

EIOPA

# FINANCIAL STABILITY REPORT

December 2024

EIOPA(2024)0103269  
Risk & Financial Stability Department  
EIOPA REGULAR USE  
EIOPA-BoS-24-516  
12 December 2024

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## FOREWORD BY THE CHAIRPERSON



Geopolitical tensions have escalated to levels unseen in years. Recent and upcoming elections are shifting dynamics in key economies, fuelling concerns over declining international cooperation and growing scepticism about the future of globalization. While the impact of the ongoing developments and fragmentation seems to not reach financial markets or stock markets yet, risks seem to be building up. The war in Ukraine is, sadly, still ongoing with the potential for further escalation in many ways, in particular cyber. While inflation has eased, unexpected bottlenecks amid the broader uncertainties can fundamentally change the current macro conditions. Also, growth concerns are mounting up as the latest information indicates some weakening that lies ahead in some of the key markets in the EU. Climate change is driving more frequent and intense weather events, and we are seeing the effects of rising temperatures, heatwaves, wildfires, and air pollution on public health. The rapid development of AI is raising questions around regulation, security, and ethics. Similarly, the rise of cyber threats presents a growing concern, especially with the possibility of state actors deploying cyber-attacks.

The Draghi and Letta reports emphasize the EU's need to accelerate technological development for collective benefit and in order to finance this they strongly advise a rethink of the Single Market and enhance competitiveness. The insurance and pensions sectors are pivotal in contributing to this needed transition, by contributing within a Savings and Investment Union and driving savings through innovative products. To meet the challenges ahead, the industry must focus on five key imperatives: resilience amid volatility, fulfilling its protective purpose, fostering fairness and inclusivity, leveraging data to address emerging risks, and enhancing efficiency to deliver real value.

There is a growing relevance of non-bank financial intermediaries (NBFIs). NBFIs encompass a very wide range of players operating under varying regulatory frameworks. Insurers and institutions for occupational retirement provision (IORPs) stand out as being subject to robust regulation under Solvency II (SII) and IORP II. Notably, SII already incorporates macroprudential elements, which will be further strengthened through the current review, reinforcing the sector's role in supporting financial stability.

EIOPA has outlined key strategic priorities to advance its mission of meeting the challenges ahead. These include closing pension gaps to ensure adequate retirement savings for all, addressing insurance protection gaps to provide comprehensive coverage for individuals and businesses, and reinforcing EU insurance supervision to uphold high standards across the market. Additionally, improving data quality ensures decisions are grounded in reliable information, while strengthening consumer protection safeguards the interests of all market participants. These efforts aim to create a stronger, more dependable, and trustworthy Single Market for everyone.

In 2024, EIOPA focused its financial stability work on stress tests and scenario analyses. Alongside the one-of “Fit-for-55” climate scenario analysis, EIOPA is conducting its regular EU-wide insurance stress test. This exercise will assess the resilience of European insurers' capital and liquidity under an adverse economic scenario featuring higher yields and inflation spikes. Recognizing that transparency fosters trust—a crucial factor for attracting capital and enhancing sector competitiveness—EIOPA aims to publish individual results with the industry's cooperation. Furthermore, EIOPA has already kicked off the work on the 2025 IORP Stress Test exercise based on a focused scenario on liquidity.

Currently, insurers alone manage EUR 9.5 trillion in assets, of which around 70% is invested in the EU. In addition, pension funds manage 2.7 trillion serving 71 million members. These sectors not only provide financial security and peace of mind for individuals, but also enable the broader economy to flourish. Keeping in mind that these are mainly consumers savings, the complex and volatile environment presents significant challenges for those working to mitigate risks to financial stability in the European Union. Two elements can assist us in addressing these challenges.

First, it is crucial to remain vigilant in monitoring new and emerging risks, ensuring nothing is taken for granted. For example, digitalization and cyber risks, which were moderate in 2023, are projected to escalate based on current developments and forward-looking assessments. Supervisors increasingly view cybersecurity and hybrid geopolitical conflicts as key concerns. Another concern lies in the growing allocation to alternative assets, characterized by higher illiquidity and complex structures. Real estate, a significant component of these assets, has drawn attention due to falling prices in 2023, raising concerns about financial stability in the near term. The search for yield behaviour observed during low- and ultra-low-interest rate periods, turned into search for investment spread once interest rates increased pushing insurers to diversify their investments. Hence, the first topical focus of the report deep dives into trends and vulnerabilities for insurance and IORP sectors rising from real estate risk in the light of the most recent developments. Furthermore, an increasing global trend has been observed in the use of asset intensive reinsurance in the last years. This type of transactions could pose risks to financial stability therefore the second topical focus presents important insights and implications that have yet to be fully considered by supervisors.

Secondly, we must adopt a comprehensive, holistic approach to assessing risks to financial stability. EIOPA, in line with its mandate, contributes to the assessment of the systemic implication of the European insurance industry. The European Systemic Risk Assessment Framework (SRAF), in place since 2022, has the goal of supporting EIOPA and its members to determine their own view on EEA insurance market trends and developments and the current and potential future systemic risk in the European insurance sector. In this context, the third topical focus describes the main methodological and organisational elements of the SRAF, providing also the highlights of the 2024 risk assessment that cover the main sources of systemic risk. Another example is protection gaps. Climate change could render certain risks uninsurable in a market where already 75% of the risk is not insured.

In 2024, the persistent trend of high natural disaster losses, driven by rising event frequency and economic factors, remained a pressing concern. Beyond consumer protection, such losses could affect the broader economy and financial stability, as uninsured damages from natural catastrophes may delay reconstruction efforts. Similarly, pension gaps pose significant challenges. High fees on savings products not only undermine consumer protection but also reduce the wealth of future retirees. This shortfall could exacerbate resource distribution conflicts, fuelling societal and political instability.

The EU's insurance and pension fund sectors have shown remarkable resilience amid recent years of change and transformation. As key risk managers and major long-term investors, they are uniquely positioned to address sustainability challenges and support the transition to a more sustainable and resilient economy. While the future remains uncertain, we remain steadfast in our commitment to upholding a robust insurance and pension industry that benefits all European citizens.

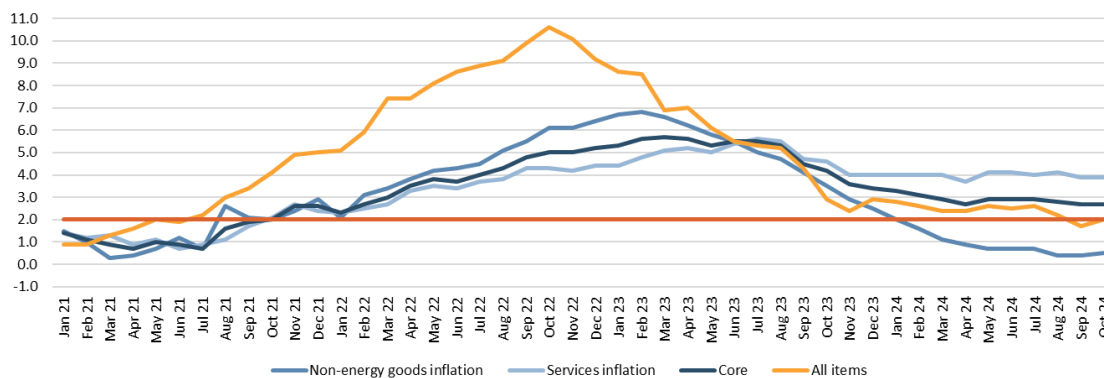
**Petra Hielkema**

## KEY DEVELOPMENTS AND RISKS

**Intensification of geopolitical tensions (including recent/upcoming elections), lower policy rates and the build-up of growth risks comprise the key elements that shaped the economic and financial market evolutions in 2024.**

**While the impact of geopolitical tensions in the European macro-financial landscape is currently limited, risks seem to be building up.** The direct impact of the recent intensification in geopolitical tensions shows up in the modest (for the time being) increase and volatility of oil prices, but a wider conflict can have a stronger and broader effect on energy prices. In fact, energy prices continue to contribute significantly to inflation falling towards the target, giving strong momentum to the disinflationary process in Europe. For example, the annual inflation of the energy component was estimated at -6.1% and -4.6% as of September and October 2024, respectively, compensating (less effective for October) other stickier components such as services prices (Figure 1). Hence, unexpected bottlenecks in the disinflationary process, amid the broader uncertainties during (geo)political tensions, could fundamentally change the current macro conditions. Regarding financial markets, the impact of the ongoing conflicts/developments remains as well muted. The equity market correction during early August was partially reinforced by certain geopolitical developments at the time, but without wider repercussions and proved to be short-lived.

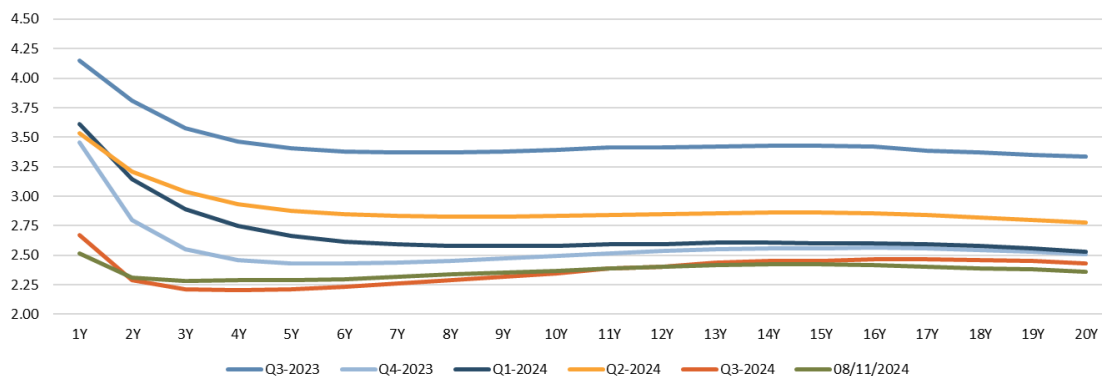
Figure 1: Euro area Inflation and Main Components



Source: ECB, cut-off date October 2024.

**Interest rates continue to decrease, amid policy rate cuts.** Central banks lowered policy rates, e.g. the ECB cut another 25 basis points in its October meeting and are expected to continue to do so. However, the exact pace and timing of the future path hinges on several uncertainties e.g., inflation evolution, impact from labour market, and growth momentum. In any case, lower policy rates bring the short tenor part of the Euro swap rate curve lower (Figure 2). These effects combined with markets' perceptions about longer-term interest rates staying relatively high, result in a dynamic that flattens or even steepens the swap curve on a forward basis. This means that the present value of shorter duration cash flows becomes relatively better off than ones with longer-term duration (e.g., positive in case assets have shorter durations than liabilities).

Figure 2: Euro swap rates (in %)



Source: Refinitiv, cut-off date 08/11/2024

**Growth concerns are mounting up.** Real growth over the previous quarter for the Euro area came in at 0.2% for Q2 and 0.3% for Q1<sup>1</sup>, while latest information from forward leading indicators (as of September 2024) indicates some weakening ahead. For example, the composite Purchasing Managers' Index inched below 50 in September, typically considered to signal a negative outlook, only to cover at 50 in October. In fact, the weakness is not only due to manufacturing (well below 50 since many months), but also stems from the services sector (though still remains above 50) that is a key component of what is driving the economy so far. Labour market remains strong, e.g., based on employment, and wage growth. However, some signs of cooling are showing up. For example, employment growth for the Euro area slowed to 0.2% in the second quarter, from 0.3% in the first, while forward leading indicators point to moderation in labour demand<sup>2</sup>. Less labour hoarding, in case growth deteriorates, can amplify the impact on the real economy and financial markets.

**Consumer consumption has not been impressive so far, failing to boost growth.** In other words, higher real wages are not proving as supportive as expected for consumption and growth. Instead, saving ratios continue to increase. In fact, unless consumer confidence meaningfully recovers from the continuing negative sentiment, the precautionary savings effect will most likely prevail looking ahead. However, buffers remain at the discretion of the households, leaving scope for insulating future shocks.

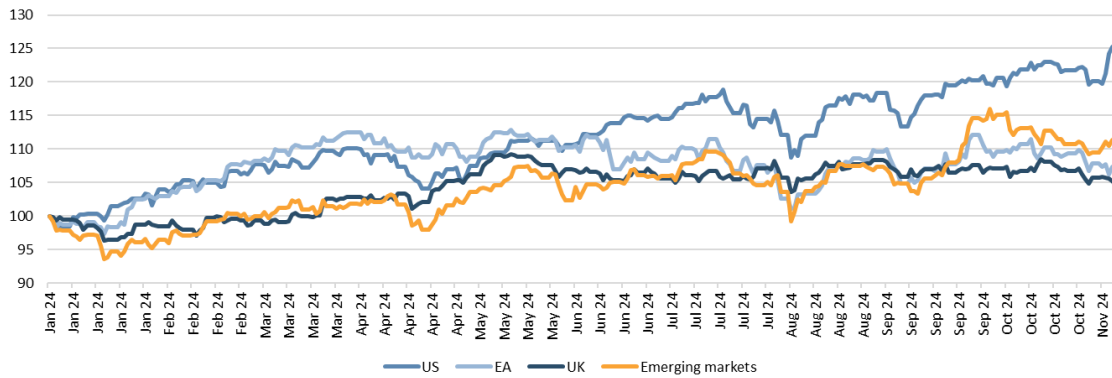
**Financial conditions show resilience.** The swift and quick recovery of the early August equity market correction proved that financial markets are resilient but remain fragile to unexpected bad news. The main uncertainty remains to which extent risk premia (e.g. spreads) are appropriately priced to capture the complexity of the current risk landscape (Figure 4). If too benign, unexpected bad news can propagate and result in excessive volatility. The initial market reaction following the recent election developments was relatively mute.

<sup>1</sup> [Eurostatistics 09/2024 \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=sdg_8_4_1&plugin=1).

<sup>2</sup> [Economic Bulletin Issue 6, 2024 \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=sdg_8_4_1&plugin=1).

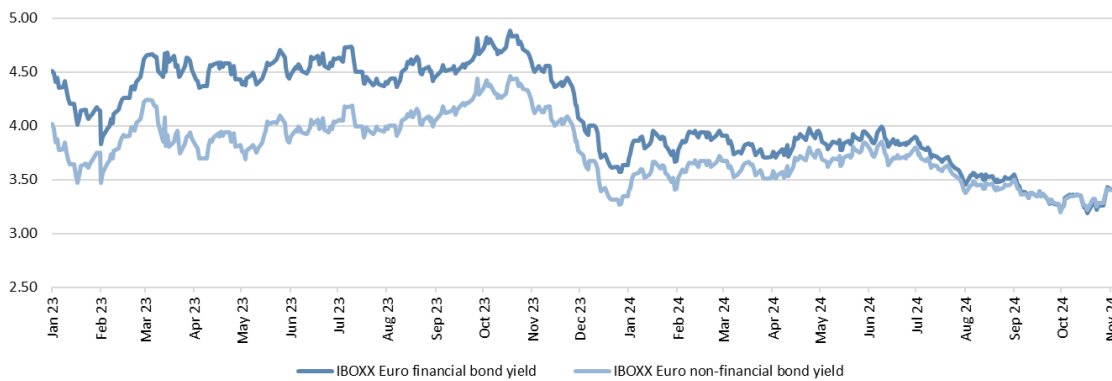


Figure 3: Equity performance (01/01/2024=100)



Source: Refinitiv, cut-off date 08/11/2024

Figure 4: Corporate bond yields (in %)



Source: Refinitiv, cut-off date 07/11/2024

**The combination of rising costs, reduced demand, and broader economic pressures has created a challenging environment for the real estate market in recent years.** Starting in 2022, rising interest rates, implemented by central banks to curb inflation, have significantly increased the cost of borrowing, making mortgages and commercial loans more expensive. This has diminished buyer demand and reduced affordability, particularly in residential real estate. Additionally, high inflation and economic uncertainty were potential factors that held back investors and developers, leading to decreased transaction volumes and slower market activity. These, in conjunction with the consequences of the COVID-19 pandemic that meant a shift towards remote work, have weakened demand for commercial spaces, further contributing to declining property values and higher vacancy rates. EU insurers and pension funds invest around 10% of their portfolios in real estate related assets.

**Insurers and IORPs, with robust aggregate solvency positions, appear well positioned to absorb potential shocks.** Even though the median SCR ratio for all types of undertakings showed a slight reduction in Q2 2024, insurers are still well capitalised above the 100% SCR threshold (Figure 5). Life undertakings reported the highest solvency ratio in Q2 2024 (239.2% median SCR ratio), followed by composites (218.8% median SCR ratio) and non-life undertakings (212.6% median SCR

ratio). The funding ratio of EEA defined benefit (DB) IORPs slightly increased from 119.8% to 120.6% in Q2 2024 compared to the same quarter of the previous year (Figure 6).

Figure 5: SCR Ratios by type of undertaking

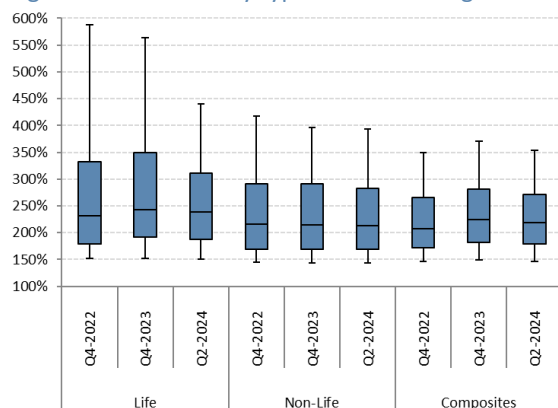
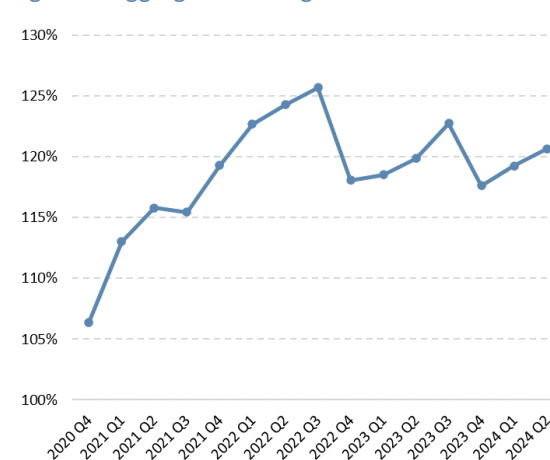


Figure 6: Aggregate Funding Ratio for DB IORPs



Source: SII Quarterly Reporting Solo and Occupational Pension Statistics, Q2 2024

While EIOPA constantly assesses the wide spectrum of risks stemming from the balance sheet exposures of insurers and IORPs, areas of attention in their risk profile are, among others, the potential vulnerabilities stemming from exposures to alternative assets such as real estate investments and the use of funded reinsurance.

The search for yield behaviour observed during low- and ultra-low-interest rate periods, turned into search for investment spread once interest rates increased, pushing insurers to diversify their investments. As reported in the June 2024 Financial Stability Report<sup>3</sup>, insurers increased over time their exposures to alternative forms of assets characterised by higher illiquidity, more complex structures, and higher opacity in the approach to valuation compared to more traditional forms of investments such as listed stocks and fixed income assets. Real estate investments in all their forms, e.g., property, real estate funds, and mortgages embody all the characteristics to qualify as an alternative investment<sup>4</sup>. The evolution of the real estate market and its subsequent impact on property and real estate funds prices calls for thorough scrutiny as also signalled by the warning issued by the ESRB. The first topical focus of the report deep dives into trends and vulnerabilities for insurance and IORP sectors arising from real estate risk in light of most recent developments.

An increasing global trend has been observed in the use of asset intensive reinsurance in the last years. Asset intensive reinsurance, also described as funded reinsurance, involves the transfer of both investment and underwriting risks, typically associated with certain long-dated life insurance liabilities. This type of transaction could pose risks to financial stability. Therefore, the second topical focus presents important insights and implications that have yet to be fully considered by supervisors.

<sup>3</sup> EIOPA (2024) Financial Stability Report. Available at: [EIOPA FINANCIAL STABILITY REPORT \(europa.eu\)](https://www.eiopa.europa.eu/financial-stability-report)

<sup>4</sup> In absence of a commonly recognised definition and classification of alternative assets, the International Association of Insurance Supervisors (IAIS) defines alternative assets according to their risk profile which includes illiquidity, difficulty in valuation, and complex structures (IAIS [2023] GIMAR. Available at: [Global-Insurance-Market-Report-2023.pdf](https://www.iais.org/~/media/Files/2023/GIMAR/GIMAR-2023.pdf)).

**Insurers provide protection and long-term funding to the economy, contributing to the global and European financial stability.** The increased role of non-bank financial intermediation (NBFI) brings under the spotlight the systemic relevance of the sectors therein and the related regulatory frameworks<sup>5</sup>. NBFI comprises very diverse financial sectors including regulated entities such as asset management companies and investment funds, non-bank investment firms, pension funds, insurance companies, as well as unregulated entities, such as family offices and supply chain finance companies. The insurance sector operates globally under heterogeneous microprudential Solvency regimes. European insurers operate under Solvency II, which, while being a microprudential framework, it entails since its inception instruments with macroprudential implications, and the Solvency II review reinforces these aspects. Additionally, European supervisors and European insurers contribute to the Global Monitoring Exercise run annually by the IAIS as part of the Holistic Framework for the assessment and mitigation of systemic risk in the insurance sector.

**EIOPA, in line with its mandate<sup>6</sup>, contributes to the assessment of the systemic implication of the European insurance industry.** The European Systemic Risk Assessment Framework (SRAF), in place since 2022, has the goal of supporting EIOPA and its members to determine their own view on EEA insurance market trends and developments as well as the current and potential future systemic risk in the European insurance sector. In this context, the third topical focus describes the main methodological and organisational elements of the SRAF, providing also the highlights of the 2024 risk assessment that cover the main sources of systemic risk.

**Besides the risks elaborated in this report, emerging risks such as climate remain high in the agenda of EIOPA. Recurring droughts and wildfires as well as other climate-related events across Europe during the summer have sadly become a near-normal occurrence.** Addressing the risks posed by climate change to insurers and pension funds continues to be a central focus of EIOPA's work. Adaptation and prevention measures are key elements of policy action, which should also be at the core of potential policy measures to be taken to reduce the climate insurance protection gap, such as possible national or EU-wide public-private partnerships to absorb higher loss layers<sup>7</sup>.

**The global disruption in the IT system experienced during summer, the rise in cyber-attacks, and concerns over hybrid geopolitical conflicts cannot be ignored.** The global IT disruption in July, triggered by the CrowdStrike update, underscores the breadth of vulnerabilities tied to operational risks. In the light of these, supervisors' attention to digitalisation and cyber risks has to further increase going forward, with the Digital Operational Resilience Act (DORA) paving the path for this reinforcement. Additionally, institutions and supervisors should be prepared to tackle challenges introduced by emerging technologies such as artificial intelligence.

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<sup>5</sup> Refer to EC (2023) Targeted consultation assessing the adequacy of macroprudential policies for non-bank financial intermediation (NBFI). Available at: [Targeted consultation assessing the adequacy of macroprudential policies for non-bank financial intermediation \(NBFI\) - European Commission \(europa.eu\)](#)

<sup>6</sup> According to its Regulation, EIOPA shall develop criteria for the identification and measurement of systemic risk.

<sup>7</sup> [Staff Paper on Policy options to reduce the climate insurance protection gap \(europa.eu\)](#)

# TOPICAL FOCUSES

# 1. EEA INSURERS' AND IORPS' REAL ESTATE RELATED INVESTMENTS: TRENDS AND VULNERABILITIES

*This topical focus discusses potential vulnerabilities to insurers and pension funds stemming from recent developments in real estate. The shift to remote work during the Covid-19 pandemic decreased the demand for office space, but the overall impact on commercial real estate was limited. However, with the sharp increase in inflation and interest rates from 2022 onwards, both commercial and residential real estate valuations declined, albeit to varying degrees across EU countries.*

*Since the entry into force of Solvency II, when granular reporting data became available, insurers continued to increase their real estate investments, which now account for approximately 10% of total investments (excluding unit-linked business), with exposures via funds showing the largest growth throughout the last eight years. When investing in real estate related assets, life insurers invest primarily in mortgages (43.3%) and funds (24.2%), while non-life insurers invest extensively via funds (34.6%) and direct property ownership (27.1%). Similarly, IORPs real estate assets, now account for almost 10% of total investments, with exposures via funds representing the lions' share of more than 50%. For IORPs, reporting data is available to EIOPA only from 2020 and exposures have been quite stable since then.*

*Notably, insurers did not engage in active rebalancing of their real estate investments during the recent downturn, indicating that they are not acting pro-cyclically. Historically, insurers have generated attractive rental yields (approximately 4% per annum) from direct property ownership. A concern is that rental income may deteriorate because of the weak macroeconomic environment, but the analysis suggests that the impact on the overall sector profitability would be negligible, given that insurers derive only a small share of their cash-flow income from property. A sensitivity analysis on all real estate related investments reveals that even a strong shock in the real estate market alone would have a modest impact on the insurance sector's Excess of Assets over Liabilities, with some individual exceptions. A similar analysis on IORPs, at the country level, also shows a very low material impact of real estate risk.*

## INTRODUCTION

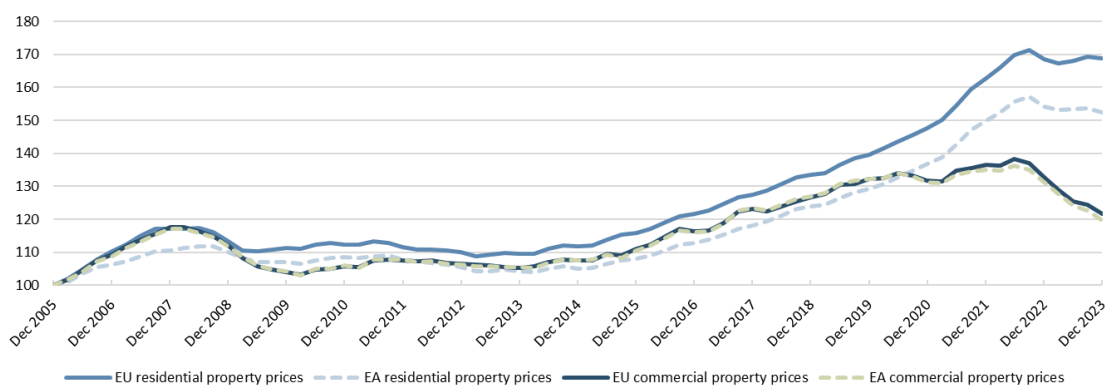
**The dynamics of real estate are significantly relevant for the overall economy for three main reasons.** Firstly, the unwinding of construction booms typically has a profound impact on the growth rates of national economies. Secondly, periods marked by substantial declines in house prices often lead to a surge in mortgage defaults. This situation erodes bank profits, increases the

risk of bank failures, and adversely impacts other real estate investors. Thirdly, house prices trends are crucial as they influence household wealth and consequently consumer spending.

**Insurers are directly exposed to the real estate market through their investment portfolios.** Real estate holdings are characterized by their illiquidity; properties are infrequently sold, typically traded on private markets, and transaction prices are often kept confidential. For insurers, illiquid real estate investments are appealing because they align well with their long-term, illiquid liabilities and can offer an illiquidity premium. This appeal has been particularly pronounced during the period of ultra-low interest rates. Indeed, on aggregate, there has been a steady shift from low- or negative-yielding assets towards alternative investments and asset classes that offer potentially higher yields.<sup>8</sup>

**The European real estate market reached a turning point at the end of 2022 (Figure T1.1).** Following a sustained period of rising prices that began in the aftermath of the 2007-2008 global financial crisis, there are now definitive signs indicating that the market has surpassed its historical peak.

Figure T1.1: Commercial and residential real estate prices in the EU and EA (Dec 2005 = 100)



Source: ECB, Statistical Data Warehouse, RESC - Real Estate Statistics - Commercial property prices and Residential property prices, Eurostat. Index 2005 Q4 = 100. For EA RRE Euro area 20 (fixed composition) as of 1 January 2023, for EA CRE Euro area 18 (fixed composition) as of 1 January 2014. For EU RRE changing composition is considered, for CRE prices the EU27 (fixed composition) as of 31 January 2020 (Brexit) is considered. Downloaded 10 October 2024.

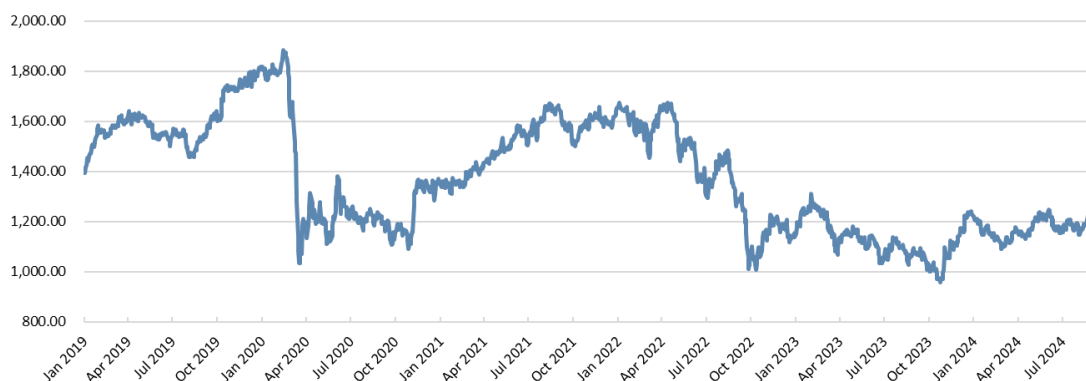
**Commercial Real Estate (CRE) is a cyclical market characterised by the inelasticity of supply, which limits the sector's ability to rapidly adjust to a shift in demand.** Structural changes such as the increased adoption of remote work and a subdued economic forecast may exert additional downward pressure on CRE prices. Real estate price trends can also be gauged by analysing the market valuations of Real Estate Investment Trusts (REITs)<sup>9</sup>. Although REIT prices can be as volatile as the broader market, and the underlying properties are often leveraged, over the long term, they tend to reflect the value of commercial property portfolios. The Euronext IEIF REIT Europe index, which represents European commercial real estate companies, experienced a significant drop during the COVID-19 pandemic and has not fully recovered to its early 2020 peak (Figure T1.2). As the index shows, REIT valuations have been adversely affected by rising interest rates,

<sup>8</sup> EIOPA - Impact of ultra-low yields on the insurance sector, including first effects of COVID-19 crisis [\[link\]](#).

<sup>9</sup> REITs are companies that own, operate, or finance income producing real estate, and they are highly sensitive to interest rates and inflation changes.

with a further price decrease in 2022. One reason for the valuation slump in the wake of increased interest rates is the leveraged nature of REIT portfolios, which leads many investors to treat REITs as bond alternatives. Furthermore, low valuations can pressure constructors, potentially resulting in a deceleration of new property developments.

Figure T1.2: Daily prices of index Euronext IEIF REIT Europe (Jan 2019 – Sept 2024)



Source: Euronext

**Over the recent years, the COVID-19 crisis and the rise in interest rates have had divergent impacts on the commercial and residential real estate sectors.** During the pandemic, residential real estate experienced an uptick in valuations, driven by work-from-home policies and the increasing desire for larger living spaces. Conversely, commercial real estate suffered due to decreased demand for office space and the shift towards new hybrid work models. Instead, higher interest rates have negatively influenced both sectors, as tighter financing conditions put pressure on households seeking to buy homes and on developers financing new construction projects<sup>10</sup>. Also, the slowdown in residential real estate investments could lead to a supply shortage, which may sustain or even drive-up rents and prices in the future.

**The real estate cycle varies significantly between countries.** In 2023, Germany experienced one of the steepest declines in house prices, with an 8.4% drop reported by the Federal Statistical Offices. Scandinavian countries also saw negative trends, with residential house prices falling by 5.3% in SE, 5.7% in FI, and 4.2% in DK. High financing costs and weakening house prices affected Sweden's housing construction and investment sectors. Finland's economy entered a recession in 2023, with real GDP shrinking by 1.2%<sup>11</sup>. The construction industry faced more bankruptcies than during the global financial crisis of 2009, significantly contributing to the downturn. The country had not witnessed such a substantial decline in real estate prices since the early 1990s, when it suffered its worst recession. The most pronounced decrease occurred in the Helsinki metropolitan area, where housing prices fell by 7.7% year-on-year<sup>12</sup>. However, not all EU countries saw a decrease in property values. In 2023, Greece and Croatia experienced double-digit growth rates,

<sup>10</sup> According to research from UBS, the financially affordable living space for a skilled service-sector worker is, on average, 40% less than in 2021, before the rise in global interest rates. UBS Global Real Estate Bubble Index, September 2024.

<sup>11</sup> IMF, [World Economic Outlook \(April 2024\) - Real GDP growth \(imf.org\)](https://www.imf.org/en/Publications/WEO/Issues/2024/04/01/w2404)

<sup>12</sup> Statistics Finland,

[https://pxdata.stat.fi/PxWeb/pxweb/fi/StatFin/StatFin\\_ashi/statfin\\_ashi\\_pxt\\_13ms.px/table/tableViewLayout1](https://pxdata.stat.fi/PxWeb/pxweb/fi/StatFin/StatFin_ashi/statfin_ashi_pxt_13ms.px/table/tableViewLayout1)

driven by foreign investments. For Greece, the main drivers of economic growth included private consumption, investments and other external factors, such as the strong performance of the tourism sector. In Italy and Spain markets remained relatively stable.

**Several factors could adversely affect the near-term outlook for real estate, especially CRE.**

Demand for office space remains weak and even though interest rates are on a downward trajectory, they are unlikely to return to the lows observed in recent years. The primary concern is the still high level of interest rates, which, in a market that heavily relies on debt for financing deals, leads to increased borrowing costs and deters investment in the sector. Indeed, numerous real estate investors will soon face the challenge of refinancing at higher rates. Concerns regarding “higher-for-longer” prompted global investors to scale back their real estate allocations to a 15-year low. Worries over the sector are further evidenced by the steep decline in commercial real estate transactions which, at the beginning of 2024, reached a 13-year low<sup>13</sup>. On the supply side, sellers want to avoid crystalizing losses following decreased asset valuations, while on the demand side lower occupancy rates and shifts in working patterns have reduced the need for new office spaces. This combination of factors has resulted in European office values plummeting by an average of 23.7% from their peak in 2022<sup>14</sup>.

**The European Systemic Risk Board (ESRB) has intensified its focus on risks within the commercial real estate sector, issuing a recommendation to tackle its vulnerabilities<sup>15</sup>.** The ESRB advised European and national authorities to increase their monitoring of the sector. The idea is that supervisory authorities should ensure sound financing practices in the European commercial real estate market and take steps to increase the resilience of financial institutions engaged in the sector.

## TRENDS AND OVERVIEW OF EEA INSURERS’ REAL ESTATE RELATED INVESTMENTS

**Insurers’ real estate related investments excluding unit-linked<sup>16</sup> increased from 7.3% to a peak of 10.4% of total investments in Q4 2022 (Figure T1.3 a), and the declined later, in Q2 2024, to 9.9%.** As of Q2 2024, real estate funds account for 2.6% of total investments. Mortgages and loans represent 2.7% and direct investments in property stand at approximately 1.9%. Equity holdings in real estate sector firms, mainly consisting of shares in real estate companies, constitute 1.7%.

<sup>13</sup> According to CBRE data, Q2 2024 investment volumes in the office space are 39% lower compared to the same quarter of 2022, with a total volume of 9.2Bn in the Q2 2024. CBRE, European Real Estate Investment Volumes Q2 2024.

<sup>14</sup> According to Green Street pan-European commercial property price index. Green Street’s Commercial Property Price Index is a time series of unleveraged Pan-European commercial property values that captures the prices at which commercial real estate transactions are currently being negotiated and contracted.

<sup>15</sup> The ESRB has identified several vulnerabilities in the commercial real estate sector. These stem from cyclical developments such as the increase in inflation and the deterioration in the growth outlook, as well as structural changes such as climate-related policies. Adverse developments in the sector can spill over to the broader financial system, given the interconnectedness of the commercial real estate market with banks, funds and insurers. This makes the commercial real estate sector a potential source of risk to financial stability.

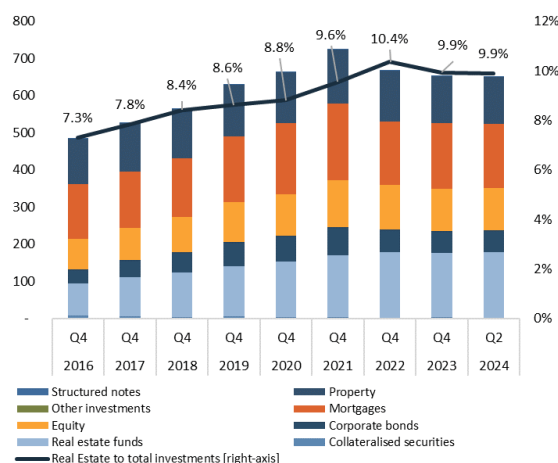
<sup>16</sup> Unit-linked, as of Q2 2024, UL real estate investments amount to approx. EUR 72 Bn. which is (only) 11.5% of total real estate investments; UL portfolio breakdown: 53.8% is Real Estate Funds, 23.3% Equity and 14.3% Property and 5.6% by others (See Figure 8).



Furthermore, insurers allocate 0.9% of their investments to corporate bonds issued by these firms. Overall, direct property investments have only slightly increased in value over time, with most of the growth in real estate related funds, corporate bonds, and equity.

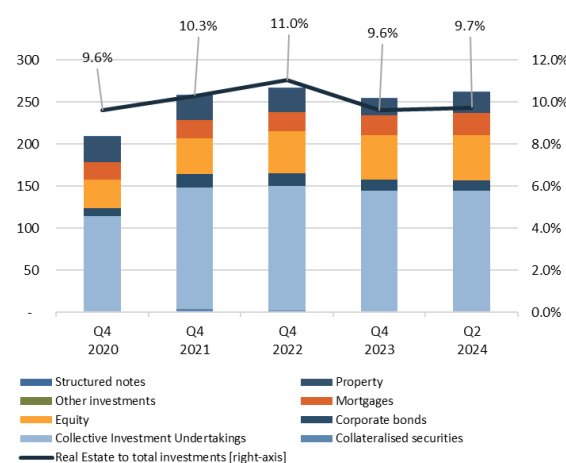
**IORPs’ real estate related investments decreased from 11.0% to 9.7% of total investments in Q4 2023 compared to Q4 2022 (Figure T1.3 b).** As of Q1 2024, Collective Investment Undertakings (CIUs) represent roughly 6% of total investments in real estate related positions. Mortgages and direct investments in property represent roughly 1%. Equity and bonds of real estate firms respectively 2.0% and 0.4%.

Figure T1.3 a: Insurer’s real estate related investments to total investments



Source: Solvency II data, Quarterly Solo Reporting, Q2 2024. Unit linked and index-linked business is excluded.

Figure T1.3 b: IORP’s real estate related investments to total investments



Source: EIOPA Occupational Pensions Statistics – Quarterly Reporting, Q2 2024. All pension scheme types are included.

**As of Q2 2024, real estate related investments (excluding unit-linked) amount to approximately EUR 650 bn with insurers from DE, FR, NL, and BE showing the largest exposures.** Among these countries, insurers from the NL and BE stand out for exposures towards mortgages while Italian and French insurers for exposures towards real estate funds (Figure T1.4 a). Insurers registered in Austria and Spain have large exposures towards direct property holdings while the ones from NO, DK, SE, and PT have more significant exposures towards equity issued by real estate companies.

**As of Q2 2024, IORPs real estate related investments amount to approx. EUR 260 bn. with IORPs from NL, SE and DE having the largest exposures (Figure T.4 b).** Among the IORPs with the largest holdings in real estate related assets, exposures towards mortgages are higher for pension funds in NL, SE and DE and quite low for the others. Holdings through CIUs represent the highest exposure for most of the IORPs at country level. IORPs registered in LU, SE, BE and IT show the highest exposures towards equity of real estate.

Figure T1.4 a: Insurers’ Real estate related investments by home country

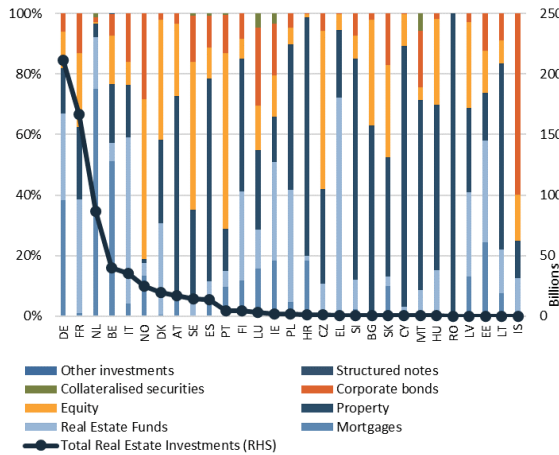
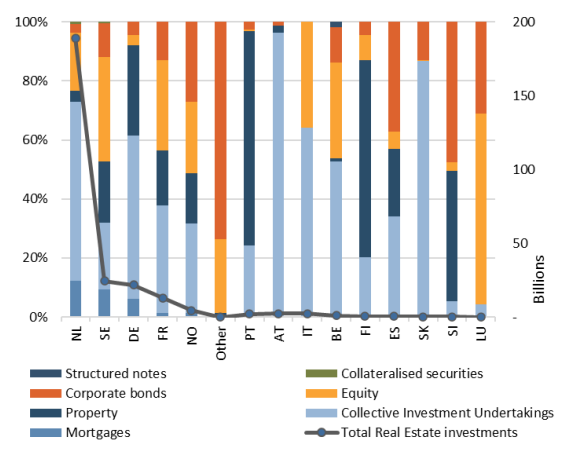


Figure T1.4 b: IORPs’ Real estate related investments by home country



Source: Solvency II data, Quarterly Solo Reporting, Q2 2024. Unit linked and index-linked business is excluded.

Source: EIOPA Occupational Pensions Statistics – Quarterly Reporting, Q2 2024

In Solvency II reporting data, for some asset categories real estate related investments can be split between Commercial (CRE) and Residential (RRE)<sup>17</sup>. Figure T1.5 a shows that out of total real estate related investments, mortgages represent 27.2%, real estate funds 26.5%, property 19.5%, equity 17.6 %, corporate bonds 8.9%, and other residual categories 1%.

Figure T1.5 a. Insurer’s real estate related investments split by asset classes and type: CRE versus RRE

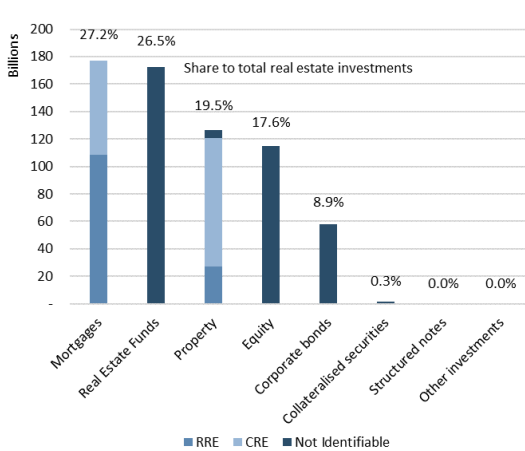
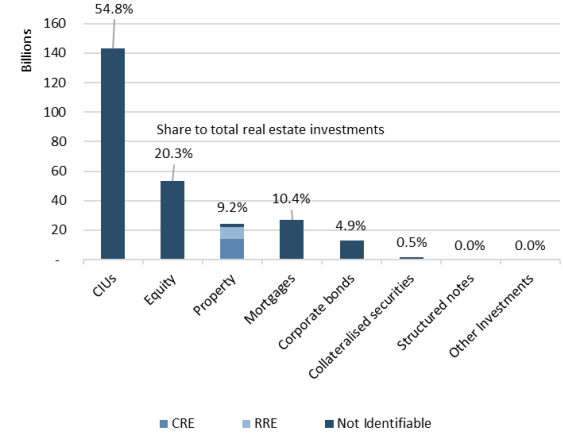


Figure T1.5 b: IORP’s real estate related investments split by asset class and type: CRE versus RRE



Source: Solvency II data, Quarterly Solo Reporting, Q2 2024. Unit linked and index-linked business is excluded.

Source: EIOPA Occupational Pensions Statistics – Quarterly Reporting, Q2 2024

<sup>17</sup> Criteria to identify real estate related investments in SII data can be found at FAQ insurance statistics (europa.eu), however for what concerns the distinction between Residential (RRE) and Commercial Real Estate (CRE) within the category Mortgages & Loans this topical focus take a different approach. This is due to the fact that in this FSR topical focus the best effort is done to be able to keep the distinction between RRE and CRE; in the EIOPA published statistics this is not possible at the moment due to the recent taxonomy change, however reporting instructions on the mortgage categorisation are under revision and classifications could change in the future. The methodology used in this topical focus is the following: on a best effort basis for CIC84-87-88 RRE is identified as those for which CO200 in S.06.02 is accurately filled as “Loans to other natural person” or “Loans to AMSB members”. For each CICs 84-87-88, CRE is assumed to be the complement (this is a reasonable assumption).

For IORPs, while some asset categories of real estate related investments can be split between Commercial (CRE) and Residential (RRE)<sup>18</sup>, a very large portion falls under the “Not Identifiable” category. Considering this split, Figure T1.5 b shows that out of total real estate related investments CIUs represent almost 55% of the investment bucket, equity 20.3% and property 9.2%, mortgages 10.4% and corporate bonds 4.9%.

CRE is generally considered to be more vulnerable because its dynamics is more linked to the economic cycle (leveraged investments, pandemic and home-office pattern, etc.). For insurers, mortgages are predominantly RRE while property more CRE. In fact, it is possible to see that CRE represents 38% of the mortgages and 74% of the property class.

AT, BE, DE and NL insurers have significant exposures to RRE (Figure T1.6 a). Insurers from DK, NO and SE have a large share of not classified exposure. These often relate to equity in real estate firms, which may in turn be linked to both CRE and RRE. Consequently, it is important to closely monitor both market segments, especially given the negative impact on both areas of the Scandinavian real estate market.

For IORPs, the split between RRE and CRE is available only for the “property” category, with a prevalence of the CRE component. Figure T1.6 b shows that German IORPs are characterised by the most material exposure towards RRE, followed by IORPs in FR, SE and NL. IORPs in most of the countries show a large share of not identifiable exposures. This is because, as already pointed out, these are characterised by exposures towards equity of real estate and funds, which might be in turn exposed to both CRE and RRE.

Figure T1.6 a: Insurer’s real estate related investments split by type of real estate (CRE versus RRE) and home country

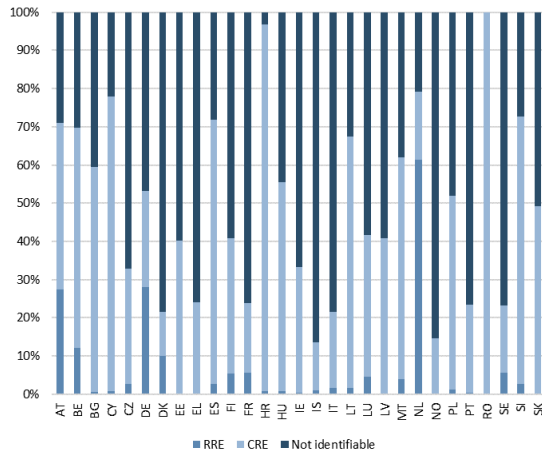
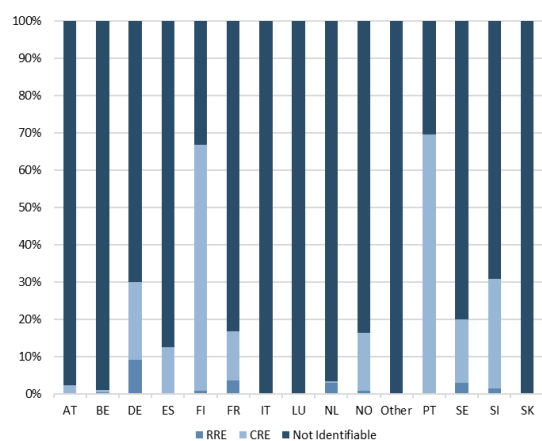


Figure T1.6 b: IORP’s real estate related investments split by type (CRE versus RRE) and home country



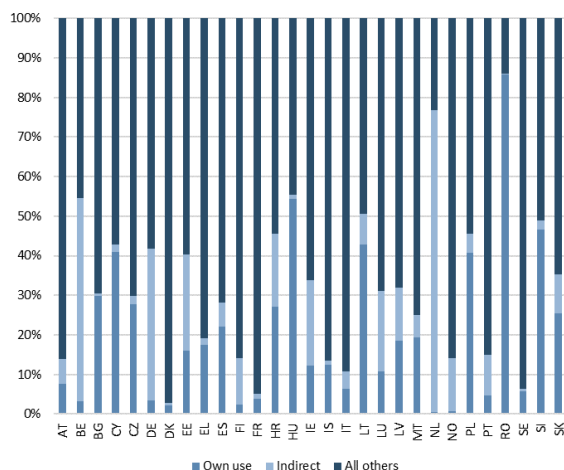
Note. The distinction between CRE and RRE is made where possible i.e., for investment category “Property” and “Mortgages”. Therefore, the dark-blue bar captures investments that are not in “property” or “mortgages”. 2024 Q2. Unit linked and index-linked business is excluded.

Source: EIOPA Occupational Pensions Statistics – Quarterly Reporting, Q2 2024

<sup>18</sup> Criteria to identify real estate related investments in IORP data and the definition of CRE versus RRE can be found at: [FAQ Occupational Pensions statistics – Section 22 \(europa.eu\)](#)

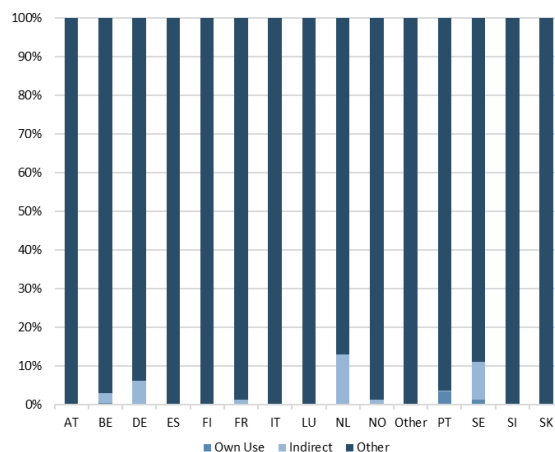
Real estate related investments can be also split between “own use” (property for own use), “indirect” (structured notes, collateralised securities and mortgages) and “all others” (property for investment, real estate funds, equity and bonds of real estate corporations)<sup>19</sup>. Figure T1.7 a and Figure T1.7 b show the split by country for insurers and IORPs respectively. BE, DE, LI and NL insurers are characterised by large indirect (basically mortgages) exposures towards real estate investments. For IORPs, NL, SE, and DE are characterised by large indirect (basically mortgages) exposures towards real estate investments.

Figure T1.7 a: Insurers real estate related investments by types: 1) Own use, 2) Indirect and 3) all others



Note. Own use: CIC 93, 95 and 96 (property). Indirect: CIC 55, 65 and 84-87-88 (collateralised sec., structured notes, and mortgages & loans, loans to AMBS members and other loans to natural person). All other real estate exposures. Quarterly. Reference date 2024 Q2. Unit linked and index-linked business is excluded.

Figure T1.7 b: IORPs real estate related investments by types: 1) Own use, 2) Indirect and 3) other



Note. Own use: CIC 93, 95 and 96 (property). Indirect: CIC 55, 65 and 84 (collateralised sec., structured notes, and mortgages). All other real estate exposures. Quarterly. Reference date 2024 Q2.

Among all types of insurers, life insurers are those which hold more real estate assets (13.6% of investments), but also non-life invest materially in real estate (9.6% of investments) (Figure T1.8). Life insurers invest relatively more in mortgages (43.3%), non-life invest more extensively in funds (34.6%) and property (27.1%), reinsurers invest in equity (45.6%) of real estate corporations and in property (31.9%) while UL/IL insurers are invested primarily in funds (53.8%) and equity (23.3%).

<sup>19</sup> “Own use” (property for own use CIC 93, 95 and 96), “indirect” (structured notes CIC 55, collateralised securities CIC 65 and mortgages & loans 84-87-88) and “all others”. Criteria to identify real estate related investments in SII data and the definition of CRE versus RRE are explained in footnote 17.

Figure T1.8: Real estate related investments broken down by type of investment by type of insurers.

Type of Investment	Composites	Life	Non-Life	Reinsurance	Unit-linked	Total
Real Estate Funds	27.0%	24.2%	34.6%	10.1%	53.8%	29.3%
Mortgages	12.0%	43.3%	17.2%	3.9%	3.7%	24.9%
Mortgages and loans (CRE)	82.6%	29.6%	39.1%	99.9%	9.6%	38.2%
Mortgages and loans (RRE)	17.4%	70.4%	60.9%	0.1%	90.4%	61.8%
Property	25.2%	11.8%	27.1%	31.9%	14.3%	19.0%
Not identifiable	5.2%	6.1%	1.8%	4.1%	16.4%	5.5%
Property (CRE)	73.9%	64.6%	82.4%	85.4%	59.0%	72.8%
Property (RRE)	21.0%	29.3%	15.8%		24.7%	21.8%
Equity	24.4%	13.3%	11.5%	45.6%	23.3%	18.2%
Corporate bonds	11.3%	7.2%	9.1%	7.3%	3.9%	8.4%
Collateralised securities	0.1%	0.2%	0.5%	1.2%	0.1%	0.2%
Structured notes	0.0%	0.0%	0.0%	0.0%	1.0%	0.1%
Other investments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Real Estate Total (EUR bn)	213	303	114	20	72	723
Total Investments (EUR bn)	2,456	2,221	1,185	720	2,077	8,658
Real estate to total investments	8.7%	13.6%	9.6%	2.8%	3.5%	8.3%

Source: Solvency II, Solo Reporting – Quarterly. 2024 Q2. Unit linked and index-linked business is excluded. Note: Criteria to identify real estate related investments in SII data and the definition of CRE versus RRE are explained in footnote 17.

## ACTIVITY ON REAL ESTATE INVESTMENTS DURING THE RECENT DOWNTURN

Following the sharp interest rates increase in 2022 and the downward correction of real estate markets, three questions emerged. The first is whether insurers have actively rebalanced real estate investments. The second is whether valuations adjustments of real estate holdings have been timely and the third is to what extent insurers have adjusted the valuations and whether these do reflect actual market developments.

There has been no material sell-off of real estate investments by insurers. An extensive analysis of the Solvency II reporting data delivers this result for the different asset classes. This information is synthesized in Table T1.1 below.

Table T1.1: Rebalancing real estate related investments in Solvency II

<b>Real estate funds</b>	Starting from approximately EUR 87 bn, positions have increased by around 100% since the introduction of Solvency II, it is therefore the type of real estate asset that increased the most among all (from 1.3% to 2.7% of total investments, excluding unit-linked and index-linked business). Even if this is potentially the most liquid of the real estate investments, no material rebalancing is observed <sup>20</sup> .
<b>Mortgages</b>	Due to the rise in interest rates, the valuations of mortgages experienced a significant drop. In terms of size, mortgages have also interrupted the previous positive trend. There's still a need to evaluate if credit quality has worsened and whether lenders have realised losses.
<b>Property</b>	This is typically a buy and hold type of asset. In insurers' balance sheet, property valuations tend to be reassessed <sup>21</sup> only at year-end (Figure T1.9). Market

<sup>20</sup> As also documented in Box 51. Pg 65 in EIOPA FSR June 2024

<sup>21</sup> In order to analyse valuation dynamics, a balanced panel of property items was constructed to disentangle valuation change from volume change (property sold or purchased). Tracking the Solvency II valuations property-by-property over time makes it possible to

	valuations declined across 2022 and 2023, but this has been reflected in reporting with a time-lag only at year end 2023 (Figure T1.10). Over the past year, property valuations in the balance sheets of insurers in the sample have decreased <sup>22</sup> . In the last year, in Germany, overall property valuation decreased by 4.3%, in France by 7.1%, while in Austria and Spain increased by 1% and 3.3% respectively, accordingly to what reported by insurers.
<b>Real estate equity and corporate bonds</b>	It is not observed any material rebalancing of these assets. Real estate bond prices declined by approx. -16% in line with other corporate bonds held by insurers; this is largely driven by interest rates increases. Prices of real estate equity declined less than bonds (i.e. -8%) but decoupled from other equity held by insurers (which increased by 4%).

In order to analyse valuation dynamics, a balanced panel of property items was constructed to disentangle valuation change from volume change (property sold or purchased). Tracking the Solvency II valuations property-by-property over time makes it possible to gain insights into the frequency with which insurers revalue their direct property holdings. The analysis focuses on the insurers from four largest holder countries. The sample includes all office and commercial, residential, own use and other properties.

Figure T1.9 addresses the second question, more precisely whether valuations adjustments are timely. It can be seen that the frequency of zero changes of property valuations is the lowest always in Q4 indicating that adjustments in reporting data tend to take place at year end.

Figure T1.9: Frequency of changes of valuations by quarter (note major negative revision in 2023)

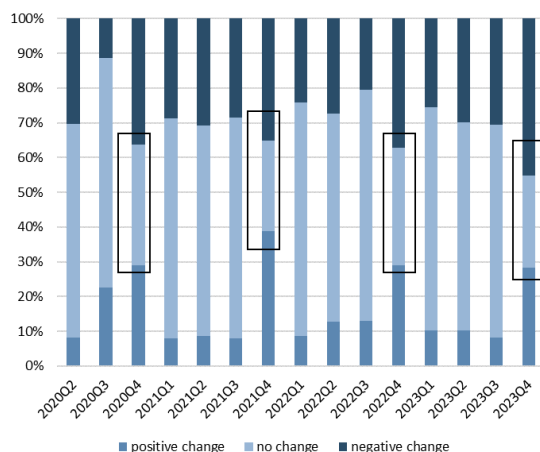
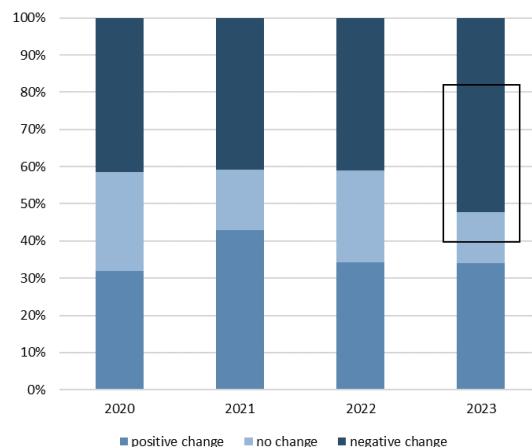


Figure T1.10: Frequency of changes of valuations annualised (note major negative revision in 2023);



Source: EIOPA Quarterly Solo, QRT 06.02; Note that Investments covering unit- or index linked contracts are excluded; SII valuation are based on a balanced panel of property items held from Q1 2018 to Q4 2023 only by AT, DE, FR and ES insurers. More info on methodological aspects are in EIOPA FSR June 2024. Note: major updates took place in Q4 2023;

Finally, regarding the third question, it results that over the past year, property valuations in the balance sheets of insurers in the sample have decreased<sup>23</sup>. In the last year, in DE, overall property valuation decreased by 4.3%, in France by 7.1% while in AT and ES increased by 1% and 3.3%

gain insights into the frequency with which insurers revalue their direct property holdings. The analysis focuses on the four largest holder countries. The sample includes all office and commercial, residential, own use and other properties.

<sup>22</sup> As also documented in pg. 64 of EIOPA FSR June 2024.

<sup>23</sup> As discussed in the EIOPA June 2024 FSR (Figure 5.37 of June FSR).

respectively. External data sources to validate this information with precision are not available, but it seems that market developments have been more severe than what reflected in reporting data.

**Results discussed in the previous paragraphs support the view that during market downturns insurers do not act pro-cyclically.** They purchase investments without borrowing (i.e., no use of financial debt) and are therefore not exposed to the sharp increase in funding costs. The cyclical nature of real estate markets, particularly CRE, tends to be of minor concern for insurers as they typically invest with a long-term perspective. This approach not only enables insurers to weather short-term price swings, but it also positions them to potentially act countercyclically in times of crisis. By continuing to channel premium cash flows into real estate investments, insurers can help stabilize markets during volatile periods.

## RENT-INCOME TO TOTAL INCOME AND PROPERTY HOLDINGS VALUATIONS

**In recent years, insurers have generated attractive returns from direct property ownership, with rental yields in the EEA averaging 4% annually since 2016.** Although their investment valuations are directly impacted by shifts in the real estate market, the consistent rental income provides a steady stream of cash flow. Figure T1.11 illustrates some differences in rental returns among countries, with SK, SI, and BE generating the highest yields. Figure T1.12 shows that property valuations increased steadily over the years generating positive unrealised gains before stabilising in 2022 and then dropping in 2023 (i.e., approx. -5% to holdings). Across quarters, realised gains (i.e. net gains and losses) tend to be only a small share of the total gains, confirming the tendency of insurers to be buy-and-hold investors. On the other hand, rental income has been relatively stable year over year but decreased slightly since 2016 from EUR 4.9 bn to EUR 4.0 bn (approximately -2% per year).

Figure T1.11: Rent income relative to property holding excl. unit-linked business. Median period 2016-2023.

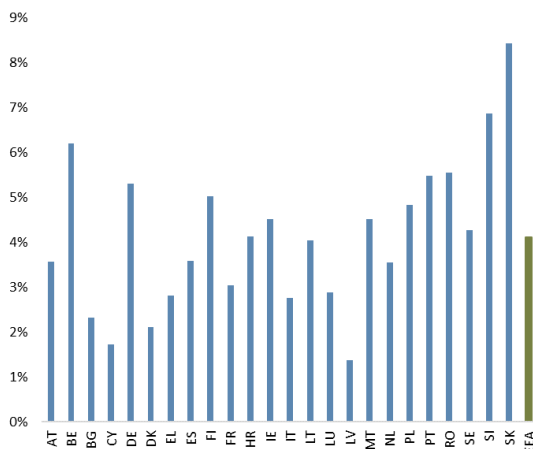
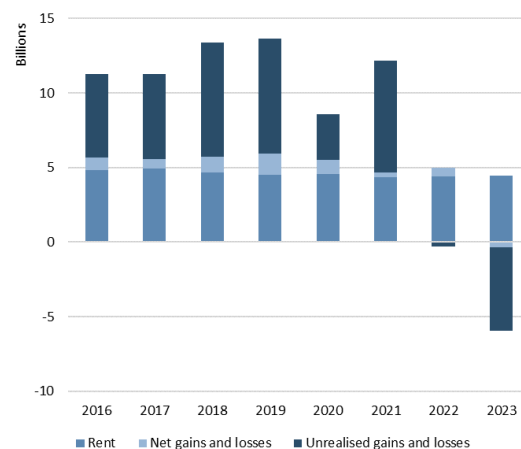


Figure T1.12: Gains and losses and rent income relative to property holding



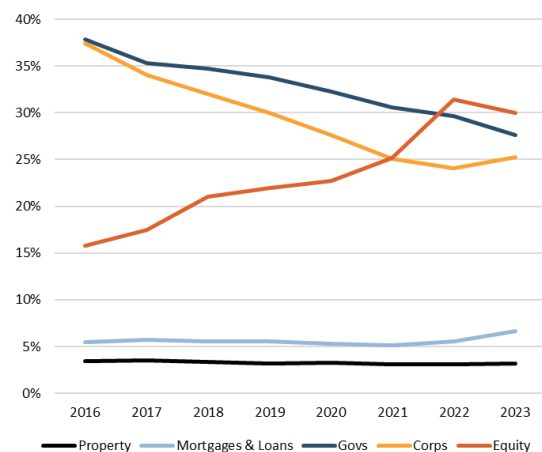
Source: SII QRTs annual solo. Numerator: annual solo reporting, template S.09.01, rent income (column C0090) filtered by property (CIC 9) excluding unit-linked. Denominator: List of assets S.06.02, filtered by property (CIC 9), subcategories office and commercial (1), residential (2), under construction for investment (4) and other (9) excluding unit-linked.



One concern is the potential impact on future cash flows if real estate rents were to decline sharply due to negative market outlooks. This can be examined by assessing the proportion of rental income to total cash flows at annual level.

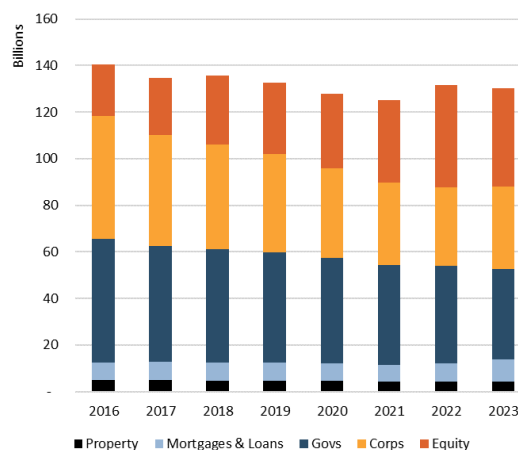
At aggregate level, rental income constitutes a minor portion of insurers’ cash flows, accounting for just approximately 3% of the total annual cash flow income (Figure T1.13). Meanwhile, cash flows from government and corporate bonds have seen a steady decrease due to reinvestments in a persistently low yield environment. In 2023, government bonds account for EUR 38.7 bn, while corporate bonds for EUR 34.5 bn, down from respectively EUR 53.1 bn and EUR 52.5 bn of 2016. In contrast, equity dividends, including holdings in related undertakings, have seen a significant increase from EUR 22.1 bn in 2016 to EUR 42.1 bn in 2023 (Figure T1.14). However, a more detailed analysis of granular data at firm level reveals a notable variation in terms of cash flow sources. In fact, the percentages for the top 15 undertakings ranked by "Rent-to-total cash flows" range considerably in 2023, from 18% to as high as 60%.

Figure T1.13: Realised cash-flow income: relative shares to total cash-flows



Source: SII QRTs annual solo template. Unit-linked and index-linked business is excluded.

Figure T1.14: Realised cash-flow income: by type of investment (EUR bn)



Source: SII QRTs annual solo template S.09.01, rent income (column C0090), dividend income (column C0070) interest income (column C0000). Unit-linked and index-linked business is excluded.

## PROPERTY RISK IN CAPITAL REQUIREMENT

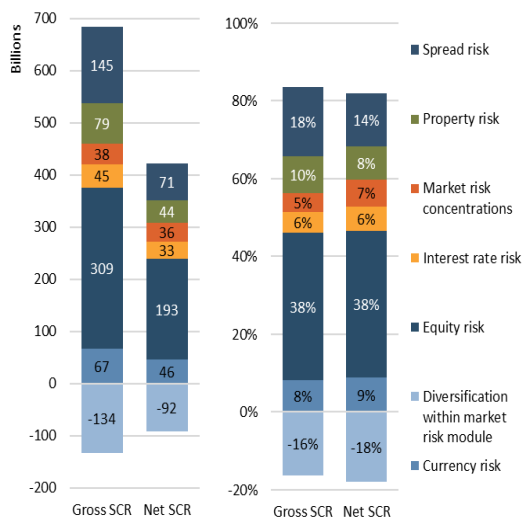
Insurers’ ability to share risk with policyholders on products with profit participation helps mitigating equity and spread risk and to a much lower extent property risk. The comparison between gross and net Solvency Capital Requirement (SCR) shows that the loss absorbing capacity of technical provisions declines capital requirements mostly for equity and spread risk while the impact on property risk is limited (Figure T1.15, this information is available only for standard formula users and does not represent the overall exposure). Property risk represents 8.5% of net SCR but there is a lot of variation in the share of property risk in net SCR across individual insurers within each country<sup>24</sup> (Figure T1.16). For insurers in several

<sup>24</sup> The limitation of this analysis is that it focuses only on standard formula users. As of 2024 Q2, the SCR of the Standard Formula users is approximately 65% of the SCR of all insurers.



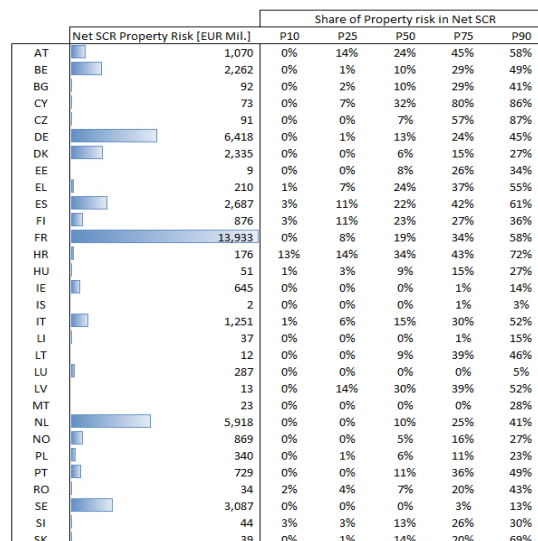
countries (AT, CY, CZ, ES, and HR) the top 25 undertakings in terms of Property risk Net SCR relative to total Net SCR (i.e., 75th percentile), are characterised by shares above 40%.

Figure T1.15: Market risk breakdown: Gross versus net. EUR amount and % breakdown for YE 2023



Source: SII QRTs annual solo. Template S.26.01. QRT available only for standard formula users.

Figure T1.16: Property risk Net SCR. EUR amount and share to total SCR for YE 2023



Source: SII QRTs annual solo. Template S.26.01. QRT available only for standard formula users.

## VULNERABILITIES: IMPACT ON EXCESS OF ASSETS OVER LIABILITIES VIA SENSITIVITY ANALYSIS

As insurers are major investors in the real estate sector, price fluctuations can have a direct impact on their Excess of Assets over Liabilities. To study this relationship, this section examines the ratio of insurers' real estate exposures to their excess of assets over liabilities (EAoL). For this analysis, commercial real estate assets include (based on Solvency II reporting definitions): (i) commercial properties (not for own use), (ii) equity in real estate companies, (iii) real estate investment funds, (iv) commercial mortgages, and (v) corporate debt from real estate firms. Residential properties and mortgages to "Administrative Management and Supervisory body members" and other individuals are categorized as residential real estate.

As of Q2 2024, the average ratio of real estate to EAoL in the EEA stands at 45.6%. This ratio drops to 35.9% when only CRE instruments are considered. A sensitivity analysis conducted on the largest 100 insurers by total assets, indicates that a 10% reduction<sup>25</sup> in the balance sheet valuations of real estate could lead to a 5.6% decrease in the EAoL. Instead, considering all insurance undertakings, the decrease in EAoL would be 4.6%, or 3.6% when only CRE instruments are considered (Table T1.2).

<sup>25</sup> The analysis is such that a one-off flat haircut is applied homogeneously to all asset categories. This is a necessary simplification as it is not trivial to model specific shocks on assets that are different in several dimensions: asset class (e.g. equity, bonds, mortgages etc.), credit risk, maturity, type of real estate exposure (CRE versus RRE).

**A shock in real estate alone, even if strong (e.g., -20%), would only have a modest impact on the Excess of Assets over Liabilities of the insurance sector, but some individual undertakings might be materially affected.** The analysis is extended at individual level as some insurers have a remarkably significant exposure towards real estate. Table T1.2 displays the sensitivity to either 10% or 20% decline in real estate valuations for the top 20 insurers with the largest share of real estate investment to EAoL aggregated in four buckets, i.e. top 5, top 10, top 15 and top 20 complemented by top 100 by total assets. Furthermore, the analysis is done on all insurers. The results show that for the top 5 insurers (bucket), a 20% decline of real estate prices would significantly erode their excess of assets over liabilities i.e., up to 69%. However, even in this case, excess of assets over liabilities would remain above zero for all insurers. Consequently, on an aggregate perspective, it would result in a decline of excess assets over liabilities by 11.2% for the 100 largest insurers (by total assets), by 9.1% for all EU insurers, and by 7.2% if residential real estate instruments are excluded.

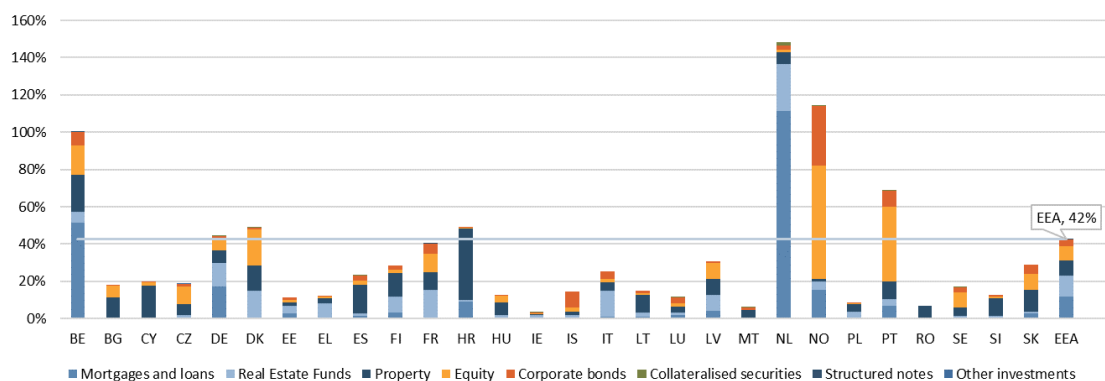
Table T1.2: Vulnerability of insurers in terms of potential excess assets over liabilities decrease (2024 Q2)

Ranking [based on Real Estate/EoAL]	Real Estate [EUR Bn.]	of which % RRE	EoAL [EUR Bn.]	Reduction of EAoL with -10% RE decline	Reduction of EAoL with -20% RE decline
Top 5 bucket	55.0	63%	15.9	35%	69%
Top 10	91.0	44%	32.3	28%	56%
Top 15	142.0	43%	67.8	21%	42%
Top 20	156.4	40%	83.3	19%	38%
Top 100 in TA	240.7	28%	429	5.6%	11.2%
All insurers	628.9	21%	1,380	4.6%	9.1%
All insurers but no RRE shock	495.7		1,380	3.6%	7.2%

Source: Solvency II data, Quarterly solo reporting 2024 Q2. RRE regards only "Property" (property residential CIC 92) and "Mortgages & loans" (CIC 84-87-88 "loans to AMSB ,members" and "loans to other natural person") CRE is from template S.06.02 and includes property (CIC 91 + C93 + CIC 94 + CIC 95 + CIC 96 CIC 99), equity of real estate related corporations (CIC 32), real estate funds (CIC 45), loans & mortgages (CIC 84-87-88) that are not RRE, corporate bonds issued by firms active real estate firms CIC 2, where NACE = F.41.2, F.41.2.0, other (CIC 65 and CIC 55). Excess asset over liabilities (EAoL) is from balance sheet template S.02.01 row R1000. Right columns show hypothetical EAoL if prices of CRE decline by 10% or 20% with keeping everything else constant. Assets that belong to unit and index-linked insurance are excluded.

**Insurers' exposure towards real estate investments over EAoL differs widely across countries (Figure T1.17 a).** It is particularly high for insurers in the NL (148.1%), NO (114.0%) and BE (100.1%). This implies that a shock of respectively 10% and 20% would reduce EAoL by 14.81% and 29.62% for the Dutch insurance sector, by 11.40% and 22.80% for the Norwegian insurance sector and by 10.0% and 20.0% for the Belgian insurance sector. In all other countries, a decline in real estate asset values would not have a strong negative impact. Out of total exposures towards real estate, commercial real estate prevails, indeed residential real estate (not shown here) is material only for NL (60%), BE (40%) and DE (20%) and can be considered of lower risk.

Figure T1.17 a: Insurers’ Real Estate related investments to excess of assets over liabilities by country (as of Q2 2024)

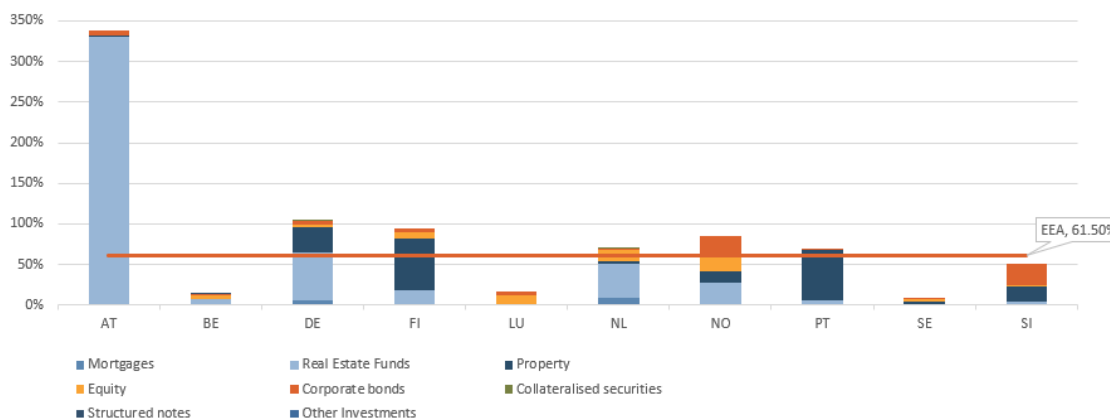


Source: Solvency II, Solo Reporting – Quarterly. Assets that belong to unit and index-linked insurance are excluded.

Given the data limitations on IORPs reporting, it is not possible to distinguish precisely for all individual undertakings, across the various countries, between Defined Benefits (DB) and Defined Contributions (DC) related investments where risks are borne respectively by IORPs and beneficiaries. For this reason, a granular sensitivity analysis is not proposed for IORPs as done for insurers. In any case it is possible to offer a risk perspective for those countries with DB IORPs.

Also, IORPs exposure towards real estate investments over excess of assets over liabilities differs widely across countries (Figure T1.17 b). The ratio is material in only 7 EEA countries. It is particularly high for insurers in Austria (330%), while for insurers in countries like DE, FI, NL, NO, PT and SI it ranges between 50% and 100%. In summary, a decline in real estate asset values would not have a large negative impact on IORPs.

Figure T1.17 b. IORPs real estate related investments to excess of assets over liabilities by country for DB IORPs



Source: EIOPA Occupational Pensions Statistics – Quarterly Reporting, Q2 2024. Only for investments under defined benefits schemes. For this reason, not all countries with IORPs are included in the figure.

## CONCLUSIONS

**In conclusion, while insurers are significant investors in real estate related assets, the overall risks to the insurance sector appear to be limited, albeit some individual material exposures.** It is also important to recognise that downturns in the real estate market rarely occur in isolation; instead, they are often influenced by other factors, such as for example interest rates, or even have an impact on economic growth. A more thorough analysis that accounts for price fluctuations in other instruments would be well-suited to address the overall impact on insurers' balance sheet.

**The results of this analysis support the view that during market downturns insurers do not act pro-cyclically.** As they purchase investments without borrowing (no use of financial debt) they are not exposed to the sharp increase in funding costs. Furthermore, the cyclicality of real estate markets, particularly CRE, is not a significant concern for insurers. In fact, undertakings are typically long-term investors that can hold assets through economic cycles and are able to withstand short-term price fluctuations. Moreover, insurers can potentially act countercyclically in times of crisis by utilising premium cash flows to invest in real estate and stabilize markets.

**In its regular EIOPA 2024 Autumn qualitative survey among National Competent Authorities, supervisors reported heterogeneous dynamics related to the real estate sector across different regions.** According to supervisory authorities, insurers maintain stable and diversified exposures to real estate assets, with a prevalence of commercial properties, particularly office spaces in major cities. This stability in holdings confirms the long-term nature of insurers' investments. Only a few countries experienced an expansion of holdings in real estate during the period of low interest rates, driven by a search-for-yield in their strategic asset allocation. The survey highlights that insurers' investment approaches do vary across member states. While some primarily invest in commercial real estate for their own use (e.g. headquarter buildings), others rely more on indirect investments through equities, unit-linked vehicles, and real estate funds. Insurers can even hold equities in subsidiaries involved in real estate management. Despite fluctuations in the real estate market, insurers benefit from high hidden reserves and manageable credit risks, thanks to loans backed by high quality collateral and well-diversified portfolios. In one jurisdiction, it was signalled that legal discussions about rental increases may indirectly affect investors in specific areas, requiring cautious monitoring. Regarding supervisory approaches, most supervisors adopt a continuous monitoring approach rather than immediately regulatory action, often using ad hoc tools and scenario analysis.

## 2. ASSET INTENSIVE (OR FUNDED) REINSURANCE

*This topical focus explores potential risks rising from the increasing global trend observed in asset intensive reinsurance. It contextualises the trends in the European insurance industry and presents important insights and implications that are being considered by supervisors. Asset intensive reinsurance involves the transfer of both investment and underwriting risks, typically associated with certain long-dated life insurance liabilities. Less than 1% of life business is reinsured with counterparties domiciled outside EU/EEA, with the UK and Bermuda being the most material jurisdictions. Only a limited number of European (re)insurers, in few Member States, cede business via cross-border asset intensive reinsurance. Although the financial stability concerns seem to be limited for now, concentration of this business among a few reinsurers, often with alternative business models and in specific offshore jurisdictions, warrants supervisory monitoring. Indeed, Solvency II data shows that the use of this type of reinsurance is associated with higher allocation to alternative assets such as private credit.*

### INTRODUCTION

**Reinsurance plays an important role not only in the insurance industry but also in the broader economy by, inter alia, providing risk management solutions and investing into various industries.** With their global reach, reinsurers provide substantial capital and expertise, making it possible for insurers to underwrite larger and more varied policies. This, in turn, fosters market innovation and stability. EEA insurers and reinsurers have written gross premiums amounting to EUR 1,370 bn in 2023, of which 16% were ceded to reinsurers. Within life and non-life segments, 6% and 25% of the gross premiums were ceded to reinsurers respectively.

**Increasing use of cross-border asset intensive reinsurance (or funded reinsurance) has caught supervisory attention in several jurisdictions.** In June 2023, the UK Prudential Regulation Authority warned against systemic use of funded reinsurance<sup>26</sup>. Later in the year, IAIS initiated work to examine supervisory approaches towards cross-border asset intensive reinsurance (AIR)<sup>27</sup>. AIR contracts frequently involve outsourcing the management of the underlying assets to a reinsurer, which introduces substantial counterparty risk that is usually mitigated through collateralisation. Counterparty risk further increases if the reinsurer follows a different investment strategy than the insurer, such as investing in riskier and more illiquid assets. This is particularly relevant when considering recapture risk, i.e., the termination of the reinsurance agreement with the underlying assets or collaterals returning to the cedant (direct) insurer. In addition, these transactions might lead to a material transfer of market and underwriting risk, which might be

<sup>26</sup> [Feedback on the PRA's preliminary thematic review work on funded reinsurance arrangements \(bankofengland.co.uk\)](https://www.bankofengland.co.uk/feedback-on-the-pra-preliminary-thematic-review-work-on-funded-reinsurance-arrangements)

<sup>27</sup> [IAIS publishes preview of 2023 Global Monitoring Exercise results - International Association of Insurance Supervisors \(iaisweb.org\)](https://iaisweb.org/)

subject to lower capital requirements in some foreign jurisdictions. Several national supervisors have reported encountering asset intensive reinsurance in their markets<sup>28</sup>, a development that EIOPA is closely monitoring.

**The drivers for this development differ among ceding jurisdictions.** The American Academy of Actuaries cites reserving efficiency, investment flexibility and tax efficiency as some of the factors motivating AIR transactions between US life insurers and Bermuda based reinsurers<sup>29</sup>. In the UK, the increase in Bulk Purchase Annuity (BPA) deals, i.e., an insurer ceding pension liabilities to a reinsurer, has contributed to higher demand for reinsurance<sup>30</sup>. In the EU/EEA, the prolonged period of low interest rates has put significant pressure on the profitability of life insurers, thereby creating incentives to optimise capital requirements via reinsurance. These trends have coincided with increased involvement of private equity in life insurance and more business being ceded to Bermuda in particular. Supervisors are aware of the risks from such reinsurance arrangements and continue to monitor and investigate the cedants' understanding of these risks.

## WHAT IS ASSET INTENSIVE REINSURANCE (AIR)?

**Asset intensive reinsurance refers to any reinsurance agreement involving a material transfer of investment risks, in addition to the underwriting risks, from a cedant to the reinsurer.** Although the term is commonly used in the context of life (re)insurance, it can theoretically apply to non-life insurance as well. For the purpose of this article, AIR refers to transfer of investment and life underwriting risks. The cedant pays a single upfront premium to the reinsurer, who invests the premium and pledges it back to the cedant as collateral. On the asset side of the balance sheet, the cedant recognises a reinsurance asset (reinsurance recoverables) backed by the collateral. Figure T2.1 shows a simplified representation of the Solvency II balance sheet of the cedant under two different arrangements – funds withheld, and funds transferred. As the name suggests, the former involves the cedant holding the assets backing the reinsured liabilities on its own balance sheet but deposited in a custody account. On the liabilities side, an item comparable to reinsurance recoverables is recognized. As such, the size of the cedant's balance sheet increases in this arrangement. The reinsurer may be required to pledge collateral besides the assets in custody. In case of funds transferred, the reinsurance recoverables are backed by off-balance sheet collateral and no corresponding liability is recognized, leading to a smaller balance sheet. The benefit to the cedant can be described as follows: on the liabilities side, the ceded longevity risk leads to a reduction of the risk margin and lower technical provisions (Figure T2.1). The own funds (OF) are increased due to the release of risk margin. Consequently, the solvency capital requirement (SCR) decreases because of the ceded longevity and investment risk that is partially offset by the introduction of counterparty default risk SCR. The effect of the increase in OF and decrease of SCR is illustrated in Figure T2.1 as higher excess OF, i.e., the amount of own funds that exceed SCR. Thus, the net result is a materially higher Solvency II ratio for the cedant. The benefit

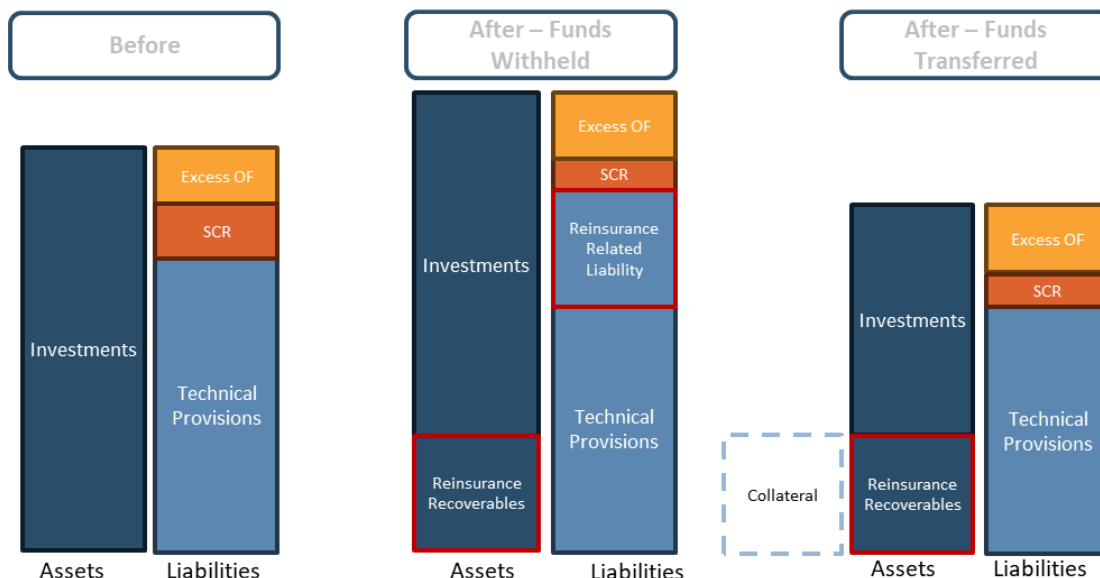
<sup>28</sup> Based on EIOPA's interactions with the European National Competent Authorities (NCAs)

<sup>29</sup> [risk-brief-bermuda-reinsurance\\_0.pdf \(actuary.org\)](#)

<sup>30</sup> [CP24/23 – Funded reinsurance | Bank of England](#)

for the reinsurer could come from any of the three factors - investing in riskier or more illiquid assets with higher expected returns, holding lower level of regulatory capital (subject to terms of reinsurance contract and regulatory approval) and advantageous taxation.

Figure T2.1: Simplified representation of cedant’s solvency II balance sheet before and after a asset intensive reinsurance transaction

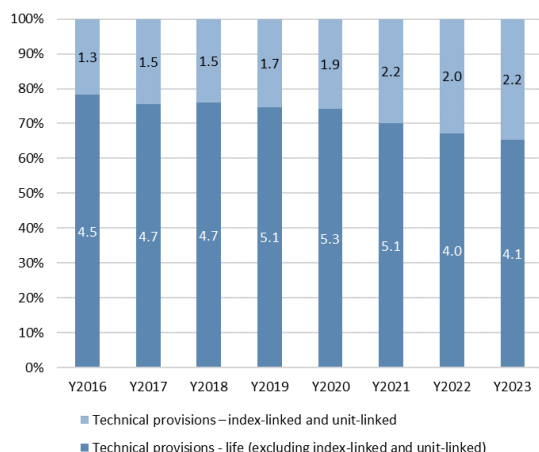


## FACTORS DRIVING THE USE OF ASSET INTENSIVE REINSURANCE (AIR)

In practice, AIR is often used as a tool by insurers looking to reduce their exposure to the areas of business requiring holding high levels of capital (i.e., capital intensive). The low interest rates period of 2014 – 2021 meant that previously issued life insurance policies and guaranteed higher interest rates became much more expensive for life insurers to service. This put significant pressure on the return on equity (ROE) of life insurers and prompted them to reduce the share of capital intensive business while increasing the share of ‘capital light’ business (e.g., unit-linked life insurance, Figure T2.2). Euronext 100, which is a pan-European blue-chip index, has provided much higher returns to shareholders during the 15-year period 2007-2022, compared to an index representative for the European life insurance sector (Figure T2.3). For European insurance and reinsurance undertakings, the relative share of index-linked and unit-linked business has grown over recent years. This trend, in the EU/EEA level aggregate figures, has persisted in 2023<sup>31</sup> despite the increasing interest rates since 2022.

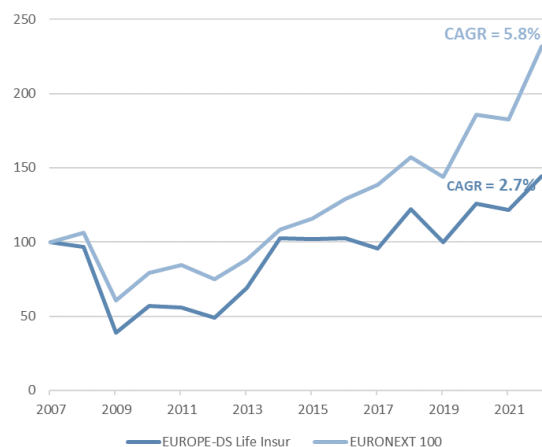
<sup>31</sup> It does not hold for all EU/EEA jurisdictions individually.

Figure T2.2: Evolution of life insurance liabilities of European (re)insurers [% and euro trillions]



Source: EIOPA insurance statistics

Figure T2.3: Total shareholder return of Euronext 100 and EUROPE-DS Life Insurance



Source: Refinitiv, EIOPA own calculations

**While the low yield environment helps explaining the demand for AIR, supply (of reinsurance capacity) side factors have played an important role as well.** SII undertakings looking to optimize their capital positions have options besides AIR, e.g., selling part of the business to another (re)insurer. (Re)insurers affiliated with private market investors have shown active interest in the European life insurance sector. They include undertakings whose business model is to acquire legacy portfolios of life insurers. EIOPA has taken note of these developments and issued a supervisory statement<sup>32</sup> on the supervision of run-off undertakings in April 2022. The statement acknowledges the potential benefits and risks associated with such arrangements and emphasizes the need for high-quality and convergent supervision.

**The private equity (PE) sector has become increasingly intertwined with life insurance worldwide in recent years.** According to IMF<sup>33</sup>, rising interest rates since 2022 have contributed to a slow-down in the private equity (PE) sector due to the enhanced attractiveness of fixed income. This has led the PE firms to focus on the private credit side of the business where they help facilitate lending from non-banking institutions to companies that are often part of their own portfolio. Large PE firms have taken steps to position themselves as the preferred provider of AIR and some of them have established their own reinsurers in offshore jurisdictions like Bermuda. By influencing the investment decisions of the (re)insurer, the PE firms can direct funding to alternative assets such as private credit.

**Last but not least, jurisdictional differences contribute to the availability of reinsurance capacity.** The American Academy of Actuaries notes that ceding AIR to Bermuda “may create benefits for economic based ALM/hedging strategies” for a US life insurer. This has helped Bermuda to emerge as a hub for reinsurers, of which some are affiliated with US private equity firms, accepting reinsurance from the UK and the EU/EEA, in addition to the US. Convenient access to ceding insurers from these three jurisdictions allows these reinsurers to develop scale and expertise, which, in turn, helps them attract even more business. It also helps explaining EU/EEA insurers’ exposure to Bermuda even though the regulatory outcomes for (re)insurers under Solvency II and

<sup>32</sup> [Supervisory statement on the supervision of run-off undertakings - EIOPA \(europa.eu\)](https://www.eiopa.europa.eu/supervisory-statement-on-the-supervision-of-run-off-undertakings)

<sup>33</sup> [Private Equity and Life Insurers \(imf.org\)](https://www.imf.org/private-equity-and-life-insurers)



Bermudian supervisory regimes are not expected to be vastly different due to full equivalence status enjoyed by the latter.

## EXPOSURE OF EUROPEAN (RE)INSURERS TO CROSS-BORDER AIR

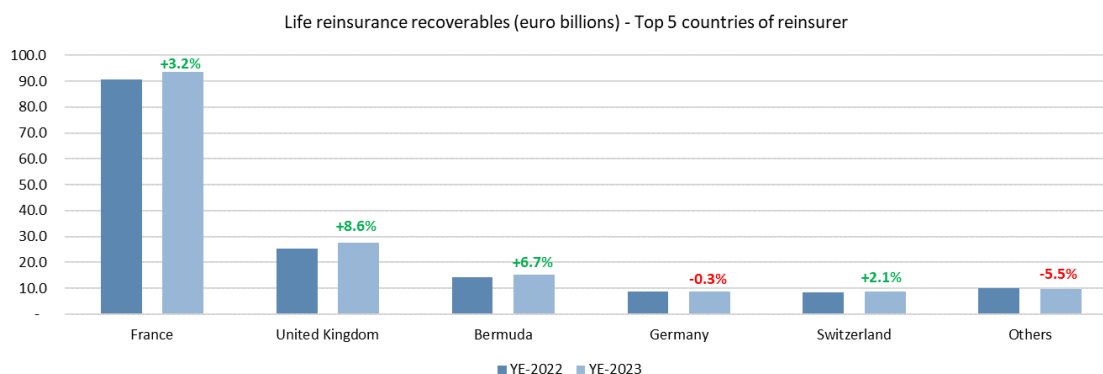
**The total life liabilities for EU/EEA insurance and reinsurance undertakings amounted to around EUR 6,340 bn at the end of 2023.** Only about 2.5% of this amount is ceded to reinsurers<sup>34</sup>; the figure for reinsurers outside EU/EEA is even smaller at less than 1%. Therefore, reinsurance cannot be considered as a source of systemic risk for the European life insurance sector.

**UK and Bermuda-based reinsurers accounted for 17% and 9% of the ceded life liabilities in 2023.**

A large majority of this business is of the asset intensive type. Figure T2.4 shows the life reinsurance recoverables (i.e., part of cedant's liabilities that can be expected to be recovered from the reinsurer) for 2023, aggregated by the reinsurer's country of residence; the percentages on top of the bars indicate the increase or decrease relative to 2022 data. A significant part of the business ceded to the UK can be attributed to the business transferred to EU/EEA post Brexit, which helped to ensure continuity for the European policyholders.

**The use of cross-border AIR by Solvency II undertakings appears to be limited.** In the EU/EEA, AIR transactions have been observed by supervisors in Austria, Belgium, Germany, Ireland, Liechtenstein, Luxembourg, Netherlands and Spain. The materiality of these transactions, however, varies widely among the Member States. As of year-end 2023, the reinsurance contracts of ceding undertakings in Belgium, Ireland and Luxembourg accounted for the largest share of outgoing life reinsurance to Bermuda and the UK.

Figure T2.4: Outgoing life reinsurance to Bermuda & UK has become more material in 2023



Source: SII reporting data. Note: percentages indicate the change relative to 2022 data

**Bermuda-based reinsurers are a key source of reinsurance capacity for European (re)insurers.**

Not only is the AIR business ceded to Bermuda concentrated among a small number of reinsurers, but much of it takes place via intra-group or related Solvency II undertakings. The ceded business is a significant part of the balance sheet of the cedants. Some of the reinsurers are either directly or indirectly linked to private equity firms.

<sup>34</sup> Ceded reinsurance and/or risk here refers to life reinsurance recoverables.

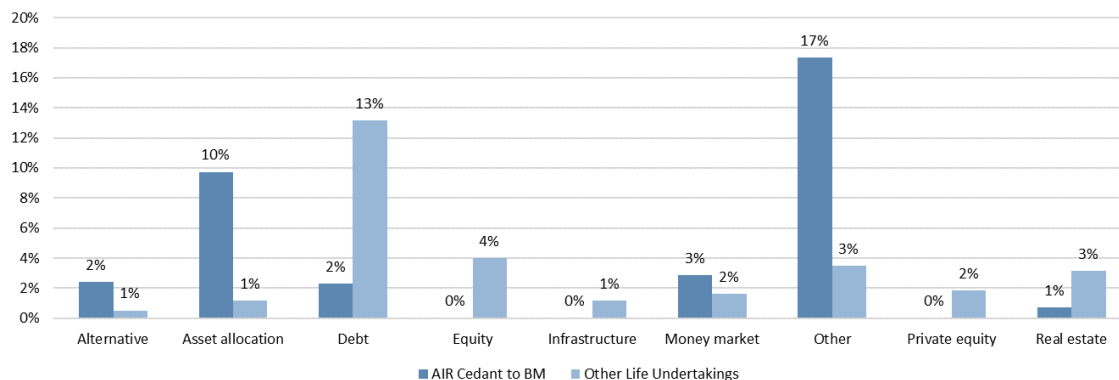
## RISKS TO EUROPEAN (RE)INSURERS FROM CROSS-BORDER AIR

**Asset intensive reinsurance introduces additional credit, legal and operational risks for the cedant.** The credit risk is somewhat mitigated, but not eliminated, by posting collateral by the reinsurer. This is done by pledging the assets (backing the reinsured liabilities) as collateral to the cedant and placing them in a trust account. The exposure, however, would depend on the relative valuation of the collateral and the reinsured liabilities. For example, if the reinsurance agreement were to allow the reinsurer to discount the liabilities using a discount rate comparable to the weighted yield of the assets posted as collateral, a material widening of credit spreads would imply a similar fall in the value of assets and liabilities (assuming no duration gap). If the reinsurer were to fail at this time, a Solvency II cedant would “re-inherit” the liabilities and value them using Solvency II best estimate assumptions, which is likely to increase their valuation. In this case, the cedant would need funds in addition to the collateral to maintain its solvency position. Therefore, it would be prudent for the reinsurance agreement to establish, inter alia, the rules for valuation and amount of collateral required, as well as the investment guidelines for the assets to ensure appropriate ALM. In the event of default by the reinsurer, the cedant should be able to take possession of the collateral. If the value of collateral is lower than that of the reinsured liabilities, the cedant should also be able to claim the difference. While this is not an exhaustive list of items to be captured in an asset intensive reinsurance agreement, it offers an imprint of the magnitude of the associated legal and operational risks. The material operational costs of implementing such an arrangement imply that the reinsurers that can exploit economies of scale would have a competitive edge. The reinsurers would also strive to earn higher credit spreads on the collateral portfolio by investing in risky and/or illiquid assets (to the extent permitted by the reinsurance agreement). It is, therefore, not surprising to observe the AIR exposure of Solvency II undertakings to Bermuda being concentrated among few reinsurers, including some that are linked to private equity. PE-linked reinsurers can leverage the asset origination capabilities of the PE firms, allowing the reinsurer to have a wider choice of investment options that can be accessed more efficiently.

**Use of AIR appears to be correlated with higher investments in alternative assets.** Undertakings with material AIR contracts with Bermuda-based reinsurers hold 35% of their non-unit linked investment assets via funds (i.e., Collective Investment Undertakings, or CIU), compared to 30% allocation by other life undertakings for year-end 2023. Further breakdown within this category shows that the AIR cedants’ allocation to alternative funds, asset allocation funds and “other” funds is much higher than that of other life undertakings (Figure T2.5). Several issues may arise from this type of allocation. A sizeable portion of these funds appears to be issued by related entities, which could pose a conflict of interest. For example, if the reinsurer belongs to a private equity firm, that firm could influence the investments of the reinsurer in a manner such that it benefits the other holdings of the firm at the expense of the policyholders. Furthermore, many of these investments entail alternative assets such as private credit that could be highly illiquid, prone to credit risk or part of “layered leverage” (i.e., borrowing against an asset that is already leveraged). Within the same cohort of AIR cedants, the share of exposure to mortgages and loans via an investment fund is much higher than for other life undertakings. The reported details on

these investments are, on average, less thorough than for direct investments, making them less transparent and can pose challenges in their valuation in stressed scenarios.

Figure T2.5: Allocation to different fund types (within CIU category) by major cedants to Bermuda versus other life undertakings. Percentages indicate shares of an investment type over total investments (excluding unit-linked).



Source: SII reporting data.

## CONCLUSIONS AND NEXT STEPS

**The risks to the financial stability of the European (re)insurance market do not appear to be material for now.** This is due to the limited use of cross-border asset intensive reinsurance by EU/EEA insurance and reinsurance undertakings. However, the AIR activity from reinsurers based in Bermuda rose in 2023. This development has coincided with an increase in the exposure to alternative assets and warrants continued monitoring from the supervisory community. This article takes stock of the current usage of AIR in Europe largely based on Solvency II reporting data. Ensuring that the risks relating to AIR are well understood requires a broader scope of work. Macprudential risks emanating from cross-border asset intensive reinsurance are rooted in the details of the negotiated reinsurance contracts. These risks include, inter alia, underestimation of the probability of collateral recapture as well as the loss given recapture. EIOPA's Opinion on the use of risk mitigation techniques<sup>35</sup> notes that complex reinsurance structures require a case-by-case analysis by the supervisory authorities. EIOPA continues monitoring developments in the use of AIR and associated risks. It will seek to improve the Solvency II reporting on reinsurance to increase transparency of AIR, in cooperation with National Supervisors. It will also continue to contribute to discussions on the matter at international level.

<sup>35</sup> [Supervisory Statement on the use of risk mitigation techniques](#)

### 3. ASSESSMENT OF SYSTEMIC RISK IN THE EEA INSURANCE SECTOR

*This topical focus describes the EIOPA's framework to assess systemic risk in the European insurance sector, hereby named the European Systemic Risk Assessment Framework (SRAF). The focus is on the main methodological and organisational elements of the SRAF, providing also the highlights of the 2024 risk assessment that cover the main sources of systemic risk. The assessment is based on the key risk indicators and ancillary indicators included in the framework and calculated based on annual supervisory data from the Solvency II QRTs with reference to 2023 year-end, as well as other relevant data.*

#### INTRODUCTION AND MOTIVATION

**According to its Regulation<sup>36</sup>, EIOPA shall develop criteria for the identification and measurement of systemic risk.** For this purpose, the European Systemic Risk Assessment Framework (SRAF) has been in place since 2022, with the goal of supporting EIOPA and its members to determine their own view on EEA insurance market trends and developments and the current and potential future systemic risk in the European insurance sector.

**The SRAF is a quantitative risk assessment framework based primarily on supervisory reporting and aimed at supporting an annual risk discussion at EIOPA level.** It was developed considering existing approaches to the assessment of systemic risk at European and international level, as well as based on the experience with other risk monitoring products of EIOPA.

**The framework assesses potential systemic risk at aggregated level, from both EEA and country perspectives.** Unlike other risk assessments and macroprudential analyses, the SRAF examines the potential emergence of risks in a structured and comprehensive manner also at the national level. This should allow the identification of vulnerabilities building up in certain jurisdictions that could have cross-jurisdictional implications, as well as a better understanding of trends observed in the EEA. The framework covers all the countries in the EEA and leverages on Solvency II reporting, making it well-suited to address the unique characteristics of the EEA insurance sector.

**Additionally, the SRAF includes a process for incorporating qualitative input from National Competent Authorities (NCAs).** This qualitative assessment enhances the understanding of specific developments at country and European levels and ensures that the framework remains up-to-date and responsive to emerging risks.

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<sup>36</sup> [Regulation - 1094/2010 - EN - EUR-Lex \(europa.eu\)](#)

EIOPA undertakes regular reviews of the SRAF methodology with the goal of keeping it as a relevant tool for monitoring systemic risk, combining international standards with a focus on European specificities.

## METHODOLOGICAL ASPECTS

### DATA

The SRAF relies primarily on supervisory data from the Solvency II QRTs and, specifically, on data from the Annual Reporting Solo (ARS) aggregated at EEA level and at the jurisdictional level. Given that the goal of the assessment is to formulate a view on systemic risk in the EEA that might arise from common exposures and activities, all countries in the EEA are in the scope of the exercise. For some indicators, the SRAF also relies on data from other sources.

### RISK CATEGORIES AND INDICATORS

The indicators and categories included in the framework consider relevant European and international approaches to the assessment of systemic risk<sup>37</sup>. Currently, the SRAF encompasses 73 key risk indicators and 24 ancillary indicators<sup>38</sup> grouped into 10 different risk categories (Table 1). The key risk indicators are designed to assess the stability of the insurance sector and identify potential vulnerabilities that could impact financial stability, while the ancillary indicators provide background information to better understand the developments in the key risk indicators. Not all indicators are expected to have the same relevance across jurisdictions, depending on the specificities of the national insurance markets. The choice of indicators is conditioned by the data available in Solvency II reporting and it might be revised over time to accommodate developments in European and international approaches to the assessment of systemic risk and changes to supervisory reporting.

Table T3.1: Overview of risk categories

Risk category
<b>Size &amp; Global activity</b>
Size and global activity are not sources of systemic risk <i>per se</i> , but they may contribute to amplify risks. Indicators in this category are aimed at assessing the potential relevance of the insurance sector to the functioning of the financial system as well as potential contagion risks due to size or international activity of European insurers.
<b>Interconnectedness</b>
This category intends to capture interlinkages with other parts of the financial system and the real economy, considering interconnections due to exposures to the potential distress or default of a counterparty or exposures to key macroeconomic risk factors (e.g. interest rates, exchange rates, etc.). Indicators in this risk

<sup>37</sup> IAIS Holistic Framework for the assessment and mitigation of systemic risk in the insurance sector: [Holistic Framework - International Association of Insurance Supervisors \(iaisweb.org\)](#)

EIOPA Systemic Risk and Macroprudential Policy in Insurance: [EIOPA-BoS-19-131 - Discussion Paper - Systemic risk and macroprudential policy-rev \(002\) \(europa.eu\)](#)

EIOPA Insurance Risk Dashboard: [Insurance Risk Dashboard - EIOPA \(europa.eu\)](#)

<sup>38</sup> Please refer to annexes 3.1 and 3.2 for further details.

category have therefore been allocated to two subcategories, macroeconomic or counterparty exposure, but they should not be seen in isolation.

#### **Asset liquidation & Policyholder behaviour**

This category aims to assess the exposure to liquidity risk, which can arise because of imbalances between liquidity sources and needs, for example due to material policyholder lapses. Such imbalances can prompt insurance undertakings to liquidate assets at a speed or scale that could exacerbate market movements and trigger losses beyond the insurance sector.

#### **Substitutability**

This category aims to assess the degree of concentration or competitiveness in the markets for various lines of business for which a disruption in the supply of insurance coverage could have an impact on financial stability or the broader economy.

#### **Underwriting & Solvency**

This category aims to provide an overview of the resilience and profitability of the insurance sector through the monitoring of various indicators, such as solvency ratios, combined ratios, premium growth, return on investments, among others.

#### **Emerging risks<sup>39</sup>**

Emerging risks covers new and evolving risks that may have implications for financial stability. This category includes risks such as climate transition and physical risks, and digitalisation and cyber risks.

#### **Economic environment**

This category provides background and insight into the macroeconomic environment surrounding the insurance sector, through the monitoring of several macro and financial market variables. It is not intended to capture systemic risk *per se* but rather to give context to the analysis of the indicators included in the other risk categories.

## RISK LEVELS

**Each key risk indicator is assigned a risk level among low, medium-low, medium-high and high.**

The risk levels are generally applied based on pre-defined thresholds calculated from the historical cross-sectional distribution (i.e. considering both the time and country dimension). Some indicators have specificities that might require deviations from this approach. This is the case when there are natural thresholds associated to the indicators, i.e. if there is a widely accepted threshold for the indicator defined either by regulation or implied by economic theory. Examples are the return on investments, the combined ratio or the SCR ratio. Deviations could also occur if there is not sufficient variation in the data that provides for the application of the four different risk levels or depending on the span of the time series.

**The conclusion on the level of risk for a risk category relies on the combined analysis of all the key risk indicators within that category, and where relevant additional information putting indicators into perspective.** There is no mathematical calculation of a risk level for each risk category, i.e. risk levels for each indicator are not aggregated. It should be noted that risk levels can be associated to different degrees of risk, but also to the size of exposures or to distinct clusters of countries depending on the key risk indicator. Moreover, results provide an indication for developments that are worth investigating rather than a scientific calculation of a level of risk. They shall not be interpreted in isolation but considering any additional information available and expert judgment.

<sup>39</sup> For presentation purposes and to ease the analysis, this category might be split into ESG risks and Digitalisation and cyber risks.

## PROCESS

**The SRAF results are produced and analysed annually in close collaboration with the NCAs, and they inform an annual risk discussion at EIOPA level.** NCAs are also invited to comment on the results and to explain developments at country level before the risk discussion takes place. Accordingly, the final risk assessment incorporates both the quantitative information provided by the framework and other relevant qualitative information given by national authorities. Given the constant evolution of the insurance sector and risk landscape, developments in supervisory approaches, and/or future changes in supervisory reporting, EIOPA features regular methodological reviews in the framework to capture the main vulnerabilities of the sector. Whenever relevant, these reviews also consider potential changes to the thresholds used to define the risk levels.

## OVERVIEW OF 2024 RISK ASSESSMENT

**This section provides an overview of the latest results of the SRAF for the EEA aggregate, based on the assessment of the key risk indicators per risk category.** The results are based on 2023 year-end Solvency II data and macroeconomic and financial market data up to end-July 2024.<sup>40</sup>

## ECONOMIC ENVIRONMENT

**In 2023 the economic landscape continued to present challenges, and the global economy has been marked by a gradual recovery from the disruptions caused by the COVID-19 pandemic and geopolitical tensions, particularly Russia's invasion of Ukraine.** Governments and central banks have been navigating the challenges of inflation, supply chain disruptions, and varying growth rates across different regions.

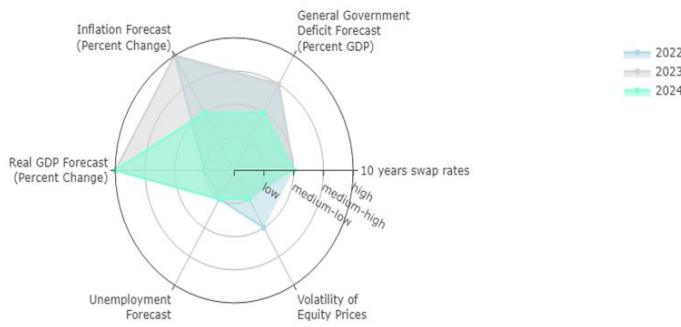
**In 2024 the macroeconomic environment is still challenging but it has improved, with slightly better prospects for GDP growth and inflation.** Inflation projections for the EU cooled to 2.7% in 2024 (from 6.3% in 2023), now classifying in the medium-low risk bucket (from high in 2023). The outlook for GDP growth has improved slightly in 2024 but remains cautious, still classifying in the high-risk bucket for the EU (1.1% compared to 0.6% in 2023).

**Other macroeconomic indicators shown in Figure T3.1 have remained in the same risk buckets in 2024 compared to 2023, namely the forecasted rate of unemployment and the forecasted general government deficit as a percentage of GDP.** Financial market conditions are still uncertain in 2024 and the potential for sudden shifts in outlook and market expectations cannot be excluded, even though the indicators pointed to overall low or medium-low risk at end-July. Equity market volatility slightly decreased in the first half of 2024 compared to end-2023 and it classified in the low-risk bucket. The 10-year swap rates slightly increased compared to 2023 year-end and were still high by historical standards, therefore pointing to medium-low risk for the sector.

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<sup>40</sup> The cut-off for the Solvency II data is 5 September 2024.

Figure T3.1: Economic environment



Note: The indicators residential real estate prices growth, debt service ratio and sovereign CDS spreads are not shown in the chart due to unavailability of data for 2024 or the EU/EEA aggregate.

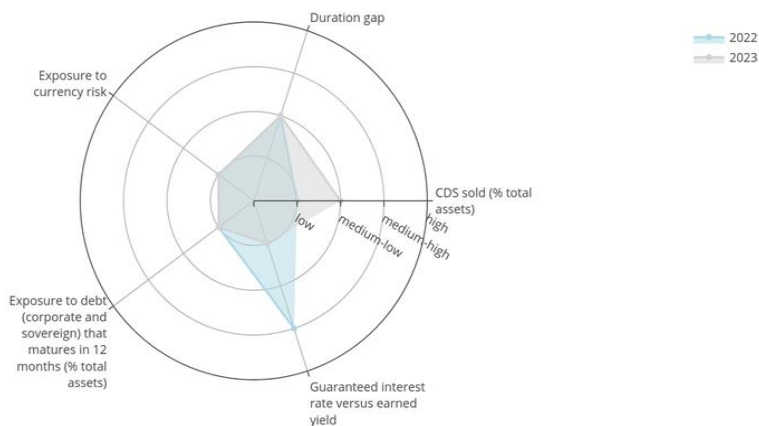
INTERCONNECTEDNESS – MACROECONOMIC EXPOSURE

In 2023, all indicators for the EEA classify either in the low or medium-low risk buckets, with the risk level changing for two out of five indicators.

On the negative side, there has been an increase in the selling of credit default swaps (CDS) in the EEA, with the indicator on CDS sold (notional amount) as a percentage of total assets increasing in the EEA from 0.1% in 2022 to 0.2% in 2023, now classifying in the medium-low risk bucket (low in 2022). Even though this increase seems somewhat contained when considering the aggregated exposures in the EEA, it masks more sizeable developments at individual level.

On the positive side, the spread between guaranteed rates and investment returns for life business declined (-1.5% compared to -0.2% in 2022), with a corresponding adjustment in the risk level from medium-high in 2022 to low in 2023. The duration gap, which classified in the medium-low risk bucket in 2023 (same as in 2022) is negative at the EEA level and it has been declining since 2019, standing at -4.3 in 2023 (-5.5 in 2022 and -6.3 in 2019). Further policy rate cuts by central banks are expected to have a bigger impact on insurers with more negative duration gaps. All other indicators classify in the low-risk bucket at EEA level in 2023.

Figure T3.2: Interconnectedness – Macroeconomic exposures





INTERCONNECTEDNESS – COUNTERPARTY EXPOSURE

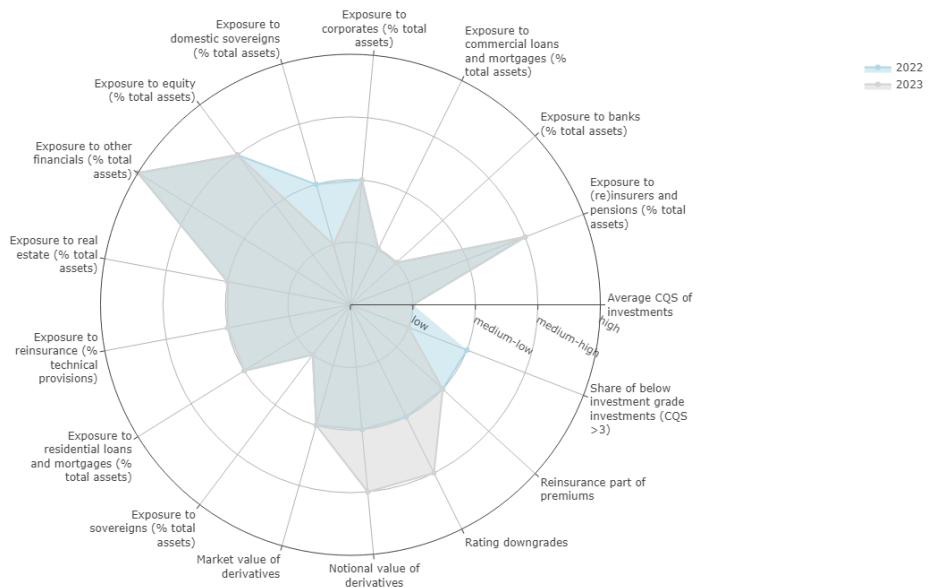
Compared to last year, all but four of the risk indicators of this category remain in the same risk clusters in 2023 when considering the EEA aggregate figures. Changes were overall minor at aggregate level, apart from exposures to derivatives.

Accordingly, the share of below investment grade investments in insurers’ portfolios slightly declined vis-à-vis 2022, with the risk level moving from medium-low to low. The indicator is at 1.4% of total investments in the EEA in 2023, compared to 1.7% in 2022).

On the other hand, the risk level for the indicator on rating downgrades increased at the EEA level from medium-low to medium-high, with rating downgrades moving only slightly from 2.3% of investments in 2022 to 2.4% in 2023. Overall, the average credit quality step (CQS) of investments in the EEA was 1.8 in 2023 corresponding to an S&P rating between AA and A, broadly unchanged compared to 2022 and classifying in the low-risk category.

The risk level for the indicator capturing the notional value of derivatives as a share of total assets, aimed at assessing the overall exposure to derivatives, increased at the EEA level from medium-low (55.9%) to medium-high (96.7%).

Figure T3.3: Interconnectedness – Counterparty exposures



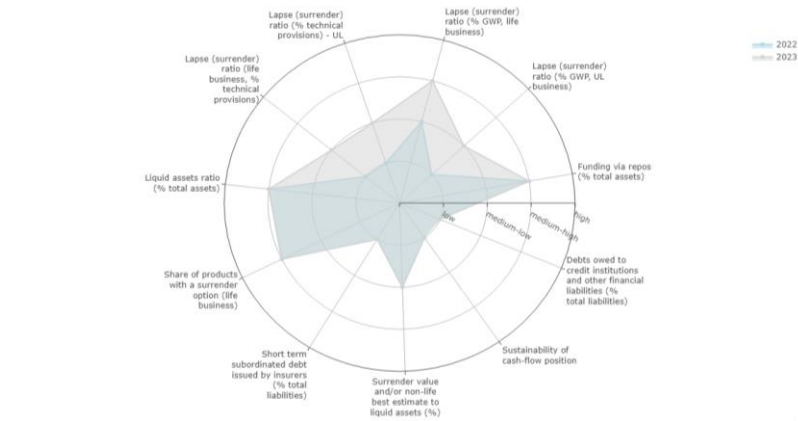
ASSET LIQUIDATION AND POLICYHOLDER BEHAVIOUR

Most key risk indicators on asset liquidation and policyholder behaviour have remained broadly stable in the EEA when compared to 2022, with risk levels increasing only for the indicators on lapse rates.

The lapse (surrender) ratio as a percentage of gross written premiums, which assesses how cash inflows from premiums cover cash outflows related to surrenders, has increased since 2022 for both life excluding unit-linked (38.6%; +9 p.p. compared 2022) and unit-linked business (50.1%, +14 p.p. compared 2022). Also, the indicator on lapse (surrender) rates as a share of technical

provisions increased at EEA level from low to medium-low level in 2023, for both life excluding unit-linked (4.3%, +1.8 p.p.) and unit-linked business (6.1%, +2 p.p.). Despite the increase in the lapse rates, the sustainability of the cash-flow position, calculated as the share of net cash-flows from underwriting activities and investment income over liquid assets and assessing whether in case of net outflows the undertakings hold enough liquid assets, classifies in the low risk level in the EEA in 2023 (3.1%, +2.1 p.p. than in 2022).

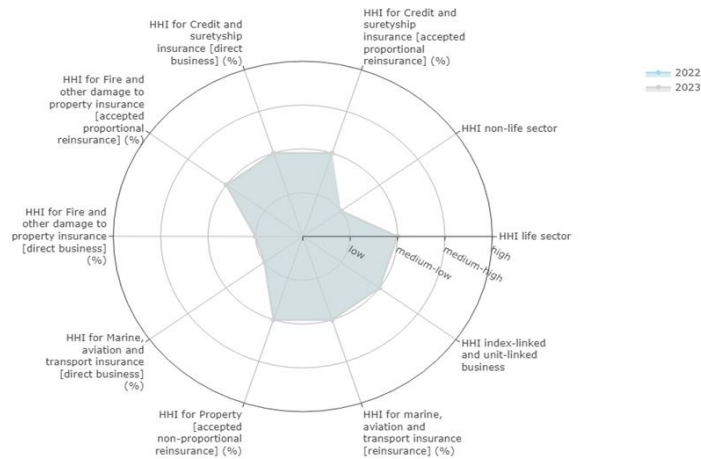
Figure T3.4: Asset liquidation & Policyholder behavior



### SUBSTITUTABILITY

The risk levels/degree of competitiveness for all substitutability indicators remained stable in 2023. Overall, most of the sectors / lines of business are, at EEA level, either highly competitive (non-life sector, fire and other damage to property insurance, marine and aviation transport insurance) or unconcentrated (other sectors and lines of business) as measured by the Herfindahl-Hirschman Index (HHI)<sup>41</sup>.

Figure T3.5: Substitutability



<sup>41</sup> The analysis at EEA level is based on solo data and it does not consider whether undertakings are part of the same insurance group. Consequently, the degree of concentration could be underestimated.

## UNDERWRITING AND SOLVENCY

**Underwriting and solvency risks have improved in 2023 at the EEA level due to premium growth for both life and non-life business and higher portfolio returns** (all now classifying in the low-risk bucket).

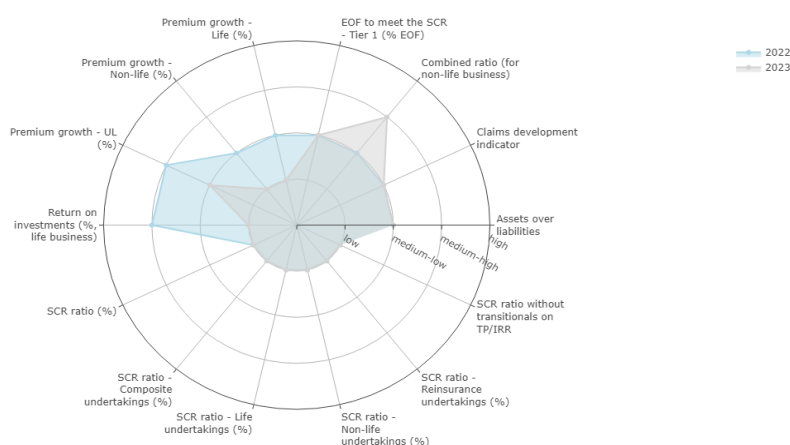
**After negative rates in 2022, premium growth for life business rebounded to positive levels on aggregate at the EEA level in 2023. The unit-linked business continued shrinking, but to a lesser degree.** Premium growth for life business was 4.6% in the EEA in 2023 (-3.7% in 2022), while premium growth in the unit-linked segment was -3.7% (-12.3% in 2022). Non-life business kept on a growing trend expanding by 6.7% in the EEA in 2023 (10.3% in 2022), possibly driven by a combination of new business and a potential compensation of premiums increase with higher cost of claims due to inflation. Non-life combined ratios increased following the pattern of the claims' behaviour, reaching closer to 100% at EEA level and moving from the medium-low to the medium-high risk bucket (97.5% in 2023 in comparison with 96.4% in 2022).

**Underwriting profitability worsened, with the non-life combined ratio moving to medium-high risk,** potentially driven by higher claims that were not fully offset by the increase in premiums.

**The return on investments for life undertakings has improved to 2.4% for the EEA** (1.0% in 2022). This improvement, driven by the overall positive performance of financial markets in 2023 and sustained by high interest rates, has resulted in a shift towards the low-risk level (from medium-high).

**Solvency indicators remain strong and in the low to medium-low risk buckets across the EEA,** with the SCR ratio for the whole sample at 257.4% in 2023 (256.8% in 2022). The SCR ratio for the various types of undertakings, whether considering transitional measures on technical provisions or interest rates, remains on aggregate at comfortable levels.

Figure T3.6: Underwriting & Solvency



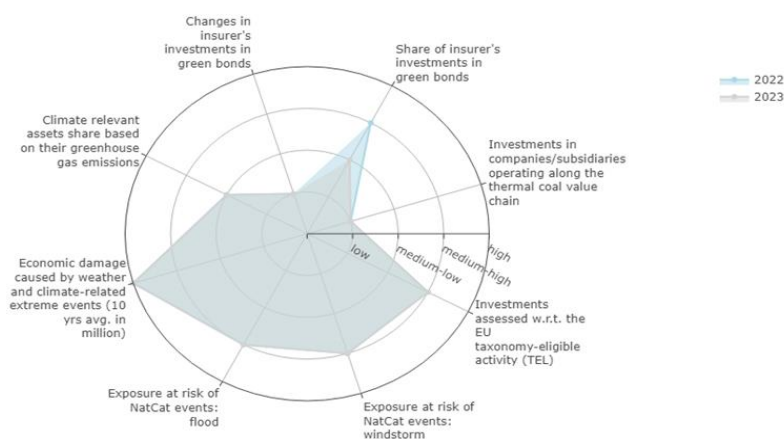
EMERGING RISKS – ESG

At EEA level, the exposures to ESG risks remained overall stable with all but two indicators capturing physical and transition risks pointing to a medium-low or medium-high risk level. Although the 2023 results highlight that the investments in green bonds and in EU taxonomy-eligible activities continue to steadily grow over time, risks may suddenly emerge from a disorderly transition towards a low carbon economy.

The share of insurers’ investments in green bonds in the total corporate bond portfolio has steadily increased over the last years. In 2023, at EEA level, it has reached 5.9%, shifting from a medium-high risk bucket in 2022 to a medium-low risk bucket in 2023. Similarly, the investments in EU taxonomy-eligible activities (TEL) continued to increase reaching 18.1% (15.3% in 2022) of the total direct bonds held and issued in the EEA, remaining stable at mid-high level.

Natural disasters affecting Europe in 2023 included severe thunderstorms and flooding, with insured losses reaching ≈ EUR 7.2 bn. for windstorms<sup>42</sup>. After a sharp increase in 2022, the total sum insured against windstorm reported by standard formula users dropped of -47% to EUR 62.9 trillion, however remaining above the historical figures (+21% compared to 2021). This change in exposure explains the slight change in the exposure at risk of Nat cat events (windstorm) indicator from 2.41 to 2.35, remaining stable at mid-high risk level.<sup>43</sup> Similarly to what observed for windstorm, the total sum insured against flood reported by standard formula users dropped by -26% in 2023 (to EUR 42.6 trillion) after the sharp increase in 2022 (+47% compared to 2021 figures totalling EUR 39.2 trillion). However, the aggregated indicator measuring the EEA exposure at risk of flood showed an opposite trend compared to the windstorm indicator. On aggregate, the flood indicator has increased from 2.37 in 2022 to 2.50 in 2023 in line with the historical trends and it remains stable at mid-high level.

Figure T3.7: Emerging risks – ESG risks



<sup>42</sup> EIOPA, 2024 June Financial Stability Report

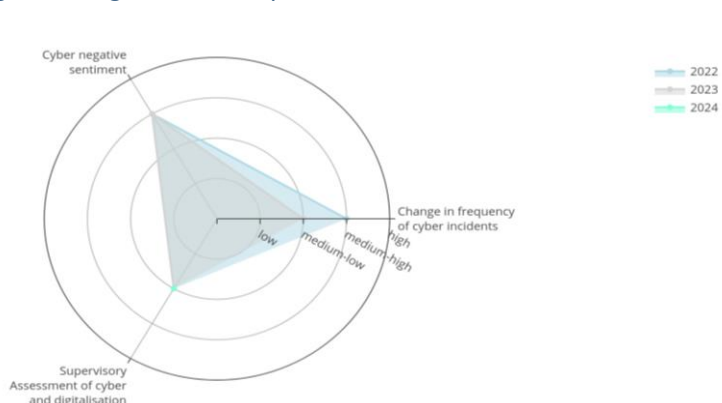
<sup>43</sup> The indicator captures only exposures located in the European countries for which the perils of flood and windstorm are considered within the standard formula, hence not capturing developments of these risks across all EU jurisdictions.

## EMERGING RISKS – DIGITALISATION AND CYBER RISKS

**Indicators capturing digitalisation and cyber risks are at a medium-low or medium-high level, with one out of three indicators displaying a decline in the risk level for the EEA in 2023 compared to 2022.** The indicator on the supervisory assessment of digitalisation and cyber risks, which is based on the qualitative responses from NCAs to the EIOPA insurance bottom-up survey, shows a stable assessment compared to 2022, with the indicator remaining in the medium-low risk bucket for the EEA. Several supervisors continue to associate Russia’s invasion of Ukraine and related uncertainties with a potential increase in cyber risks. Data already available for Q1-2024 shows that the risk levels remain overall consistent with those identified for 2023. The indicator measuring negative sentiment of listed insurance companies towards cyber risk, which is based on a count of negative sentiment-related and cyber-related bigrams of European insurers’ earnings call and corporate events transcripts, remained stable in 2023 at a medium-high risk level.

**The indicator on the year-on-year change in the frequency of cyber incidents, which is based on information publicly available regarding incidents affecting all sectors of activity globally<sup>44</sup>, declined to 19.9% in 2023 from 27.3% in 2022, resulting in a change from a medium-high risk level in 2022 to a medium-low risk level in 2023.**

Figure T3.8: Emerging risks – Digitalisation & cyber risks



## CONCLUSION

**The SRAF supports, since 2022, EIOPA and its members to determine their own view on EEA insurance market trends and developments and the current and potential future systemic risk in the European insurance sector.** The framework is based on several indicators built primarily on annual supervisory data from Solvency II reporting, which were developed considering existing approaches to the assessment of systemic risk in the insurance sector at both the European and international levels. An annual risk assessment based on the included indicators informs a risk discussion at EIOPA level.

**The results of this assessment show a still challenging but slightly improved economic environment in 2024 compared to the previous year, with better prospects for GDP growth and**

<sup>44</sup> The indicator is based on information available in <https://www.hackmageddon.com/>.

**inflation.** Supervisory data for 2023 shows an increase in risks related to interconnectedness due to an increase in the selling of credit default swaps and in the overall derivatives positions of insurers in some jurisdictions. This has been somehow counterbalanced by a reduction in the spread between guaranteed rates and investment returns for life business and a decline in the share of below investment grade investments. Lapse rates have increased across most jurisdictions in the EEA, but liquidity positions seem to have remained sustainable. Exposures to emerging risks such as ESG risks and digitalisation and cyber risks continue to be material across the EEA.

## A.1. RESULTS OF THE QUESTIONNAIRE TO NATIONAL COMPETENT AUTHORITIES

In order to assess the key risks and vulnerabilities to the insurance and IORP sectors, EIOPA conducted its regular Autumn qualitative survey among National Competent Authorities (NCAs).

According to results of the Autumn qualitative survey, macroeconomic outlook remained among the top risks for both insurers and IORPs supervisors, despite a slight improvement in the materiality of the risks for IORPs (Figure A.1.1 and Figure A.1.2). While modest economic growth and lower inflation rates were observed in the first half of 2024<sup>45</sup>, significant uncertainty still surrounds the macroeconomic environment. Ongoing geopolitical tensions, inflation rates above the 2% target<sup>46</sup>, and evolving monetary policies continue to contribute to uncertainty, posing challenges for both the insurance and IORP sectors.

**Geopolitical risks, identified by most NCAs as the main driver for macro risks, increase uncertainty around the outlook for inflation and growth.** In the insurance sector, half of the respondents identified geopolitical risks as the main driver, followed by inflationary pressures (15.6%) (Figure A.1.3). For IORPs, over two-thirds of the respondents (70.6%) identified geopolitical risks as a key concern (Figure A.1.4).

Figure A.1.1: Materiality of risks for the insurance sector.

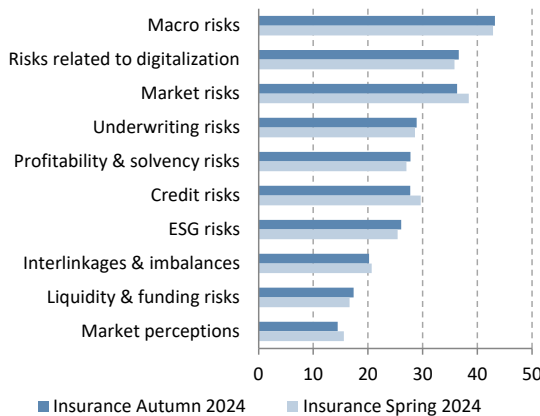
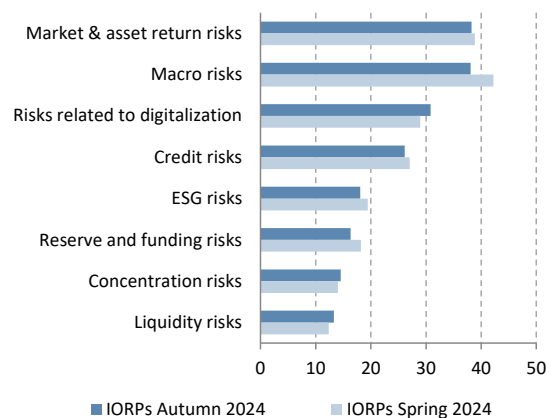


Figure A.1.2: Materiality of risks for the IORP sector.



Source: EIOPA Insurance and IORPs Bottom-Up Surveys Autumn 2024 and Spring 2024.

Note: The ranking is based on the responses received. Risks are ranked according to the probability of their materialisation (from 1 indicating low probability to 4 indicating high probability) and their impact (1 indicating low impact and 4 indicating high impact). The figures show the aggregation (i.e., the product probability times impact) of the average scores assigned to each risk. The results were subsequently normalised on a scale from 0 to 100.

<sup>45</sup> Please refer to the section “Key development and risks” for additional details.

<sup>46</sup> See ECB: Two per cent inflation target. Available at: [www.ecb.europa.eu/mopo/strategy/pricestab/html/index.en.html](http://www.ecb.europa.eu/mopo/strategy/pricestab/html/index.en.html).

Figure A.1.3: Main drivers of macro risks for the insurance sector.

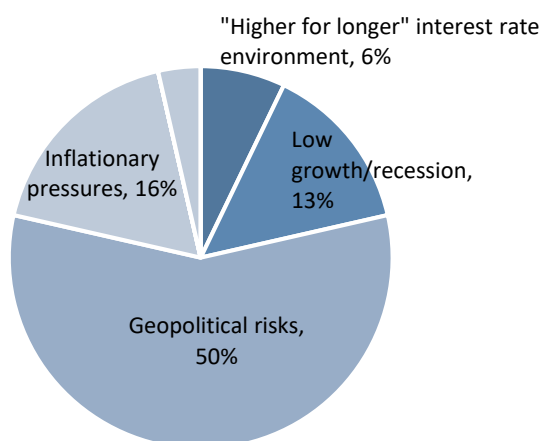
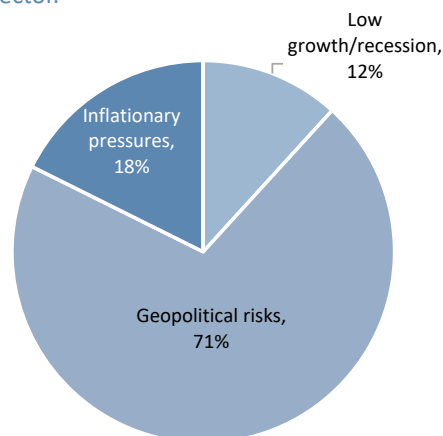


Figure A.1.4: Main drivers of macro risks for the IORP sector.



Source: EIOPA Insurance and IORPs Bottom-Up Surveys Autumn 2024 and Spring 2024.

Note: Based on the responses received.

**Market risks continue to rank among the top concerns for the insurance sector.** Following the positive returns in 2023 for insurers, concerns over market risks still loom in 2024. For insurers, interest rate risk was identified in the survey as the main driver for market risks (41.2% of the respondents) reflecting their high exposure to fixed-income assets and the interest rate guarantees they have provided in several EEA Member States. Furthermore, given the fluctuations and still high interest rates in the real estate market, insurers with high exposure towards this asset class could incur losses in their investment portfolio.

**The materiality of market and asset return risks for the IORP sector increased since Spring 2024, ranked as the top risk, outpacing macro risks (Figure A.1.2).** Investment returns could be negatively impacted by a potential deterioration in economic and financial markets conditions. For Defined Benefits plans this could necessitate additional sponsor support, while for beneficiaries of Defined Contributions plans this translates into lower pension payments. The potential impact depends on the specificities of IORPs across Member States and their asset allocations.

**The materiality of the risks related to digitalization increased since Spring 2024 for both insurance and IORP sectors, ranking as the second key risk for insurers and the third for IORPs (Figure A.1.1 and Figure A.1.2).** Risks related to digitalization were ranked as the second key risk for insurers, ahead of market risks. The ongoing geopolitical conflicts are amplifying uncertainty in the macroeconomic outlook and increasing the frequency and sophistication of cyber threats. While supervisors reported an increase in the number of cyberattacks to insurance undertakings, the overall impact on most members has so far remained limited.

**Cyber risks affect insurers through two main channels: first, operational risks from cyberattacks on themselves and second, exposure to (cyber) underwriting risk.** Additionally, insurers failing to adapt their business to digital transformation face the risk of losing premium income. Going forward, risk related to digitalization are expected to increase further for both sectors (Figures A.1.5 and Figure A.1.6).



According to the respondents, the weak macroeconomic environment is challenging insurers’ underwriting, ranked as the fourth key risk (Figure A.1.1). The prolonged low economic growth and higher inflationary environment is creating pressure over households’ savings and investments. This may result to a further increase in lapses and lower demand for (new) insurance products, impacting negatively insurers’ underwriting performance. In the reinsurance sector, the occurrence of significant catastrophe claims in recent years has led to higher reinsurance prices in 2023<sup>47</sup>. This could impact the future profitability and affordability of insurance.

Overall, the risk outlook for the insurance and IORP sectors in the next 12 months improved, though uncertainty remains (Figure A.1.5 and Figure A.1.6). While, on aggregate, the expected materiality of the risks for insurers and IORPs lowered since Spring 2024, the weak macroeconomic environment and the on-going geopolitical conflicts could still worsen their outlook.

Figure A.1.5: Risks with the highest expected increase in their materiality over the next 12 months for the insurance sector.

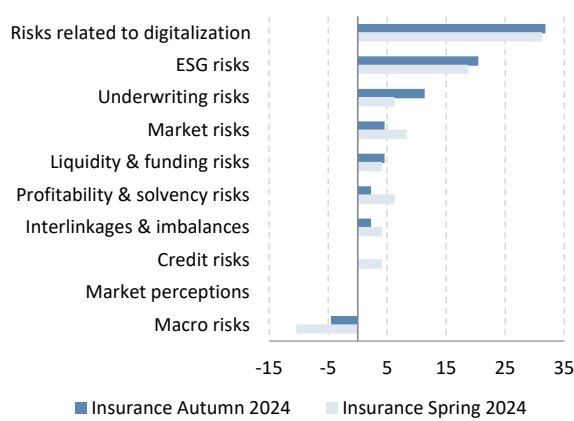
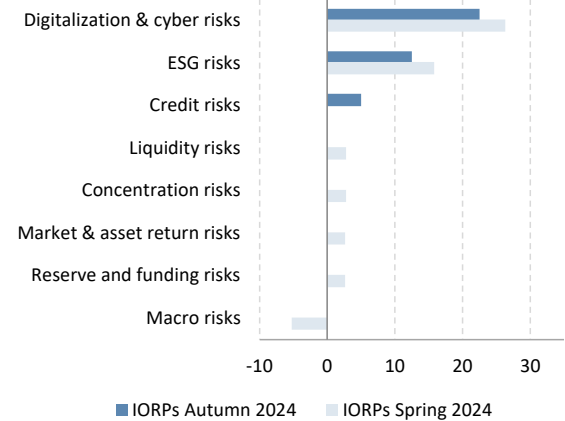


Figure A.1.6: Risks with the highest expected increase in their materiality over the next 12 months for the IORP sector.



Source: EIOPA Insurance Bottom-Up Surveys Autumn 2024 and Spring 2024.

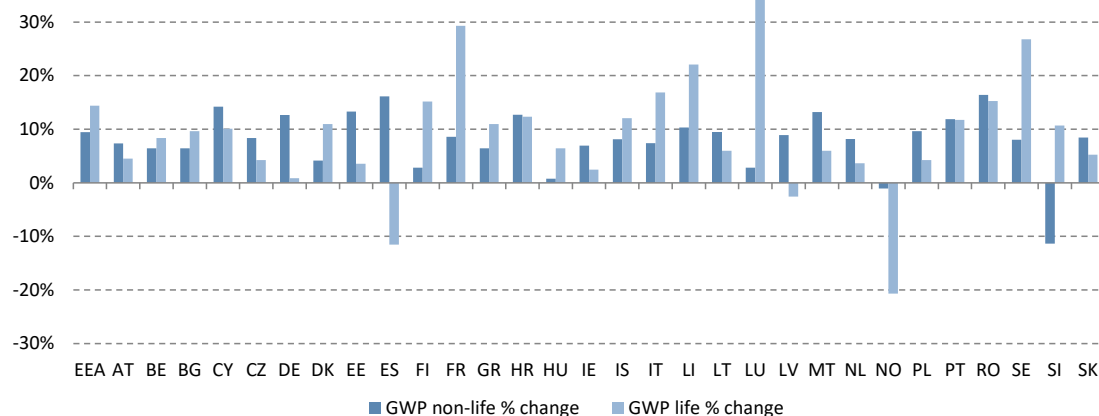
Note: Ranking based on the responses received. Risks are ranked according to the expectation for the future change in their materiality (from -2 indicating strongly decrease to +2 indicating strongly increase). The figures show the aggregation of the average scores assigned to each risk. The results were subsequently normalised on a scale from -100 to 100.

<sup>47</sup>Gallagher Re 1st View, January 2024 [\[link\]](#)

## A.2. STATISTICAL ANNEX

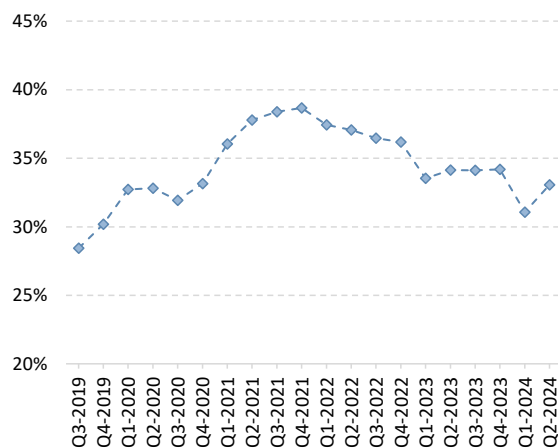
### Insurance sector

Figure A.2.1: Total Life and Non-Life GWP growth from Q2 2023 to Q2 2024 (in %, year-on-year).



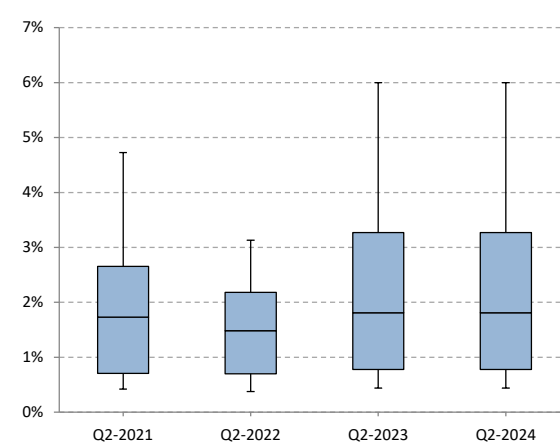
Source: EIOPA Quarterly solo. Note: EEA weighted average. Growth rates are computed by weighting the GWP per reporting currencies. Note: year-on-year change computed on undertakings reporting in both reference quarters.

Figure A.2.2: GWP-Life business: Unit-linked share development over time (% UL in GWP life).



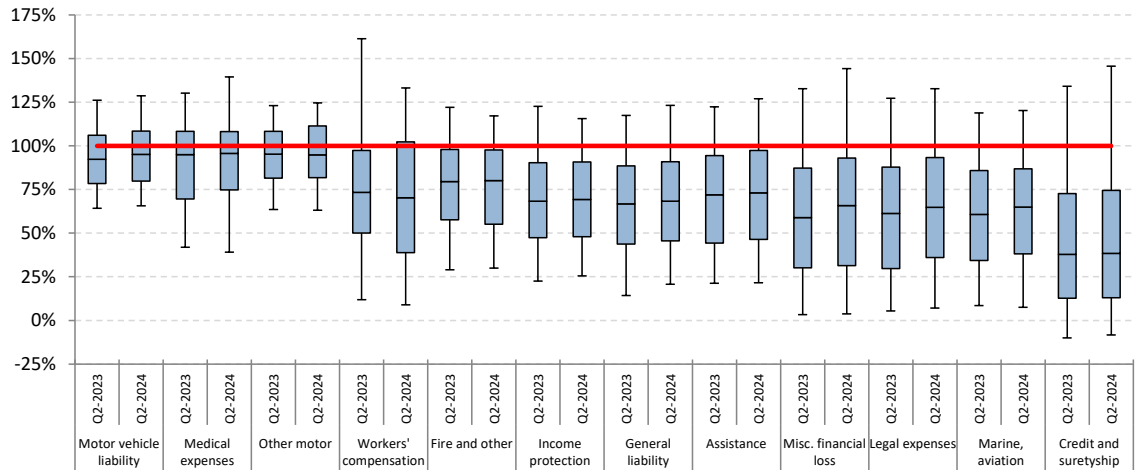
Source: EIOPA Quarterly Solo

Figure A.2.3: Lapse rates (in %; median, interquartile range and 10th and 90th percentile).



Source: EIOPA Quarterly Groups.

Figure A.2.4: Gross Combined Ratio across lines of business (in %; median, interquartile range and 10th and 90th percentile).



Source: EIOPA Quarterly solo

Figure A.2.5: Investment split in Q2 2024 compared to Q2 2023, Q2 2022 and Q2 2021.

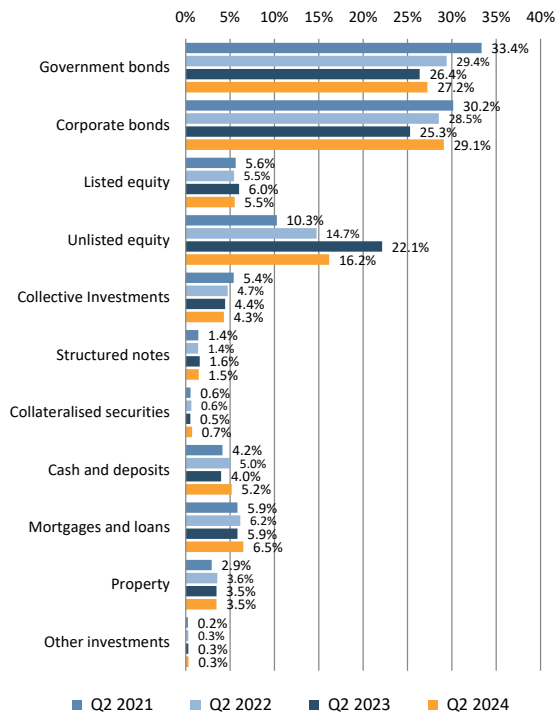
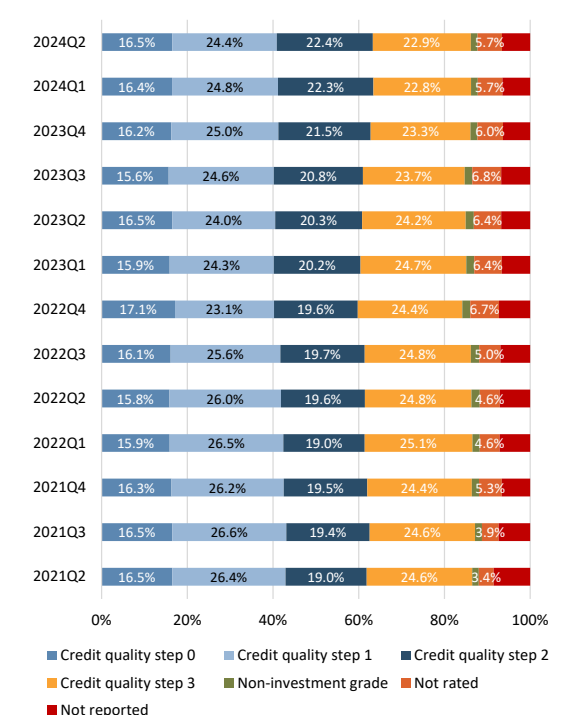


Figure A.2.6: Development in credit quality of bond portfolios for the insurance sector.



Source: EIOPA Quarterly Reporting Solo. Note: For figure A.2.5 assets held for unit-linked business are excluded. For figure A.2.6 government and corporate bond portfolios are combined and assets held for unit-linked contracts are included.

Figure A.2.7: Holdings of government bonds by issuer country for the insurance sector.

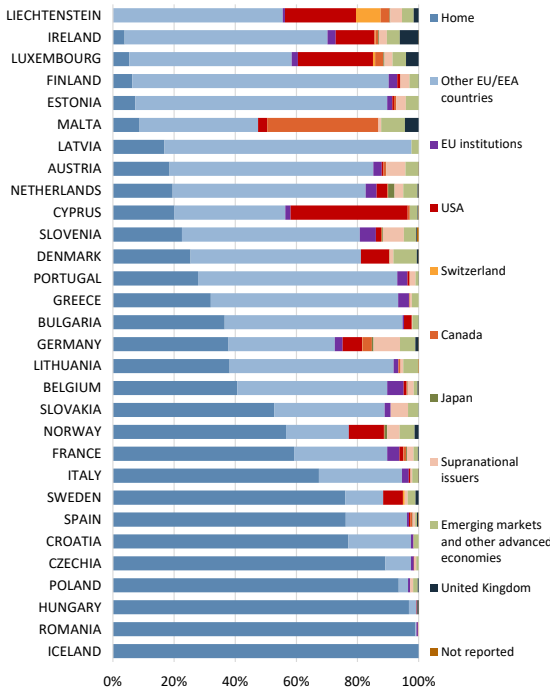
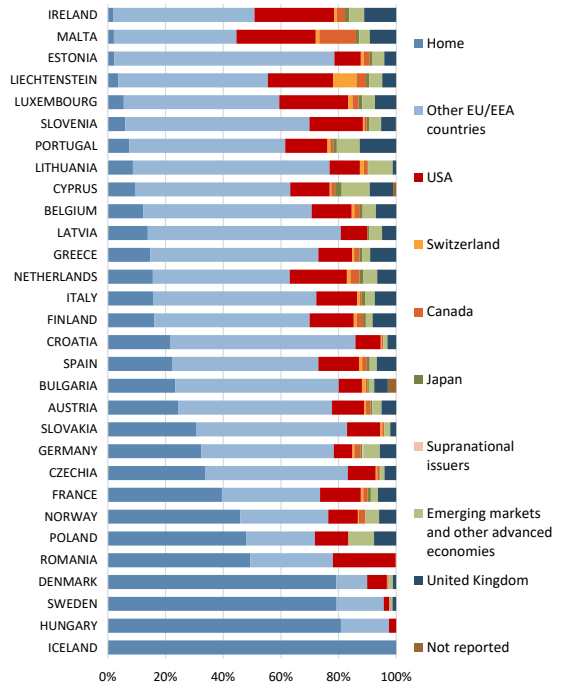


Figure A.2.8: Holdings of corporate bonds by issuer country for the insurance sector.



Source: EIOPA Quarterly Reporting Solo. Reference date: Q2 2023. Note: Look-through approach is not applied. Assets held for unit-linked business are included.

### Reinsurance sector

Figure A.2.9: Gross Written Premiums in the EEA (in EUR bn and %) in Q2 2024.

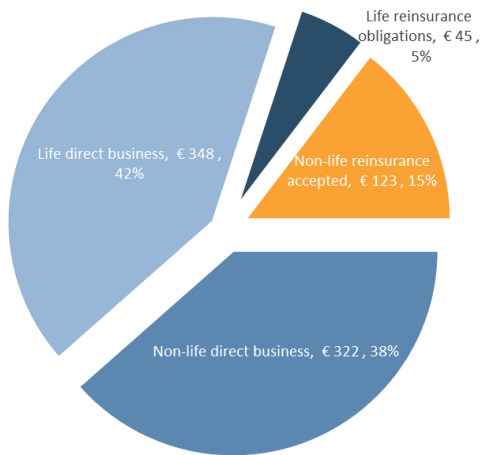
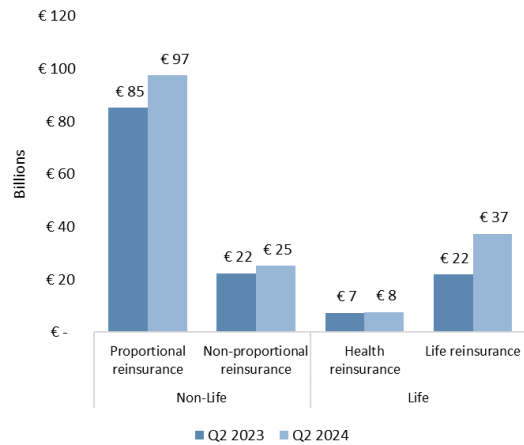
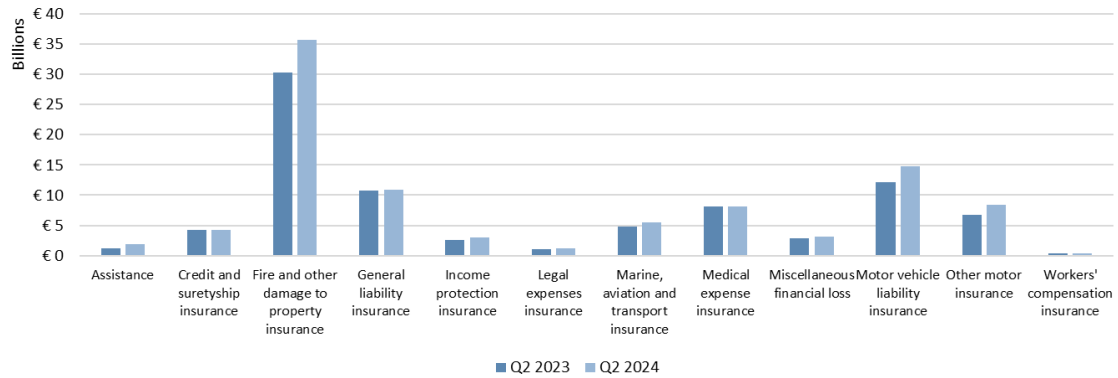


Figure A.2.10: Reinsurance Gross Written Premiums in the EEA (in EUR bn) in Q2 2024.



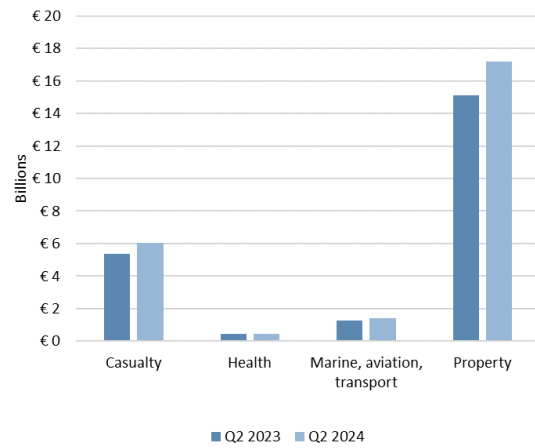
Source: EIOPA Quarterly Solo. Note for figure 2.10: Year-to-date amounts. Non-life reinsurance accepted includes proportional and non-proportional reinsurance. Life reinsurance obligations include life reinsurance and health reinsurance.

Figure A.2.11: Gross written premiums for non-life proportional reinsurance by line of business (EUR bn).



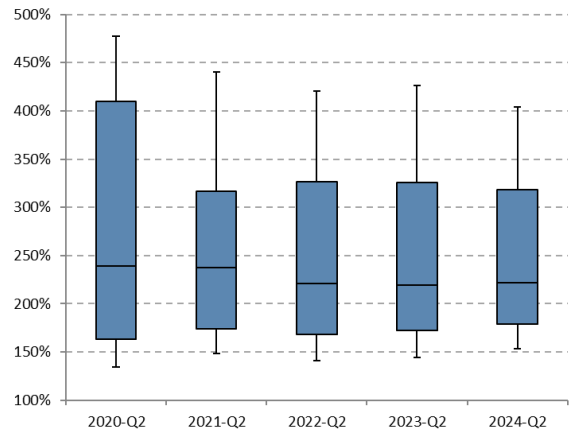
Source: EIOPA Quarterly Solo.

Figure A.2.12: Gross Written Premiums for non-life non-proportional reinsurance by Line of Business (EUR bn).



Source: EIOPA Quarterly Solo

Figure A.2.13: Solvency ratio of EEA reinsurance undertakings (in %; median, interquartile range and 10th and 90th percentile).



**IORP sector<sup>48</sup>**

Figure A.2.14: Total Assets (EUR bn).

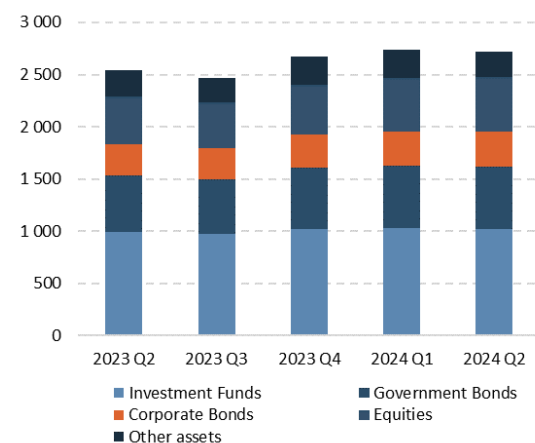
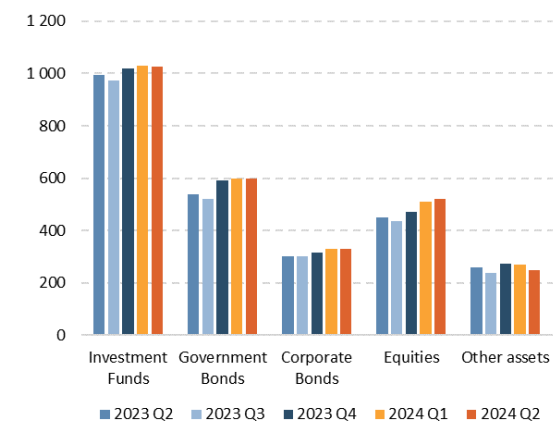


Figure A.2.15: Assets by category (EUR bn).



Source: EIOPA Occupational Pension Statistics.

<sup>48</sup> Figures may be subject to revisions, as they could not cover all Member States due to missing submissions. Information on small IORPs, which are exempted from the full reporting requirements, are excluded, so that for some Member States data may not represent 100% of the total national IORPs sector.

Figure A.2.16: Excess of Assets over Liabilities (EUR bn).

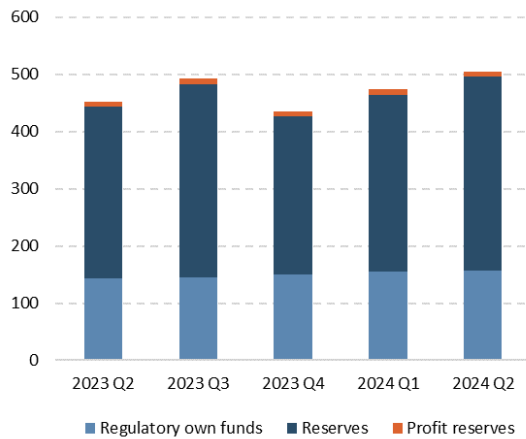
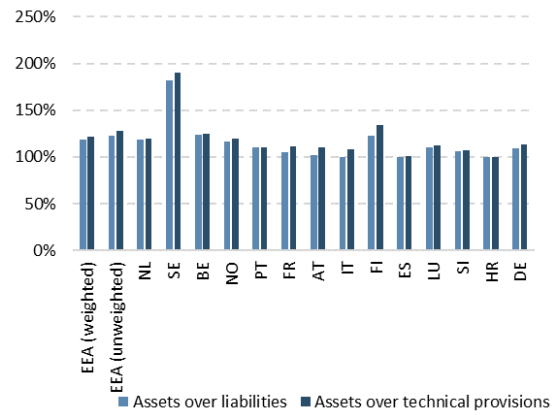
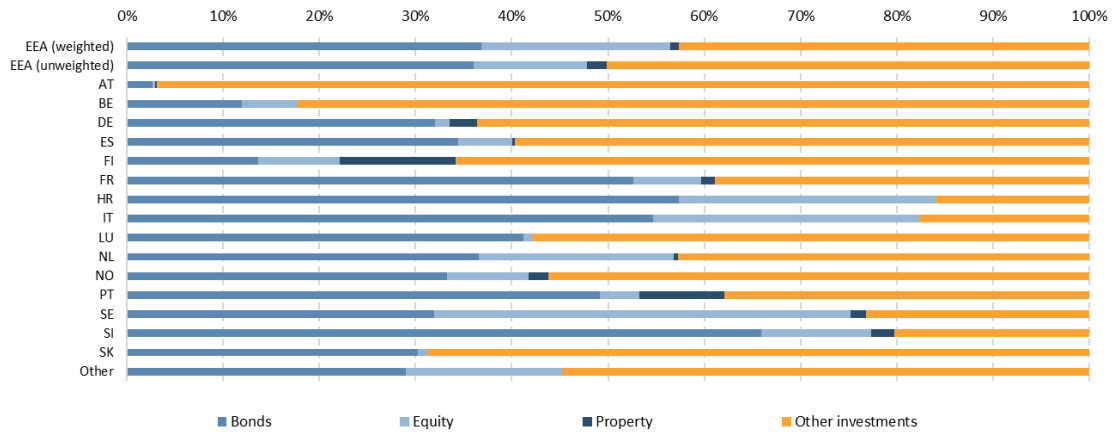


Figure A.2.17: Funding Ratios (DB schemes) by EEA Member State (Q2 2024).



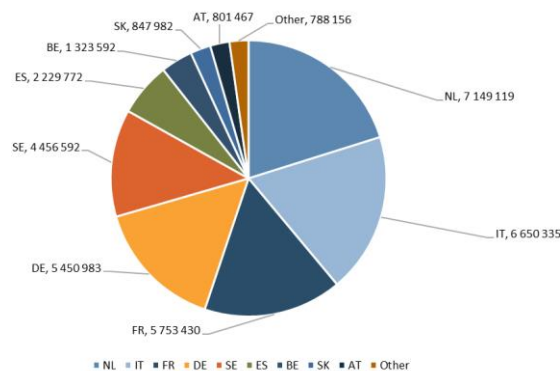
Source: EIOPA IORPs statistics. Regarding Figure A.2.17, in the case of Italy, due to the discontinuation of many DB schemes, the data on technical provisions that are reported to EIOPA are set as equal to the assets held. Notice that the overall share of DB schemes in Italy is only around 2.6% of total EEA DB assets.

Figure A.2.18: Asset allocation with full look through (in %).



Source: EIOPA Occupational Pension Statistics. Date: Q2 2024. Note: Bonds consist of government bonds, corporate bonds, mortgages and loans, debt funds and money market funds. Equity consists of direct equity, equity funds and private equity funds. Property consists of direct property, real estate funds and infrastructure funds and 'other' investments consist of direct other investments, asset allocation funds, alternative funds and other funds.

Figure A.2.19: Active members (2023)



Source: EIOPA Occupational Pension Statistics.

## A3. ANNEXES FOR THE TOPICAL FOCUS “ASSESSMENT OF SYSTEMIC RISK IN THE EEA INSURANCE SECTOR”

### ANNEX 3.1 - LIST OF KEY RISK INDICATORS

Risk category
<b>Size &amp; Global activity</b>
<p><b>Size</b></p> <ul style="list-style-type: none"> <li>• Total assets (% Total assets in the EEA)</li> <li>• Total GWP (% Total GWP in the EEA)</li> <li>• Total technical provisions (% Total technical provisions in the EEA)</li> </ul> <p><b>Global activity</b></p> <ul style="list-style-type: none"> <li>• Premiums written outside of the home country by domestic undertakings (% GWP)</li> <li>• Premiums written in a country by non-domestic insurers (% GWP in a country)</li> </ul>
<b>Interconnectedness</b>
<p><b>Interconnectedness – Macroeconomic exposure</b></p> <ul style="list-style-type: none"> <li>• Duration gap</li> <li>• Guaranteed interest rate versus earned yield</li> <li>• Exposure to currency risk</li> <li>• CDS sold (% Total assets)</li> <li>• Exposure to Debt (Corporate and Sovereign) that matures in 12 months (% Total assets)</li> </ul> <p><b>Interconnectedness – Counterparty exposure</b></p> <ul style="list-style-type: none"> <li>• Exposure to sovereigns (% Total assets)</li> <li>• Exposure to domestic sovereigns (% Total assets)</li> <li>• Exposure to corporates (% Total assets)</li> <li>• Exposure to commercial loans and mortgages (% Total assets)</li> <li>• Exposure to residential loans and mortgages (% Total assets)</li> <li>• Average CQS of investments</li> <li>• Share of below investment grade investments (CQS &gt;3)</li> <li>• Rating Downgrades</li> <li>• Exposures to equity (% Total assets)</li> <li>• Exposures to real estate (% Total assets)</li> <li>• Exposures to banks (% Total assets)</li> <li>• Exposures to (re)insurers and pensions (% Total assets)</li> <li>• Exposures to other financials (% Total assets)</li> <li>• Notional value of derivatives</li> <li>• Market value of derivatives</li> <li>• Exposure to reinsurance (% Technical Provisions)</li> </ul>

<ul style="list-style-type: none"> <li>• Reinsurance part of premiums</li> </ul>
<b>Asset liquidation &amp; Policyholder behaviour</b>
<p><b>Asset liquidation</b></p> <ul style="list-style-type: none"> <li>• Liquid assets ratio (% Total assets)</li> <li>• Surrender value and/or non-life Best Estimate to liquid assets (%)</li> <li>• Share of products with a surrender option (life business)</li> <li>• Sustainability of cash-flow position</li> <li>• Lapse (surrender) ratio (% Gross written premiums, life business)</li> <li>• Short term subordinated debt issued by insurers (% Total liabilities)</li> <li>• Debts owed to credit institutions and other financial liabilities (% Total liabilities)</li> <li>• Funding via Repos (% total assets)</li> </ul> <p><b>Policyholder behaviour</b></p> <ul style="list-style-type: none"> <li>• Lapse (surrender) ratio (Life business, % Technical provisions)</li> </ul>
<b>Substitutability</b>
<ul style="list-style-type: none"> <li>• HHI Non-life sector</li> <li>• HHI Life sector</li> <li>• HHI index-linked and unit-linked business</li> <li>• Number of insurers - growth</li> <li>• Number of insurers - volatility</li> <li>• Market concentration (HHI) for specific lines of business (LoBs)</li> </ul>
<b>Underwriting &amp; Solvency</b>
<ul style="list-style-type: none"> <li>• Premium growth (% , split by type of business)</li> <li>• Claims development indicator</li> <li>• Combined ratio (for non-life business)</li> <li>• Return on investments (% , life business)</li> <li>• SCR ratio (%)</li> <li>• Assets over Liabilities</li> <li>• SCR ratio without Transitionals on TP/IRR</li> <li>• EOF to meet the SCR - Tier 1 (% EOF)</li> </ul>
<b>Emerging risks<sup>49</sup></b>
<ul style="list-style-type: none"> <li>• Insurers' external ESG ratings</li> <li>• Insurers' external ESG ratings (change in ratings)</li> <li>• Changes in insurers' investments in green bonds</li> <li>• Share of insurers' investments in green bonds</li> <li>• Climate relevant assets share based on their greenhouse gas emissions</li> <li>• Exposure at risk of NatCat events: i) flood and ii) windstorm</li> <li>• Economic damage caused by weather and climate-related extreme events</li> <li>• Investments assessed w.r.t the EU taxonomy – eligible activity (TEL)</li> </ul>

<sup>49</sup> For presentation purposes and to ease the analysis, this category might be split into ESG risks and Digitalisation and cyber risks.



- Investments in companies/subsidiaries operating along the thermal coal value chain
- Supervisory assessment of digitalisation & cyber risks
- Change in frequency of cyber incidents
- Cyber negative sentiment

#### **Economic environment**

- Real GDP forecast
- Inflation forecast (percent change in average consumer prices, %)
- Unemployment forecast (percent of total labour force, %)
- General Government Deficit forecast (percent of GDP, %)
- Sovereign CDS spreads
- Debt service ratios for the private non-financial sector (%)
- Residential real estate prices (annual average rate of change, %)
- Volatility of equity prices
- 10 Years SWAP rates (%)
- Total assets of insurance sector (% of GDP)
- Insurance penetration (GWP as % of GDP)

## ANNEX 3.2 - LIST OF ANCILLARY INDICATORS

Risk category
<b>Size &amp; Global activity</b>
<p><b>Global activity</b></p> <ul style="list-style-type: none"> <li>• Business activity of foreign insurers in the jurisdiction (% # insurers)</li> <li>• Business activity of domestic insurers abroad (% # domestic insurers)</li> <li>• Number of cross border insurance groups</li> </ul>
<b>Interconnectedness</b>
<p><b>Interconnectedness – Macroeconomic exposure</b></p> <ul style="list-style-type: none"> <li>• Assets duration</li> <li>• Liabilities duration</li> <li>• Currency mismatch</li> <li>• Share of below investment grade sovereign bonds (CQS &gt;3)</li> <li>• Share of below investment grade corporate bonds (CQS &gt;3)</li> <li>• Average CQS of government bond portfolio</li> <li>• Average CQS of corporate bond portfolio</li> </ul>
<b>Underwriting &amp; Solvency</b>
<ul style="list-style-type: none"> <li>• Eligible Own Funds (% Total assets)</li> <li>• EOF to meet the SCR - Tier 2 (% EOF)</li> <li>• Ancillary own funds (% AOF)</li> <li>• Reconciliation reserve (% AOF)</li> <li>• MCR ratio</li> <li>• Weight of P/FIM (% BS)</li> <li>• SCR Market risk (SF - % BSCR)</li> <li>• SCR Counterparty default risk (SF - % BSCR)</li> <li>• SCR Life underwriting risk (SF - % BSCR)</li> <li>• SCR Health underwriting risk (SF - % BSCR)</li> <li>• SCR Non-life underwriting risk (SF - % BSCR)</li> <li>• Diversification (SF - % BSCR)</li> <li>• Intangible asset risk (SF - % BSCR)</li> </ul>
<b>Emerging risks<sup>50</sup></b>
<ul style="list-style-type: none"> <li>• Insurers' external E /S /G ratings</li> </ul>

<sup>50</sup> For presentation purposes and to ease the analysis, this category might be split into ESG risks and Digitalisation and cyber risks.

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