

INSURANCE RISK DASHBOARD

November 2023

EIOPA-BoS/23-392
November 2023

INSURANCE RISK DASHBOARD*

NOVEMBER 2023

		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 Q2-2023 for quarterly indicators and 2022-YE for annual indicators. The cut-off date for most market indicators is end of September 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

- ▶ Risks for the European insurance are elevated in the areas of macro, market and cyber, while they remain moderate for the other risk categories. **Macro-related risks** remain among the most relevant for the insurance sector as the outlook for the next four quarter GDP growth at global level has deteriorated and credit-to-GDP gap widened. CPI forecasts slightly further decreased. **Credit risks** is at medium level with no noticeable changes while **market risks** are prominent as volatility in equity market increased and bond volatility remain elevated.
- ▶ **Liquidity and funding risks** remain stable, with the median of liquid assets ratio slightly improved compared to the previous quarter. On the other hand, bond issuance and catastrophe bond issuance increased. **Profitability and solvency risks** moderate slightly on the profitability side as performance indicators increased in the first half of 2023. The distribution of the SCR ratio improved especially for life and groups.
- ▶ **Interlinkages and imbalances risks** also are constant. Exposures to banks, insurances and other financial institutions are overall stable, with minor changes in the distributions compared to the previous quarter. Derivatives to total assets and investment in domestic sovereign debt was stable in Q2-2023. **Insurance risks** remain at medium level with a positive median year-on-year premium growth for life business, after the negative levels reported in the previous quarters.
- ▶ **Market perceptions** show underperformance of non-life insurance stocks when compared to the market for the second quarter of 2023.
- ▶ **ESG related risks** remain stable at medium level, as insurers' median ESG rating score remain unchanged around A-. The median exposure towards climate relevant assets hovers around 3.3% of total assets, while insurers' investments in green bonds over total green bonds outstanding are at 7%. As for physical risks, the exposure at flood risks slightly increased while exposure at windstorm risk slightly decreased between 2021 and 2022.
- ▶ **Digitalization and cyber risks** increased to high levels and are expected to further increase according to the supervisory assessment. The frequency of cyber incidents impacting all sectors of activity, as measured by publicly available data, increased since the same quarter of last year. Cyber negative sentiment also indicates an increasing concern in the third quarter of 2023.

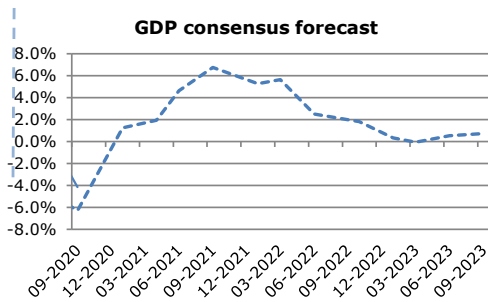
MACRO RISKS

Macro-related risks remain among the most relevant for the insurance sector, mainly driven by forecasted GDP growth at global level, which decreased to an average level of 0.6% compared to the previous quarter, a negative and widening credit-to-GDP gap and global CPI forecasts still above the target. Fiscal balances have slightly improved. The weighted average of the 10 years swap rates for major currencies remains at a high level. Central banks continue to tighten their monetary policy, with the average global policy rates increasing and the balance sheets' sizes decreasing.



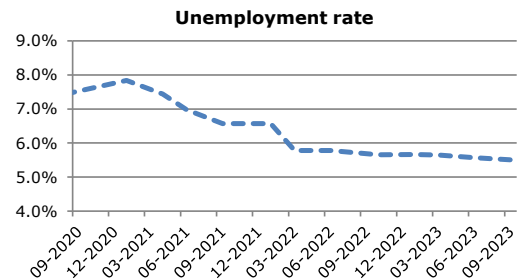
LEVEL: HIGH
TREND: CONSTANT

Average forecasted GDP growth for the next four quarters slightly decreased from 0.74% to 0.61%. Compared to the previous assessment, forecasts have been revised downwards for the US and EU, while for the UK they remain broadly in line.



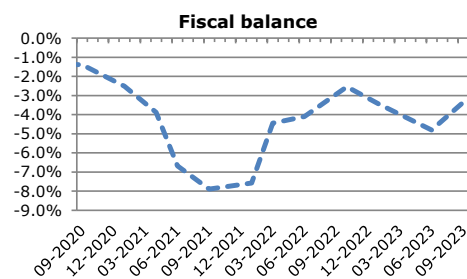
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. Source: Bloomberg Finance L.P.

Unemployment rates across major geographical areas are on average around 5.51%, pointing to a stable trend.



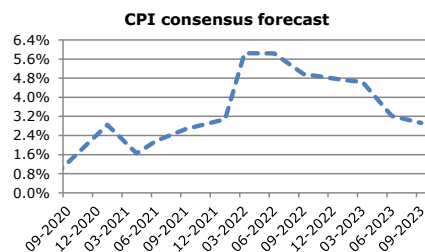
Note: Weighted average for EU, Switzerland, United States, China. Source: Refinitiv

Fiscal balances improved to an average level of -3.3% of GDP with respect to -4.8% in the previous quarter, driven mostly by the EU.



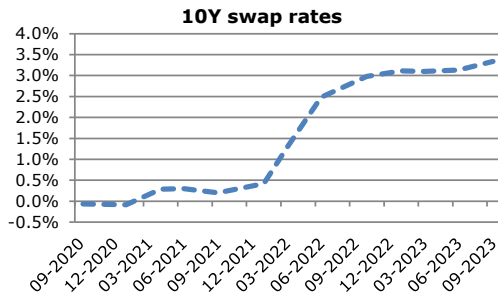
Note: Weighted average for EU, UK and United States. Source: Refinitiv

Average forecasted inflation for the next four quarters further decreased to 2.92%. The downward revisions are across all geographical areas.



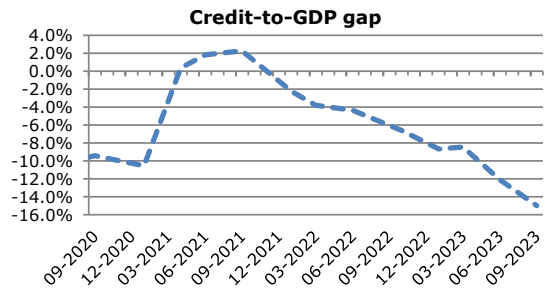
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. Source: Bloomberg Finance L.P.

The indicator on the 10 years swap rates across main currencies hovers around 3.3% on average in the third quarter of 2023.



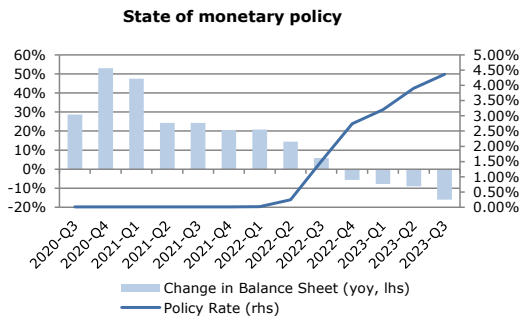
Note: Weighted average for EUR, GBP, CHF, USD. Source: Refinitiv

The credit to GDP gap across main geographical areas further decreased to an average of -15%, mainly driven by the Euro Area.



Note: Weighted average for Euro area, United Kingdom, Switzerland, United States, China. Source: BIS

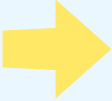
Central banks average policy rate further increased from 3.90% to 4.4% in Q3 2023. The balance sheets of the major central banks decreased by 16% on average with respect to the last 12 months (average value across countries).



Note: Weighted average for Euro area, United Kingdom, Switzerland, United States. Source: Bloomberg Finance L.P.

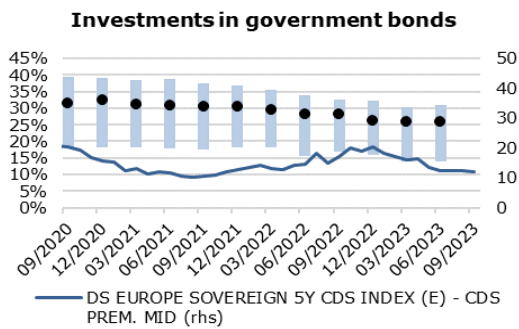
CREDIT RISKS

Credit risks remained at medium level and stable. The CDS spreads for financial secured bonds increased in the third quarter of 2023, while CDS spreads for other fixed income market segments receded slightly or hover around the same levels of the previous quarter. A decline is reported in the exposure to financial bonds in the second quarter of 2023, especially for unsecured financial bonds. The median average credit quality of insurers' investments and the median share of below investment grade assets (with a credit quality step higher than 3) in insurers' portfolios remained stable.



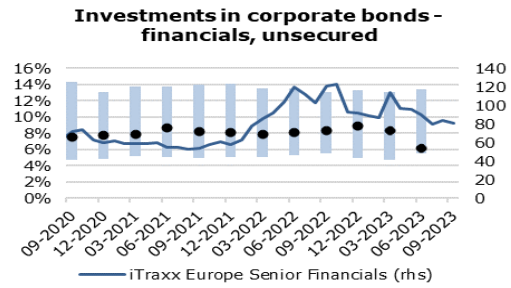
LEVEL: MEDIUM
TREND: CONSTANT

In the third quarter of 2023, CDS spreads for European sovereign bonds slightly decreased. Insurers' median exposures to this asset class hover around 26% of total assets in Q2-2023.



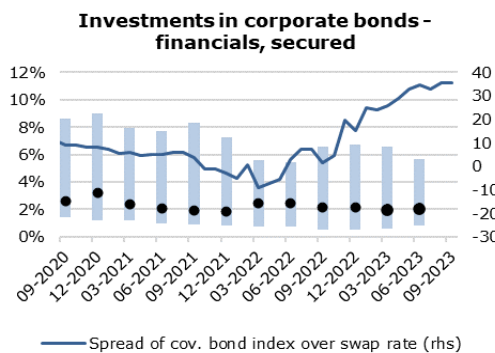
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG (N_{2023 Q2}=94)

Spreads for unsecured financial bonds decreased in the third quarter of 2023. The median exposures of EU27 insurers' investments decreased from 8.3% to 6.2% in Q2 2023.



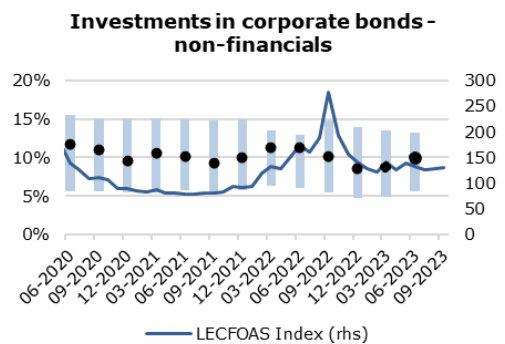
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG (N_{2023 Q2}=82)

Spreads for secured financial bonds further increased to 37 bpts in the third quarter of 2023. Median exposures of EU27 to this asset class hover around 2% of total assets in Q2-2023.



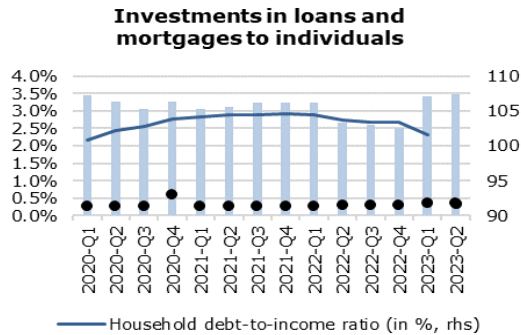
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N_{2023 Q2}=77)

Spreads for non-financial corporate bonds hover around 131 bpts in the third quarter of 2023. Median exposure to non-financial corporate bonds for the EU27 increased from 9% to 10% of total assets in Q2-2023.



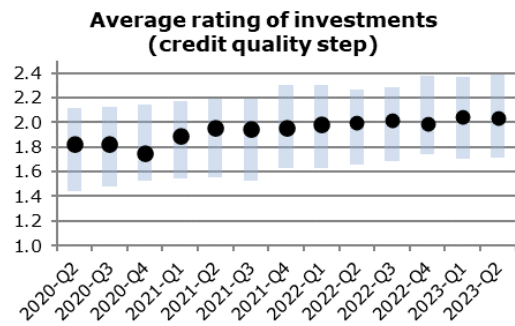
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N_{2023 Q2}=80)

The latest data available shows an average household debt-to-income ratio around 102%, while the median exposures to loans and mortgages remained around 0.35% in Q2-2023.



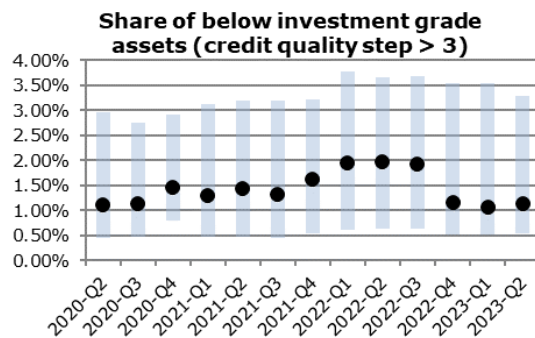
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure (weighted average of EA and UK). Source: QFG (N_{2023 Q2}=94), ECB

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



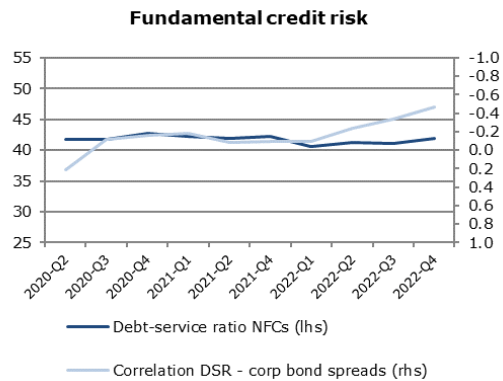
Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=91)

The median share of below investment grade assets (with a credit quality step higher than 3) is stable around 1.1% in Q2-2023.



Note: Distribution of indicator (interquartile range, median). Includes both internal and external credit ratings. Source: QFG (N_{2023 Q2}=93)

The negative correlation between the debt-service ratio of non-financial corporations and corporate bond spreads slightly increased. The debt service ratio remained around 42% on average, based on the latest data available.



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

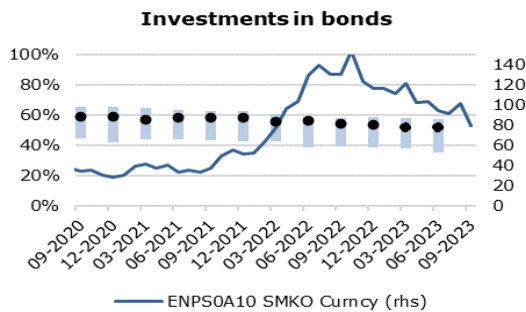
MARKET RISKS

Market risks are stable at a high level. Volatility in the equity markets increased since the previous quarter and volatility in bond markets remained at high level. The concentration of assets is stable. Available annual data shows a narrowing of the duration mismatch and a deterioration in the spread of investment returns compared to guaranteed rates in 2022 when compared to 2021.



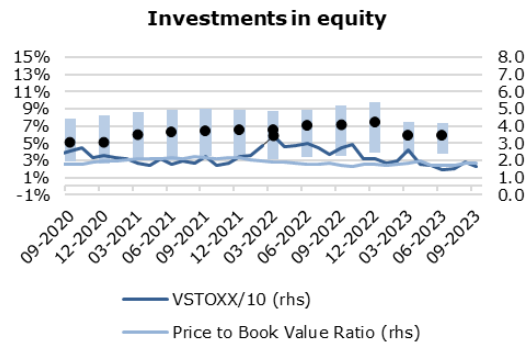
LEVEL: HIGH
TREND: CONSTANT

The volatility in interest rates (proxied by the index on the swap option for the Euro) slightly decreased to 80 bps in September. Median exposures to bonds remain stable at 51% of total assets in Q2-2023.



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_{2023 Q2}=94)

Volatility of equity prices as well as the price to book value increased slightly in September compared to the first half of 2023. Median exposures to equity remains at around 5.9% of total assets in Q2-2023.



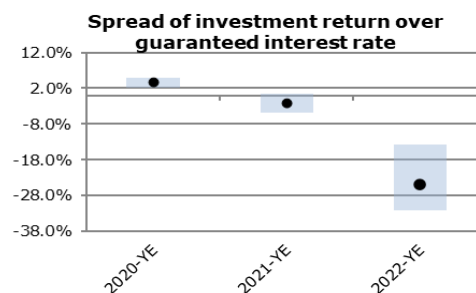
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N_{2023 Q2}=94)

The indicator on the annual growth rate of real estate prices decreased to -2.35% in the last quarter of 2022. Median exposures to property hover around 3.5% of total assets in Q2-2023.



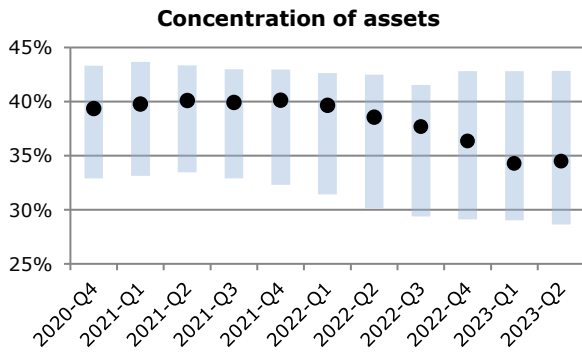
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Latest observation for property prices is Q4-2022. Source: QFG (N_{2023 Q2}=94); ECB

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%.



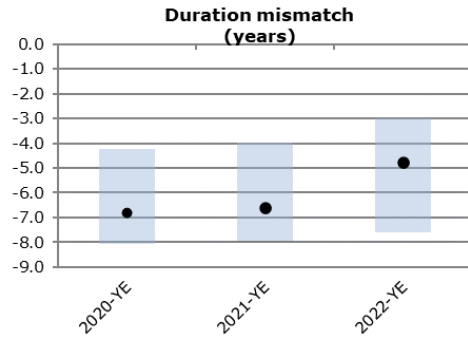
Note: Distribution of indicator (interquartile range, median).. The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N₂₀₂₂=363)

The distribution range of the concentration of assets remains overall stable, with the median standing at 34.5% in Q2-2023.



Note: Herfindal Hirshman 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_{2023 Q2}=95)

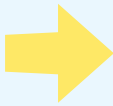
The median of the duration mismatch indicator narrowed to around -5 years, as the duration of liabilities decreased more than that of assets. Duration mismatch is based on the modified duration of the fixed income assets and of the liabilities. Duration of the liabilities does not consider optionalities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



Note: Distribution of indicator (interquartile range, median). Source: Assets QFG (N_{2022 Q4}=83); Liabilities AFG (N₂₀₂₂=90)

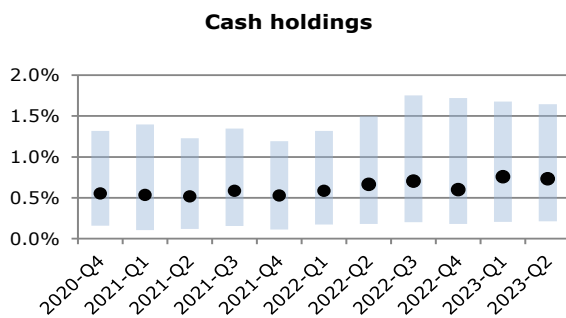
LIQUIDITY AND FUNDING RISKS

Liquidity and funding risks remain stable at medium level. The median liquid assets ratio slightly improved compared to the previous quarter. Bond issuance and catastrophe bond issuance increased, the latter in line with the seasonality experienced in the past years.



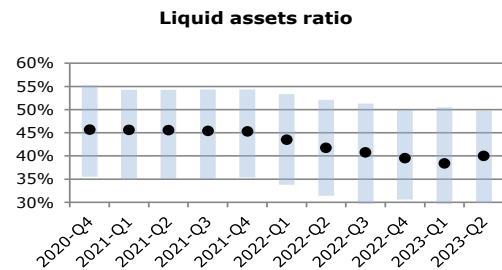
LEVEL: MEDIUM
TREND: CONSTANT

The distribution range of cash holdings remains overall stable, with the median standing at 0.73% in Q2-2023.



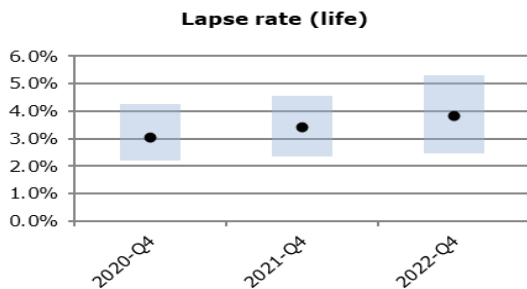
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,780).

The median of the liquid assets to total assets ratio increased to 40% in Q2-2023 (38% in the previous quarter), while the tails of the distribution remain stable.



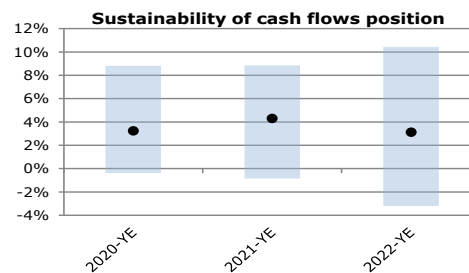
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,706).

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).



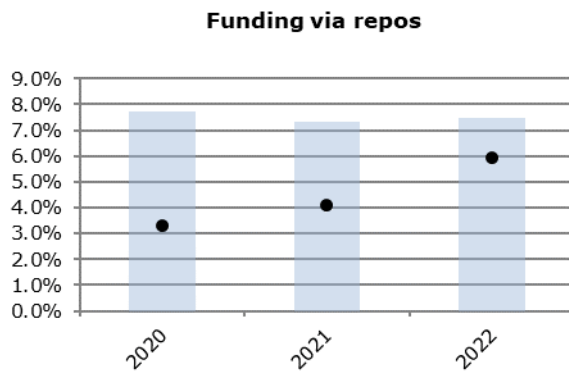
Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2022 Q4}=92)

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.



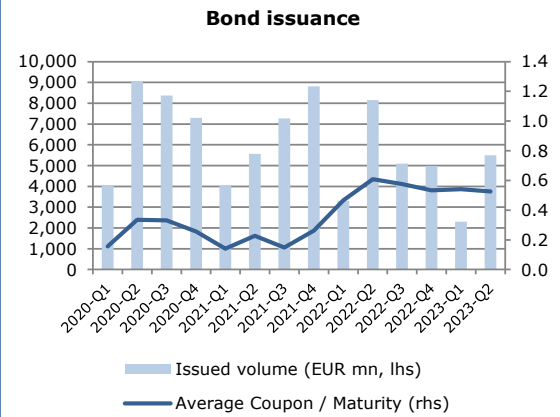
Note: Distribution of indicator (interquartile range, median). From October 2023, the indicator has been adjusted. Source: ARS (N₂₀₂₂=2,314).

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



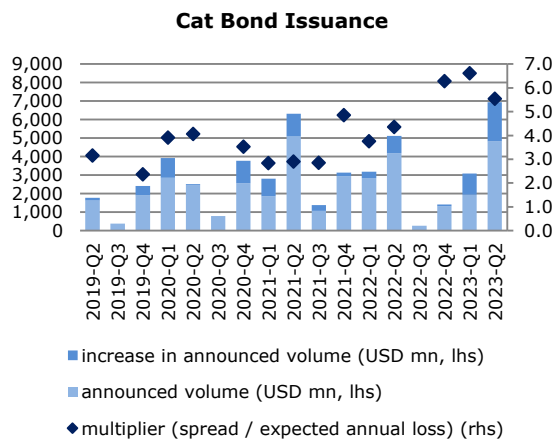
Note: Distribution of indicator (interquartile range, median). Source: ARS (N₂₀₂₂=88).

Bond issuance volumes increased to EUR 5.5 billion in Q2-2023. The average ratio of coupons to maturity remains stable around 0.53.



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

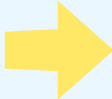
Catastrophe bond issuance further increased in Q2-2023 to USD 6,936 million (of which 4,827 announced), reaching the highest amount of the last four years, and the multiplier lowered to 5.5. Most cat bonds issued covered US multi-risk natural catastrophes.



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

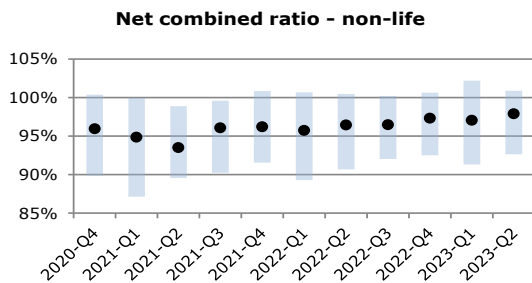
PROFITABILITY AND SOLVENCY

Profitability and solvency risks remain stable at medium level. After a decline in returns in 2022, profitability increased in the first half of 2023. The annualized return on the excess of assets over liabilities doubled compared to Q4-2022, going back to pre-pandemic levels. The net combined ratio (for non-life insurers) remained stable. The solvency ratios of the insurance sector remained stable with improvements in the median ratios of life undertakings and groups.



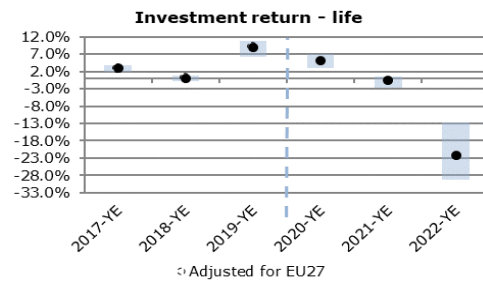
LEVEL: MEDIUM
TREND: CONSTANT

The median net combined ratio for non-life business slightly increased from 97% to 98% in Q2-2023.



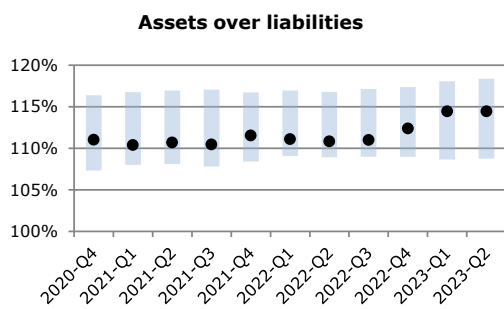
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,364).

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.



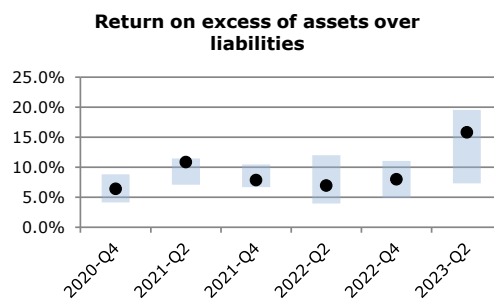
Note: Distribution of indicator (interquartile range, median). The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N₂₀₂₂=383).

The median of the ratio of assets over liabilities is stable at 114% in Q2-2023.



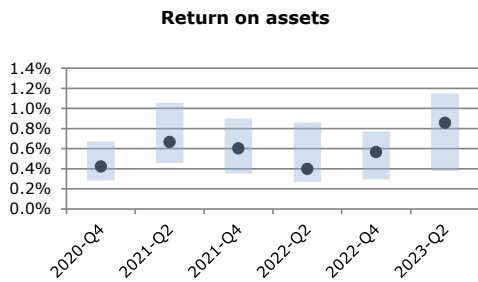
Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=94).

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.



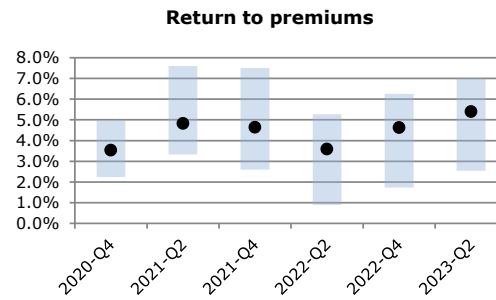
Note: Distribution of indicator (interquartile range, median). Q2 figures annualised. Source: QFG and ARG (N_{2023 Q2}=91).

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.



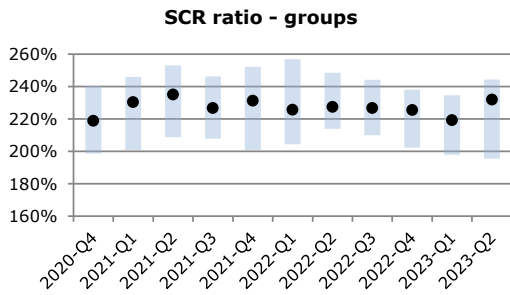
Note: Distribution of indicator (interquartile range, median). Q2 figures annualized. Source: QFG and ARG (N_{2023 Q2}=91).

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



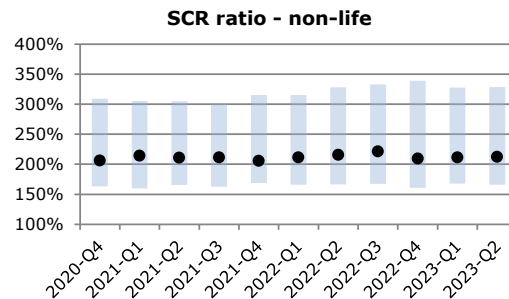
Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG (N_{2023 Q2}=92).

The median SCR ratio for groups increased to 232% in Q2-2023 from 219% observed in the previous quarter. Nevertheless, the lower tail of the distribution further decreased, indicating a continued deterioration of SCR ratios for the insurance groups with lower ratios.



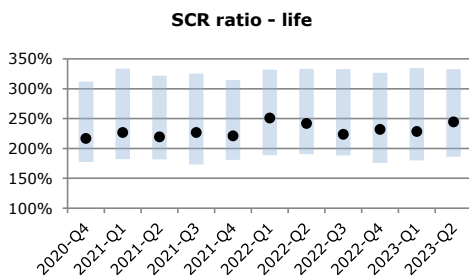
Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG (N_{2023 Q2}=93).

The distribution of the SCR ratio for non-life solo undertakings remained stable with a median value of 212% in Q2-2023.



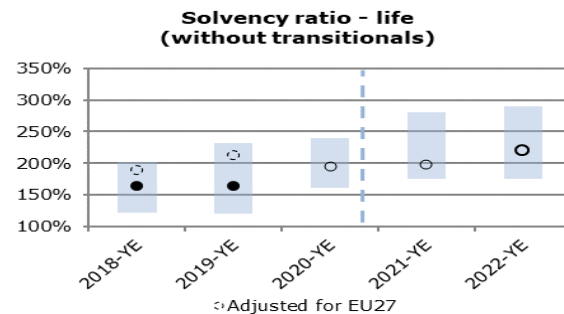
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,082).

The median SCR ratio for life solo undertakings increased to 244%. The distribution was overall stable with respect to the previous quarter.



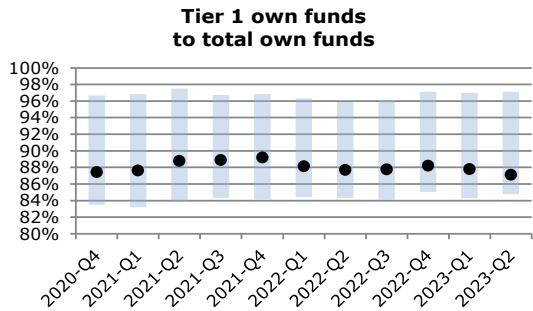
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=368).

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



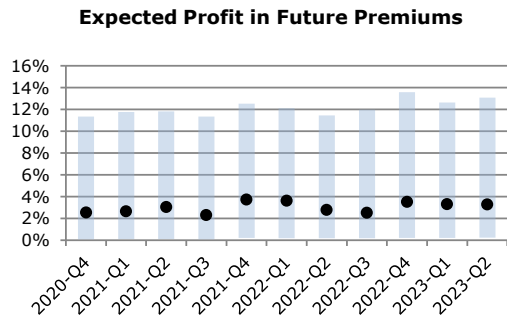
Note: Distribution of indicator (interquartile range, median). Source: ARS (N₂₀₂₂=232).

The distribution range of tier 1 capital on total own funds remains overall stable, with the median at 87% in Q2-2023 (88% in the previous quarter).



Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=95).


The median of the distribution of expected profit in future premiums was at 3% of total eligible own funds.



Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,849).

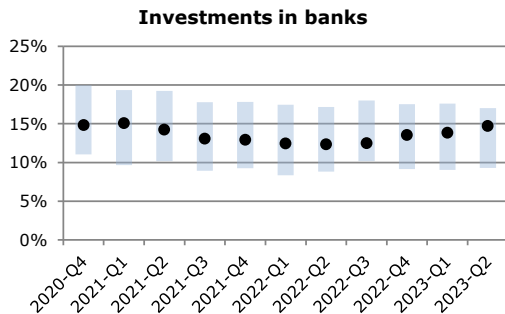
INTERLINKAGES AND IMBALANCES

Interlinkages and imbalances risks remain stable at medium level in Q2-2023. Exposures to banks, insurances and other financial institutions are overall stable, with minor changes in the distributions compared to the previous quarter. The medium share of premiums ceded to reinsurance moved downwards compared to the previous quarter. Exposures to derivatives as a share of total assets and investments in domestic sovereign debt were stable in Q2-2023.



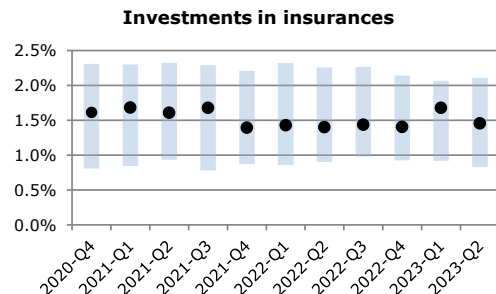
LEVEL: MEDIUM
TREND: CONSTANT

The distribution of investments in banks as a share of total assets remained overall stable. The median increased to 14.7% in Q2-2023 with respect to 13.8% in Q1-2023.



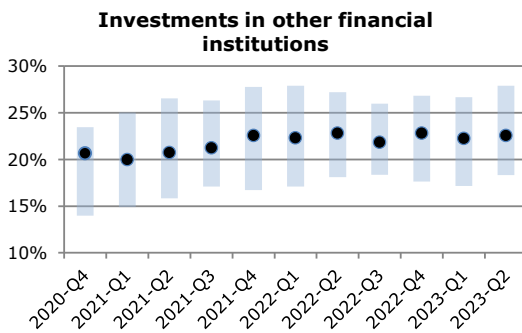
Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9. Source: QFG (N_{2023 Q2}=93).

The median of investment exposures to insurers as a share of total assets decreased to 1.5% in Q2-2023 from 1.7% in the previous quarter.



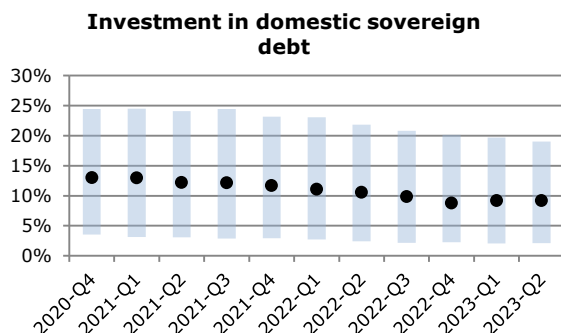
Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3. Source: QFG (N_{2023 Q2}=90).

The median of investments in other financial institutions was stable at 23% in Q2-2023.



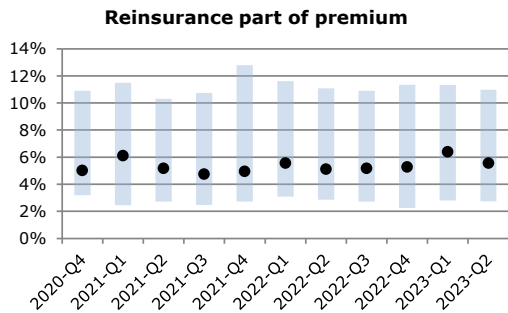
Note: Distribution of indicator (interquartile range, median). Other financial institutions comprise all activities identified with NACE codes K66, K65.3 and K64 excluding K64.1.9. Source: QFG (N_{2023 Q2}=93).

The median share of investments in domestic sovereign debt in Q2-2023 is stable at 9.2% in line with the level of the previous quarter.



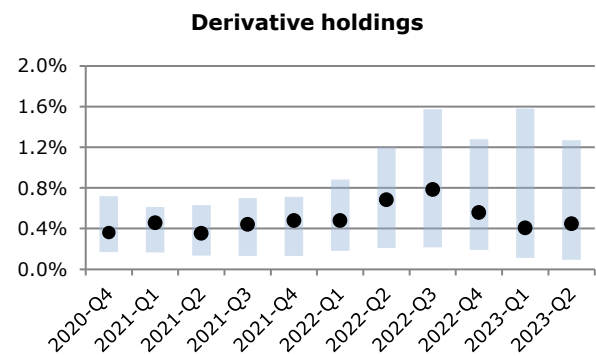
Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,190).

The median of premiums ceded to reinsurers shifted downwards, standing at 5.6% in Q2-2023 vs. 6.4% in Q1-2023.



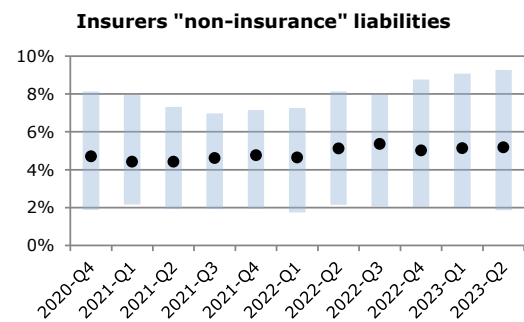
Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=90).

The median of exposures to derivatives as a share of total assets was stable at 0.4% in Q2 2023.



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_{2023 Q2}=94).


The distribution range of “non-insurance” liabilities of insurers remains overall stable with a median value around 5% in Q2-2023.



Note: Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=94).

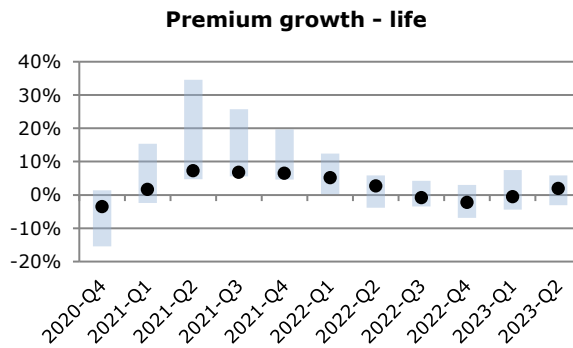
INSURANCE (UNDERWRITING) RISKS

Insurance risks remain stable at medium level in Q2-2023. The median year-on-year premium growth for life turned positive after the negative values reported in the previous quarters, whereas for non-life no significant changes were reported during the second quarter of 2023. The median loss ratio increased compared to the previous quarter.



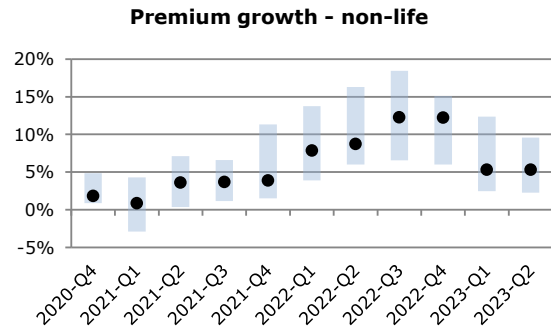
LEVEL:	MEDIUM
TREND:	CONSTANT

The median for life premium growth turned positive after the negative values reported during the last quarters. The median stands at 1.9% in the Q2-2023.



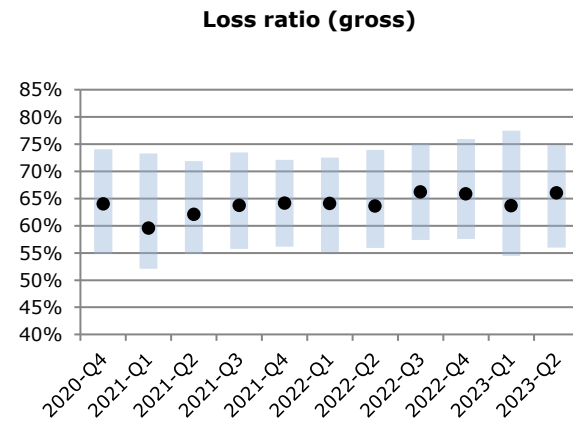
Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=85).

The median non-life premium growth remains stable at 5.3% in Q2-2023. The upper tail of the distribution decreased to 9.6% from 12.3% in the previous quarter.



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N_{2023 Q2}=82).


The median loss ratio increased, standing at 66% in Q2-2023 (63.6% in Q1-2023).



Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2023 Q2}=1,355).

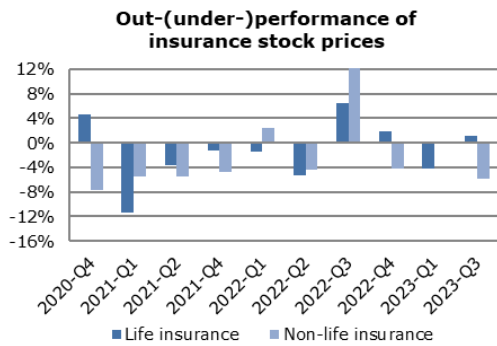
MARKET PERCEPTIONS

Market perceptions remain stable at medium level. No-life insurance stocks underperformed the market, while the median price-to-earnings ratio of insurance groups in the sample was stable at 11%. The median of CDS spreads of insurers decreased back to the level of Q1-2023. Insurers’ external ratings remained broadly stable since the last assessment, though negative changes in the rating outlook for insurers in the sample surpassed positive changes.



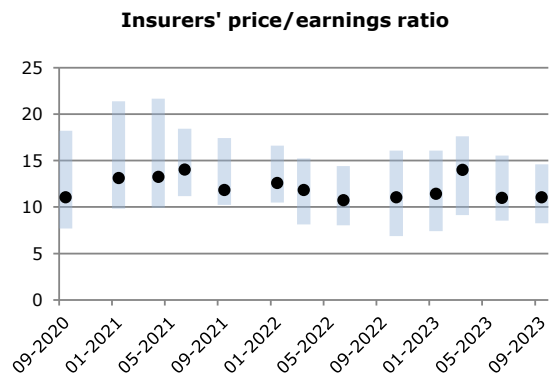
LEVEL: MEDIUM
TREND: CONSTANT

Life stocks performed slightly above the market (1% over the market) while non-life stocks underperformed (-6% under the market) in the third quarter of 2023.



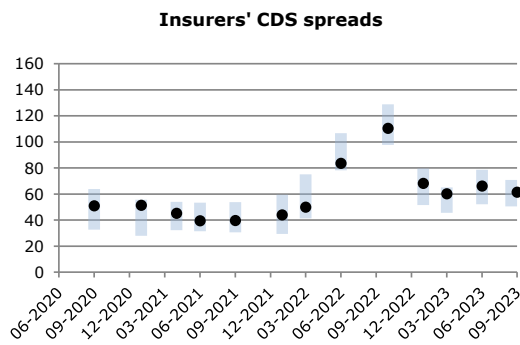
Note: Out-(under-)performance over 3-month periods vs Stoxx 600. Source: Refinitiv

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



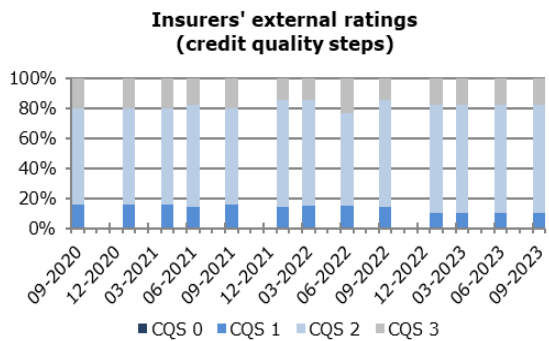
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

The range of the distribution of insurers’ CDS spreads decreased compared to the previous assessment, back to the level of Q1-2023, with a median value of 61bps.



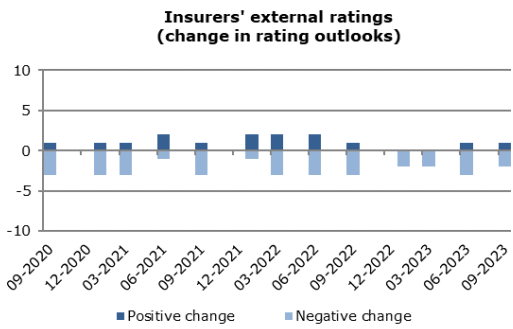
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

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 (2) surpassed positive changes (1).



Source: Standard & Poor's via Refinitiv. Correction to previous data submissions have been applied.

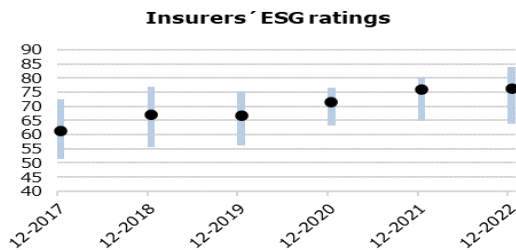
ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) RELATED RISKS

ESG related risks remain stable at medium level. The median ESG rating scores of insurers remain unchanged in 2022 compared to 2021. The median exposure towards climate relevant assets hovers around 3.3% of total assets in Q2-2023. The share of insurers' investments in green bonds over total green bonds outstanding is stable compared to the previous quarter. As for physical risks, the exposure at risk to flood and to windstorm remain overall stable, with minor changes in the distributions between 2021 and 2022.



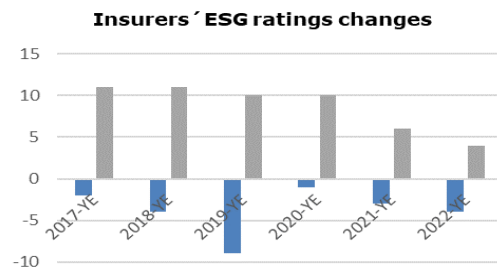
LEVEL: MEDIUM
TREND: CONSTANT

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



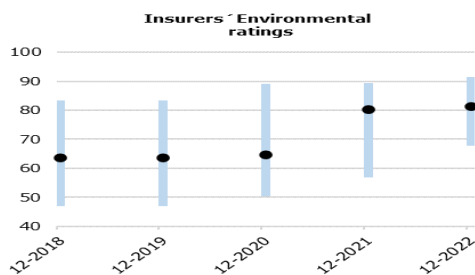
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Latest possible update refers to 2022. Source: Refinitiv

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



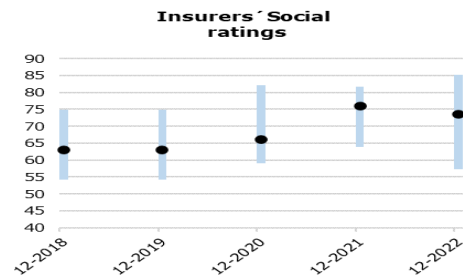
Note: Numbers of positive (grey bar) and negative (blue bar) changes. Latest possible update refers to 2022. Corrections to previous values have been applied. Source: Refinitiv

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



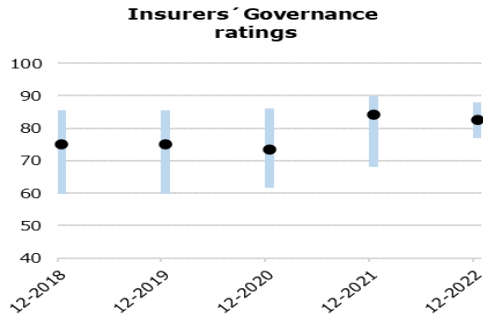
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Source: Refinitiv

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



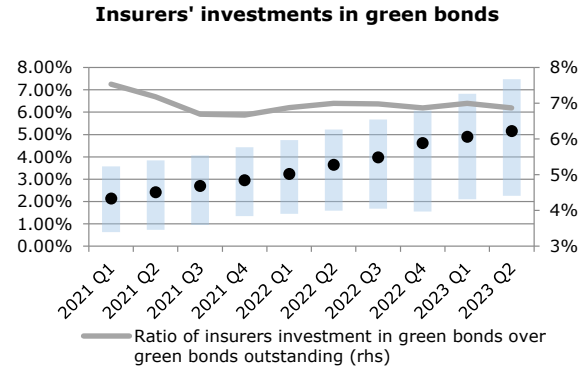
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings. Source: Refinitiv

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



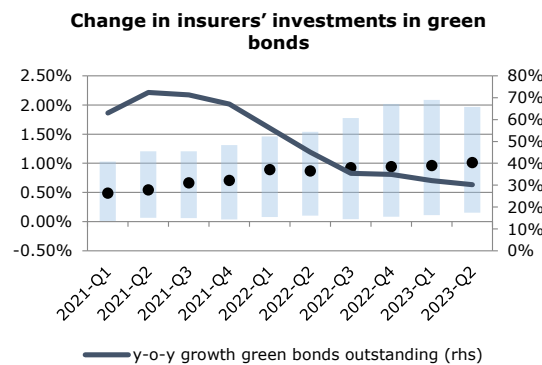
Note: Distribution of indicator (interquartile range, median). Higher rating scores correspond to better ratings Source: Refinitiv

The median investments in green bonds over corporate bonds is at around 5% in Q2 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%).



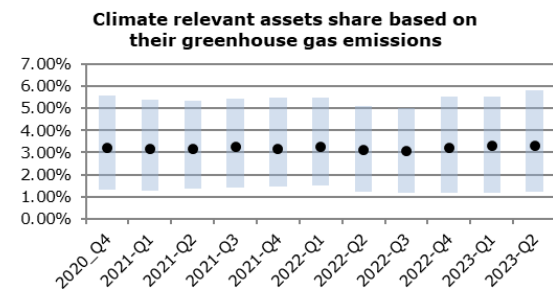
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS (N_{2023 Q2}=1,357).

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



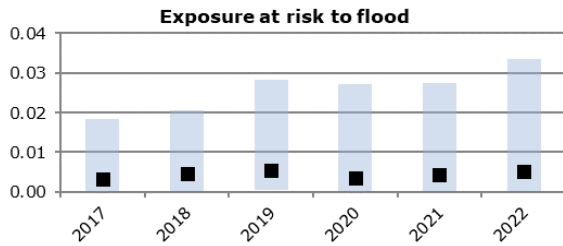
Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS (N_{2023 Q2}=1,319).

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



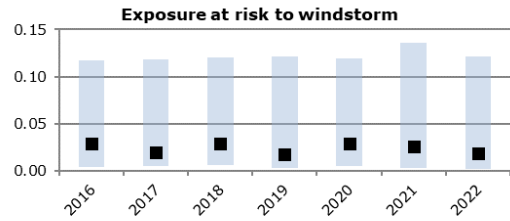
Note: The six climate-relevant sectors (agriculture, fossil fuel, utilities, energy-intensive, transport and housing) based on their greenhouse gas emissions and mapped at NACE Rev2 4-digit level. Due to data limitations, there are assets which cannot be entirely included in the "climate relevant" category 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_{2023 Q2}=1694).

The median exposure to flood risk slightly increased.



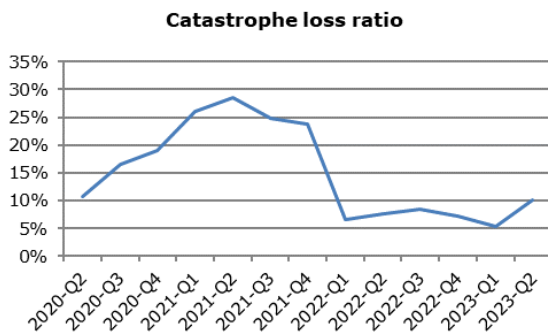
Source: EIOPA new dashboard on insurance protection gap for natural catastrophes, Eurostat, Litpop, ARG (N₂₀₂₂=112). Latest possible update refers to 2022. Due to changes in the data sources, the calculation of the indicator has been revised. We expect further revision of the distribution, when the new reporting requirements will be implemented.

The median exposure to windstorm risk slightly decreased.



Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat, Litpop, ARG (N₂₀₂₂=127). Latest possible update refers to 2022. Due to changes in the data sources, the calculation of the indicator has been revised. We expect further revision of the distribution, when the new reporting requirements will be implemented.

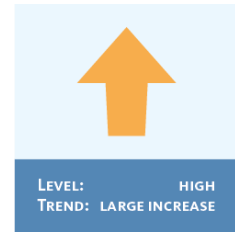
The cumulative catastrophe loss ratio increased, due to the increased cat losses for all reinsurers.



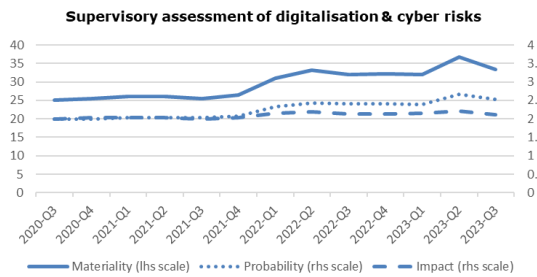
Note: Cumulative year-to-date loss ratio calculated based on Munich Re, Hannover Re and Everest Re. Due to data revisions, past data have been corrected. Source: Bloomberg Finance L.P.

DIGITALISATION & CYBER RISKS

Digitalization and cyber risks show an increasing trend and are now at high level. The materiality of these risks for insurance as assessed by supervisors slightly decreased in the third quarter of 2023, but is expected to increase with cyber security remaining as a main concern. The frequency of cyber incidents impacting all sectors of activity, as measured by publicly available data, increased since the same quarter of last year. Cyber negative sentiment also indicates an increasing concern in the third quarter of 2023.

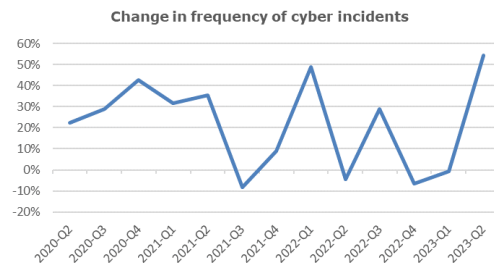


The supervisory assessment of digitalisation and cyber risks slightly decreased in Q3-2023, with cyber security remaining as a main concern.



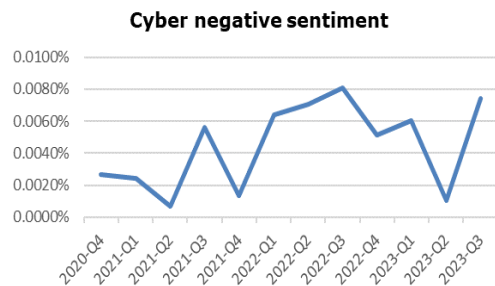
Note: Scores compiled based on the assessment of probability and impact (rhs: scale from 1 to 4) of digitalisation & cyber risks from National Competent Authorities. The country average for each answer is then normalised (lhs: scale 0-100). Source: EIOPA’s Insurance Bottom-up Survey.

The y-o-y change in frequency of cyber incidents calculated based on publicly available data increased in Q2-2023, with the number of cyber incidents affecting all sectors of activity rising above 1000.












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 in the third quarter of 2023.



Note: Text analysis based indicator, calculated from earning calls transcripts (N_{2023 Q3}=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

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