

# INSURANCE RISK DASHBOARD

February 2024

05 February 2024

# INSURANCE RISK DASHBOARD\*

FEBRUARY 2024

		LEVEL / TREND	OUTLOOK
	Macro risks		
	Credit risks		
	Market risks		
	Liquidity and funding risks		
	Profitability and solvency risks		
	Interlinkages and imbalances		
	Insurance (underwriting) risks		
	Market perceptions		
	ESG-related risks		
	Digitalisation and cyber risks		


\* The reference date for company data is Q3-2023 for quarterly indicators and 2022-YE for annual indicators. The cut-off date for most market indicators is end December 2023, The Level (color) corresponds to the level of risk as of the reference date, the Trend is displayed for the 3 months preceding the reference date and the Outlook is displayed for the 12 months after the reference date. The latter is based on the responses received from 24 national competent authorities (NCAs) and ranked accordingly to the expected change in the materiality of each risk (substantial decrease, decrease, unchanged, increase and substantial increase).

## RISK DASHBOARD – KEY OBSERVATIONS

- ▶ Market risks for the European insurance sector are at high level, while other risk categories are all at medium level. **While macro-related risks persist** in the insurance sector with projections still pointing to a subdued outlook for GDP growth, there is a declining trend, primarily propelled by a reduction in forecasted inflation across all geographical areas considered. **Credit risks** are stable at medium level, with spreads for the most relevant fixed income categories somewhat declining at end-2023. **Market risks** are prominent as volatility in the bond market remains elevated and commercial real estate prices have further declined.
- ▶ **Liquidity and funding risks** remain at medium level with an increasing trend driven by developments in cat bond issuance. The median of cash holdings has slightly decreased compared to the previous quarter. **Profitability and solvency risks remain stable** with a slight decline in the median ratio of assets over liabilities and in the median solvency ratio of insurance groups. The median SCR ratio of non-life undertakings reported an increase, while the distribution for life undertakings is overall unchanged.
- ▶ **Interlinkages and imbalances risks** are also stable at medium level. Median exposures to banks, domestic sovereign debt, and derivative holdings, as well as the reinsured part of premiums, have slightly decreased compared to the previous quarters. **Insurance risks** remain at medium level with positive median year-on-year premium growth reported for both life and non-life business, and a further deterioration observed for the loss ratio.
- ▶ **Market perceptions** show underperformance of life and non-life insurance stocks when compared to the broader market for the fourth quarter of 2023.
- ▶ **ESG related risks** remain stable at medium level. The median exposure towards climate relevant assets hovers around 3.3% of total assets, while investments in green bonds are at around 7% of total green bonds outstanding.
- ▶ **Digitalization and cyber risks** decreased to medium level, but they are expected to further increase according to the assessment of national insurance supervisors. Cyber negative sentiment also indicates an increasing concern in the fourth quarter of 2023. The annual rate of change in the frequency of cyber incidents impacting all sectors of activity, as measured by the latest publicly available data, remained high in the third quarter of 2023 but decreasing compared to the previous quarter.

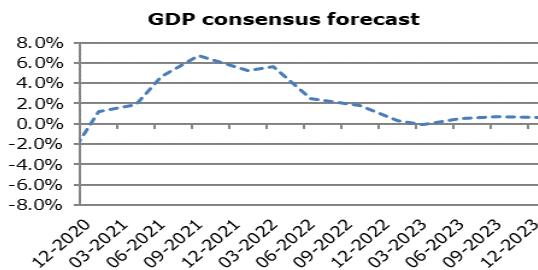
## MACRO RISKS

While macro-related risks persist in the insurance sector, there is a declining trend pushing the risk level to medium, primarily propelled by a reduction in forecasted inflation. The average forecasted inflation rate across all geographical areas decreased, diminishing from 2.9% to approximately 2.4%, and for the western areas is approaching the target. Overall, the economic data suggest a downward revision in GDP growth outlook, a slight increase in unemployment rates, a decrease in fiscal balances and tightening of monetary policy stances.



LEVEL:	MEDIUM
TREND:	DECREASE

Average forecasted GDP growth for the next four quarters slightly decreased from 0.61% to 0.56%. Compared to the previous assessment, the average forecasts have been revised downwards for BRICS, UK, and EU, while there is upward revision for US and CH.



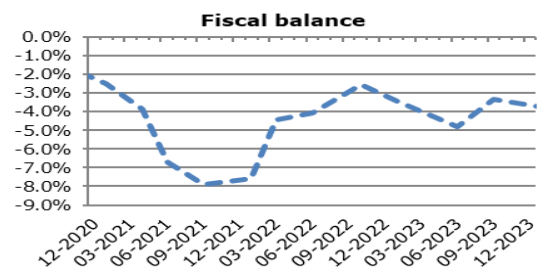
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS based on EEA insurers investment exposures. Source: Bloomberg Finance L.P.

Unemployment rates across major geographical areas are on average around 5.64%, slightly increasing.



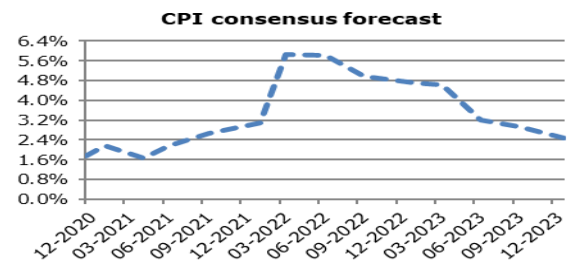
Note: Weighted average for EU, Switzerland, United States, China, based on EEA insurers investment exposures Source: Refinitiv

Fiscal balances decreased to an average level of -3.76% of GDP with respect to -3.34% in the previous quarter, driven mostly by the UK.



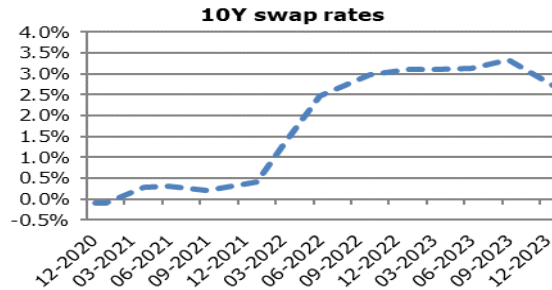
Note: Weighted average for EU, UK and United States, based on EEA insurers investment exposures. Source: Refinitiv

Average forecasted inflation for the next four quarters further decreased to 2.41%, from 2.92% in the previous quarter. The decrease was reflected in all geographical areas, particularly EU and UK.



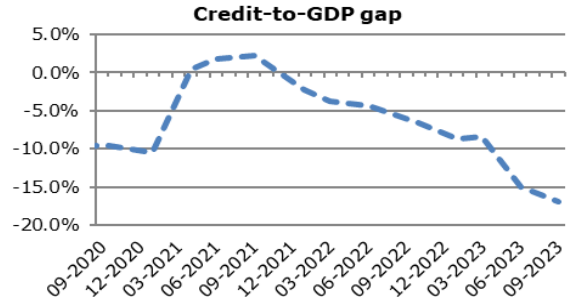
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS, based on EEA insurers investment exposures. Source: Bloomberg Finance L.P.

The indicator on the 10 years swap rates across main currencies is around 2.68% on average in the fourth quarter of 2023, slightly decreasing compared to 3.34% in the previous quarter.



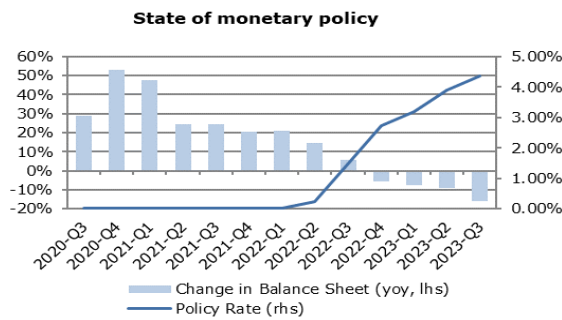
Note: Weighted average for EUR, GBP, CHF, USD, based on EEA insurers investment exposures Source: Refinitiv

The credit to GDP gap across main geographical areas further decreased to an average of -17%.



Note: Weighted average for EA, United Kingdom, Switzerland, United States, China, based on EEA insurers investment exposures. Source: BIS

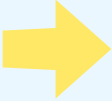
Central banks' average policy rate further increased from 4.37% to 4.57% in Q4 2023. The balance sheets of the major central banks decreased by 12.5% on average with respect to the last 12 months (average value across countries).



Note: Weighted average for Euro area, United Kingdom, Switzerland, United States, based on EEA insurers investment exposures. Source: Bloomberg Finance L.P.

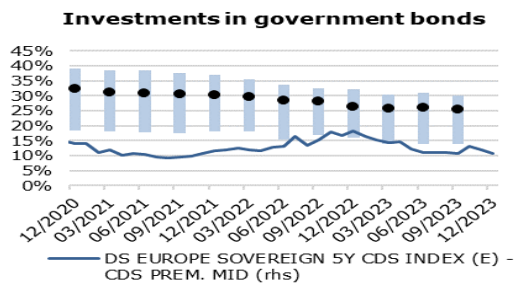
## CREDIT RISKS

Credit risks remained at a medium level and display a stable trend. In Q4-2023, CDS spreads showed varied dynamics across sectors. European sovereign bond CDS spreads slightly decreased, with insurers' median exposures to this investment class stable around 25.4% of total assets. Unsecured financial bond spreads also decreased, while secured financial bond spreads increased. Non-financial corporate bond spreads slightly declined, with the median exposure to this segment remaining around 9.7% of total assets. The median average credit quality of insurers' investments remained stable, corresponding to an S&P rating between AA and A.



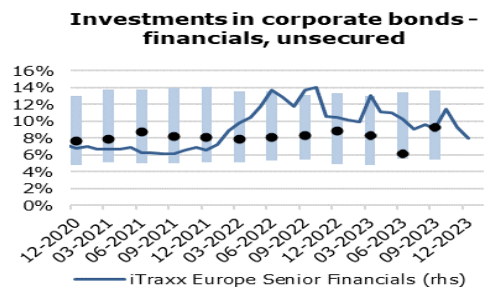
**LEVEL: MEDIUM**  
**TREND: CONSTANT**

In the fourth quarter of 2023, CDS spreads for European sovereign bonds slightly decreased. Insurers' median exposure to this asset class hovers around 25.4% of total assets in Q3-2023.



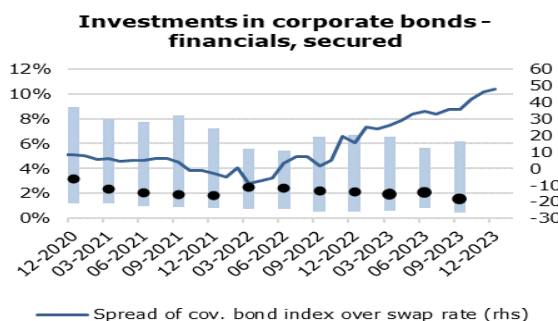
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG (N<sub>2023</sub> Q3=93)

Spreads for unsecured financial bonds decreased in the fourth quarter of 2023. The median exposure of European insurers to this asset class increased from 6.2% to 9.3% in Q3 2023.



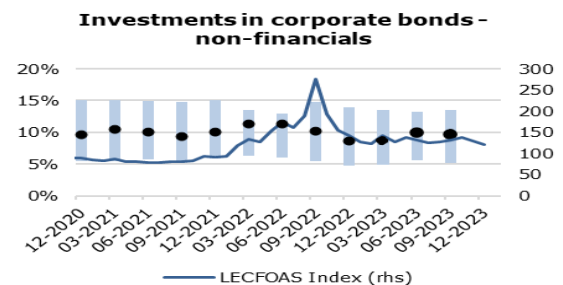
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG (N<sub>2023</sub> Q3=82)

Spreads for secured financial bonds further increased to 48 bpts in the fourth quarter of 2023. Median exposure to this asset class slightly decreased to 1.6% of total assets in Q3-2023.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2023</sub> Q3=77)

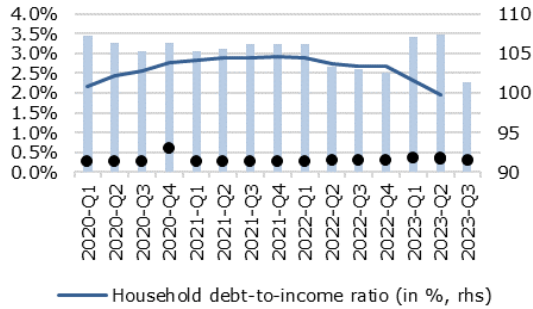
Spreads for non-financial corporate bonds slightly decreased to 120 bpts in the fourth quarter of 2023. Median exposure to non-financial corporate bonds for European insurers was around 9.7% of total assets in Q3-2023.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2023</sub> Q3=80)

The latest data available shows an average household debt-to-income ratio around 99.7%, slightly decreasing, while the median exposure of insurers to loans and mortgages remained around 0.31% in Q3-2023.

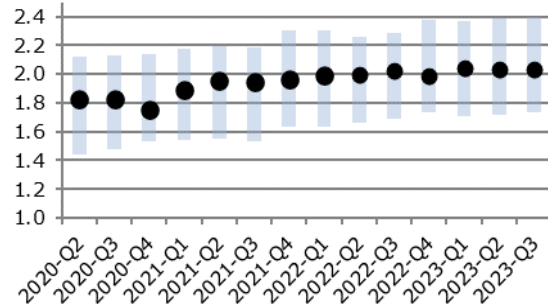
**Investments in loans and mortgages to individuals**



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure (weighted average of EA and UK). Source : QFG (N<sub>2023 Q3</sub>=93), ECB

The median average credit quality step is around 2, corresponding to an S&P rating between AA and A, and the 75<sup>th</sup> percentile remained at a higher level than the average of the past 5 years.

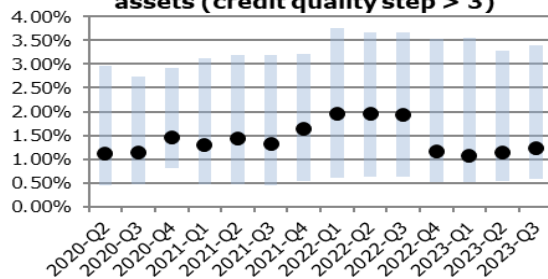
**Average rating of investments (credit quality step)**



Note: Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=90)

The median share of below investment grade assets (with a credit quality step higher than 3) slightly increased to 1.2% in Q3-2023 (from 1.1% in the previous quarter).

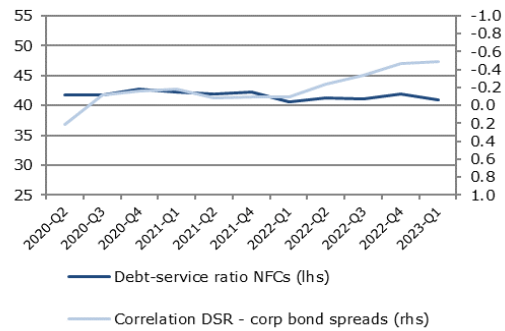
**Share of below investment grade assets (credit quality step > 3)**



Note: Distribution of indicator (interquartile range, median). Includes both internal and external credit ratings. Ssource: QFG (N<sub>2023 Q3</sub>=92)

The correlation between the debt-service ratio of non-financial corporations and corresponding corporate bond spreads, aimed at capturing potential mispricing of credit risk, became more negative. The debt service ratio remained around 41% on average, based on the latest data available.

**Fundamental credit risk**



Note: Correlation between the debt-service ratio of non-financial corporates (weights based on EEA insurers investment exposures) and the spread of non-financial corporate bonds based on a 12-quarter rolling window. Source: BIS, Bloomberg Finance L.P.

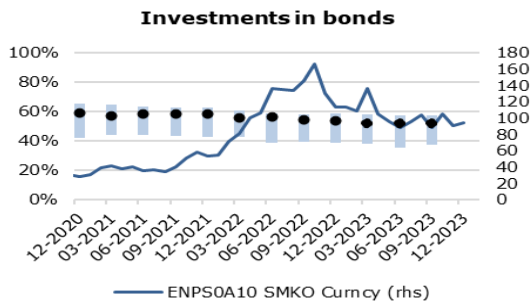
## MARKET RISKS

Market risks are stable at a high level. Volatility in the fixed income market increased and it decreased in the equity markets since the previous quarter. The annual growth rate of real estate prices decreased to -4.77% in the first quarter of 2023 and vulnerabilities in the CRE remain a concern. The indicator concentration of assets shows an increasing median in the third quarter of 2023. Other indicators in this risk category are annual and will be updated once new data is available.



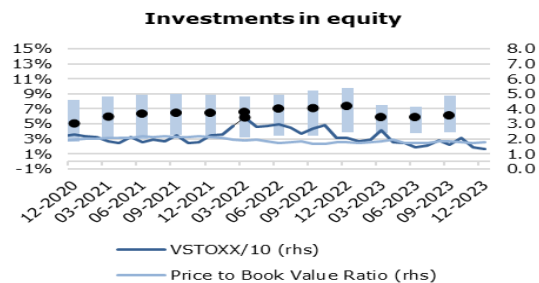
**LEVEL:** HIGH  
**TREND:** CONSTANT

The volatility in interest rates (proxied by the index on the swap option for the Euro) increased to 94 bpts in the last quarter of 2023. Median exposures to bonds remain stable at 51% of total assets in Q3-2023.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2023 Q3</sub>=93)

Volatility of equity prices as well as the price to book value decreased slightly in the last quarter compared to the third quarter of 2023. Median exposures to equity slightly increased to 6.1% of total assets in Q3-2023.



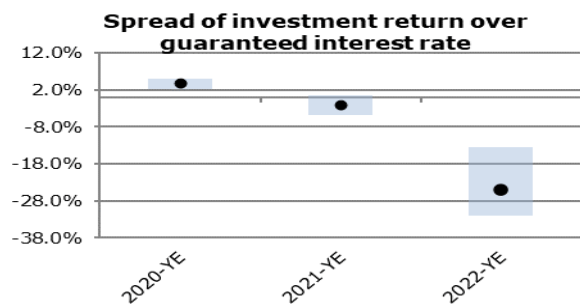
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2023 Q3</sub>=93)

The indicator on the annual growth rate of real estate prices decreased to -4.77% in the first quarter of 2023. Commercial real estate prices for the second quarter 2023 (not shown in the chart) report a further decrease of -9.8%. Median exposures to property hover around 3.2% of total assets in Q3-2023.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. The growth of real estate prices is based on a weighted average of commercial and residential real estate prices. Latest observation for property prices is Q1-2023. Source: QFG (N<sub>2023 Q3</sub>=93); ECB

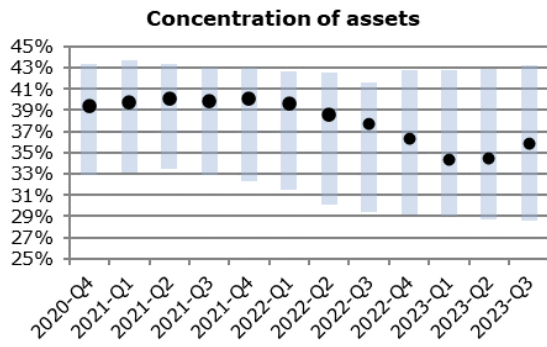
The median spread of investment returns over guaranteed rates decreased to -25% at the end of 2022. The significant decrease is driven by unrealised losses in investment returns. Without unrealised losses, the median spread would be around 0%.



Note: Distribution of indicator (interquartile range, median). The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N<sub>2022</sub>=363)

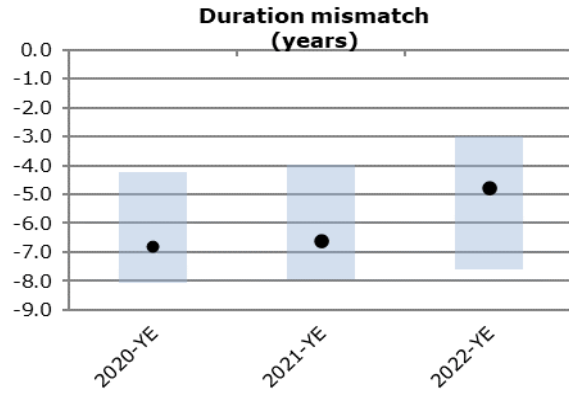


The indicator on concentration of assets shows an increasing median, standing at 35.85% in Q3-2023 (34.51% in the previous quarter).



Note: Herfindal-Hirschman index computed on six balance sheet asset classes (government bonds, corporate bonds, equities, properties, cash and cash equivalents and loans and mortgages). Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=94)

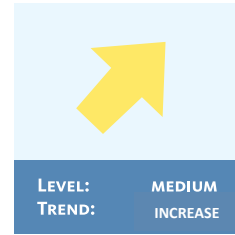
The median of the duration mismatch indicator narrowed to around -5 years, as the duration of liabilities decreased more than that of assets. Duration mismatch is based on the modified duration of the fixed income assets and of the liabilities. Duration of the liabilities does not consider optionality such as future profit participation.



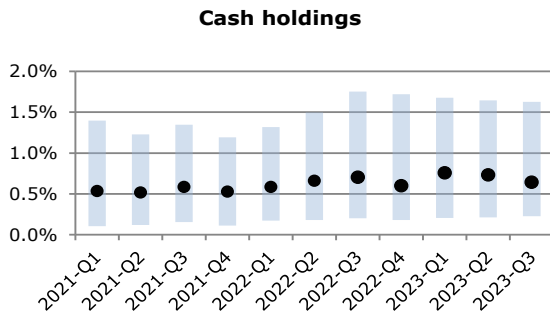
Note: EIOPA estimates the modified duration of the liabilities based on the reported Macaulay duration. This calculation might be revised with the introduction of the new taxonomy, depending on data quality and availability. Distribution of indicator (interquartile range, median). Source: Assets QFG (N<sub>2022 Q4</sub>=83); Liabilities AFG (N<sub>2022</sub>=83)

## LIQUIDITY AND FUNDING RISKS

Liquidity and funding risks are at medium level but show an increasing trend driven by developments in the cat bond issuance indicator. The latter shows a low issuance volume in the third quarter of last year, in line with the seasonality experienced in the past years, and an increase in the multiplier (spread to expected annual loss). Insurers' bond issuance volumes declined, as well as the average ratio of coupons to maturity. The median liquid assets ratio and cash holdings decreased only slightly compared to the previous quarter.

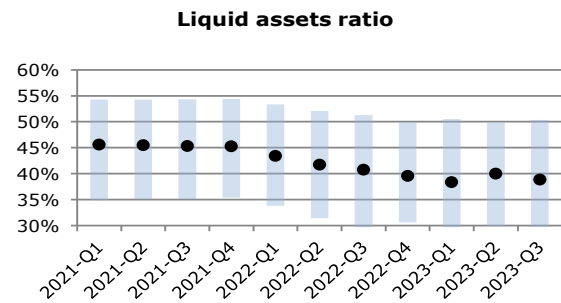


The median of cash holdings decreased to 0.64% in Q3-2023 from 0.73% in the previous quarter.



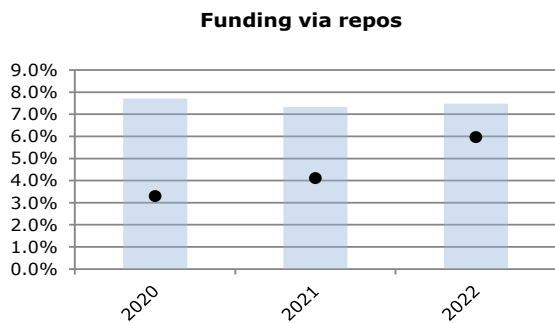
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,771).

The distribution of the liquid assets to total assets ratio is overall stable, with the median at 39% in Q3-2023 (40% in the previous quarter).



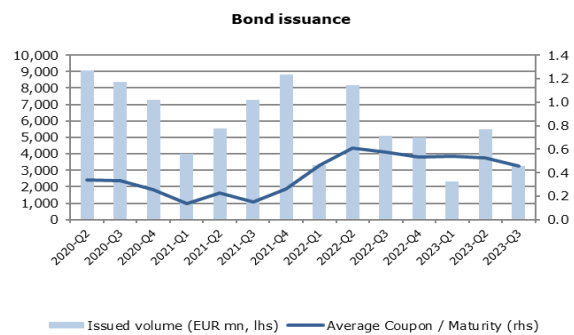
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,698).

The median exposure to funding via repos continued increasing, amounting to 6% in 2022 from 4% in the previous year.



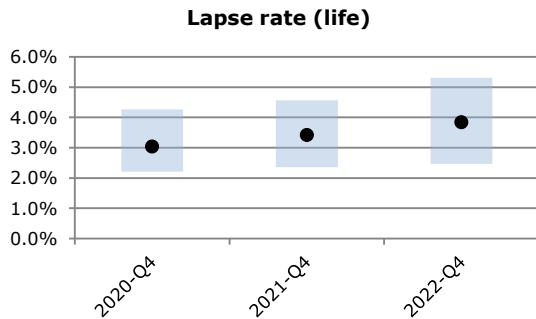
Note: Distribution of indicator (interquartile range, median). Source: ARS (N<sub>2022</sub>=88).

Bond issuance volumes decreased to EUR 3.2 billion in Q3-2023. The average ratio of coupons to maturity also dropped to 0.46 (from 0.53 in the previous quarter).



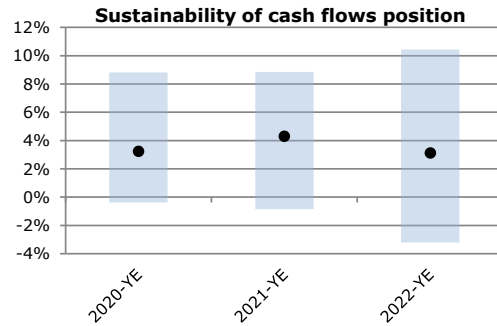
Note: Volume in EUR mn. Source: Bloomberg Finance L.P.

The distribution of lapse rates in life business shifted slightly upwards, with a median standing at 3.8% in Q4-2022 (+0.4 p.p. compared to the previous year).



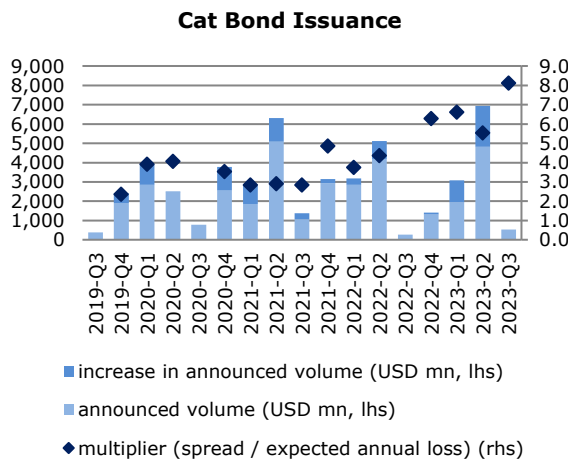
Note : Distribution of indicator (interquartile range, median). Source : QFG (N<sub>2022 Q4</sub>=92)

The median of the indicator on the sustainability of the cash flow position decreased from 4% in 2021 to 3% in 2022, though a more significant decline is observed for the lower tail of the distribution. The indicator intends to capture whether the undertakings hold enough liquid assets to cover net cash outflows at a given time.



Note : Distribution of indicator (interquartile range, median). From October 2023, the indicator has been adjusted. Source : ARS (N<sub>2022</sub>=2,314).


Catastrophe bond issuance decreased in Q3-2023 to USD 533 million following the seasonality observed in the past quarters. The multiplier increased from 5.5 to 8. Most of the cat bonds issued covered US multi-risk natural catastrophes (storm and earthquake).



Note: Volumes in USD mn, spread in per cent. Source: <http://artemis.bm>

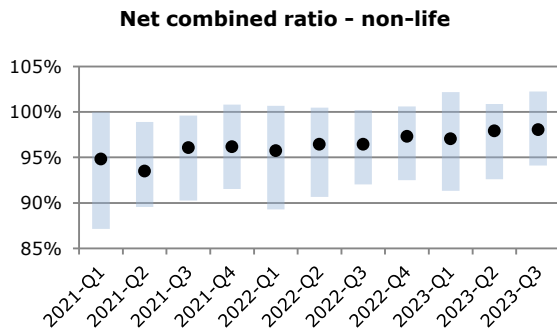
## PROFITABILITY AND SOLVENCY

Profitability and solvency risks remain stable at medium level. The median net combined ratio (for non-life insurers) remained stable in the third quarter of 2023, while other profitability measures are only available on a semi-annual or annual basis. The median ratio of assets over liabilities slightly declined, as well as the median solvency ratio of insurance groups. The median SCR ratio of non-life undertakings reported an increase, while for life undertakings the distribution remained overall unchanged. Expected profits in future premiums slightly decreased.



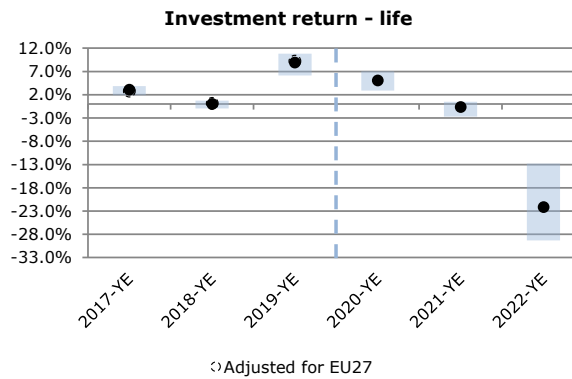
LEVEL: MEDIUM  
TREND: CONSTANT

The median net combined ratio for non-life business remains stable at 98% in Q3-2023, while the two tails of the distribution shifted upwards.



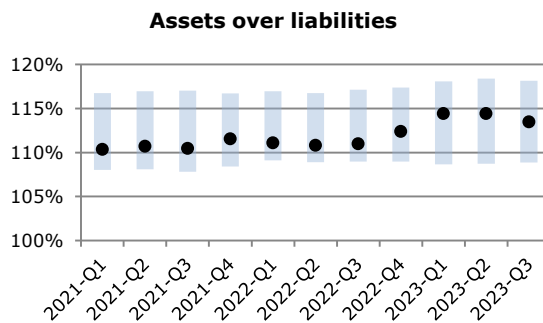
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,361).

The distribution range of the return on investments for life solo undertakings shifted downwards, reaching a median of -22.1% in 2022, driven by unrealised losses especially on fixed income assets. Excluding unrealised losses, the return on investments would decrease from 2% in 2021 to 0.9% in 2022.



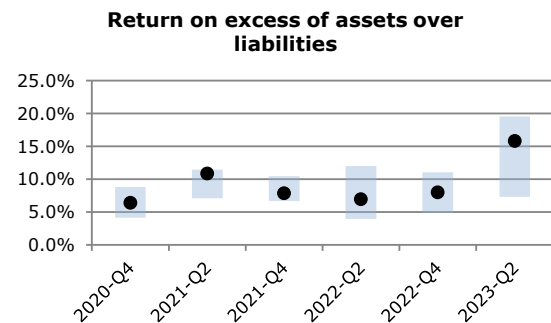
Note: Distribution of indicator (interquartile range, median). The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N<sub>2022</sub>=383).

The median of the ratio of assets over liabilities shifted slightly downwards standing at 113.5% in Q3-2023 (114.4% in the previous quarter).



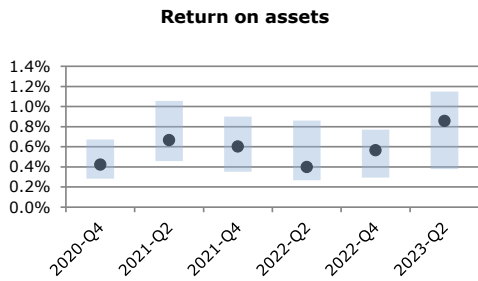
Note: Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=93).

The median of the return on excess of assets over liabilities (based on statutory accounts) doubled from 8% in Q4 2022 to 16% in Q2-2023.



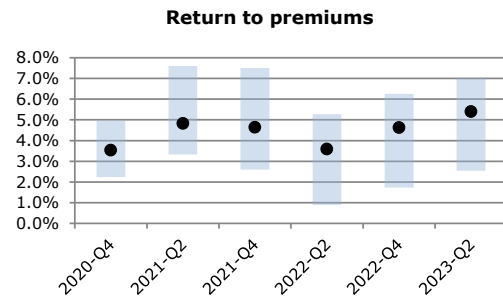
Note: Distribution of indicator (interquartile range, median). Q2 figures annualised. Source: QFG and ARG (N<sub>2023 Q2</sub>=91).

The median ratio of return on assets (based on statutory accounts) increased to 0.9%, from 0.4% in Q2-2022 and 0.6% in Q4-2022.



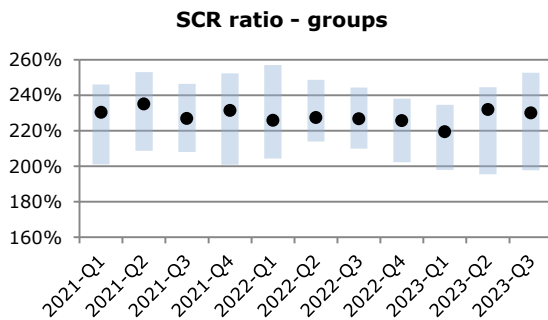
Note: Distribution of indicator (interquartile range, median). Q2 figures annualized. Source: QFG and ARG (N<sub>2023 Q2</sub>=91).

The distribution of return to premiums moved upwards, with a median of 5.4% in Q2-2023.



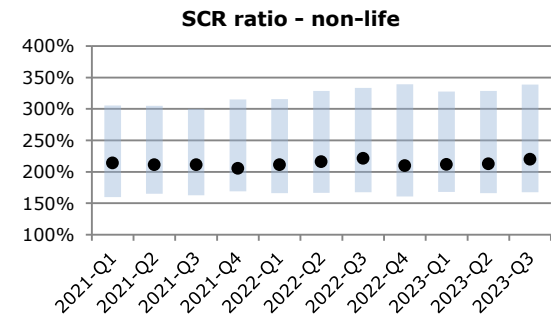
Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG (N<sub>2023 Q2</sub>=92).

The median SCR ratio for groups slightly decreased to 230% in Q3-2023 from 232% observed in the previous quarter.



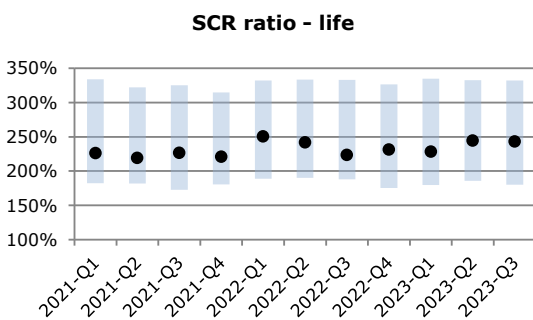
Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG (N<sub>2023 Q3</sub>=91).

The median of the SCR ratio for non-life solo undertakings increased to 220% in Q3-2023 (212% in Q2-2023).



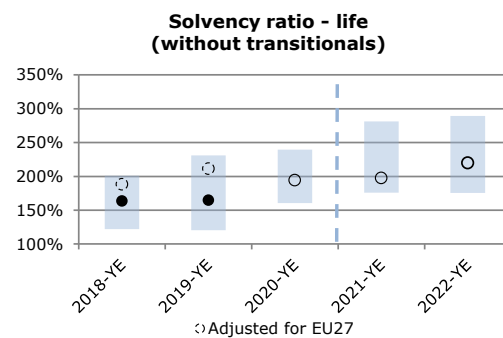
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,079).

The interquartile range of the SCR ratio for life solo undertakings remained overall stable, with a median standing at 243%.



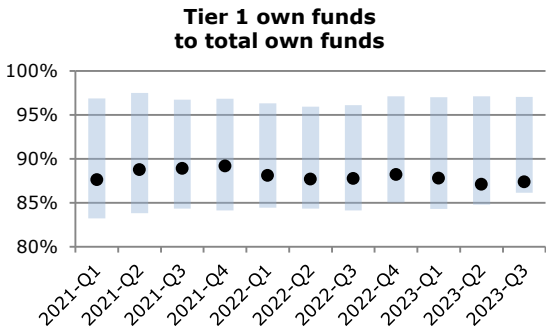
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=368).

The median SCR ratio of life solo companies excluding the impact of transitional measures improved to 219% (198% in 2021).



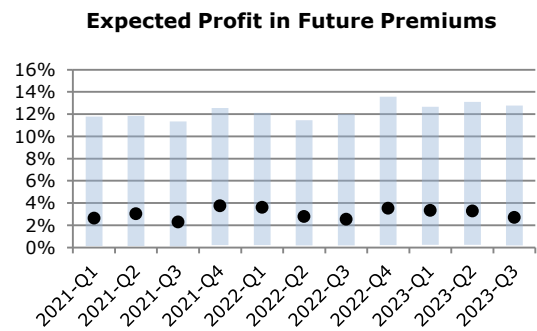
Note: Distribution of indicator (interquartile range, median). Source: ARS (N<sub>2022</sub>=232).

The median of the tier 1 capital on total own funds remained overall stable, standing at 87% in Q3-2023, while the lower tail of the distribution increased.



Note: Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=94).

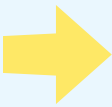
The median of the distribution of expected profit in future premiums decreased to 2.7% in Q3-2023 (3.3% in Q2-2023), after hovering around the same level in the previous quarters.



Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,841).

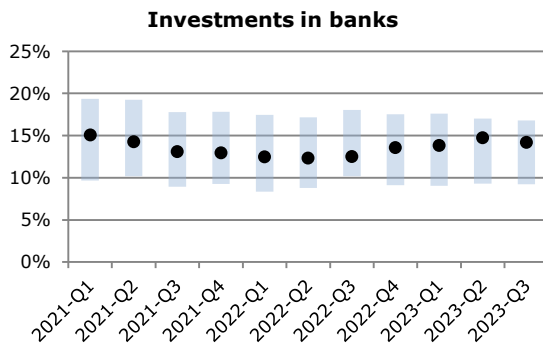
## INTERLINKAGES AND IMBALANCES

Interlinkages and imbalances risks remain stable at medium level in Q3-2023. Median exposures to banks, domestic sovereign debt, and derivative holdings, as well as the median reinsured part of premiums, slightly decreased compared to the previous quarter. Median exposures to insurance and other financial institutions remained overall stable in Q3-2023.



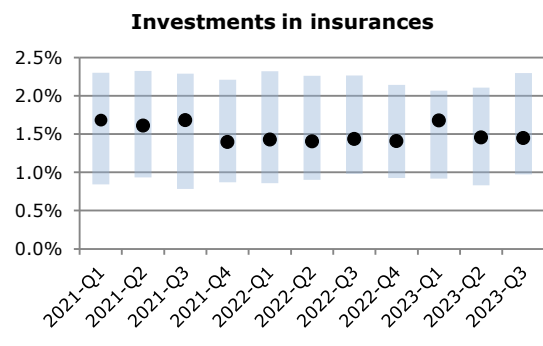
**LEVEL: MEDIUM**  
**TREND: CONSTANT**

The median of investments in banks as a share of total assets slightly decreased to 14.2% in Q3-2023 (14.7% in Q2-2023).



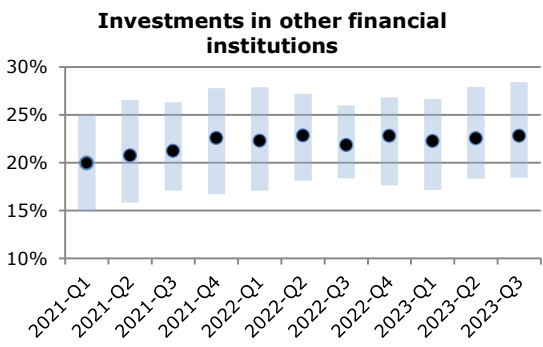
Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9. Source: QFG (N<sub>2023 Q3</sub>=92).

The median of investment exposures to insurers as a share of total assets remained stable at 1.5% in Q3-2023, while the upper tail of the distribution moved up.



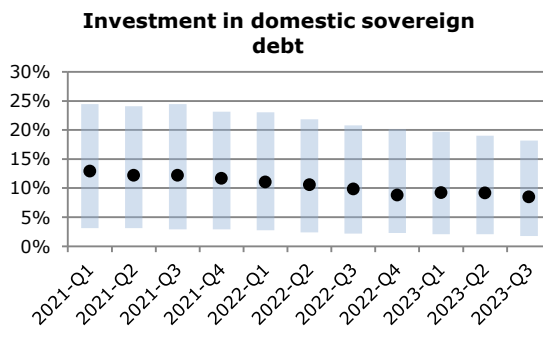
Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3. Source: QFG (N<sub>2023 Q3</sub>=89).

The interquartile range of investments in other financial institutions remained overall stable, with a median at 23% in Q3-2023.



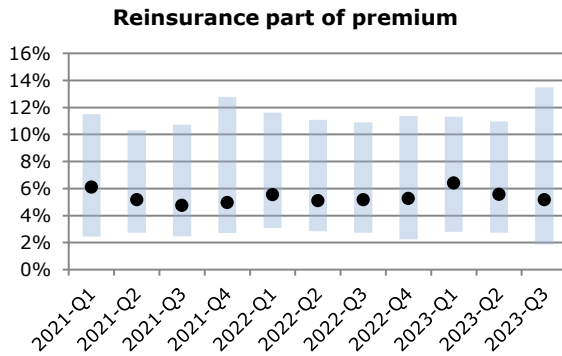
Note: Distribution of indicator (interquartile range, median). Other financial institutions comprise all activities identified with NACE codes K66, K65.3 and K64 excluding K64.1.9. Source: QFG (N<sub>2023 Q3</sub>=92).

The median share of investments in domestic sovereign debt declined to 8.5% in Q3-2023 (9.2% in Q2-2023).



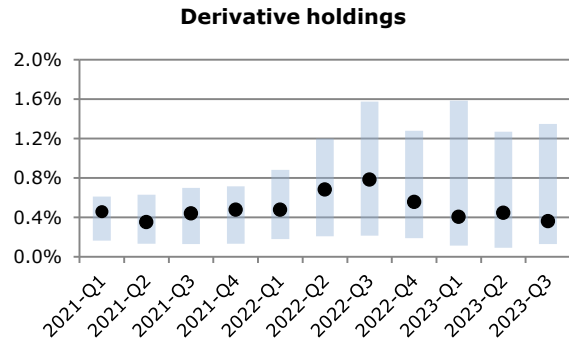
Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,191).

The median of premiums ceded to reinsurers slightly shifted downwards, standing at 5.6% in Q2-2023 vs. 5.2% in Q3-2023.



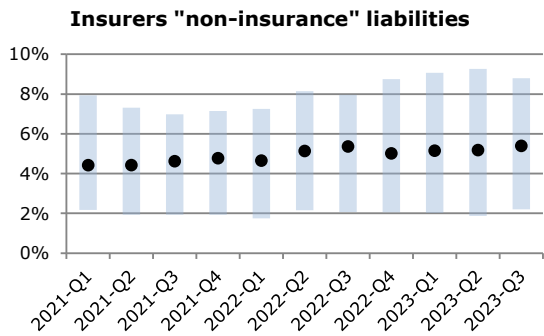
Note: Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=91).

The median of exposures to derivatives as a share of total assets decreased to 0.36% in Q3-2023 from 0.45% in the previous quarter.



Note: Distribution of indicator (interquartile range, median). Derivatives holdings are calculated as the total value of derivatives from the balance sheet (i.e. both asset and liability values in absolute terms). Source: QFG (N<sub>2023 Q3</sub>=93).

The median of "non-insurance" liabilities of insurers moved slightly upwards, standing at 5.4% in Q3-2023 (5.2% in Q2-2023).




Note: Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=93).



## INSURANCE (UNDERWRITING) RISKS

Insurance risks remain stable at medium level in Q3-2023. The median year-on-year premium growth was positive for both life (1.1%) and non-life business (5.6%), whereas the median (gross) loss ratio deteriorated for the second consecutive quarter and is now at 67.8%.

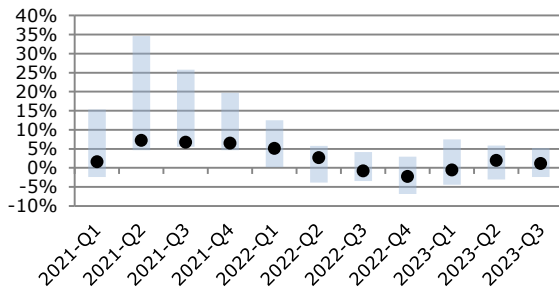


LEVEL:	MEDIUM
TREND:	CONSTANT

The median for life premium growth slightly decreased to 1.1% in Q3-2023 (1.9% in the Q2-2023.), while remaining positive for the second consecutive quarter.

The median non-life premium growth slightly increased to 5.6% in Q3-2023 (5.3% in Q2-2023).

**Premium growth - life**



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=83).

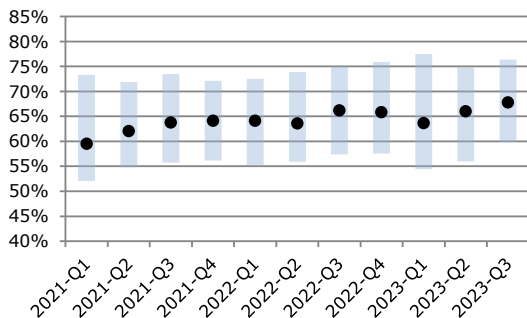
**Premium growth - non-life**



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N<sub>2023 Q3</sub>=79).

The interquartile range of the distribution of the loss ratio shifted upwards for the second consecutive quarter, with a median standing at 67.8% in Q3-2023 (66% in Q2-2023).

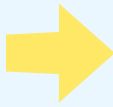
**Loss ratio (gross)**



Note: Distribution of indicator (interquartile range, median). Source: QRS (N<sub>2023 Q3</sub>=1,353).

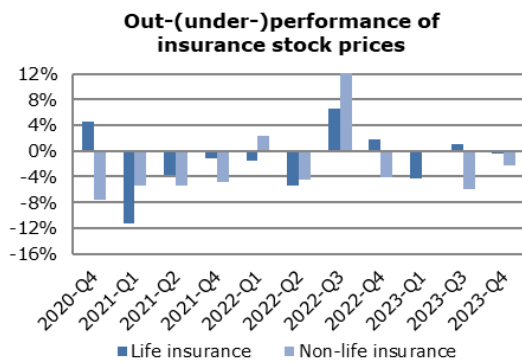
## MARKET PERCEPTIONS

Market perceptions remain stable at medium level. Life and non-life insurance stocks under-performed the market in the fourth quarter of 2023, while the median price-to-earnings ratio of insurance groups in the sample was stable at 11%. The median of CDS spreads of insurers slightly decreased. Insurers' external ratings remained stable since the last assessment, though negative changes in the rating outlook surpassed positive changes.



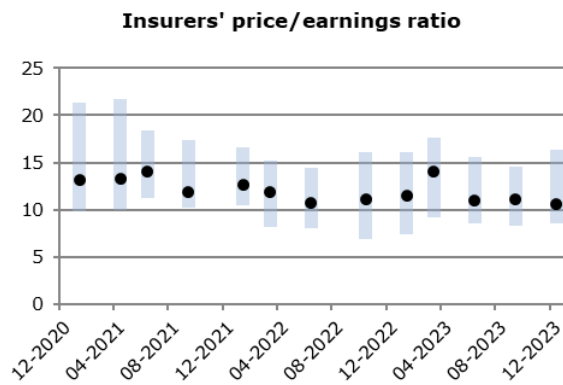
**LEVEL:** MEDIUM  
**TREND:** CONSTANT

Life and non-life stocks under-performed the market (-0.4% and -2.3% respectively) at the end of 2023.



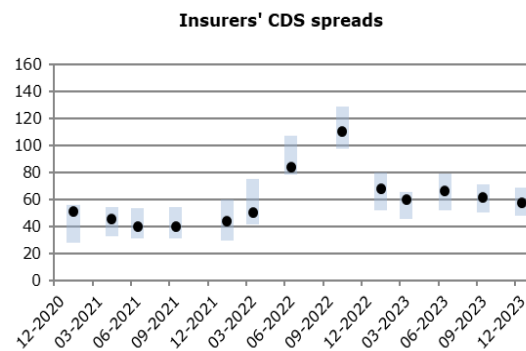
Note: Out-(under-)performance over 3-month periods vs Stoxx 600. Source: Refinitiv

The median price-to-earnings (P/E) ratio of insurance groups in the sample was stable at the end of 2023 at a level of 11%.



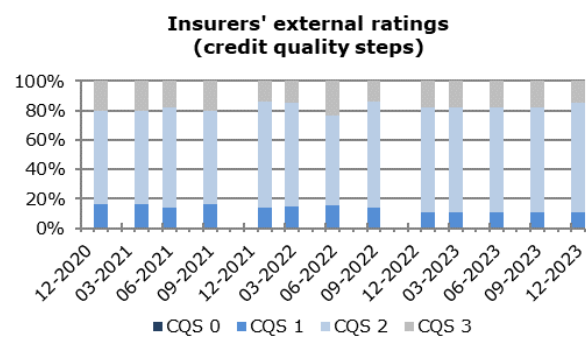
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

The median of the distribution of insurers' CDS spreads slightly decreased from 61 bpts to 57 bpts.



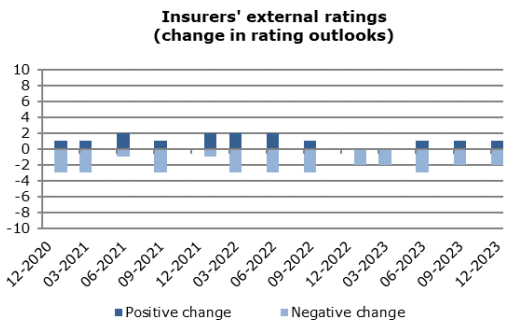
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

Insurers' external ratings remained stable since the previous risk assessment.




Source: Standard & Poor's via Refinitiv

Negative changes in rating outlooks for insurers in the sample surpassed positive changes.



Source: Standard & Poor's via Refinitiv.

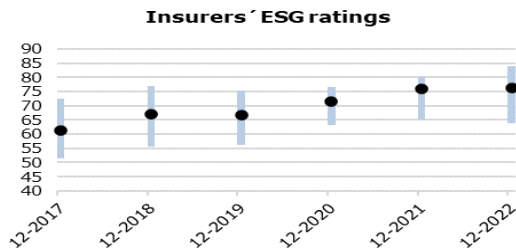
## ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) RELATED RISKS



**LEVEL: MEDIUM**  
**TREND: CONSTANT**

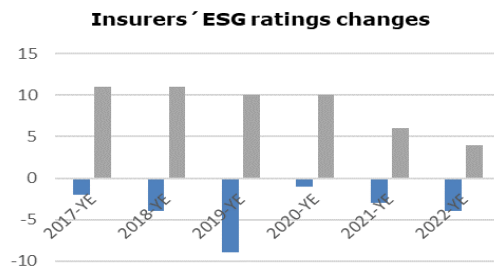
ESG related risks remain stable at medium level. The median exposure towards climate relevant assets hovers around 3.3% of total assets in Q3-2023. The median share of insurers’ investments in green bonds over total green bonds outstanding is stable compared to the previous quarter and is at around 7%. As for physical risks, the exposure at risk to flood and to windstorm based on the latest available data remains overall stable, with minor changes in the distributions between 2021 and 2022.

*The median ESG ratings of the insurers in the sample remained around A- in 2022, but the gap between the lower and higher tails of the distribution widened.*



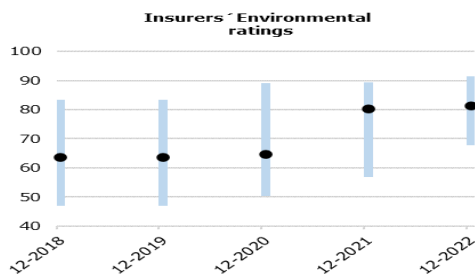
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Latest possible update refers to 2022. Source: Refinitiv

*The number of improvements in ESG ratings for the insurers in the sample has been the same as the negative changes in 2022.*



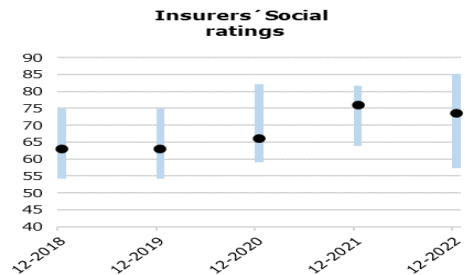
Note: Numbers of positive (grey bar) and negative (blue bar) changes. Latest possible update refers to 2022.. Source: Refinitiv

*The median environmental rating of the insurers in the sample hovers around A.*



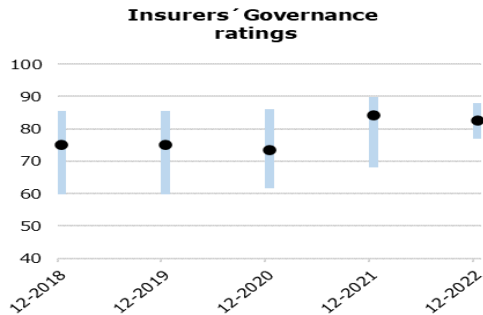
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Source: Refinitiv

*The median social rating of the insurers in the sample corresponds to around A- and it slightly decreased in 2022 compared to 2021.*



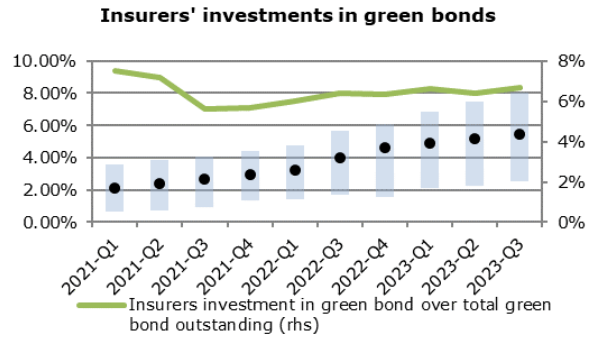
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Source: Refinitiv

The median governance rating of the insurers in the sample is stable and corresponds to around A.



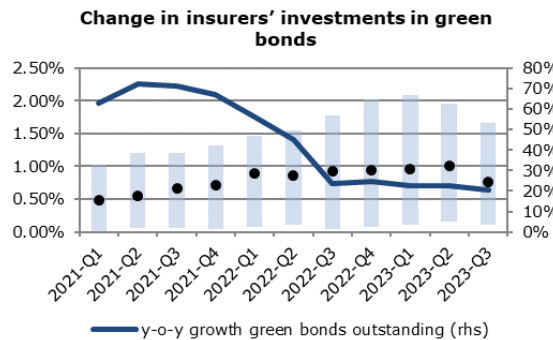
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings Source: Refinitiv

The median investments in green bonds over total corporate bonds is at around 5% in Q3 2023. The share of insurers' investments in green bonds over total green bonds outstanding is stable compared to the level of the previous quarter (at 7%).



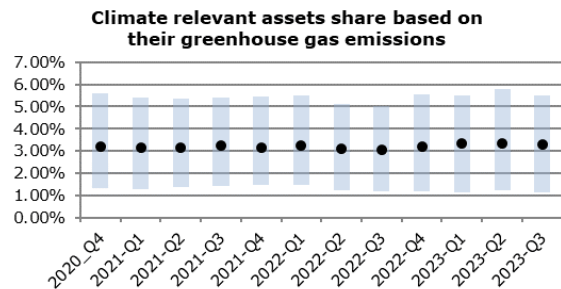
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS (N<sub>2023 Q3</sub>=1,348).

The y-o-y growth of green bonds outstanding is slightly decreasing, and the median growth of insurers' investments in green bonds shows a slight decline compared to the last quarter.



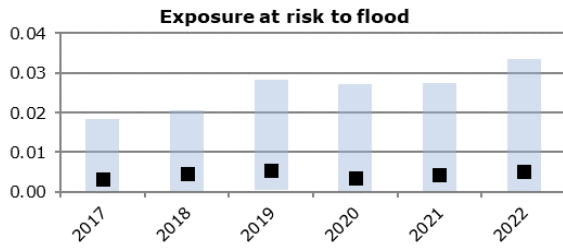
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS (N<sub>2023 Q3</sub>=1295).

The median exposure towards climate relevant assets hovers around 3.3% of total assets.



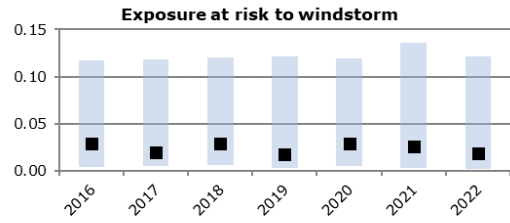
Note: The six climate-relevant sectors (agriculture, fossil fuel, utilities, energy-intensive, transport and housing) based on their greenhouse gas emissions and mapped at NACE Rev2 4-digit level. Due to data limitations, there are assets which cannot be entirely included in the "climate relevant" category and therefore they are currently excluded from the calculation of the indicator leading to a potential underestimation of the risk. We expect an upward shift of the distribution, when the new reporting requirements will be implemented. Source: QRS (N<sub>2023 Q3</sub>=1721).

The median exposure to flood risk slightly increased.



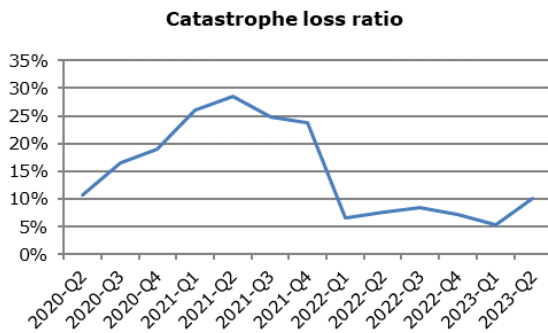
Source: EIOPA new dashboard on insurance protection gap for natural catastrophes, Eurostat, Litpop, ARG (N<sub>2022</sub> =112). Latest possible update refers to 2022. The calculation of the indicator might be revised with the introduction of the new taxonomy, depending on data quality and availability.

The median exposure to windstorm risk slightly decreased.



Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat, Litpop, ARG (N<sub>2022</sub> =127). Latest possible update refers to 2022. The calculation of the indicator might be revised with the introduction of the new taxonomy, depending on data quality and availability.


The cumulative catastrophe loss ratio increased, due to increased cat losses for all reinsurers in Q2-2023.



Note: Cumulative year-to-date loss ratio calculated based on Munich Re, Hannover Re and Everest Re. No update available for Q3-2023. Source: Bloomberg Finance L.P.

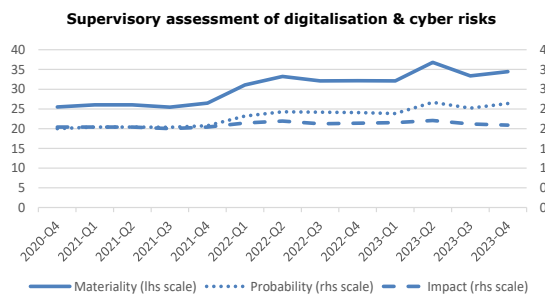
## DIGITALISATION & CYBER RISKS

Digitalization and cyber risks show a decreasing trend and are now at medium level. The materiality of these risks for insurance as assessed by supervisors slightly increased in the fourth quarter of 2023, and is expected to continue increasing, with cyber security as a main concern. Cyber negative sentiment also indicates an increasing concern in the fourth quarter of 2023. The year-on-year change in the frequency of cyber incidents impacting all sectors of activity, as measured by the latest publicly available data, decreased compared to the previous quarter.



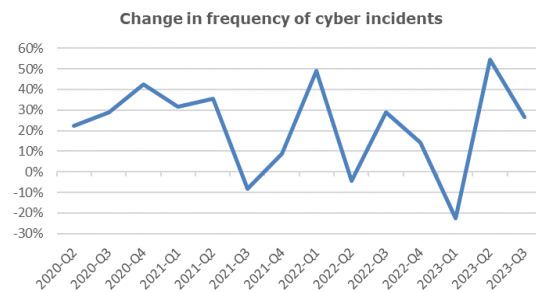
**LEVEL: MEDIUM**  
**TREND: LARGE DECREASE**

*The supervisory assessment of digitalisation and cyber risks slightly increased in Q4-2023, with cyber security remaining as a main concern.*



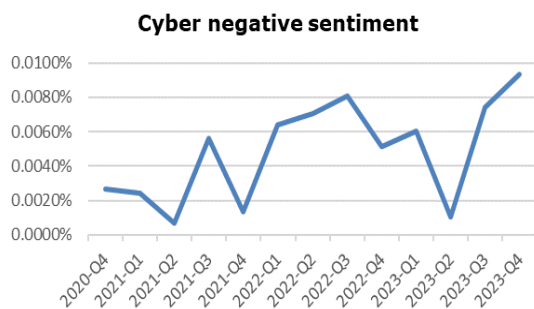
Note: Scores compiled based on the assessment of probability and impact (rhs: scale from 1 to 4) of digitalisation & cyber risks from National Competent Authorities. The country average for each answer is then normalised (lhs: scale 0-100). Source: EIOPA’s Insurance Bottom-up Survey.

*The y-o-y change in frequency of cyber incidents calculated based on publicly available data decreased in Q3-2023 compared to Q2-2023, while the number of cyber incidents affecting all sectors of activity remain above the long-term average.*












Note: Year-on-year change in frequency of cyber incidents. Source: HACKMAGEDDON website.

*The cyber negative sentiment indicator, by counting the number of negative-sentiment and cyber-related terms in the earning calls transcripts of major insurance groups, increased slightly in the fourth quarter of 2023.*



Note: Text analysis based indicator, calculated from earning calls transcripts (N<sub>2023 Q4</sub>=29). Source: Refinitiv, EIOPA calculations.

## APPENDIX

Level of risk		Trend/Outlook	
	Very high		Large increase
	High		Increase
	Medium		Constant
	Low		Decrease
			Large decrease

Arrows for the Trend show changes when compared to the previous quarter, while arrows for the Outlook show expected developments for the next 12 months.

### Description of risk categories

#### Macro risks

Macro risk is an overarching category affecting the whole economy. EIOPA’s contribution focuses on factors such as economic growth, state of the monetary policies, consumer price indices and fiscal balances which directly impact the insurance industry. The indicators are developed encompassing information on the main jurisdictions where European insurers are exposed to both in terms of investments and product portfolios.

#### Credit risks

The category measures the vulnerability of the European insurance industry to credit risk. To achieve this aim, credit-relevant asset class exposures of the (re)insurers are combined with the relevant risk metrics applicable to these asset classes. For instance, the holdings of government securities are combined with the credit spreads on European sovereigns.

#### Market risks

Market risk is, for most asset classes, assessed by analyzing both the investment exposure of the insurance sector and an underlying risk metric. The exposures give a picture of the vulnerability of the sector to adverse developments; the risk metric, usually the volatility of the yields of the associated indices, gives a picture of the current level of riskiness. The risk category is complemented by an indicator which captures the difference between guaranteed interest rates and investment returns.

#### Liquidity and funding risks

This category aims at assessing the vulnerability of the European insurance industry to liquidity shocks. The set of indicators encompasses the lapse rate of the life insurance sector with high lapse rate signaling a potential risk, holdings of cash & cash equivalents as a measure of the liquidity buffer available, and the issuance of catastrophe bonds, where a very low volume of issuance and/or high spreads signals a reduction in demand which could form a risk.



### Profitability and solvency

The category scrutinizes the level of solvency and profitability of the European insurance industry. Both dimensions are analyzed for the overall industry (using group data) and include a breakdown for the life and non-life companies (using solo data). In detail, the solvency level is measured via solvency ratios and quality of own funds. Standard profitability measures for the whole industry are complemented by indicators such as the combined ratio and the return on investments specifically applied to the non-life and life industry respectively.

### Interlinkages and imbalances

Under this section various kinds of interlinkages are assessed, both within the insurance sector, namely between primary insurers and reinsurers, between the insurance sector and the banking sector, as well as interlinkages created via derivative holdings. Exposure towards domestic sovereign debt is included as well.

### Insurance (underwriting) risks

As indicators for insurance risks gross written premiums of both life and non-life business are an important input. Both significant expansion and contraction are taken as indicators of risks in the sector; the former due to concerns over sustainability and the latter as an indicator of widespread contraction of insurance markets.

### Market perception

This category encompasses the financial markets' perception of the healthiness and profitability of the European insurance sector. For this purpose, relative stock market performances of European insurance indices against the total market are assessed, as well as fundamental valuations of insurance stocks (price/earnings ratio), CDS spreads and external ratings/rating outlooks.

### Environmental, Social and Governance (ESG) related risks

This risk category aims at assessing the vulnerability of the European insurance industry to Environmental, Social and Governance (ESG) risks but also to capture these kinds of risks that may emerge and rise in the near future. The set of indicators encompasses ESG ratings of listed insurers signaling low insurers' attention to ESG factors and hence could increase their reputational and operational risk, the share of green bonds in insurers' portfolios and share of climate relevant assets based on their greenhouse gas emissions as a measure of exposure towards transition risk, exposure at risk of Nat Cat events, economic damage caused by weather and climate-related extreme events and catastrophe loss ratio as a flag for potential physical risk. Information on claims and insurance losses due to natural catastrophes also contribute to this risk category.

### Digitalization & Cyber risks

This risk category aims to capture potential financial stability risks related to an increased digitalization, which exposes the insurance sector to risks both from an operational resilience perspective (as insurers themselves can be targets of cyber-attacks) and from an underwriting perspective (related to the provision of cyber insurance products). The set of indicators encompasses the supervisors' assessment of digitalization & cyber risks considering different aspects such as cyber security risks, cyber underwriting risks and Insurtech competition, the year-on-year change in the frequency of cyber incidents as reported in the Hackmageddon.com database and, finally, the negative sentiment of European insurers against cyber risk. This section will be further developed as new data becomes available.

**EIOPA**

Westhafen Tower, Westhafenplatz 1

60327 Frankfurt – Germany

Tel. + 49 69-951119-20

[info@eiopa.europa.eu](mailto:info@eiopa.europa.eu)

<https://www.eiopa.europa.eu>