk than traditional life products with fixed guarantees.[55] For instance, individual death cover attached to investment-linked products should notably gain prevalence in Germany and France.

[53] U.S. Individual Annuity Yearbook: 2022 Year in Review, LIMRA.
[54] C. Tuohy, *"Genworth To Restart Selling Long-Term Care Policies This Year"*, Life Annuity Specialist, 1 March 2024.
[55] *A retirement lifeline*, Swiss Re Institute, 2023.

Deeper integration of life insurance and asset management

Asset manager-owned insurers and insurer-owned asset managers are increasingly competing in the same arena.

Insurers are increasingly emphasising their asset management capabilities. When interest rates were low, insurers and asset managers turned to alternative assets including direct lending and asset-backed securities to earn additional yield as banks exited traditional lending segments. During this period, increasing numbers of life insurers outsourced investment management, and mid-sized insurers are the most likely to outsource at least 10% of invested assets.[56] Today we see insurers placing greater emphasis on asset management capabilities. Affiliated asset manager / life insurer relationships are not new, but the wave of PE-owned insurers entering the sector upended the traditional order of insurers developing or acquiring asset management companies.[57] Some of the largest PE firms owning re/insurers compete with traditional insurers with large and sophisticated asset management divisions, including private asset origination capabilities.

The return of dynamic hybrid products, supported by reinsurers, will help lifers compete.

Life insurers also adopted more sophisticated investment-linked offerings during the low-rate era alongside their gradual transfer of investment risk to policyholders. In Europe, Germany was an early pioneer of the development of dynamic hybrid products, where exposure to market risks and guaranteed returns are achieved by a periodical algorithmic rebalancing mechanism between investment funds.[58] The return to low-cost dynamic investment strategies, supported by reinsurers' asset management capabilities, is expected to strengthen the competition with asset managers and PE for new savings business.

Competition will remain elevated as insurers and asset managers recognise the complementary nature of their businesses.

We anticipate continued competition in the asset management / life insurance space. Asset management capabilities support both spread-based and fee-based business, and insurance balance sheets support asset management earnings. Trends include (i) small insurers outsourcing parts of investment management such as the private credit function, (ii) large insurers expanding private credit capabilities, including acquiring specialist private credit managers, (iii) asset managers such as PE funds and direct lenders acquiring insurance companies and insurance-linked asset managers. Customers benefit through higher guaranteed returns or access to higher-yielding options in variable products.

[56] J. Hopper and K. Piasecki, "Growing Number of Life/Health Insurers Outsourcing Investment Management", AM Best, 26 February 2024.
[57] S. Hawkins, "Asset Manager Re/Insurers: What's so Different?" Conning, 2021.
[58] *A retirement lifeline*, op. cit.

Building support to bridge the retirement saving gap

The low interest rate years were a challenge for individuals seeking to accumulate assets to finance their retirement needs. Low interest rates made life savings products less attractive and real saving premium growth of 1.1% in the pre-Covid-19 decade fell behind economic growth. Meanwhile, responsibility for retirement saving is shifting onto individuals as the traditional systems face funding challenges. We estimate a retirement savings gap for six advanced economies and China and India of USD 106 trillion in 2022. Higher rates spur demand for life & annuity products by lifting investment yields, improving crediting rates on saving products, while gradually improving the pricing of protection business. With life insurers managing an estimated USD 6 trillion in pension funds, the industry is set to play an important role in closing the retirement gap going forward.

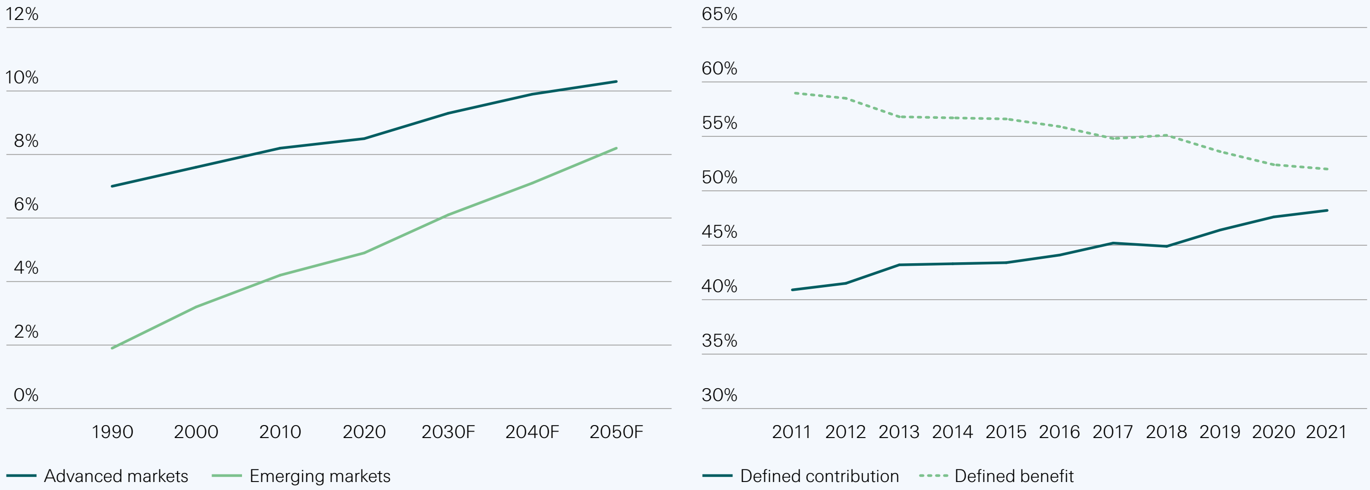
Life insurance provides products for individual retirement preparedness.

The low interest rate years were a challenge for individuals seeking to finance their retirements with products such as annuities. Savings business is a core competency for life insurers but annual premium growth slowed significantly in the decade after 2010, with an annual real growth rate of only 1.1% on average globally. The low interest rate era made savings business less attractive. This was particularly evident for Europe, with zero real growth.

Responsibility for retirement saving is shifting onto individuals as the traditional systems face funding challenges.

The retirement saving market needs to evolve as the role of governments and employers in pension provision declines. Ageing populations challenge the funding of pension systems, as a smaller working-age population must support a growing retired cohort. Public spending on pensions is rising fast as populations age (see Figure 22, left). In response, many governments are reforming pension systems to contain future public spending, such as raising the retirement age, reducing benefits and transferring funding risks to individuals. For example, France and the Netherlands have recently increased the legal retirement age and China is considering the same.[59, 60]

Figure 22
Left: Public pension spending as a percentage of GDP. Right: Defined benefit and -contribution as a percentage of US occupational pension assets



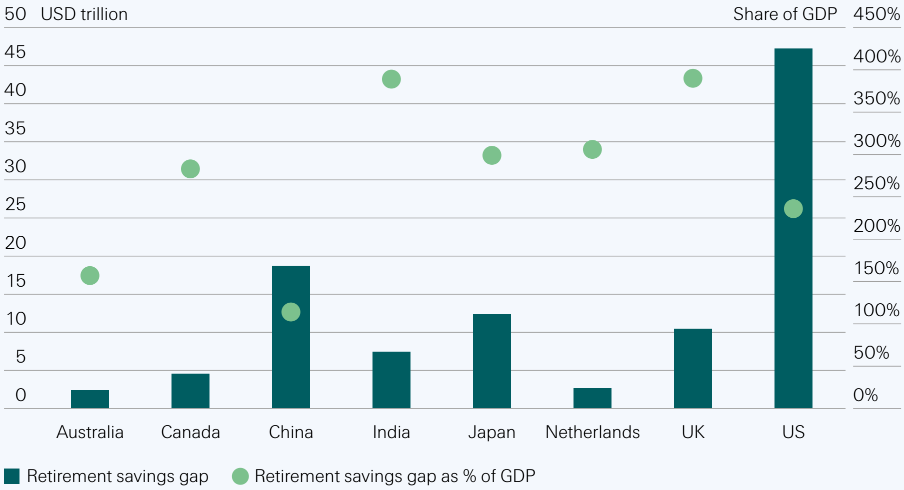
Source: IMF, OECD, Swiss Re Institute

[59] *K. Armstrong, "France pension reforms: Macron signs pension age rise to 64 into law", BBC News, 15 April 2023.*
[60] *"China to raise retirement age to deal with aging population – media", Reuters, 14 April 2023.*

The low interest rate decade held back real premium growth.

Concern is growing that the rate of saving for retirement accumulation globally falls far short of the sums that individuals will need. By using a WEF study that estimates the level of funding of government-provided systems, public employee systems, employer-based systems, and individual pension savings, we assessed the scale of the challenge (see Figure 20). We estimate the retirement savings gap for six advanced economies and China and India at USD 106 trillion in 2022 (see Figure 23). The estimates reflect a gap of 270% of GDP on average.[61]

Figure 23
Retirement savings gap in 2022 values, USD trillion



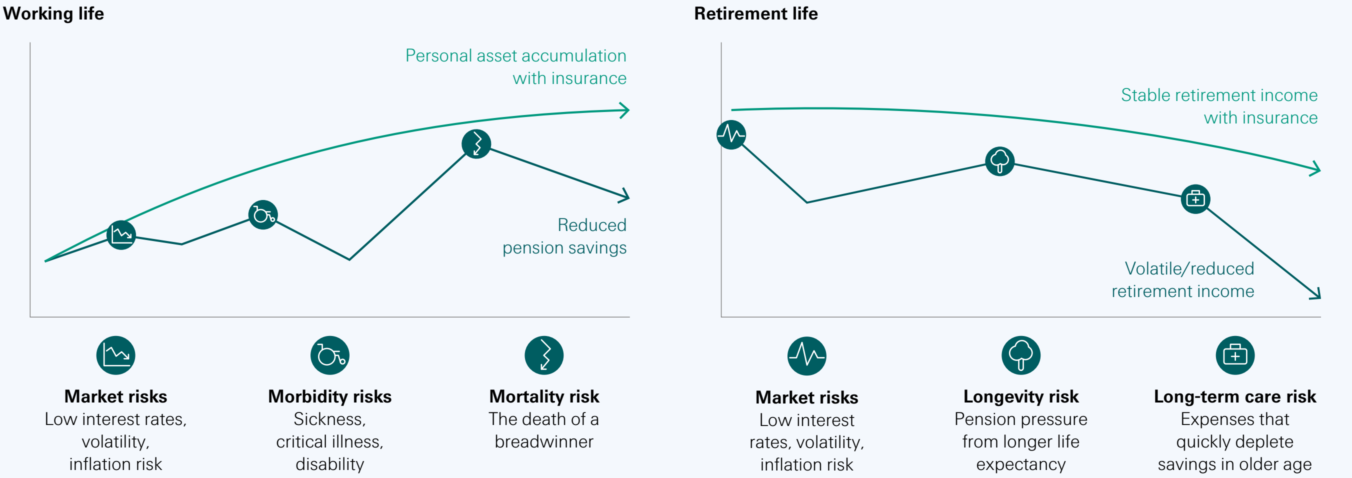
Source: WEF, Swiss Re Institute

Life insurance helps individuals accumulate and decumulate assets, while providing life protection covers.

Life insurance offers various saving products to accumulate or decumulate savings over time. They often embed a life protection component and are in this case referred to as "composite" or "hybrid" saving products. Composites combine investment and insurance protection components, allowing policyholders to allocate a portion of their premiums towards investment funds. The inclusion of a protection component is what differentiates a life insurer's value-added from asset management competitors. Depending on the policy, the protection element (also referred to as a "rider") can cover one or multiple life risks faced during the lifecycle. These include morbidity and mortality risks in the accumulation phase, and longevity and long-term care risks in the decumulation phase (see Figure 24).

[61] *A retirement lifeline*, op. cit. The markets we sampled are Australia, Canada, China, India, Japan, Netherlands, the UK and the US.

Figure 24
Pension saving accumulation and decumulation risks



Source: Swiss Re Institute

Long-term saving products for private individuals are the bedrock of the life industry.

The life insurance industry plays an important role providing products for retirement preparedness in the private saving market. With USD 3.1 trillion of global premiums in 2023, traditional life (life insurance and savings business, disability, critical illness, and long-term care) is the core of the L&H sector. About USD 2.4 trillion (77% of premiums) account for savings business, i.e. the accumulation of retirement assets. The other USD 0.7 trillion (23%) for mortality, morbidity and longevity risks provide income protection during the accumulation (savings) phase. About 80% of global savings premiums originate from advanced markets but the share of emerging markets is rising steadily. We estimate that life insurers now manage some USD 6 trillion of assets under management, or about 12% of the USD 51.3 trillion private (funded) pension assets in 28 OECD countries as of 2022.[62]

Higher interest rates will not be enough to close the retirement savings gap.

Since 2022, rising interest rates in most markets have reshaped the business environment for life insurers. Higher rates have lifted investment yields and improved crediting rates on saving products while gradually improving the pricing of protection business. This notably sparked renewed interest in annuity-type products as consumers seek to capitalise immediately on more attractive returns. Yet, higher interest rates will not be enough to close the retirement savings gap. To mobilise the large needed private retirement savings in the long-term requires life insurers to be agile in anticipating evolving consumer needs. We see an opportunity for life insurers to develop new convertible life products that proactively anticipate consumers' needs and market them through digital channels. Low financial literacy can also hamper uptake of life insurance policies, and insurers could take steps to increase consumer knowledge of the life value proposition, while helping promote deeper capital markets in emerging economies. Finally, saving and investing preferences evolve, particularly among younger cohorts in Europe and Asia and on the topic of sustainability. Life insurers may benefit from aligning their offerings with these new generational aspirations.

62 "Pension Markets in Focus 2023", OECD, 11 December 2023.

Published by:
Swiss Re Management Ltd
Swiss Re Institute
P.O. Box
8022 Zurich
Switzerland

Telephone +41 43 285 2551
Email institute@swissre.com

Authors
Germante Boncaldo
James Finucane
Dr Thomas Holzheu
Loïc Lanci
John Zhu

The authors thank Michael Bacon, Augusto Diaz-Leante and Chris Rotzien for their contributions to this report.

Editor
Alison Browning

Managing editor
Dr Jerome Jean Haegeli
Group Chief Economist

The editorial deadline for this study was 3 May 2024.

sigma is available on Swiss Re's website: www.swissre.com/sigma

The internet version may contain slightly updated information.

Graphic design and production:
Corporate Real Estate & Logistics / Media Services, Zurich

Swiss Re Management Ltd.
Swiss Re Institute
Mythenquai 50/60
P.O. Box
8022 Zurich
Switzerland

Telephone +41 43 285 3095
swissre.com/institute