

EIOPA REGULAR USE

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RISK DASHBOARD

October 2022¹

Risks	Level	Trend (Past 3 months)	Outlook ² (Next 12 months)
1. Macro risks	high	—	
2. Credit risks	medium	\Rightarrow	
3. Market risks	high	→	
4. Liquidity and funding risks ³	medium	→	*
5. Profitability and solvency	medium	→	
6. Interlinkages and imbalances	medium	→	-
7. Insurance (underwriting) risks	medium	→	*
8. Market perceptions	medium	<i></i>	→
9. ESG related risks ⁴	medium	→	
10.Digitalisation & Cyber risks ⁵	medium	ţ	*

Note: The structural break as of Q1 2020 related to the Brexit withdrawal agreement and represented with a dashed line indicates a break in the number of undertakings of the time series and rebalance of the country weights. Additionally, adjusted time series for EU27 before Q1 2020 are also disclosed to reflect potential variations driven by the structural break in the sample.

 $^{^1}$ Reference date for company data is Q2-2022 for quarterly indicators and 2021-YE for annual indicators. The cut-off date for most market indicators is end of September 2022.

² The Outlook displayed for the next 12 months 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).

 $^{^{3}}$ From October 2021, a new ESG related risks category and an enhancement of the liquidity and funding risks category are included in the EIOPA's risk dashboard.

⁴ Environmental, Social and Governance (ESG) related risks. For further details please see footnote 3.

⁵ From January 2022, a new Digitalization & Cyber risks category is included.

Key observations:

- Risk levels for the European insurance sector remain broadly constant.
- Macro-related risks remain significant for the insurance sector. Forecasted GDP growth at global level further decreased and CPI forecasts remained at high level for main geographical areas. Unemployment rate for main geographical areas remained at low level. Weighted average of 10 years swap rates increased. Central banks continue the normalization of their monetary policy.
- Credit risks remain relatively moderate. The CDS spreads remain at low levels for government bonds and financial bonds, amid further increasing for nonfinancial corporate bonds in the third quarter of 2022. Insurers' relative exposure to different bonds categories remained broadly stable while slightly decreasing for government bonds in Q2-2022. The median average credit quality of insurers' investments remained stable.
- Market risks remain stable compared to the previous assessment. Volatility in bond and equity market remained at higher than last year average. Property prices remain at the same level. The median insurers' exposure to bonds, equity remain relatively unchanged while median exposure to property slightly increased in Q2 2022.
- Profitability and solvency risks remain at medium level. Given the decrease in returns for insurers in the second quarter of 2022, the three return indicators (return on excess of aseets over liabilities, return on assets and return on premiums) decreased. The increase of interest rates since the beginning of 2022 might be the main driver behind the high SCR ratios.
- Interlinkage and imbalance risks remain at medium level. Due to the current increase of interest rate, insurers realised market to market losses on derivatives because they are positioned to hedge interest rates declines.
- Market perceptions remain at medium level. Insurance life and non-life stocks underperformed. The median price-to-earnings ratio of insurance groups remained around the same level. The median of CDS spreads of insurers further increased. Insurers' external ratings remained broadly stable since the last assessment.
- Climate risks remain at medium level. Insurers mantained their relative exposure into green bonds, while the ratio of investments into green bonds over the total green bond outstanding slightly decreased. The growth of green bonds in insurers' portfolios has decreased, while the growth of green bonds outstanding is stable.
- Digitalisation and cyber risks are at medium level. The materiality of these risks for insurance as assessed by supervisors slightly decreased yet cyber security issues and concerns of a hybrid geopolitical conflict remain. Cyber negative sentiment indicates an increased concern in the third quarter of 2022 while the frequency of cyber incidents decreased compared to the same quarter last year.

Macro risks



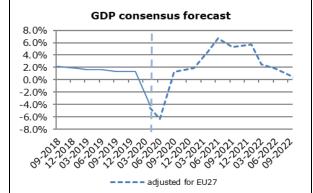
Level: high

Trend: constant

Macro-related risks remain relevant for the insurance sector. Forecasted GDP growth at global level further decreased to 0.34%, and CPI forecasts remained at high level for main geographical areas, with an average above 5%. Unemployment rate for the main geographical areas remained at low level. Weighted average of 10 years swap rates increased, reaching 3% across main currencies. Central banks continue the normalization of their monetary policy: the average global policy rates have increased to 1.5% and asset purchases continue amid at a slower pace than previous quarter and will further slowdown.

Forecasted GDP growth for the next four quarters decreased from 1.83% to 0.34%. Expectations of EU GDP growth for the forecast horizon are lower than the global average. Compared to the previous assessment, forecasts have been revised downwards.

The latest data on unemployment rates across geographical areas hover around 5.7%.



Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. The dashed line indicated a break after UK exit and rebalancing of the country weights. Source: Bloomberg Finance L.P.

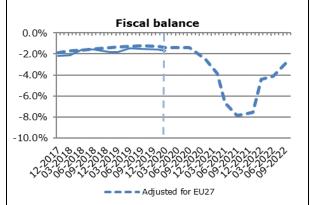
9.0% 8.0% 7.0% 6.0% 5.0%

Note: Weighted average for EU, Switzerland, United States, China. The dashed line indicated a break after UK exit and rebalancing of the country weights.

Source: Refinitiv

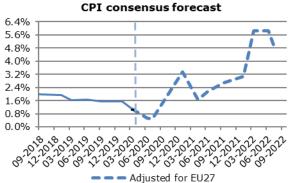
Fiscal balances have improved from -4.1% to -2.55% of GDP.

Forecasted inflation for the next four quarters slightly decreased to 4.98%, particularly driven by market downward revision of US and BRICS inflation.



Note: Weighted average for EU, UK and United States. The dashed line indicated a break after UK exit and rebalancing of the country weights.

Source: Refinitiv



Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. The dashed line indicated a break after UK exit and rebalancing of the country weights.

Source: Bloomberg Finance L.P.

The indicator on the 10 years swap rates across main currency hover around to 2.98% in the third quarter of 2022. The increase was mainly driven by the pound.

Note: Weighted average for EUR, GBP, CHF, USD. The dashed line indicates a break after UK exit and rebalancing of the country weights.

Source: Refinitiv

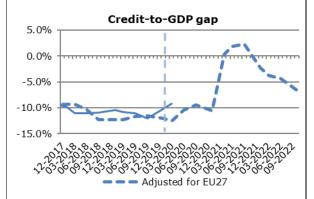
Monetary policies across all major central banks continue to adjust their expansionary actions. The average policy rate significantly increased from 0.02% to 1.51%. The balance sheets of the major central banks have been increasing at a slower pace.

State of monetary policy 60% 1.60% 1.40% 50% 1.20% 40% 1.00% 30% 0.80% 20% 0.60% 10% 0.40% 0% 0.20% -10% 0.00% Change in Balance Sheet (yoy, lhs) Policy Rate (rhs)

Note: Weighted average for Euro area, United Kingdom, Switzerland, United States. The dashed line indicates a break after UK exit and rebalancing of the country weights.

Source: Bloomberg Finance L.P.

The credit to GDP gap across main geographical areas decreased from -4.37%to -6.61% in Q3-2022. The credit to GDP gap in the Euro Area also decreased to similar levels.



Note: Weighted average for Euro area, United Kingdom, Switzerland, United States, China. The dashed line indicates a break after UK exit and rebalancing of the country weights. Source: BIS

Credit risks



Level: medium

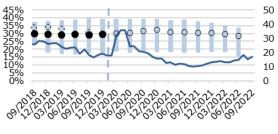
Trend: constant

Credit risks remain at medium level. The CDS spreads remain at low levels for government bonds and financial bonds, amid further increasing for non-financial corporate bonds in the third quarter of 2022. Insurers' relative exposure to different bonds categories remained broadly stable while slightly decreasing for government bonds in Q2-2022. The median average credit quality of insurers' investments remained stable. The median of below investment grade assets (with a credit quality step higher than 3) in insurers' portfolios remained stable.

In the third quarter 2022, CDS spreads for European sovereign bonds slightly increased. Insurers' median exposures to this asset class decreased from 30% to 28% of total assets in O2-2022.

Spreads for unsecured financial bonds first decreased and then went back to the June level around 126bps in the third quarter of 2022. Median exposures of EU27 insurers' investments hover around 8.7% in Q2 2022.

Investments in government bonds



 DS EUROPE SOVEREIGN 5Y CDS INDEX (E) - CDS PREM. MID (rhs)

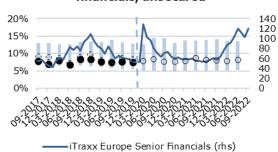
Adjusted for EU27

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Refinitiv, QFG (N_{2022 Q2}=92)

Spreads for secured financial bonds increase slightly from 2% to 4%. Median exposures of EU27 remain at the same level of 2.5% of total assets in Q2-2022.

Investments in corporate bonds - financials, unsecured

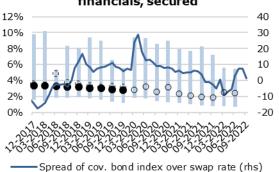


Adjusted for EU27

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: Refinitiv, QFG ($N_{2022\ O2}=83$)

Spreads for non-financial corporate bonds strongly increased from 170bps to 287bps. Median exposure to non-financial corporate bond for EU27 hover around 11.3% of total assets in Q2-2022.

Investments in corporate bonds - financials, secured

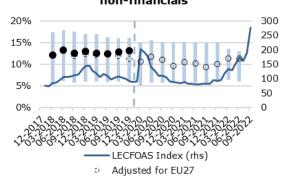


Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Bloomberg Finance L.P., QFG (N_{2022 Q2}=76)

Adjusted for EU27

Investments in corporate bonds - non-financials



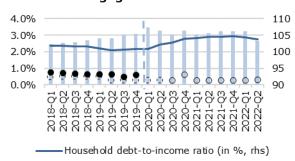
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Bloomberg Finance L.P., QFG (N_{2022 Q2}=83)

The household debt-to-income ratio hovered around 104%. The median exposures to loans and mortgages remained at 0.29% of total assets for Q2-2022.

The median average credit quality step hovered around 2, corresponding to an S&P rating between AA and A.

Investments in loans and mortgages to individuals

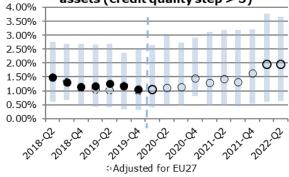


Adjusted for EU27

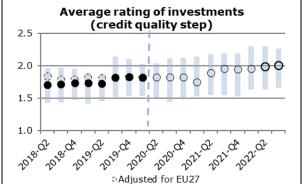
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure (weighted average of EA and UK). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG (N_{2022} Q_2 =92), ECB

The median of below investment grade assets (with a credit quality step higher than 3) hover around 1.96% Q2-2022 and the range of the distribution remains quite wide.

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



Note: Distribution of indicator (interquartile range, median). Includes both internal and external credit ratings. Time series revised - denominator now excludes assets for which no rating shall be reported. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG ($N_{2022\ Q2}$ =92)

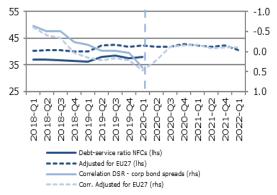


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG (N_{2022 Q2}=89)

The correlation between the debt-service ratio of non-financial corporations and corporate bond spreads slightly decreased. The debt service ratio hovers around 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.

The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: BIS, Bloomberg Finance L.P.

Market risks



Level: high

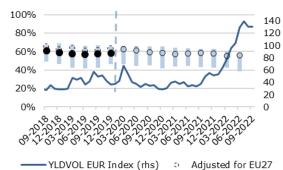
Trend: constant

Market risks remain at high level. Volatility in the bond market is very high and equity market remained at higher level than last year average. Growth of property prices remains at the same level. The median insurers' exposure to bonds and equity remain relatively unchanged while median exposure to property slightly increased in Q2 2022.

bond hovered around 130bps in the third quarter 2022. Median exposures to bonds hovered around 56% of total assets in Q2-2022.

The index on the expected yield volatility for the Euro Volatility of equity prices hovered around the same level as in the third quarter of 2022. Median exposures to equity slightly increased to 7% of total assets in Q2-

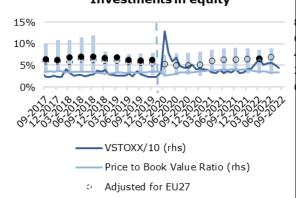




Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Bloomberg Finance L.P., QFG (N_{2022 Q2}=92)

Investments in equity



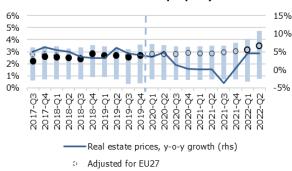
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Bloomberg Finance L.P., QFG (N_{2022 Q2}=92)

The indicator on the annual growth rate of property prices hovered around 4.6% in Q2-2022 corresponding to previous levels. Median exposures to property slightly increased to 3.5% of total assets in Q2-2022.

median spread of investment returns guaranteed rates decreased to -2% at the end of 2021.

Investments in property

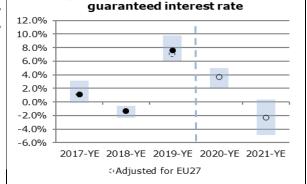


Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. From Q1-2019 time series revised due to changes in source data from the ECB.

The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

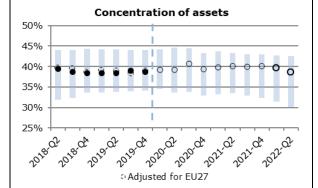
Source: QFG (N_{2022 Q2}=92); ECB

Spread of investment return over



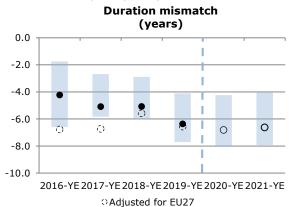
Note: Distribution of indicator (interquartile range, median). Figures have been updated for YE2021. Figures for 2021-YE have been revised. The numerator of the investment return ratio includes Solvency II reported unrealised gains and losses. Source: ARS (N₂₀₂₁=396)

The median for the indicator on the concentration of assets slightly decreased to 38% in Q2-2022.



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). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG ($N_{2022\,Q2}$ =92)

The distribution of the duration mismatch indicator hovered from 2020 to 2021, with the median mismatch standing at around -7 years. 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_{2021 Q4}=83); Liabilities AFG (N₂₀₂₁=83)

Liquidity and funding risks



Level: medium

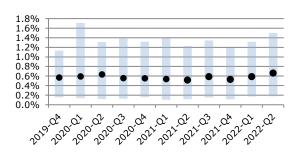
Trend: constant

Liquidity and funding risks remain at medium level. Cash holdings continued reporting a slight increasing trend since the beginning of the year. Likewise, liquid asset ratio reported a slight raise. On the other hand, bond issuance and catastrophe bond issuance increased. The latter with the majority of cat bonds covering US multi-risk natural catastrophe (storms and earthquakes).

The median of cash holdings shifted slightly upwards for a second consecutive quarter, standing at 0.66% in Q2-2022.

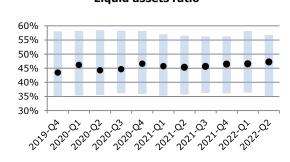
The median of the liquid assets to total assets ratio slightly increased to 47% in Q2-2022, while the lower tail displayed a drop.

Cash holdings



Note: Distribution of indicator (interquartile range, median). Source: QRS ($N_{2022 Q2}=1,799$).

Liquid assets ratio

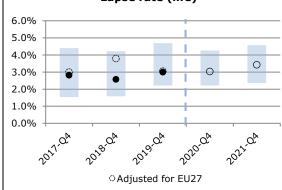


Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2022 Q2}=1,739).

The distribution of lapse rates in life business shifted upwards, with a median standing at 3.4% in Q4-2021 (+0.4 p.p. compared to the previous quarter).

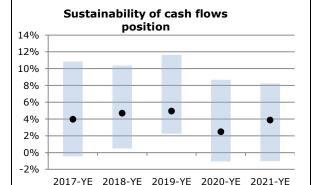
The median of the sustainability of cash flow position increased to 3.9% in 2021 from 2.5% in 2020.

Lapse rate (life)



Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

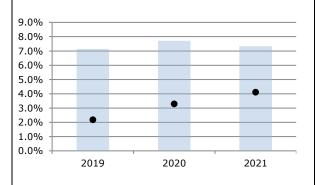
Source: QFG (N_{2021 Q4}=88)



Note: Distribution of indicator (interquartile range, median). Source: ARS (N₂₀₂₁=2,310).

The median of the funding via repos increased to 4.1% in 2021 from 3.3% in the previous year.

Funding via repos

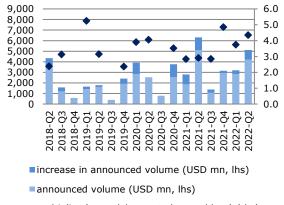


Note: Distribution of indicator (interquartile range, median). Due to data revision, the indicator has been reviewed.

Source: ARS (N₂₀₂₁=94).

Catastrophe bond issuance decreased in Q2-2022 to USD 4,186 million, compared to the previous year. Yet, issued volumes were 22% higher than announced, with an average multiplier standing at 4.4. The majority of cat bonds issued covered US multi-risk natural catastrophe (storms and earthquakes).

Cat Bond Issuance

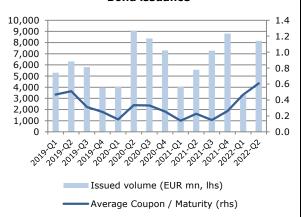


multiplier (spread / expected annual loss) (rhs)

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

Bond issuance volumes increased to EUR 8.1 billion for Q2-2022 compared to Q1-2021. The average ratio of coupons to maturity increased to 0.61 from 0.47.

Bond issuance



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

Profitability and solvency



Level: medium

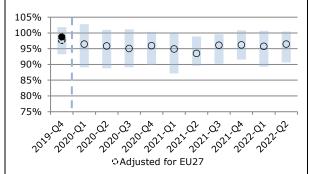
Trend: constant

Profitability and solvency risks remain at medium level. Given the decrease in returns for insurers in the second quarter of 2022, the three return indicators (return on excess of aseets over liabilities, return on assets and return on premiums) decreased. Life insurers reported a slight decrease in their SCR ratio, standing still above the levels reported during 2020 and 2021. The solvency position for groups and non-life undertakings slightly improved.

The median of the net combined ratio for non-life remains overall stable at 96% in Q2-2022.

The distribution range of the return on investments for life solo undertakings shifted downwards, with a median of -0.6% in 2021 (-5.7 p.p. compared to the previous year).

Net combined ratio - non-life



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: QRS (N_{2022} Q2=1,370).

The median of ratio of assets over liabilities shifted donwards in Q2-2022, standing at 110.8%.

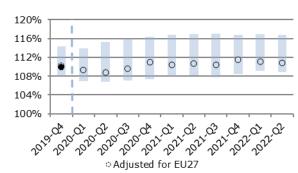
12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% -2.0%

2017-YE 2018-YE 2019-YE 2020-YE 2021-YE

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_{2022} =389).

The median of return on excess of assets over liabilities (based on statutory accounts) shifted downwards to 7% in Q2-2022 (8% in Q1-2022). Similarly the lower tail reported a noteworthy drop from 7% to 4%.

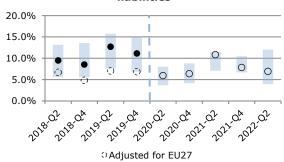
Assets over liabilities



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 ($N_{2022 Q2} = 92$).

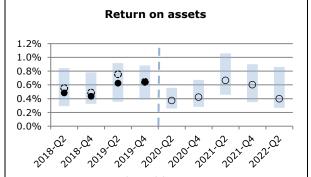
Return on excess of assets over liabilities



Note: Distribution of indicator (interquartile range, median). Q2 figures annualised. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG and ARG (N_{2022 Q2}=90).

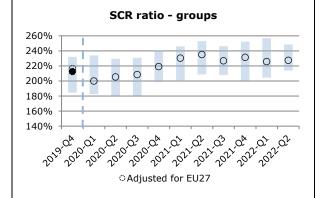
The distribution range of return on assets (based on statutory accounts) moved downwards, with a median standing at 0.4% in Q2-2022 (0.6% in Q4-2021).



Note: Distribution of indicator (interquartile range, median). Q2 figures annualized. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG and ARG ($N_{2022\ Q2}=90$).

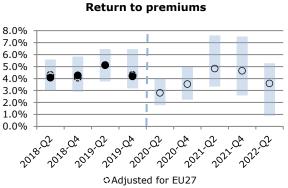
○Adjusted for EU27

The median SCR ratio for groups raised to 227% in Q2-2022 (225% in Q1-2022). Similarly, the lower tail of the distribution increased by +8.3 p.p., showing an enhancement of SCR ratios for the insurance groups with low ratios.



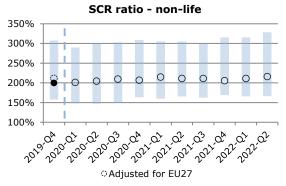
Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: "Total" QFG ($N_{2022 Q2} = 92$).

The distribution of return to premiums shifted downwards, with a median around 3.6% in Q2-2022 (4.6% in Q4-2021). The lower tail of the distribution moved from 2.6% to 0.9%.



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: "Total" QFG ($N_{2022\,Q2}=91$).

The median SCR ratio for non-life solo undertakings slightly shifted upwards to 216% in Q2-2022 (211% in Q1-2022).



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: QRS ($N_{2022\ Q2}$ =1,088).

The median SCR ratio for life solo undertakings decreased to 241% in Q2-2022 (250% in Q1-2022), still above the levels reported during 2020 and 2021.

SCR ratio - life 350% 300% 250% 0 0 0 200% 150% 100% 2020-02 2021.02 2021.03 2021-QA 2020.03 2020:04 2022-01 2021 Adjusted for EU27

Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. The distribution is weighted.

Source: QRS (N_{2022 Q2}=382).

The distribution range of tier 1 capital in total own funds remains overall stable, with a median standing around 88% in Q2-2022.

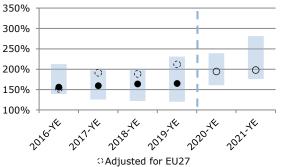
Tier 1 own funds to total own funds 100% 95% 90% 0 0 0 0 0 85% 80% 75% 70% 2021-04 2021-02 Ś 2023 ○Adjusted for EU27

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 ($N_{2022 Q2} = 92$).

The median SCR ratio of life solo companies excluding the impact of transitional measures remains unchanged, around 197%, while the lower tail increased. The latter indicates an improvement for the life undertakings with lowest SCR ratios (without transitional).

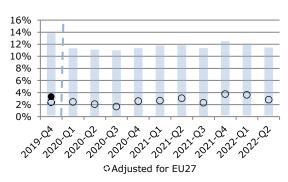
Solvency ratio - life (without transitionals)



Note: Distribution of indicator (interquartile range, median). Source: ARS $(N_{2021}=237)$.

The median share of expected profit in future premiums as a percentage of total eligible own funds slighly dropped to 2.8% in Q2-2022 from 3.6% in the previous quarter. Simialrly, the upper tail of the distribution decreased to 11.5% in the same quarter.

Expected Profit in Future Premiums



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: QRS (N_{2022 Q2}=1,872).

Interlinkages & imbalances



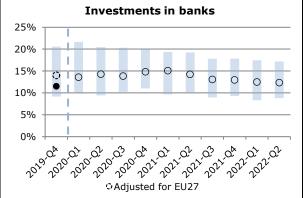
Level: medium

Trend: constant

Interlinkages and imbalances risks remain at medium level in Q2-2022. Due to the current increase of interest rate, insurers realized market to market losses on derivatives because they are positioned to hedge interest rates declines. Insurance groups' exposure to other financial institutions slightly increased, while exposure to domestic sovereign debt dropped. On the other hand, the median of "non-insurance" liabilities of insurers increased. The exposure to banks and insurances remains unchanged since the last assessment.

The median of investment in banks as a share of total assets remains stable at 12% in Q2-2022 since the last assessment.

The distribution range of investment exposures to insurers of total assets remains stable, with a median standing at 1.4% in Q2-2022.



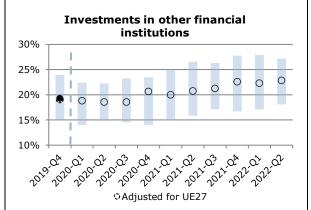
Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG ($N_{2022\ Q2}$ =90).

Investments in insurances 3.0% 2.5% 2.0% 1.5% 0 0 0 0 1.0% 0.5% 0.0% 2021.02 2020-02 2020-03 2021-01 2021-03 2020-01 2020-04 2021-04 OAdjusted for EU27

Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG ($N_{2022} Q_2 = 89$).

The median of investments in other financial institutions slightly moved upwards to 22.8% in Q2-2022, while the lower tail of the distribution increased by 1p.p. (18% in Q2-2022).

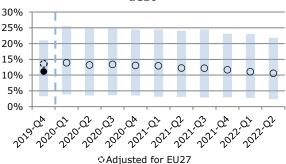
The median share of investments in domestic sovereign debt slightly dropped to 10.6% since the last assessment.



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. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. The distribution of Q1-2020 has been revised.

Source: QFG (N_{2022 Q2}=91).

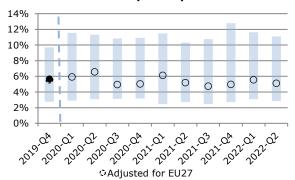
Investment in domestic sovereign debt



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: QRS ($N_{2022 Q1}=1,170$).

The distribution range of premiums ceded to reinsurers slightly shifted downwards, with a median around 5% in Q2-2022.

Reinsurance part of premium

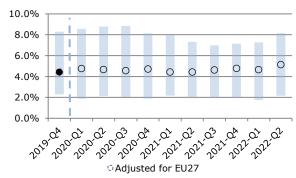


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG (N_{2022 Q2}=88).

The distribution range of "non-insurance" liabilities of insurers shifted upwards, with a median standing around 5% in Q2-2022.

Insurers "non-insurance" liabilities

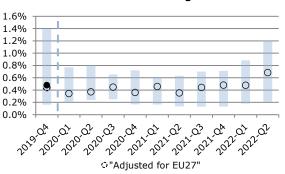


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG (N_{2022 Q2}=92).

The median exposure to derivatives of total assets shifted upwards to 0.68% in Q2-2022 from 0.48% in the previous quarter. Similarly, the upper tail of the distribution continued increasing since the beginning of 2022 to 0.21%. Insurers realized market to market losses on derivatives because they are positioned to hedge interest rates declines, instead in the last two quarters the interest rates increased sharply.

Derivative holdings



Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Derivatives are defined as the total value of derivatives from the balance sheet (i.e. both asset and liability values in absolute terms). Source: QFG (N_{2022} Q_2 =92).

Insurance (underwriting) risks



Level: medium

Trend: constant

Insurance risks remain at medium level in Q2-2022. The year-on-year premium growth for life insurance continued decreasing since the last year, while for non-life an increase was observed. The median exposure of the loss ratio slightly decreased.

2022 (5.1% in Q1-2022). The upper tail continued the |2022| (7.9% in the previous quarter). shrinking trend reaching 5.8% (12.5% in Q1-2022).

The median of the life premium growth continued The distribution of non-life premium growth continued decreasing since last year, standing at 2.7% in Q2- shifting upward, with a median standing at 8.7% in Q2-

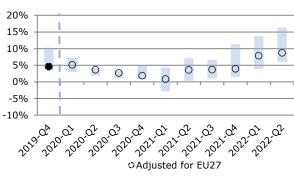
Premium growth - life 40% 30% 20% 10% \cap 0 0 0 0% 0 -10% -20% -30% 2021.03 2020.03 2020-04 202 202 201 202 202 201

Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

○Adjusted for EU27

Source: QFG (N_{2022 Q2}=89).

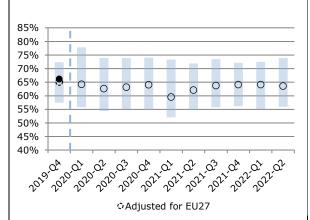
Premium growth - non-life



Note: Year-on-year change in gross written premiums. 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 Q2}=84).

The median of the loss ratio slightly decreased to 63.6% in Q2-22 since the last assessment.

Loss ratio (gross)



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: QRS (N_{2022 Q2}=1,3664).

Market perceptions



Level: medium

Trend: increase

Market perceptions remain at medium level. Insurance life and non-life stocks underperformed the market. The median price-to-earnings ratio of insurance groups remained around the same level. The median of CDS spreads of insurers further increased. Insurers' external ratings remained broadly stable since the last assessment.

Life and non-life underperformed the market.

Life insurance

12% 8%

> 4% 0%

-4%

-8% -12%

-16%

110bps.

Out-(under-)performance of insurance stock prices

■ Non-life insurance

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

The distribution of insurers' CDS spreads increased with the median level reaching for the insurers in the sample around

Insurers' CDS spreads 160 140 120 100 80 60 40 20 12:2018 05:2019 10:2019 03:2020 01:2021

08.2020

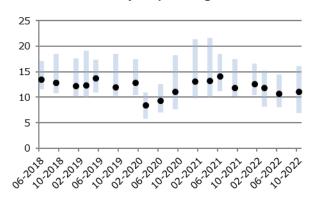
11.2021 04.2022

06-2021

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

The median price-to-earnings (P/E) ratio of insurance groups in the sample hovers around 10.7%.

Insurers' price/earnings ratio

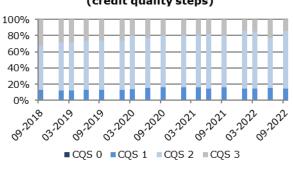


Note: Distribution of indicator (interquartile range, median).

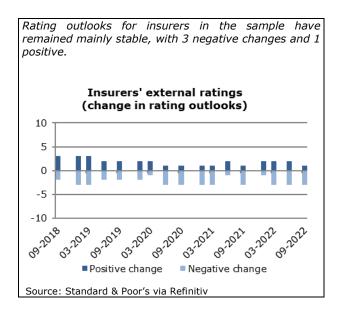
Source: Refinitiv

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

Insurers' external ratings (credit quality steps)



Source: Standard & Poor's via Refinitiv



Environmental, Social and Governance (ESG) related risks



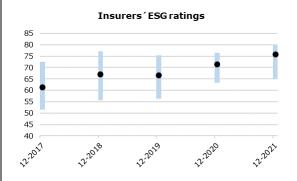
Level: medium

Trend: constant

ESG related risks remain at medium level. Insurers mantained their relative exposure into green bonds, while the ratio of investments into green bonds over the total green bond outstanding slightly decreased. The growth of green bonds in insurers' portfolios has decreased, while the growth of green bonds outstanding is stable. The median exposure to climate relevant assets remained around the same levels. Exposure at flood and windstorm risk has been slightly decreasing in the high end of the distribution from 2020 to 2021. The cumulative catastrophe loss ratio slightly increased in Q2-2022.

increased to A- in 2021

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





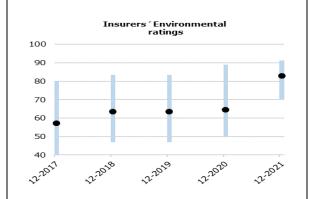
Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. The sample size for 2021 is relatively smaller as not all ratings have been issued yet.

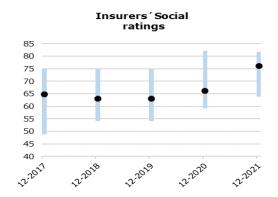
Note: Numbers of positive (green bar) and negative (blue bar) changes. The sample size for 2021 is relatively smaller as not all ratings have been issued yet. Source: Refinitiv

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.

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





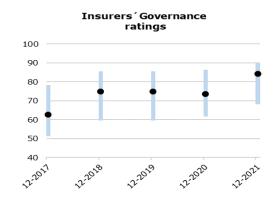
Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. The sample size for 2021 is relatively smaller as not all ratings have been issued yet.

Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. The sample size for 2021 is relatively smaller as not all ratings have been issued yet.

Source: Refinitiv

Source: Refinitiv

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

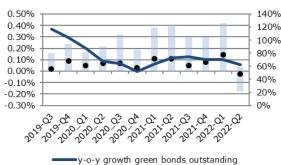


Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings. The sample size for 2021 is relatively smaller as not all ratings have been issued yet.

Source: Refinitiv

The y-o-y growth of green bonds outstanding is unchanged, while the median growth of insurers' investment in green bonds has decreased. However, the decrease might be driven by valuation effects.

Change in insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS ($N_{2022\ Q2}=1,357$).

The median investments in green bonds over corporate bonds have been hovering around 3 %. In Q2 2022, the share of insurers' investment in green bond over total green bonds outstanding slightly decreased compared to the previous quarter.

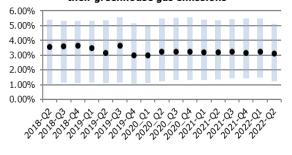
Insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, QRS ($N_{2022\ Q2}=1,369$).

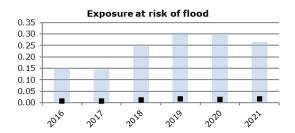
The median exposure toward climate relevant assets hovers around 3 % of total assets.

Climate relevant assets share based on their greenhouse gas emissions



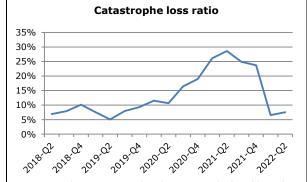
Note: The six climate-relevant sectors (agriculture, fossil fuel, utilities, energy-intensive, transport and housing) based on their greenhouse gas emissions and mapped at NACE Rev2 4-digit level. Source: QRS (N_{2022 Q2}=1741).

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



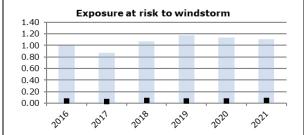
Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, ARG (N_{2021} Q_2 =109).

The cumulative catastrophe loss ratio slightly increased after the substantial decrease observed in the first quarter-2022.



Note: Cumulative year-to-date loss ratio calculated based on Munich Re, Hannover Re and Everest Re. The Q1-2022 data has been updated due to the recent data availability. Source: Bloomberg Finance L.P.

The exposure to windstorm risk remains the same.



Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, ARG (N_{2021} Q_2 =109).

Digitalisation & Cyber risks



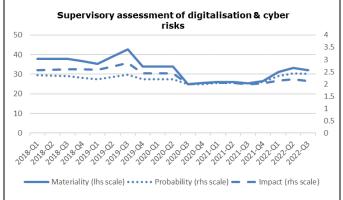
Level: medium

Trend: large decrease

Digitalisation and cyber risks are at medium level. The materiality of these risks for insurance as assessed by supervisors slightly dropped, yet cyber security issues and concerns of a hybrid geopolitical conflict remain. The frequency of cyber incidents impacting all sectors of activity, as measured by publically available data, decreased since the same quarter of last year. Cyber negative sentiment indicates an increased concern in the third quarter of 2022.

of a hybrid geopolitical conflict.

The supervisory assessment of digitalisation and cyber risks The y-o-y change in frequency of cyber incidents has slightly dropped in Q3-2022, still above the levels reported in decreased significantly in the second quarter 2022, with the the past year before the cyber security issues and concerns number of cyber incidents lower compared to the long term average.



Change in frequency of cyber incidents 60% 40% 30% 20% 10% 0% -10% -20% -30% 2019-01

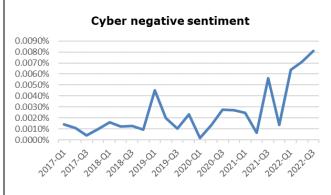
Note: Year-on-year change in frenquency of cyber incidents. Figures

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 averages for each answer is then normalised (lhs: scale 0-100)

for 2021-Q4 have been revised. Source: HACKMAGEDDON website

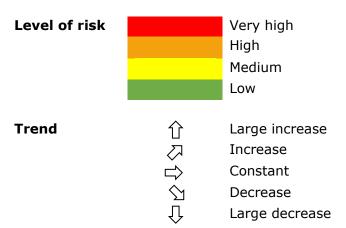
Source: EIOPA's Insurance Bottom-up Survey

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, indicates an heightened concern in the third quarter 2022.



Note: Text analysis based indicator, calculated from earning calls transcripts (N_{2022 Q2}=32). Source: Refinitiv, EIOPA calculations.

APPENDIX



Arrows show changes when compared to the previous quarter.

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 cyberattacks) 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.

Abbreviations

AFG	Annual Financial Stability Reporting for Groups
ARS	Annual Prudential Reporting for Solo Entities
QFG	Quarterly Financial Stability Reporting for Groups
QRS	Quarterly Prudential Reporting for Solo Entities
QFT	Quarterly Fast Track Reporting (pre-Solvency II, for around 32 large
	insurance groups on a best effort basis)

Notes

- Sample size for the different indicators may vary according to availability and consistency of the reported information.
- Vertical dashed lines where displayed in the graphs that signal the structural change in the series driven by the transition from Solvency I to Solvency II reporting.

EIOPA Risk Dashboard October 2022

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