

EIOPA-BoS/22-260 25 April 2022

RISK DASHBOARD

April 2022¹

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

 $Note: The structural break as of Q\ 1\ 2020\ related to the\ Brexit\ with drawal\ agreement\ and\ represented\ with\ a\ dashed\ line\ indicates$ a break in the number of undertakings of the time series and rebalance of the country weights. A dditionally, adjusted time series for EU27 before Q12020 are also disclosed to reflect potential variations driven by the structural break in the sample.

 $^{^{1}}$ Reference date for company data is Q4-2021 for quarterly indicators and 2020-YE for annual indicators. The cut-off date for

most market indicators is end of March 2022. 2 The Outlook displayed for the next 12 months is based on the responses received from 28 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).

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.

 $Environmental, Social \ and \ Governance \ (ESG) \ related \ risks. For further \ details \ pleases \ eef ootnote \ 3.$ From January 2022, a new Digitalisation & Cyber risks category is included.

Key observations:

- Risk levels for the European insurance sector remain broadly constant, with an increase in digitalization and cyber risk level.
- Macro-related risks are currently the main concern for the insurance sector, remaining at high level in current assessment. Forecasted GDP growth at global level decreased until Q4 2022 and inflation forecasts for main geographical areas show an upward trend, with an average above 5%. 10 year swap increased and unemployment rates decreased. Monetary policies remain broadly accommodative, asset purchases continue amid at a slower pace and will further slowdown.
- Credit risks have not changed significantly and remain relatively moderate. The CDS spreads remain at low levels for government bonds and financial secured bonds, but increased for financial unsecured and non-financial corporate bonds in the first quarter of 2022. The median investment in bonds and loans has changed in the last quarter of 2021. 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 slightly increased.
- Market risks overall didn't see an increase compared to the previous assessment, notwithstanding the significant impact of Russian invasion of Ukraine. Volatility in bond market and equity market increased in the first quarter of 2022 reflecting uncertainties related to the geopolitical situation. Property prices increased in the last quarter 2021. The median insurers' exposure to bonds, equity and property remained hovering around previous levels.
- Profitability and solvency risks remain at medium level. Solvency position for groups increased, while the SCR ratio for solos life and non-life undertakings slightly dropped. Return on excess of assets over liabilities and return on assets decreased, remaining above the 2020 levels.
- Interlinkages and imbalances risks remain at medium level with insurance groups' exposure to insurances reporting a drop. The median investments in other financial institutions raised.
- Market perceptions remain at medium level. The life and non-life insurance sector underperformed the stock market and the median price-to-earnings ratio decreased.
- Climate risks are at medium level, with transition risk and physical risk stable. The median growth of insurers' investment in green bonds has slightly increased. The y-o-y growth of green bond outstanding has also been volatile and it increased in the last quarter. The catastrophe loss ratio slightly decreased compared to the previous quarter.
- Digitalisation and cyber risks increased to high level. The materiality of these risks for insurance as assessed by supervisors increased given the resurge of cyber security issues and concerns of a hybrid geopolitical conflict. Cyber negative sentiment indicates an increased concern in the first quarter of 2022. The frequency of cyber incidents impacting all sectors of activity, as measured by publically available data, increased significantly since the same quarter of last year.

Macro risks



Level: high

Trend: decrease

Macro risks remain at high level. Forecasted GDP growth at global level decreased to 3.12% until Q4 2022, and forecasts for inflation for main geographical areas show an upward trend, with an average above 5%. Unemployment rate for the main geographical areas has decreased. Weighted average of 10 years swap rates increased, around 1.27% across main currencies. Monetary policies remain accommodative across jurisdictions, asset purchases continue amid at a slower pace than previous quarter and will further slowdown.

9.0%

8.0%

7.0%

6.0%

5.0%

4.0%

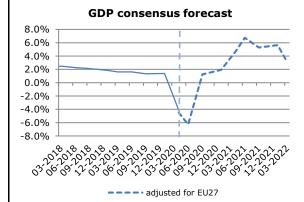
Forecasted GDP growth at global level decreased to 3.12% until Q4 2022. Expectations of EU GDP growth for the forecast horizon are in line with the global average. Compared to the previous assessment, forecasts for the last quarters of 2021 have been revised downwards.

The latest data on unemployment rates across geographical areas decreased from 6.6% to 5.8%.

Unemployment rate

Adjusted for FU27

69.202



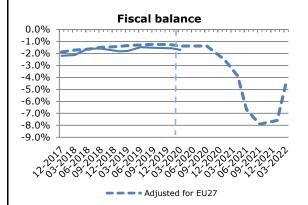
Note: A verage of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. The dashed line indicated a break after UK exit and rebalancing of the country weights. Source: Bloomberg Finance L.P.

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

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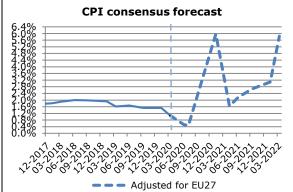
Fiscal balances improved across jurisdictions with an average of -4.5% of GDP.

Forecasted inflation for the next four quarters until Q4 2022 has been substantially revised upwards from 3.08% to 5.84%, particularly driven by market expectations in EU and UK.



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

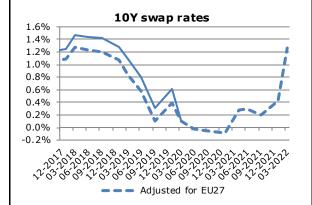


Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS. The dashedline indicated a break after UK exit and rebalancing of the country weights.

Source: Bloomberg Finance L.P.

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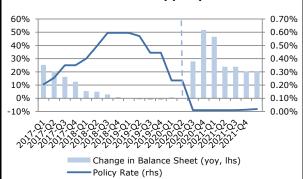
The indicator on the 10 years swap rates across main currency increased to 1.27% in the first quarter of 2022.



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

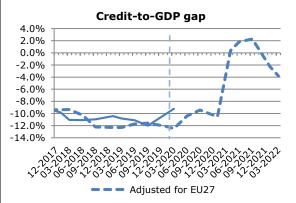
Monetary policies across all major central banks have been accommodative with extraordinary measures in slightly increased from 0.01% to 0.02%. The balance sheets of the major central banks have been increasing

response to the Covid-19 crisis. The average policy rate at a slower pace in 2021. State of monetary policy 60% 0.70%



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 area decreased to -3.81% in Q2-2022. 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

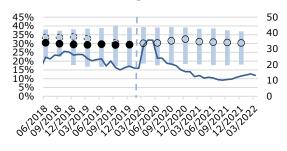
Trend: constant

Credit risks remain at medium level. The CDS spreads remain at low levels for government bonds and financial secured bonds, but increased for financial unsecured and non-financial corporate bonds in the first quarter of 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 slightly increased.

In the last guarter 2021, CDS spreads for European sovereign bonds hover around the same levels. Insurers' exposures to this asset class remain around 30% of total assets in Q4-2021.

Spreads for unsecured financial bonds increased by 30 bps, to 86bps. Median exposures of EU27 insurers investments slightly decreased from 8.2% to 8.1% in Q4 -2021.

Investments in government bonds



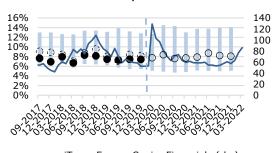
DS EUROPE SOVEREIGN 5Y CDS INDEX (E) -CDS PREM. MID (rhs)

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 2021 Q4=92)

Spreads for secured financial bonds decreased by 8bps. Median exposures of EU27 hover around 1.8% of total assets in Q4-2021.

Investments in corporate bonds financials, unsecured

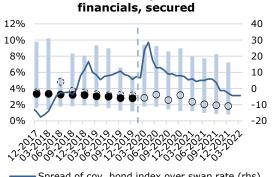


iTraxx Europe Senior Financials (rhs)

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 (N2021Q4=80)

Investments in corporate bonds -



Spread of cov. bond index over swap rate (rhs)

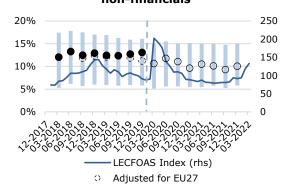
Adjusted for EU27

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: Bloomberg Finance L.P., QFG (N 2021 Q4=74)

Spreads for non-financial corporate bonds remained at 133bps. Median exposure to non-financial corporate bond for EU27 slightly increase to 10% of total assets in Q4-2021.

Investments in corporate bonds non-financials

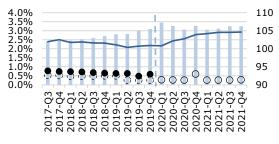


Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

The household debt-to-income ratio slightly increased to around 104%. The median exposures to loans and mortgages remained at low level at 0.28% of total assets for Q4-2021.

The median average credit quality step hovered around 1.96, corresponding to an S&P rating between AA and A.

Investments in loans and mortgages to individuals



- Household debt-to-income ratio (in %, rhs)

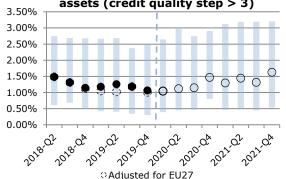
O Adjusted for EU27

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: Q FG (N_{2021} $_{Q4}=92), ECB$

The median of below investment grade assets (with a credit quality step higher than 3) slightly increased to 1.63% in Q4-2021 and the range of the distribution remains quite wide.

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

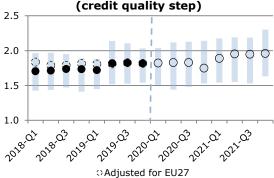


Note: Distribution of indicator (interquartile range, median). Includes both internal and external credit ratings. Time series revised - denominator now excludes assets for which no rating shall be reported.

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

Source: Q FG ($N_{2021 Q4} = 92$)



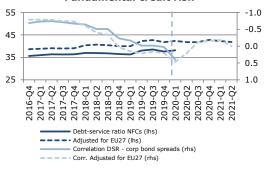


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: $Q FG (N_{2021 Q4} = 90)$

The correlation between the debt-service ratio of non-financial corporations and corporate bond spreads remain unchanged. 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 nonfinancial 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: medium

Trend: constant

Market risks remain at medium level. Volatility in bond market and equity market increased in the first quarter of 2022 reflecting uncertainties related to the Russian invasion of Ukraine. Property prices increased in the last quarter 2021. The median insurers' exposure to bonds, equity and property remained hovering around previous levels. Spread of investment returns over guaranteed interest rate is around 3.6% in 2020. Duration mismatch is wide, with the median standing at -7 years.

15%

10%

bund slightly increased to 78bps in the first quarter of 2022. Median exposures to equity remained around 2022. Median exposures to bonds hovered around 58% 6% of total assets in Q4-2021. of total assets in Q4-2021.

The index on the expected yield volatility for the Euro Volatility of equity prices increased in the first quarter

Investments in equity

8.0

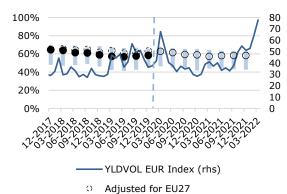
6.0

4.0

2.0

0.0

Investments in bonds



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_{2021 Q4}=92)

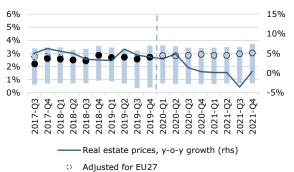
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

VSTOXX/10 (rhs)

Adjusted for EU27

After a drop in Q3-2021, the indicator on the annual growth rate of property prices increased back to 0.43% in Q4-2021 corresponding to previous levels. The increase is driven by residential property prices. Median exposures to property remain stable at around 3% of total assets in Q4-2021.

Investments in property



Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. From Q 1-2019 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.

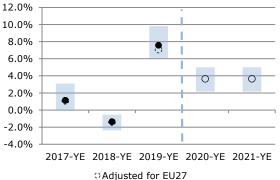
Source: QFG (N2021 Q4=92); ECB

The median spread of investment returns over guaranteed rates remained around 3.6% at the end of 2020.

Source: Bloomberg Finance L.P., QFG (N_{2021 Q4}=92)

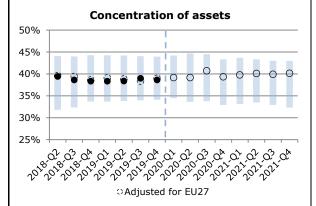
Price to Book Value Ratio (rhs)





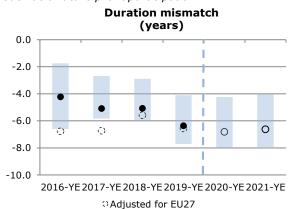
Note: Distribution of indicator (interquartile range, median). Source: ARS (N 2020 = 396)

The median for the indicator on the concentration of assets hover around 40% in Q4-2021, around the same level of the previous assessment.



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 $_{2021}$ Qt=93)

The distribution of the duration mismatch indicator declined from 2019 to 2020, 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: A ssets Q FG ($N_{2021\ Q4}$ =83); Liabilities AFG (N_{2020} =83)

Liquidity and funding risks



Level: medium

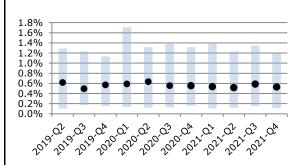
Trend: increase

Liquidity and funding risks remain at medium level. Cash holdings reported a slight drop, while liquid assets ratio increased. Bond issuance substantially raised in Q4-2021. Similarly, catastrophe bond issuance significantly increased, with the majority of cat bonds covering US multi-risk natural catastrophe (earthquakes and storms).

The distribution of cash holdings shifted downwards. with a median at 0.53% in Q4-2021 in comparison with slightly increased to 46% in Q4-2021. the previous quarter.

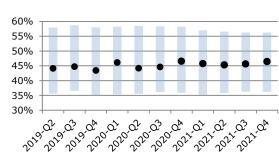
The median of the liquid assets to total assets ratio

Cash holdings



Note: Distribution of indicator (interquartile range, median). Source: $Q RS (N_{2021 Q4}=1,800)$.

Liquid assets ratio

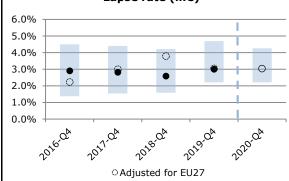


Note: Distribution of indicator (interquartile range, median). Source: QRS ($N_{2021 Q4}=1,738$).

The median lapse rates in life business remained around 3% in Q1-2021 since the previous year, while the upper quartile decreased to 4.3% (-0.4 p.p.). The first lapse rates figures after the COVID-19 outbreak in Europe, do not indicate an overall substantial deterioration.

The median of the sustainability of cash flow position decreased to 2.5% in 2020 from 5% in 2019. Similarly, the lower tail moved downwards entering the negative territory.

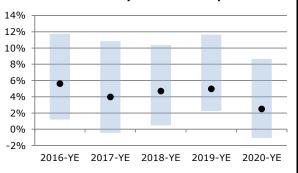
Lapse rate (life)



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

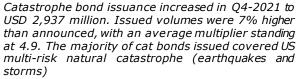
Source: QFG ($N_{2020 Q4} = 82$)

Sustainability of cash flows position

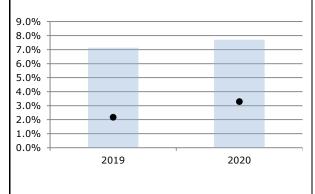


Note: Distribution of indicator (interquartile range, median). Source: ARS (N₂₀₂₀=2,365).

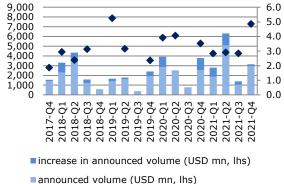
The median of the funding via repos increased to 3.2% in 2020 from 2.1% in the previous year. Similarly, the upper quartile raised to 7.7% in the same period.







Cat Bond Issuance



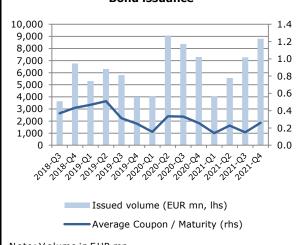
- multiplier (spread / expected annual loss) (rhs)

Note: Distribution of indicator (interquartile range, median). Due to data revision, the indicator has been reviewed. Source: ARS (N₂₀₂₀=99).

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

Bond issuance volumes raised to 8.8 billion EUR for Q4-2021. The average ratio of coupons to maturity increased to 0.25 from 0.15.

Bond issuance



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

Profitability and solvency



Level: medium

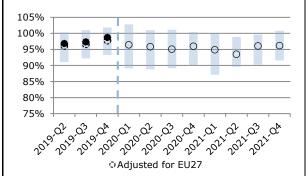
Trend: constant

Profitability and solvency risks remain at medium level. Solvency position for groups increased, while the SCR ratio for solos life and non-life undertakings slightly dropped. On the other hand, return on excess of assets over liabilities and return on assets decreased, remaining above the low levels of 2020. Expected profit in future premiums as a percentage of total eligible own funds reported an increase.

The median of the net combined ratio for non-life business remains overall stable at 96% in Q4-2021, while the two tails of the distribution moved upwards in the same quarter.

The whole distribution of the return on investments for life solo undertakings shifted downwards since 2019, with a median of 5.1% in 2020 (-4.2 p.p. compared to the previous year). This deterioration is mostly driven by the negative develoment in financial markets in the first quarter of 2020 following the COVID-19 crisis.

Net combined ratio - non-life



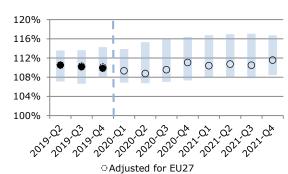
Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QRS (N_{2021 Q4}=1,369).
The median of ratio of assets over liabilities shifted upwards in Q4-2021, standing at 111%. Similarly, the lower quartile increased in the same quarter.

Investment return - life 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% -2.0% 2017-YE 2018-YE 2019-YE 2020-YE ∴ Adjusted for EU27

Note: Distribution of indicator (interquartile range, median). Source: A RS (N $_{\rm 2020}\text{=}420).$

Assets over liabilities

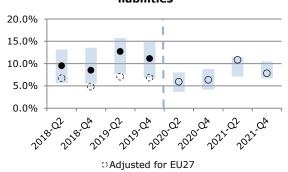


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Q FG ($N_{2021 Q4} = 92$).

The distribution of return on excess of assets over liabilities (based on statutory accounts) shifted downwards, with a median standing at 7.8% in Q4-2021 (10.8% in Q2-2021).

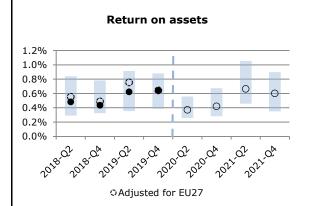
Return on excess of assets over liabilities



Note: Distribution of indicator (interquartile range, median). Q 2 figures annualised. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

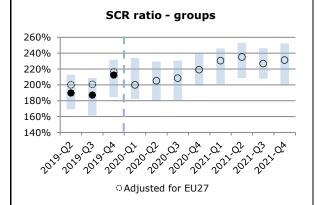
Source: QFG and ARG ($N_{2021 O4}$ =87).

The distribution range of return on assets (based on statutory accounts) moved downwards, with a median standing around 0.6% in Q4-2021 (0.7% in Q2-2021).



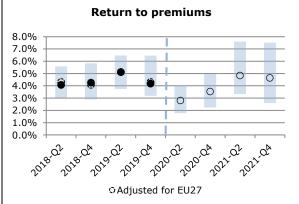
Note: Distribution of indicator (interquartile range, median). Q2 figures annualized. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: QFG and ARG ($N_{2021\ Q4}$ =87).

The median SCR ratio for groups raised to 231% in Q4-2021 (226% in Q3-2021), while the lower tail of the distribution dropped, showing a worsening for the insurance groups with low SCR ratios.



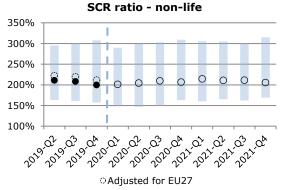
Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions. Source: "Total" Q FG (N $_{2021}$ Q $_{4}=91$).

The median return to premiums slightly decreased to 4.6% in Q4-2021 from 4.8% in Q2-2021. Similarly, the lower tail of the distribution moved in the same direction.



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 ($N_{2021\ 04}$ =93).

The distribution range of SCR ratio for non-life solo undertakings shifted upwards, while the median decreased to 205% in Q4-2021(211% in Q3-2021).



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: Q RS ($N_{2021\ Q4}$ =1,077).

The median of SCR ratio for life solo undertakings dropped to 220% in Q4-2021 (226% in Q3-2021), while the lower quartile increased to 180% in the same quarter (172% in Q3-2021). The later indicates an improvement for the life undertakings with low SCR ratios.

SCR ratio - life 350% 300% 250% \circ \circ 0 0 0 0 0 0 200% 150% 100% 2020.03 7020.03 1205, Or -2020-01 2020.0k 2027.03 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: $Q RS (N_{2021 Q4}=377)$.

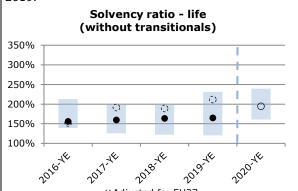
The distribution range of tier 1 capital in total own funds slightly remains overall stable, with a median standing around 89% in Q4-2021.

Tier 1 own funds to total own funds 100% 95% 90% 0 0 0 0 85% 80% 75% 70% 2020-02 2020-01 2020-03 2020.04 ○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_{2021 Q4}=92).

The median SCR ratio of life solo companies excluding the impact of transitional measures increased to 194.4% in 2020 from 165% in 2019, mainly driven by the sample adjustment after the exclusion of UK as of 2020. When considering the adjusted for EU27 figures, the median decreased by 8% in 2020 from 211.6% in 2019.

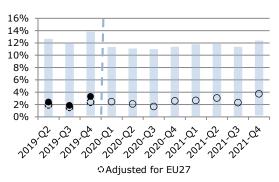


Note: Distribution of indicator (interquartile range, median). Source: ARS (N $_{\rm 2020} = 249$).

○Adjusted for EU27

The median share of expected profit in future premiums as a percentage of total eligible own funds increased to 3.7% in Q4-2021 (2.3% in Q3-2021). Likewise, the upper tail of the distribution increased to 12.5% (11.4% in Q3-2021).

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: Q RS (N $_{\rm 2021~Q4}\!=\!1,\!858$).

Interlinkages & imbalances



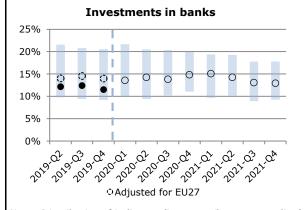
Level: medium

Trend: constant

Interlinkages and imbalances risks remain at medium level in Q4-2021. Insurance groups' exposure to insurances dropped, while the median investments in other financial institutions raised. The median of "non-insurance" liabilities of insurers slightly increased since the last assessment. Derivative holdings reported a slight increase.

The distribution of investment in banks as a share of The median of investment exposures to insurers total assets remains overall stable, with a median standing at 13% in Q4-2021.

dropped to 1.39% of total assets in Q4-2021 in comparison with the previous quarter.



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_{2021 Q4}=90).

Investments in insurances 3.0% 2.5% 2.0% C 1.5% \bigcirc 1.0% 0.5% 0.0% 2020-02 2020-02 ○Adjusted for EU27

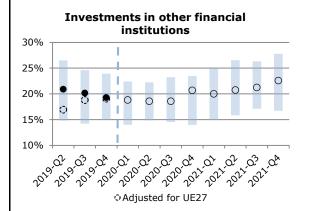
Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3. The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG (N_{2021 Q4}=89).

The median share of other financial institutions shifted upwards standing at 22.6% in Q4-2021. Similarly, the upper tail increased to 27.8% in the same quarter.

The median share of investments in domestic sovereign debt dropped to 11.7% since the last assessment.

Investment in domestic sovereign



Note: Distribution of indicator (interquartile range, median). O ther 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 ($N_{2021 Q4}=91$).

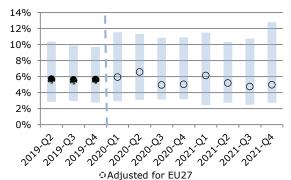
debt 30% 25% 20% 15% O 0 \circ 0 10% 5% 2020-01 2020-02 2020-03 2020.04 2021.01

○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: $QRS(N_{2021Q4}=1,163)$.

The median of premiums ceded to reinsurers slightly shifted upwards to 5% in Q4-2021. Similarly, the upper quartile increased to 13% in the same quarter.



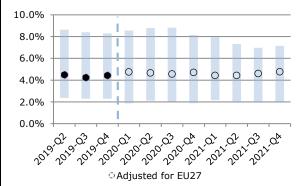


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: QFG ($N_{2021 Q4}=90$).

The median of "non-insurance" liabilities of insurers slightly increased to 4.8% in Q4-2021 in comparison with the previous quarter.

Insurers "non-insurance" liabilities

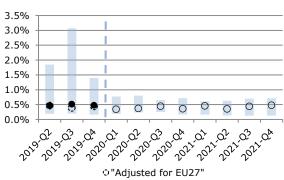


Note: Distribution of indicator (interquartile range, median). The dashed line indicates a break after UK exit and exclusion of UK undertakings from the distributions.

Source: Q FG ($N_{2021 Q4} = 92$).

The median exposure to derivatives of total assets slightly increased to 0.48% in Q4-2021.

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.

Source: Q FG ($N_{2021 Q4} = 92$).

Insurance (underwriting) risks



Level: medium

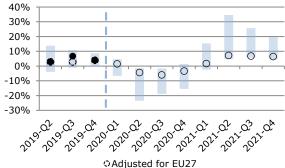
Trend: constant

Insurance risks remain at medium level in Q4-2021. The median year-on-year premium growth for life and non-life have not reported substantial changes since the last quarter. The median exposure of the loss ratio continued increasing, although in a lower speed than previous quarters.

The median of the life premium growth remains overall stable, standing around 6.4% in Q4-2021. The upper tail continued shrinking to 19.7% (25.8% in Q3-2021).

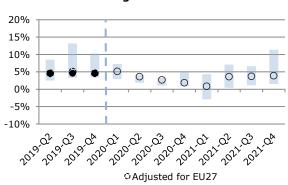
The median non-life premium growth remains around the same level as in the previous quarter at 3.9%. While, the upper quartile of the distribution raised in the same quarter.

Premium growth - 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 ($N_{2021\ O4}=82$).

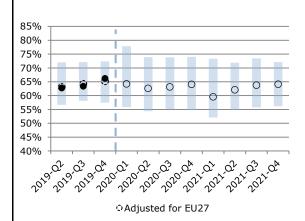
Premium growth - non-life



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: $Q FG(N_{2021\ O4}=79)$.

The median exposure of the loss ratio continued increasing to 64% in Q4-2021, although in a lower speed than the last quarters.

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: Q RS ($N_{2021\ Q4}$ =1,362).

Market perceptions



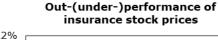
Level: medium

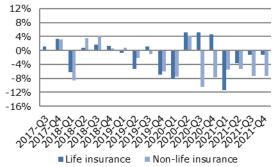
Trend: decreasing

Market perceptions remain at medium level. Insurance life and non-life stocks underperformed the market. The median price-to-earnings ratio of insurance groups in the sample decreased from the previous quarter. The median of CDS spreads of insurers remained at low level. Insurers' external ratings remain broadly stable since the last

Life and non-life insurers underperformed the market by 1% and 7.3% respectively.

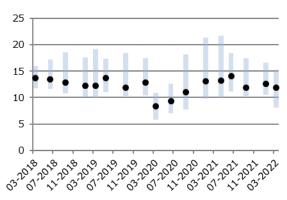
The median price-to-earnings (P/E) ratio of insurance groups in the sample decreased again to 11.8% from 12.6%.





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

Insurers' price/earnings ratio

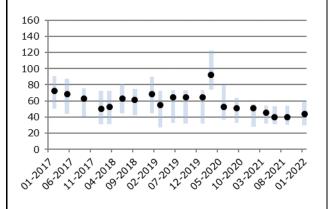


Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

The distribution of insurers' CDS spreads remain at low levels, slightly increasing with the median level for the insurers in the sample around 50bps.

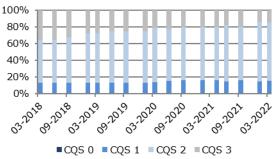
Insurers' external ratings remained overall stable since the previous risk assessment.

Insurers' CDS spreads

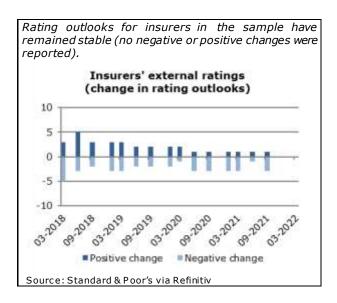


Note: Distribution of indicator (interquartile range, median). Source: Refinitiv

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 are relevant for the insurance sector. Insurers have been increasing their investments into green bonds. The median exposure to climate relevant assets has been slightly decreasing. Exposure at flood and windstorm risk has been slightly decreasing in the high end of the distribution from 2019 to 2020. The cumulative catastrophe loss ratio decreased in Q4-2021. The data may not yetfully capture the impact of the EU floods in summer 2021.

The median ESG ratings of the insurers in the sample The numbers of improvements in ESG ratings for the insurers corresponds to around B+ and it has been improving in the in the sample have been higher than the negative changes. last years.



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

Source: Refinitiv

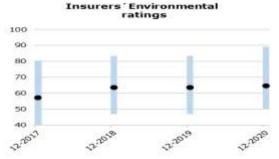


Note: Numbers of positive (green bar) and negative (blue bar) changes.

Source: Refinitiv

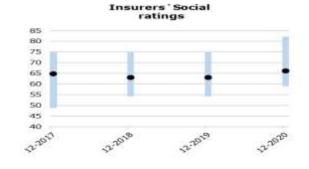
The median environmental ratings of the insurers in the sample corresponds to around B and it has been improving in the last years.

The median social ratings of the insurers in the sample correspond to around B+ and it improved in the last year.



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

Source: Refinitiv



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

Source: Refinitiv

The median governance ratings of the insurers in the sample correspond to around B+ and it has been improving until 2019 and slightly deteriorated in 2020.

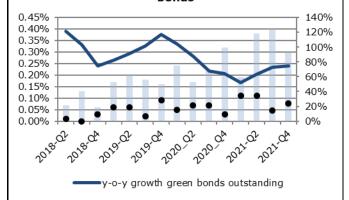


Note: Distribution of indicator (interquartile range, median). Higher rating scores corresponde to better ratings.

Source: Refinitiv

The median growth of insurers' investment in green bonds has slightly increased. The y-o-y growth of green bond outstanding has also been volatile and it increased in the last quarter.

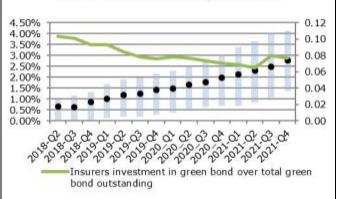
Change in insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, Q RS ($N_{2021\ Q2}$ =1,361).

The median investments in green bonds over corporate bonds have been slightly increasing to 2.76%. In the last quarter, the share of insurers' investment in green bond over total green bonds outstanding remain unchanged compared to the previous quarter.

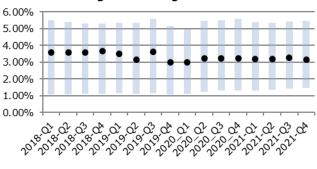
Insurers' investments in green bonds



Note: Distribution of indicator (interquartile range, median). Source: Refinitiv, Q RS ($N_{2021\,Q3}$ =1,375).

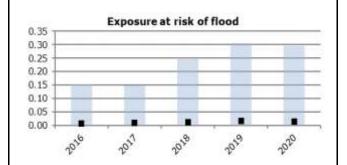
The median exposure toward climate relevant assets hovers around 3.25% of total assets.

Climate relevant assets share based on their greenhouse gas emissions



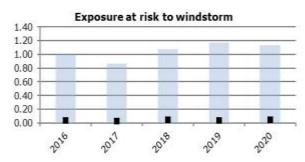
Note: The six climate-relevant sectors (agriculture, fossil fuel, utilities, energy-intensive, transport and housing) based on their greenhouse gas emissions and mapped at NACE Rev2 4-digit level. Source: $QRS(N_{2021\ Q4}=1752)$.

The exposure to flood risk has been slightly decreasing, especially in the high end of the distributions.



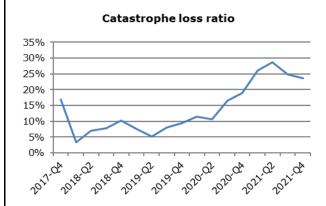
Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, A RG (N $_{\rm 2021~Q2}{=}109).$

The exposure to windstorm risk has slightly decreasing at especially in the high end of the distributions.



Source: EIOPA Pilot dashboard on insurance protection gap for natural catastrophes, Eurostat Refinitiv, A RG ($N_{2021~Q2}$ =109).

The cumulative catastrophe loss ratio decreased in the fourth quarter-2021. The potential increase due to EU floods in the summer might not have been booked yet.



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



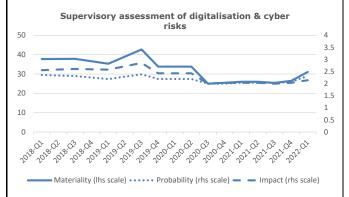
Level: high

Trend: increased

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

The supervisory assessment of digitalisation and cyber risks increased. In the last quarter, there has been a resurge of cyber security issues and concerns of a hybrid geopolitical conflict.

The y-o-y change in frequency of cyber incidents has increased significantly in the fourth quarter 2021, with the number of cyber incidents higher compared to the long term average.

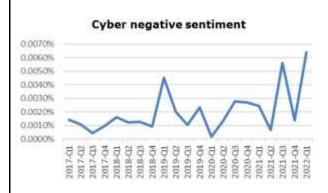


Note: Scores compiled based on the assessment of probability and impact (rhs: scale from 1 to 4) of digitalisation & cyber risks from National Competent Authorities. The country averages for each answer is then normalised (lhs: scale 0-100)

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

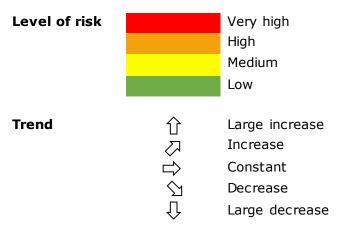
Source: EIOPA's Insurance Bottom-up Survey

The cyber negative sentiment indicator, by counting the number of negative-sentiment and cyber-related terms related to cyber risk in the earning calls transcripts of major insurance groups, indicates an increased concern in the first quarter 2022.



Note: Text analysis based indicator, calculated from earning calls transcripts ($N_{2021\ Q4}$ =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 April 2022

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