# **INSURANCE RISK DASHBOARD**

July 2023

EIOPA-BoS/23-286 July 2023



## **INSURANCE RISK DASHBOARD\***

## **JULY 2023**



<sup>\*</sup> The reference date for company data is Q1-2023 for quarterly indicators and 2022-YE for annual indicators. The cut-off date for most market indicators is end of June 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

- Risk levels for the European insurance sector remain broadly constant, with all risk categories pointing to medium risks with the exception of macro risk. Macro-related risks remain among the most relevant for the insurance sector. Forecasted GDP growth at global level further increased to 0.74%. CPI forecasts slightly decreased to 3.22%, yet remaining at high level. Credit risks is at medium level. The CDS spreads increased for financial secured bonds in the second quarter of 2023, while CDS spreads for other fixed income market segments receded slightly. Market risks decreased from high to medium level as volatility in equity market decreased and duration mismatch narrowed compared to the previous assessment.
- Liquidity and funding risks show an increase in cash holdings and a drop in the liquid assets ratio in the first quarter of 2023. Profitability and solvency risks show a drop in the investment return for life insurers in 2022 mainly due to the large increase of unrealized losses following the increase of interest rates. The distribution of the SCR ratio for insurance groups decreased. Similarly, life insurers reported a slight decline in the median SCR ratio. On the other hand, assets over liabilities increased due to the higher interest rates. Interlinkages and imbalances risks remain at medium level while insurance risks decreased in Q1-2023, with the median year-on-year premium growth for non-life insurance decreasing to end 2021 levels.
- Market perceptions show positive returns for insurance stocks, albeit an underperformance of life insurance stocks when compared to the market for the second quarter of 2023.
- **ESG related risks** display an increasing trend with the median exposure towards climate relevant assets slightly increased to 3.3% of total assets. Moreover, the catastrophe loss ratio also deteriorated. On the other hand, the share of insurers' investments in green bonds over total green bonds outstanding is stable compared to the previous quarter.
- Digitalization and cyber risks also display an increasing trend with the materiality of these risks for insurance as assessed by supervisors increasing in the first half of 2023. The frequency of cyber incidents impacting all sectors of activity, as measured by publicly available data, increased since the same quarter of last year. The indicator cyber negative sentiment indicates a decreasing concern in the second quarter of 2023.

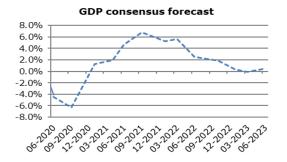
## **MACRO RISKS**

Macro-related risks remain among the most relevant for the insurance sector. Forecasted GDP growth at global level further increased to 0.74%. Global CPI forecasts slightly decreased to 3.22%, but remaining at high level. Fiscal balances have deteriorated. The weighted average of the 10 years swap rates for major currencies remains at a higher level. The credit-to-GDP gap decreased. Central banks continue to tighten their monetary policy, with the average global policy rates increasing and the balance sheets' sizes decreasing.

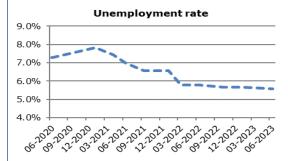


Forecasted GDP growth for the next four quarters increased from 0.53% to 0.74%. Compared to the previous assessment, forecasts have been revised upwards for the short term across all geographical areas, while there is more heterogeneity for the long term.

The latest data on unemployment rates across major geographical areas are on average around 5.58%.



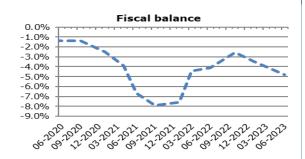
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. Source: Bloomberg Finance L.P.



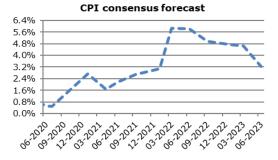
Note: Weighted average for EU, Switzerland, United States, China. Source: Refinitiv

Fiscal balances deteriorated to around -4.8% of GDP (compared to -3.4% in the previous quarter).

Forecasted inflation for the next four quarters slightly decreased to 3.22%, yet remaining at high level. The downward revisions are across all geographical areas and slightly higher for the EU.

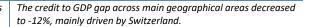


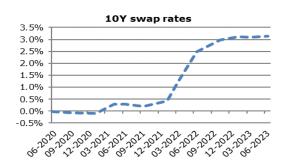
Note: Weighted average for EU, UK and United States. Source: Refinitiv

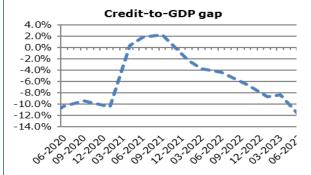


Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. Source: Bloomberg Finance L.P.

The indicator on the 10 years swap rates across main currencies hovers around 3.1% in the second quarter of 2023.



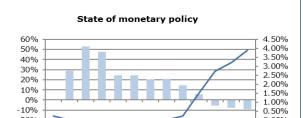




Note: Weighted average for EUR, GBP, CHF, USD. Source: Refinitiv

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

Central banks average policy rate increased from 3.20% to 3.90% in Q2 2023. The balance sheets of the major central banks have been further decreasing.



Change in Balance Sheet (yoy, lhs) Policy Rate (rhs)

0.00%

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

0% -10% -20%

## **CREDIT RISKS**

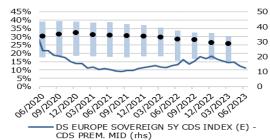
Credit risks remained at medium level. The CDS spreads increased for financial secured bonds in the second quarter of 2023, while CDS spreads for other fixed income market segments receded slightly. The relative exposure to bonds, especially government bonds, decreased. The median average credit quality of insurers' investments remained stable, while the median share of below investment grade assets (with a credit quality step higher than 3) in insurers' portfolios slightly decreased.



In the second 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 Q1-2023 while the two tails of the distribution have moved downwards.

Spreads for unsecured financial bonds decreased in the second quarter of 2023. The median exposures of EU27 insurers' investments slightly decreased to 8.3% in Q1 2023 (from 8.8%).

#### Investments in government bonds



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG ( $N_{2023}$   $O_{1}$ =95)

rtile range Note: QFG (N<sub>2023</sub> and m

Spreads for secured financial bonds increased 31bpts. Median exposures of EU27 hover around 2% of total assets in Q1-2023.

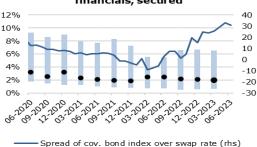
## Investments in corporate bonds financials, unsecured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Refinitiv, QFG ( $N_{2023}$   $_{01}$ =85)

Spreads for non-financial corporate bonds hover around 132bpts. Median exposure to non-financial corporate bonds for the EU27 hover around 9% of total assets in Q1-2023.

#### Investments in corporate bonds financials, secured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2023~\Omega 1}$ =76)

#### Investments in corporate bonds non-financials

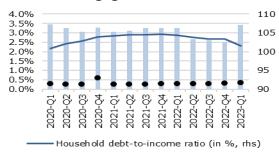


Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2023\,O1}$ =80)

The household debt-to-income ratio hovered around 101%. While the median exposures to loans and mortgages remained around 0.37%, the upper quartile of the distribution increased from 2.5% to 3.5% of total assets in Q1-2023.

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

# Investments in loans and mortgages to individuals

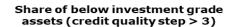


Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure (weighted average of EA and UK). Source: QFG ( $N_{2023\,Q1}$ =95), ECB

Source: QFG ( $N_{2023\,Q1}$ =95), ECB

The median share of below investment grade assets (with a credit

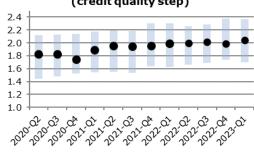
quality step higher than 3) slightly decreased to around 1% in Q1-2023 (from 1.17%).





Note: Distribution of indicator (interquartile range, median). Includes both internal and external credit ratings. Source: QFG ( $N_{2023\,01}$ =93)

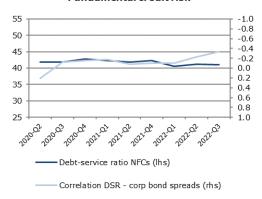
# Average rating of investments (credit quality step)



Note: Distribution of indicator (interquartile range, median). Source: QFG (N $_{2023~Q1}$ =90)

The correlation between the debt-service ratio of non-financial corporations and corporate bond spreads increased. The debt service ratio is at the same level for all the countries considered.

## Fundamental credit risk



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 at medium level, with a large decreasing trend. Volatility in the equity markets decreased in June. The duration mismatch narrowed in 2022 when compared to 2021. The annual growth rate of real estate prices decreased while insurers' median exposure to this asset class hovers around the same level of the previous assessment. The increase in interest rates in 2022 is reflected in the further deterioration of the median spread of investment returns over guaranteed rates mainly driven by an increase in unrealized losses.



The volatility in interest rates (proxied by the index on the swap option for the Euro) slightly decreased to 98bps in June 2023, yet remaining at high level. Median exposures to bonds slightly decreased to 51% of total assets in Q1-2023.

Volatility of equity prices as well as the price to book value decreased compared to beginning of 2023. Median exposures to equity also decreased to 5.8% of total assets in Q1-2023.

Investments in equity

12202202

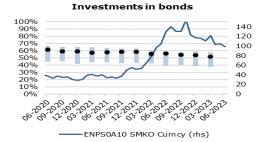
Price to Book Value Ratio (rhs)

ૺઌ

Ŝ,

6,202°

VSTOXX/10 (rhs)



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. The previous volatility indicator was discontinued and has been substituted by the swap option in this version of the risk dashboard. Source: Bloomberg Finance L.P., QFG ( $N_{2023 \, Ol}$ =95)

tile range indicator on in this L.P., QFG (N<sub>2023 Q1</sub>=95)

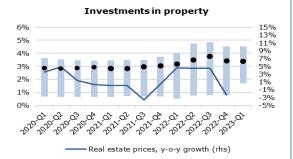
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2023 Q1</sub>=95)

09.2021

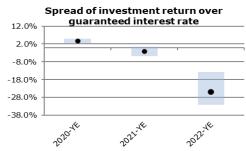
03'06

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 investments returns. Without unrealised losses, the median spread would be around 0%.

The indicator on the annual growth rate of real estate prices decreased to -2.35%. Median exposures to property hover around 3.4% of total assets in Q1-2023.

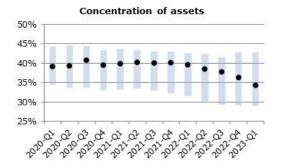


Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Latest observation for property prices is Q4-2022. Source: QFG (N<sub>2023 O1</sub>=95); ECB



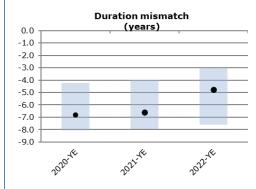
Note: Distribution of indicator (interquartile range, median).. The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N<sub>2022</sub>=363)

The median for the indicator on the concentration of assets decreased to 34% in Q1-2023.



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 ( $N_{2023\ 01}$ =96)

The distribution 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 take into account optionalities such as a future profit participation.



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

## LIQUIDITY AND FUNDING RISKS

Liquidity and funding risks remain at medium level. As interest rates increase, the value of liquid assets has been adjusted downwards and this is reflected in a decrease of the liquid assets ratio, impacting also the indicators on insurers' liquidity position included in this category. Insurers' cash holdings reported an increase in the first quarter of 2023, after a



decline in the previous quarter. On the liability side, lapse rates have slightly increased in 2022 compared to the previous year. Overall, the liquidity position of insurance undertakings deteriorated in 2022. On the funding side, the median exposure to funding via repos increased while bond issuance has slightly decreased compared to end of 2021.

60%

55%

50% 45%

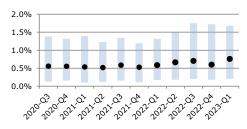
40% 35%

The median of cash holdings shifted upwards in the first quarter of 2023, after the decrease experienced in the previous quarter. The median stands at 0.76% in Q1-2023 (0.60% in the past quarter).

The median of the liquid assets to total assets ratio moved downwards, standing at 44.4% in Q1-2023 (45.6% in Q4-2022).

Liquid assets ratio

## Cash holdings



Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023.01}$ =1,766).

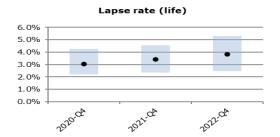
rota transtructural to the transtructural to the

Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023\,Q1}$ =1,688).

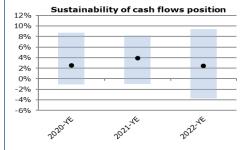
2022000

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

The median of the indicator on the sustainability of the cash flow position decreased by more than 100 bps from 3.9% in 2021 to 2.5% in 2022. The indicator intends to capture whether the undertakings hold a sufficient amount of liquid assets to cover net cash outflows at a given time.



Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG ( $N_{2022\ Q4}$ =92)



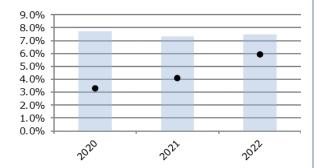
Note: Distribution of indicator (interquartile range, median). Source: ARS ( $N_{2022}$ =2,307).

The median of the exposures to funding via repos continued increasing amounting to 6% in 2022 from 4.1% of the previous year.

Bond issuance volumes dropped to EUR 2.3 billion in Q4-2022. The average ratio of coupons to maturity remains stable around 0.54.

**Bond issuance** 

## **Funding via repos**



Issued volume (EUR mn, lhs)

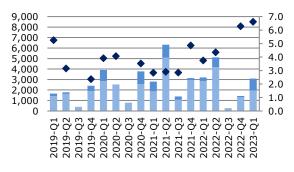
Average Coupon / Maturity (rhs)

Note: Distribution of indicator (interquartile range, median). Source: ARS ( $N_{2022}$ =88).

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

Catastrophe bond issuance further increased in Q1-2023 to USD 1,944 million, following the seasonality experienced in the past years. Also, the multiplier increased to 6.6. The majority of cat bonds issued covered US multi-risk natural catastrophe (earthquake and storm).

## **Cat Bond Issuance**



- ■increase in announced volume (USD mn, lhs)
- ■announced volume (USD mn, lhs)
- multiplier (spread / expected annual loss) (rhs)

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

# PROFITABILITY AND SOLVENCY

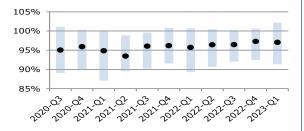


Profitability and solvency risks remain at medium level. The investment return for life insurers dropped in 2022 mostly due to unrealized losses. In Q1-2023, the net combined ratio (for non-life insurers) remain stable. The distribution of the SCR ratio for insuance groups continued moving downwards. Similarly, life insurers reported a slight drop in the median SCR ratio. Assets over liabilities increased due to the higher interest rates.

The median of the net combined ratio for non-life business was stable at 97% in Q1-2023. However, both upper and lower tails expanded with a remarked upward movement.

The distribution range of the return on investments for life solo undertakings further 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.

#### Net combined ratio - non-life



Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023}$  Q1=1,360).

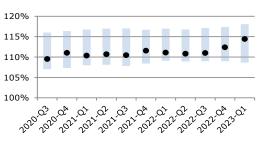
12.0%
7.0%
2.0%
-3.0%
-13.0%
-13.0%
-13.0%
-13.0%
-13.0%
-13.0%
-13.0%
-13.0%
-14.0%
-23.0%
-33.0%
-33.0%
-33.0%
-33.0%

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>=383).

The median of the ratio of assets over liabilities further increased to 114% in Q1-2023. Due to the higher interest rates, liabilities dropped to a higher extent than assets due to the negative duration gap.

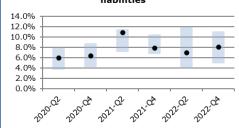
The median of the return on excess of assets over liabilities (based on statutory accounts) shifted upwards to 8% in Q4-2022 due to the increase in returns.

## Assets over liabilities



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023.01}$ =95).

#### Return on excess of assets over liabilities

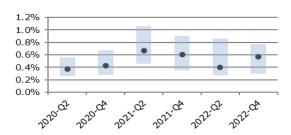


Note: Distribution of indicator (interquartile range, median). Q2 figures annualised. .Source: QFG and ARG ( $N_{2022\,Q4}$ =91).

The median ratio of return on assets (based on statutory accounts) increased to 0.6% (from 0.2% in Q2-2022) given the higher returns obtained in the last quarter of 2022.

The distribution of return to premiums moved upwards, with a median around 4.6% in Q4-2022 (3.6% in Q2-2022).

## Return on assets



8.0%
7.0%
6.0%
6.0%
4.0%
3.0%
2.0%
1.0%
0.0%

Return to premiums

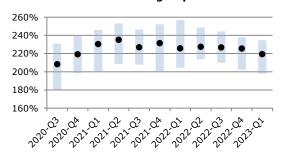
Note: Distribution of indicator (interquartile range, median). Q2 figures annualized. Source: QFG and ARG (N<sub>2022 Q4</sub>=92).

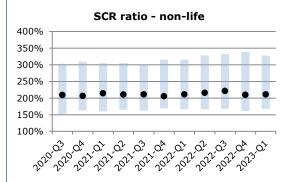
Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG (N $_{\rm 2022~Q4}=95$ ).

The median SCR ratio for groups decreased from 225% in Q4-2022 to 219.3% in Q1-2023. The lower tail of the distribution decreased by - 10.5 p.p., indicating a continued deterioration of SCR ratios for the insurance groups with lower ratios.

The median SCR ratio for non-life solo undertakings remained stable at 211% in Q1-2023.

#### SCR ratio - groups





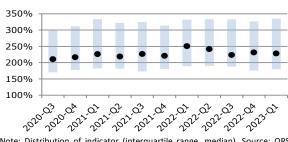
Note: Distribution of indicator (interquartile range, median). Source: "Total"

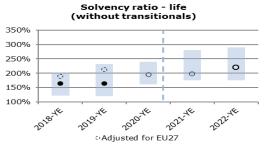
Note: Distribution of indicator (interquartile range, median). Source: QRS (N $_{\rm 2023~Q1}$  =1,074).

The median SCR ratio for life solo undertakings slightly decreased to 228%, however the distribution was stable with respect to the previous quarter.

The median SCR ratio of life solo companies excluding the impact of transitional measures improved to 219.7% (197.6% in 2021).

## SCR ratio - life



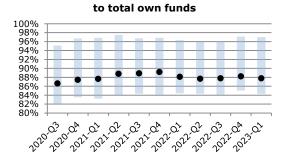


Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023\,\Omega1}$ =360).

Note: Distribution of indicator (interquartile range, median). Source: ARS ( $N_{2022}$ =232).

The distribution range of tier 1 capital in total own funds remains overall stable, with a median standing around 88% in Q1-2023.

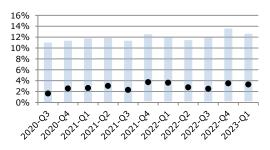
Tier 1 own funds



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023\,Q1}$ =96).

After the increase in the previous quarter, the median expected profits in future premiums slightly decreased while still being above 3%. The upper tail of the distribution decreased after increasing in the previous 3 quarters.

## **Expected Profit in Future Premiums**



Note: Distribution of indicator (interquartile range, median). Source: QRS (N $_{2023\,Q1}=1,834).$ 

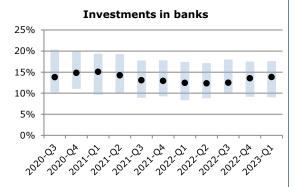
## INTERLINKAGES AND IMBALANCES

Interlinkages and imbalances risks remain at medium level in Q1-2023. Derivatives to total assets shifted downwards in the first quarter of 2023. The exposure to insurances increased, while insurance groups' exposure to other financial institutions dropped. Reinsurance part of premiums moved upwards.



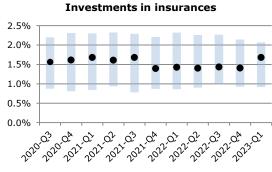
The distribution range of investment in banks as a share of total assets remains overall stable with a median standing at 13.8% in Q1-2023.

The median of investment exposures to insurers as a share of total assets increased, standing at 1.7% in Q1-2023 (1.4% in Q4-2022).



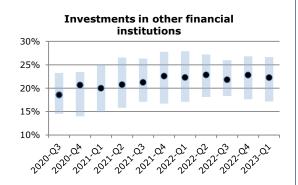
Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9. Source: QFG ( $N_{2023\,\Omega1}$ =94).

The median of investments in other financial institutions slightly moved downwards to 22% in Q1-2023.



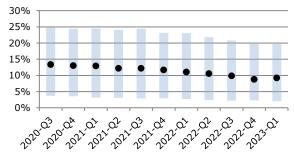
Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3. Source: QFG ( $N_{2023\,Q1}$ =90).

The median share of investments in domestic sovereign debt slightly increased to 9.2% from 8.8% in the previous quarter, reversing the ongoing decreasing trend.



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 ( $N_{2023\ 0.1}$ =94).

# Investment in domestic sovereign debt

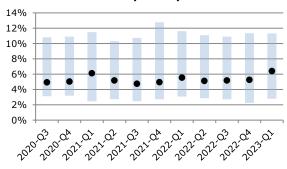


Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023\,Q1}$ =1,197).

The median of premiums ceded to reinsurers shifted upwards, standing at 6.4% in Q1-2023 (5% in Q4-2022).

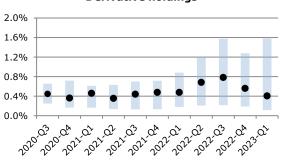
The median of derivatives to total assets continued shifting downwards in the first quarter of 2023, standing at 0.4% (0.56% in the previous quarter).

## Reinsurance part of premium



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023\,\Omega1}$ =92).

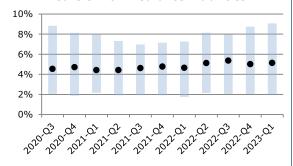
## **Derivative holdings**



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 ( $N_{2023\ Q1}$ =95).

The distribution range of "non-insurance" liabilities of insurers remains overall stable with a median around 5% in Q1-2023.

## Insurers "non-insurance" liabilities



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023\ O1}$ =95).

## **INSURANCE (UNDERWRITING) RISKS**

Insurance risks remain at medium level with a large decreasing trend in Q1-2023. The median year-on-year premium growth for non-life decreased to 2021 levels but is still well above zero. For life insurance an increase in premium growth was reported after the decreasing trend experienced in the past quarters. The median loss ratio slightly decreased.



The distribution range for life premium growth increased after declining in the last quarters. The median stands at -0.6%, still below zero.

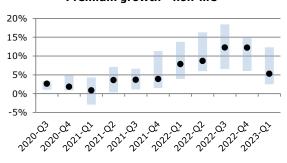
The median non-life premium growth dropped to 5.3% in Q1-2023 (12% in Q4-2022). The lower and upper tails of the distribution also decreased to 2.5% and 12.3%, respectively.

#### 

Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023\,Q1}$ =89).

The distribution of the loss ratio showed an improvement in the median level, standing at 63.6%. The upper tail of the distribution

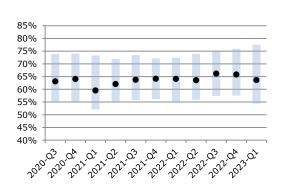
## Premium growth - non-life



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2023\,01}$ =83).

## Loss ratio (gross)

increased with respect to Q4-2022.



Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2023\,Q1}$ =1,346).

## **MARKET PERCEPTIONS**

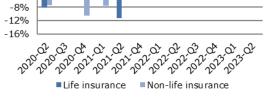
Market perceptions remain at medium level and show positive returns of insurance stocks, albeit an underperformance of life insurance stocks when compared to the market for the second quarter of 2023. The median price-to-earnings ratio of insurance groups decreased. The median of CDS spreads of insurers slightly increased. Insurers' external ratings remained broadly stable since the last assessment.



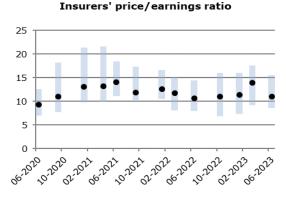
Insurance stock performance was positive as of June 2023. Life stocks underperformed (-4%) while non-life stocks performed in line with the market (0.1% over the market).

The median price-to-earnings (P/E) ratio of insurance groups in the sample decreased back to 11%.

# Out-(under-)performance of insurance stock prices 12% 8% 4% 0% -4% -8% 12%



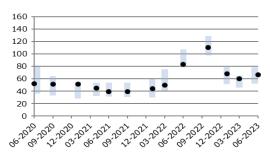
Note: Out-(under-)performance over 3-month periods vs Stoxx 600. Source: Refinitiv



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

The distribution of insurers' CDS spreads increased compared to the previous assessment.





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

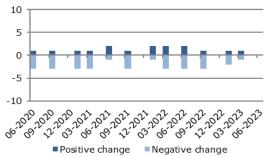
Insurers' external ratings remained stable since the previous risk assessment.



Source: Standard & Poor's via Refinitiv

Rating outlooks for insurers in the sample have remained mainly stable and there have been no changes in positive or negative direction.

# Insurers' external ratings (change in rating outlooks)



Source: Standard & Poor's via Refinitiv

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

-10

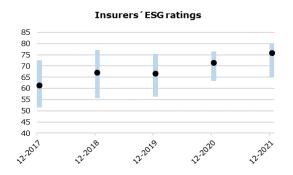
-15

ESG related risks remain at medium level, but increasing. The median exposure towards climate relevant assets slightly increased to 3.3% of total assets. The share of insurers' investments in green bonds over total green bonds outstanding is stable compared to the previous quarter. The y-o-y growth of green bonds outstanding slightly decreased, while the median growth of insurers' investments in green bonds is stable.



The median ESG ratings of the insurers in the sample increased to A- in 2021

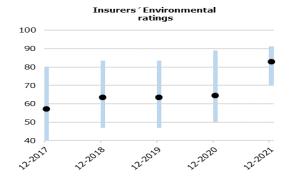
The numbers of improvements in ESG ratings for the insurers in the sample have been higher than the negative changes in 2021.



Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. Latest possible update refers to 2021. Source: Refinitiv

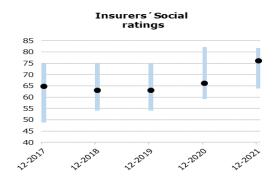
Note: Numbers of positive (grey bar) and negative (blue bar) changes. Latest possible update refers to 2021. Source: Refinitiv

The median environmental ratings of the insurers in the sample increased to around A and it has been improving in the last years.



Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. Latest possible update refers to 2021. Source: Refinitiv

The median social ratings of the insurers in the sample correspond to around A- and it improved in 2021.



Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. Latest possible update refers to 2021. Source: Refinitiv

The median governance ratings of the insurers in the sample correspond to around A and it improved on 2021.

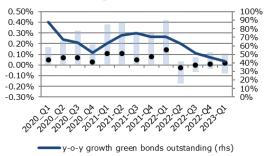
Insurers' Governance ratings

100
90
80
70
60
50
40
7,2018 7,2018 7,2018 7,201

Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. Latest possible update refers to 2021. Source: Refinitiv

The y-o-y growth of green bonds outstanding slightly decreased, while the median growth of insurers' investment in green bonds is stable.

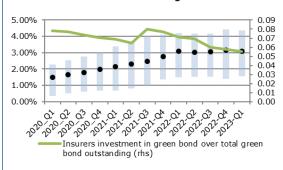
## Change in insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS ( $N_{2023\,Q1}$ =1,338).

The median investments in green bonds over corporate bonds have been hovering around 3% in Q1 2023. The share of insurers' investment in green bonds over total green bonds outstanding hover around the same level of the previous quarter (6%).

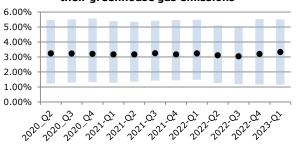
## Insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS ( $N_{2023\,Q1}$ =1,354).

The median exposure towards climate relevant assets slightly increased to 3.3 % of total assets.

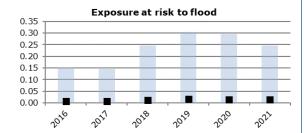
#### Climate relevant assets share based on their greenhouse gas emissions

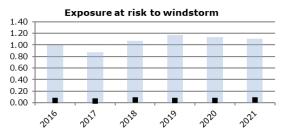


Note: The six climate-relevant sectors (agriculture, fossil fuel, utilities, energy-intensive, transport and housing) based on their greenhouse gas emissions and mapped at NACE Rev2 4-digit level. Due to data limitations, there are assets which cannot be entirely included in the "climate relevant" category 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 Q1</sub>=1722).

The median exposure to flood risk remains the same, slightly decreasing in the high part of the distribution.

The exposure to windstorm risk remains the same.



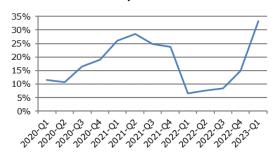


Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, ARG ( $N_{2021}$  =110). Latest possible update refers to 2021.

Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, ARG ( $N_{2021}$ =130). Latest possible update refers to 2021.

The cumulative catastrophe loss ratio continued increasing, mainly due to decrease in premiums for all reinsurers .

#### Catastrophe loss ratio



Note: Cumulative year-to-date loss ratio calculated based on Munich Re, Hannover Re and Everest Re. Source: Bloomberg Finance L.P.

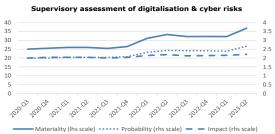
## **DIGITALISATION & CYBER RISKS**

Digitalization and cyber risks remain at medium level, but increasing. The materiality of these risks for insurance as assessed by supervisors increased for the first half 2023. 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 indicates a decreasing concern in the second quarter of 2023.



The supervisory assessment of digitalisation and cyber risks increased in the first half of 2023. Cyber-attacks are on a growing trend and concerns of a hybrid geopolitical conflict remain.

The y-o-y change in frequency of cyber incidents has increased in the first quarter of 2023, with the number of cyber incidents affecting all sectors of activity in line with the long term average.



Materiality (lhs scale) Probability (rhs scale) Impact (rhs scale)

Note: Scores compiled based on the assessment of probability and impact (rhs: scale from 1 to 4) of digitalisation & cyber risks from National

Change in frequency of cyber incidents

60%

50%

40%

30%

10%

-10%

-20%

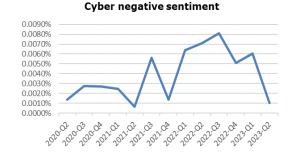
Note: Year-on-year change in frenquency of cyber incidents. Source: HACKMAGEDDON website

2021.03 -112.04

2022-02

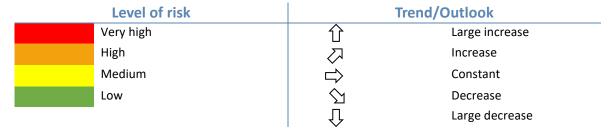
Competent Authorities. The country averages for each answer is then normalised (lhs: scale 0-100). Source: EIOPA's Insurance Bottom-up Survey

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, decreased in the second quarter of 2023.



Note: Text analysis based indicator, calculated from earning calls transcripts ( $N_{2023\ O2}$ =29). Source: Refinitiv, EIOPA calculations.

## **APPENDIX**



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 analysing 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 signalling 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 scrutinises the level of solvency and profitability of the European insurance industry. Both dimensions are analysed 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 kind of risks that may emerge and rise in the near future. The set of indicators encompasses ESG ratings of listed insurers signalling 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 NatCat 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.

#### Digitalisation & Cyber risks

This risk category aims to capture potential financial stability risks related to an increased digitalisation, 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 digitalisation & 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@eiona.europa.eu

https://www.eiopa.europa.eu