EIOPA-BoS/19-232
11 April 2019

RISK DASHBOARD

April 2019[1]

Risks	Level	Trend
1. Macro risks	Medium	
2. Credit risks	Medium	
3. Market risks	Medium	
4. Liquidity and funding risks	Medium	
5. Profitability and solvency	Medium	
6. Interlinkages and imbalances	Medium	
7. Insurance (underwriting) risks	Medium	
Market perceptions	**Level**	**Trend**
8. Market perceptions	Medium	

Key observations:

- Risk exposures for the European insurance sector remain overall stable.
- Macro risks continue at medium level. Low swap rates and recent downward revisions to GDP growth and inflation forecasts remain a concern going forward.
- Credit and market risks remain at medium level amid slightly decreased bond spreads, stable portfolio exposures and broadly unchanged bond volatility.
- Profitability and solvency risks are stable, with overall unchanged profitability indicators compared to the second half of 2018 and end-2017. Median SCR ratios are well above 100% for groups, life and non-life solo undertakings.
- Insurance risks increased to medium level due to a further increase in the catastrophe loss ratio.
- Market perceptions remain stable at medium level with insurance stocks slightly outperforming the overall market, a reduction in insurance groups' CDS spreads and unchanged external ratings.

[1] Reference date for company data is Q4-2018 for quarterly indicators and 2017-YE for annual indicators. The cut-off date for most market indicators is mid-March 2019.

Macro risks

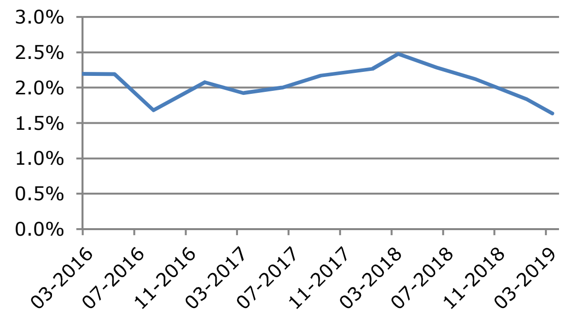
Level: medium

Trend: constant

Macro risks remained stable at medium level. Forecasted GDP growth continues to point to a potential economic slowdown across major geographic areas. The rate of expansion of balance sheet assets by major central banks continued to decrease and the level of swap rates further declined, remaining at very low levels. Lastly, unemployment rates remained at historically low levels, decreasing only very slightly compared to the previous quarter.

The indicator on forecasted GDP growth continued to decline from the previous quarter. Growth forecasts across most geographic areas were revised downwards.

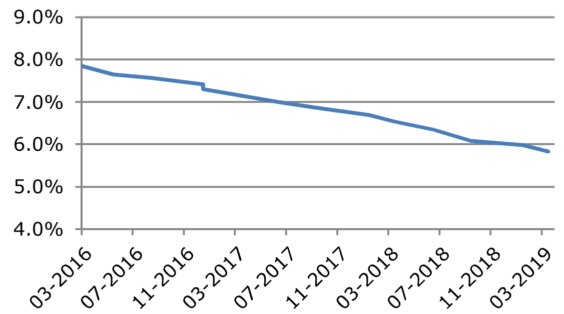
GDP consensus forecast



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

The indicator on unemployment rates remained at historically low levels, decreasing only very slightly compared to the previous quarter.

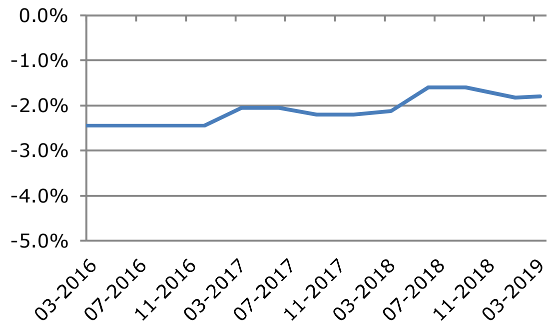
Unemployment rate



Note: Weighted average for EU, Switzerland, United States, China.
Source: Bloomberg Finance L.P.

The indicator on fiscal balances remained broadly unchanged from the previous quarter at -1.80% (+0.03 p.p.).

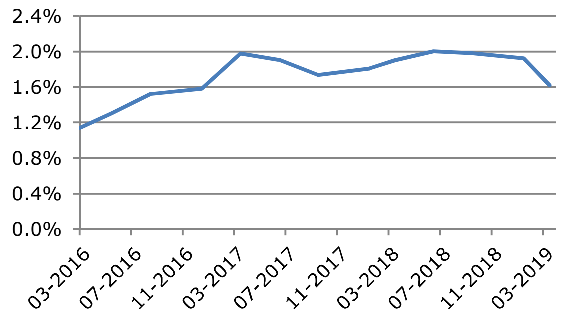
Fiscal balance



Note: Weighted average for EU and United States.
Source: Bloomberg Finance L.P.

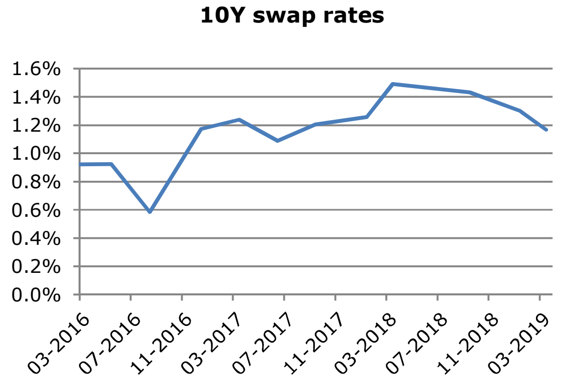
The indicator on forecasted inflation decreased from the previous quarter, standing at 1.62% (-0.30 p.p.).

CPI consensus forecast



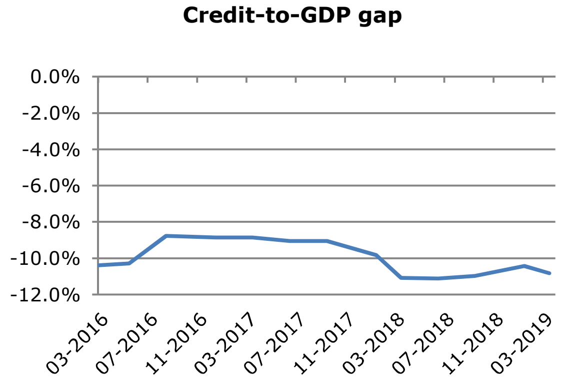
Note: Average of forecasts four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS.
Source: Bloomberg Finance L.P.

The indicator on swap rates continued to decrease compared to the previous quarter, reaching 1.2%, due to slight declines in swap rates for all the currencies considered.



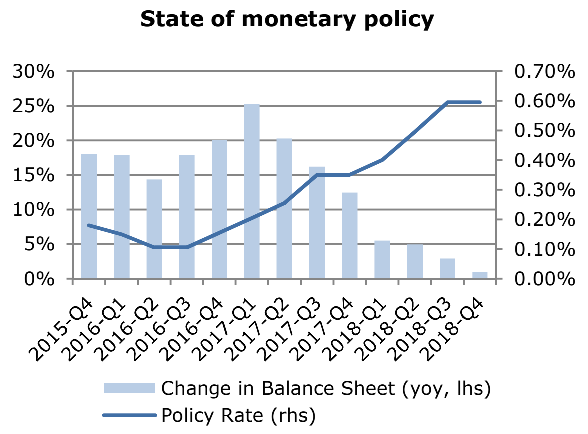
Note: Weighted average for EUR, GBP, CHF, USD.
Source: Bloomberg Finance L.P.

The indicator on credit-to-GDP gap deteriorated slightly from the previous quarter, reflecting the still large negative credit-to-GDP gaps in the US, UK and Euro area.



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

Major central banks (CB) continue to reduce the pace of quantitative easing. Policy rates have remained constant since the January's assessment. The rate of expansion of CB's balance sheets decreased in the Euro Area, Switzerland and US, with the aggregate indicator declining by 2 p.p. from the previous quarter and reaching 0.9% in Q4-2018.



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

Credit risks

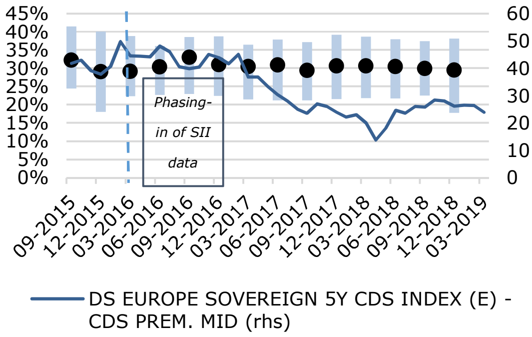
Level: medium

Trend: constant

Credit risks remained stable at medium level. Since the previous assessment, spreads have decreased across all corporate bond segments – financials (secured and unsecured) and non-financials. The average credit quality of insurers' investments remained broadly stable, corresponding to an S&P rating between AA and A.

Overall CDS spreads for European sovereign bonds slightly decreased since January. Insurers' exposures to this asset class are broadly unchanged, with the median exposure remaining close to 29%.

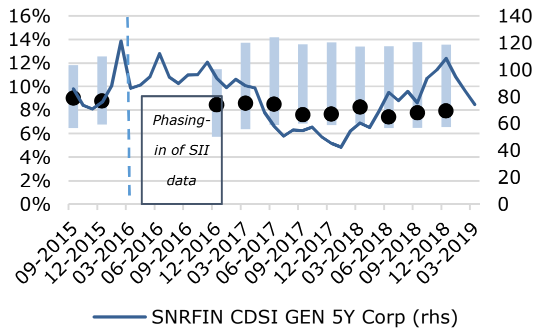
Investments in government bonds



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=91); QFT prior to 2016

Spreads for unsecured financial bonds decreased since January. Median exposures to this bond segment remain at around 8% in Q4-2018.

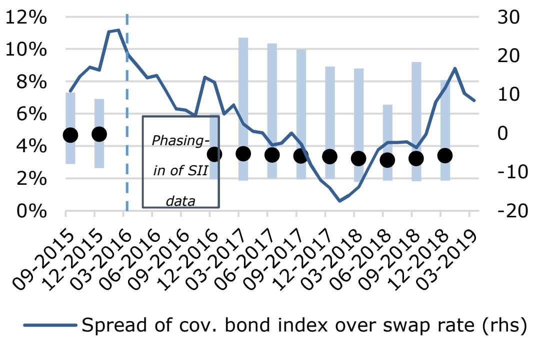
Investments in corporate bonds - financials, unsecured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=66); QFT prior to 2016

Spreads for secured financial bonds declined since the previous assessment. Median exposures remained stable at around 3% in Q4-2018.

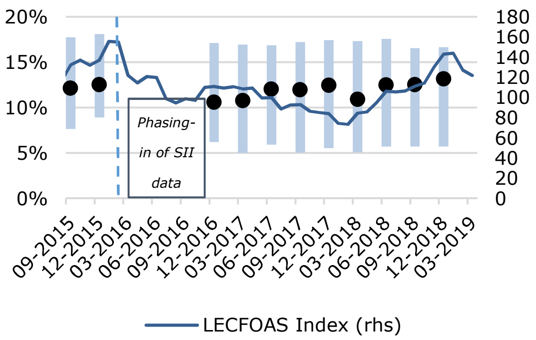
Investments in corporate bonds - financials, secured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=66); QFT prior to 2016

Spreads for non-financial corporate bonds followed the same trend of other corporate bonds, decreasing since January. Median exposure to this bond segment remained broadly unchanged at around 13%.

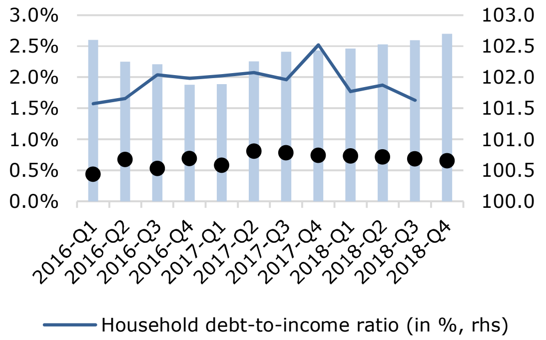
Investments in corporate bonds - non-financials



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=66); QFT prior to 2016

Median exposures to loans and mortgages remained stable at around 0.7%. The household debt-to-income ratio decreased very slightly in both the Euro Area and the UK in Q3-2018.

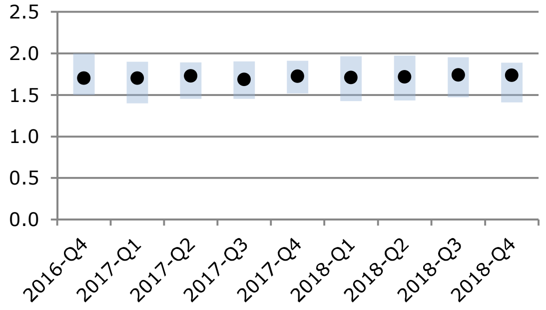
Investments in loans and mortgages to individuals



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure (weighted average of EA and UK).
Source: QFG ($N_{2018\ Q4}$=91), ECB

The average credit quality of investments remained broadly stable, corresponding to an S&P rating between AA and A.

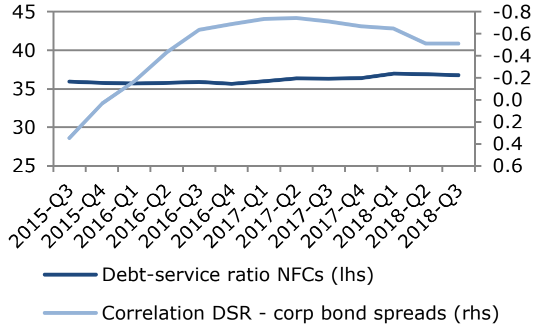
Average rating of investments (credit quality step)



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=88)

The correlation between the debt-service ratio of non-financial corporations and corporate bond spreads remained stable since the previous quarter, continuing to be negative.

Fundamental credit risk



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

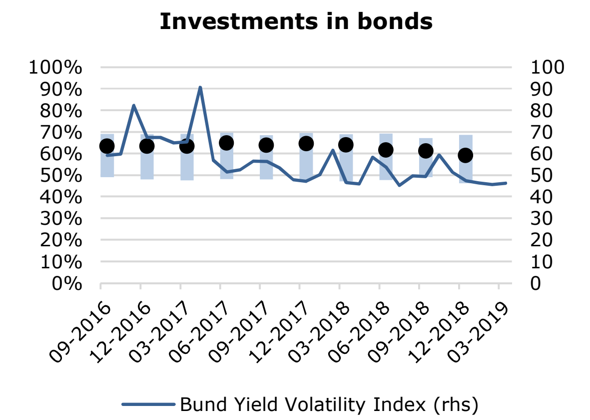
Market risks

Level: medium

Trend: constant

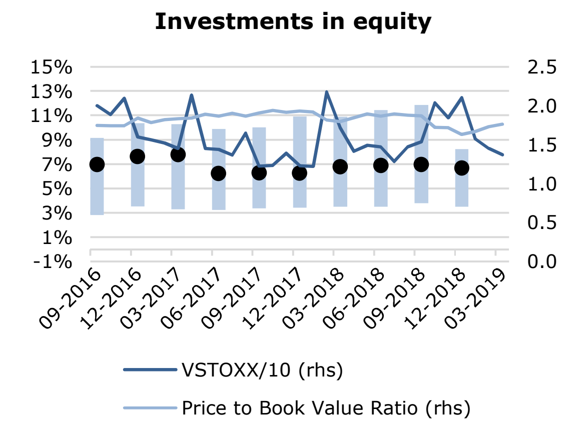
Market risks remained constant at medium level. Volatility of the largest asset class, bonds, remained broadly stable compared to the January's assessment, whereas equity market volatility decreased. The latest available data of Q3-2018 shows a stable annual growth rate in property prices.

Bond market volatility has decreased since the previous assessment. Median exposures to bonds remain close to 60%.



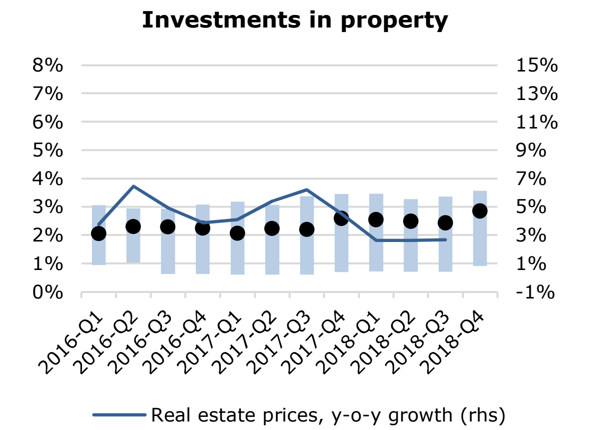
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=91)

Volatility of equity prices has decreased since January. The price-to-book value slightly increased in line with the overall positive performance of equity markets in the first quarter of the year. Median exposures to equity are broadly unchanged at 7%.



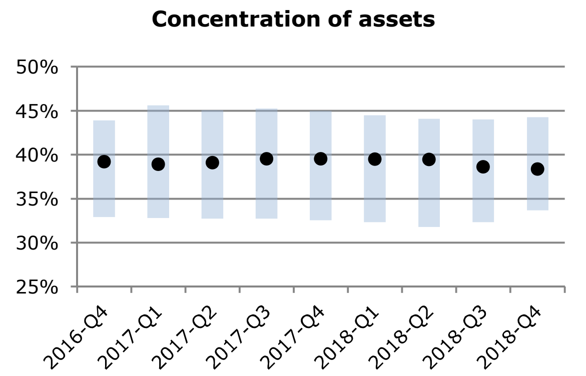
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG ($N_{2018\ Q4}$=91); QFT prior to 2016

Median exposures to property increased slightly in Q4-2018 to 2.9% of insurers' total assets (+0.4 p.p.). In Q3-2018, the indicator on annual growth in real estate prices remained broadly stable at around 2.6%.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source:QFG ($N_{2018\ Q4}$=91); QFT prior to 2016; ECB

The indicator on concentration of assets remained overall stable, with the median Herfindhahl index slightly declining from 38.6% to 38.3%.



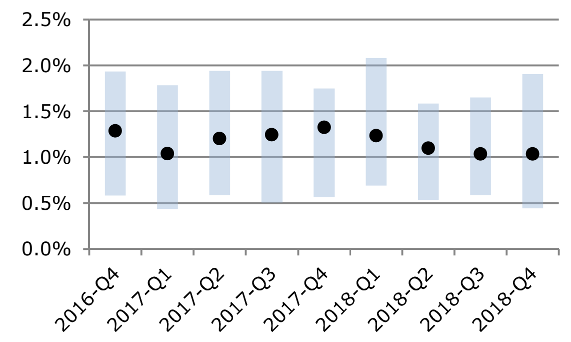
Note: Herfindal Hirshman index computed on six balance sheet asset classes (government bonds, corporate bonds, equities, properties, cash and cash equivalents and loans and mortgages). Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=94)

# Liquidity and funding risks	
	Level: medium
	Trend: stable

Liquidity and funding risks remained stable at medium level. Issued bond volumes and the average ratio of coupons to maturity increased while cat bond issuance slowed down in Q4-2018. Lapse rates in life insurance business are broadly stable since end-2017.

The distribution of the indicator on cash holdings has remained broadly stable since Q3-2018, with a median value around 1% of total assets.

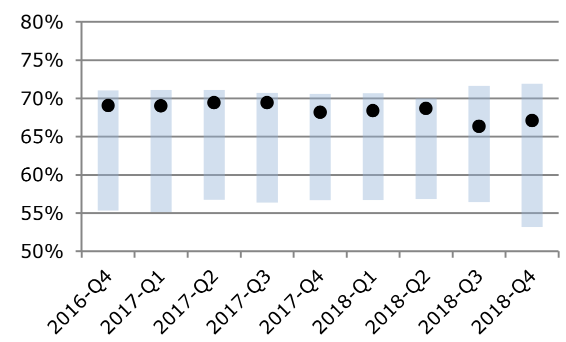
Cash holdings



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=91)

The median liquid assets ratio slightly increased compared to the previous quarter from 66.3% to 67.1%. A minor decline in the 25th percentile to 53.2% (-3.2 p.p.) has been reported in Q4-2018.

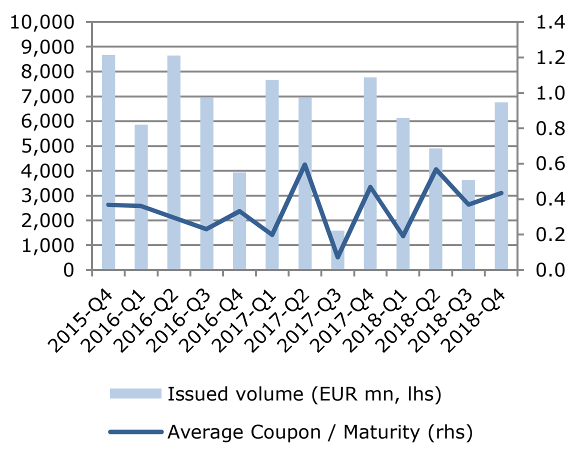
Liquid assets ratio



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=91)

Bond issuance volumes increased significantly in Q4 by almost 3 billion EUR to 6.8 billion. The average ratio of coupons to maturity recorded a slight increase to 0.43.

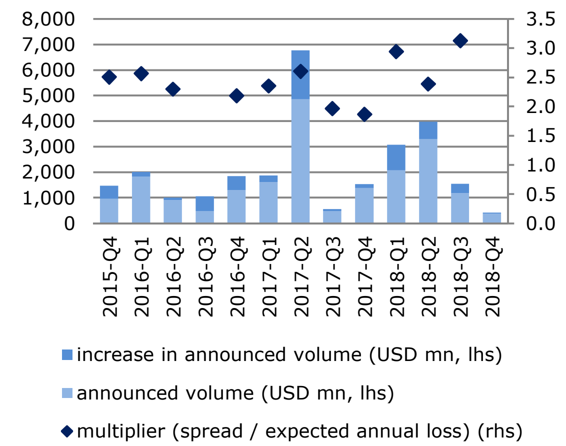
Bond issuance



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

Catastrophe bond issuance slowed down in Q4-2018 after strong issuance volumes in the first-half of the year. Additionally, in Q4, issued volumes were only 9% higher than announced.

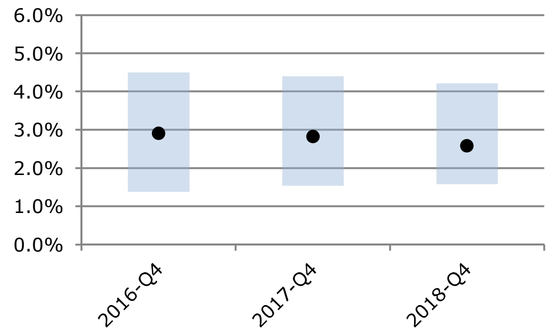
Cat Bond Issuance



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

Lapse rates in life business remained overall unchanged across the whole distribution since 2017. Median lapse rates slightly decreased to around 2.6% (-0.2 p.p.).

Lapse rate (life)



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=88)

Profitability and solvency

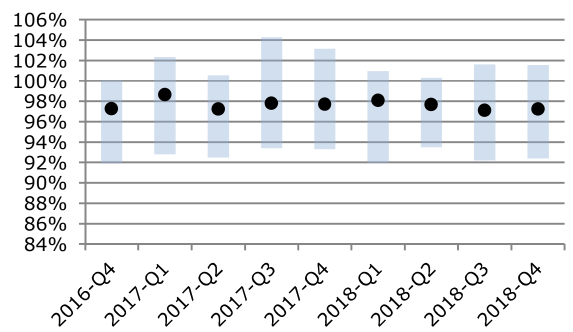
Level: medium

Trend: constant

Profitability and solvency risks remained stable at medium level. Median figures for profitability indicators in Q4-2018 show an overall stable picture when compared to the first half of the year and to end-2017. Median SCR ratios for groups and life companies have slightly decreased but remained overall stable for non-life companies. The 25th percentile of the distribution of SCR ratios remains above 100% for groups and both types of solo undertakings.

The median net combined ratio for non-life business has remained stable in Q4-2018 as compared to the previous quarter, as well as the overall distribution.

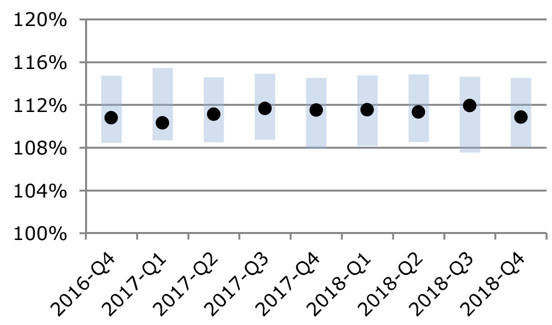
Net combined ratio - non-life



Note: Distribution of indicator (interquartile range, median).
Source: QRS ($N_{2018\ Q4}$=1,462)

The median value of the assets over liabilities ratio slightly decreased in Q4-2018 from 112% to 111%.

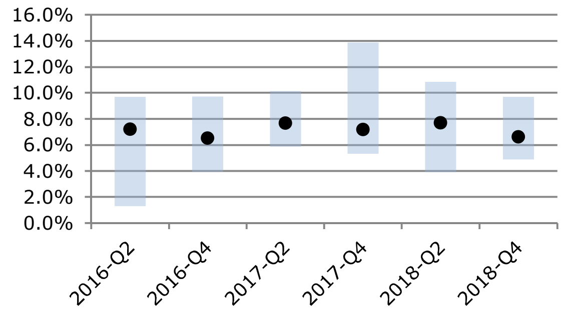
Assets over liabilities



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=91)

The median return on excess of assets over liabilities (used as a proxy of return on equity) slightly decreased from 7.7% (annualized) in Q2-2018 to 6.6% in Q4-2018.

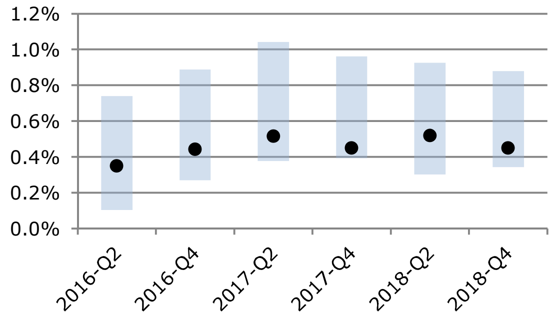
Return on excess of assets over liabilities



Note: Distribution of indicator (interquartile range, median). Q2 figures annualised.
Source: QFG ($N_{2018\ Q4}$=90)

The median return on assets has slightly decreased since Q2-2018, to 0.4% (-0.1 p.p.). No change in the median has been recorded on a year on year basis in Q4-2018.

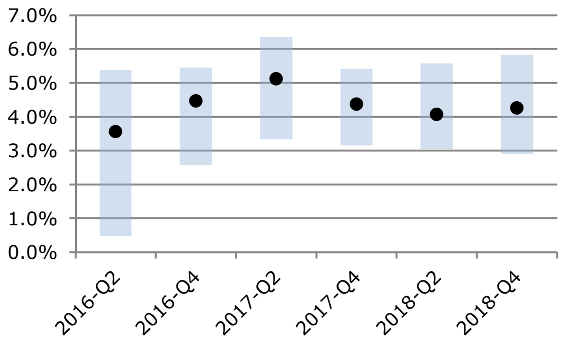
Return on assets



Note: Distribution of indicator (interquartile range, median). Q2 figures annualised.
Source: QFG ($N_{2018\ Q4}$=90)

The median return to premiums indicator has slightly improved in Q4-2018 when compared to Q2-2018, by 0.2 p.p. to 4.3%.

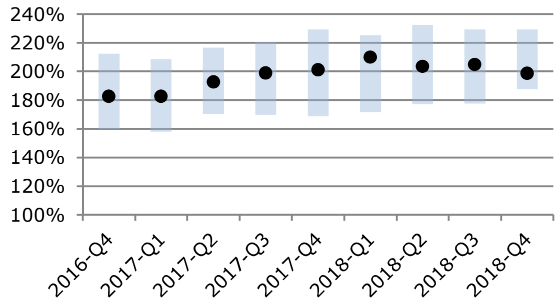
Return to premiums



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=93)

The median SCR ratio of the insurance groups in the sample has slightly decreased in Q4-2018 from around 205% to 199%, while the 25th percentile of the distribution has improved.

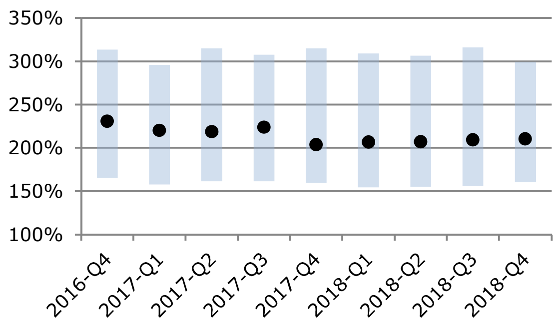
SCR ratio - groups



Note: Distribution of indicator (interquartile range, median).
Source: "Total" QFG ($N_{2018\ Q4}$=93)

The SCR ratios for non-life solo companies have remained broadly stable in Q4-2018.

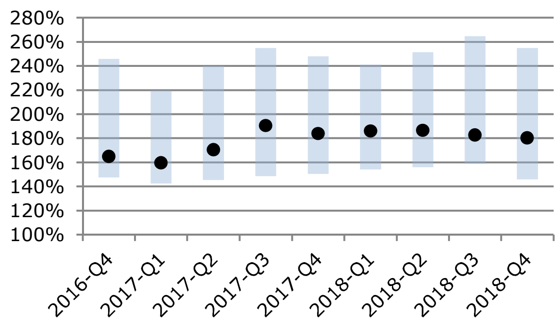
SCR ratio - non-life



Note: Distribution of indicator (interquartile range, median).
Source: QRS ($N_{2018\ Q4}$=1,125)

The median SCR ratio for life companies has slightly decreased by 2.5 p.p. to 180%, whereas the overall distribution has shifted downwards.

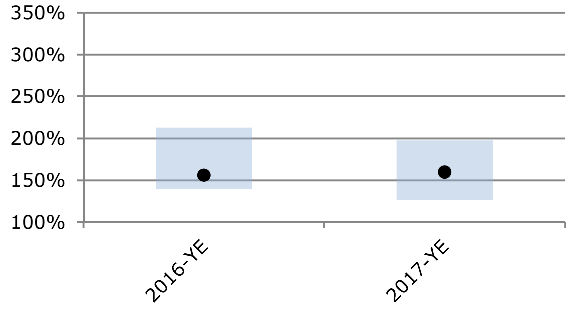
SCR ratio - life



Note: Distribution of indicator (interquartile range, median).
Source: QRS ($N_{2018\ Q4}$=474)

The median SCR ratio of life solo companies excluding the impact of transitional measures remained close to 150% in 2017. The indicator remains above 100% for most life insurers in the sample.

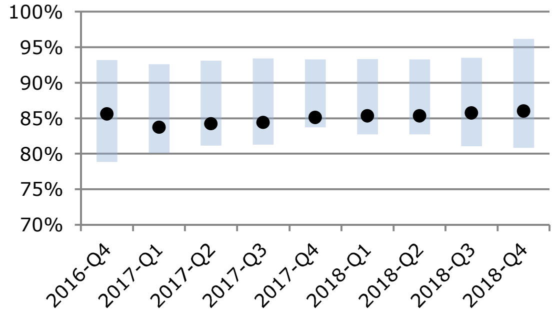
Solvency ratio - life
(without transitionals)



Note: Distribution of indicator (interquartile range, median).
Source: ARS (N_{2017}=299)

The median share of Tier 1 capital in total own funds has remained stable in Q4-2018 while the upper quartile of the distribution increased.

Tier 1 own funds
to total own funds



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=94)

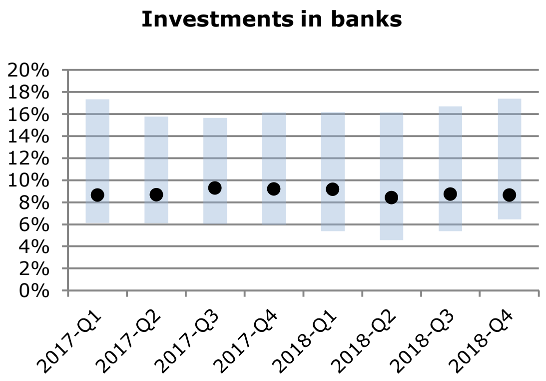
Interlinkages & imbalances

Level: medium

Trend: constant

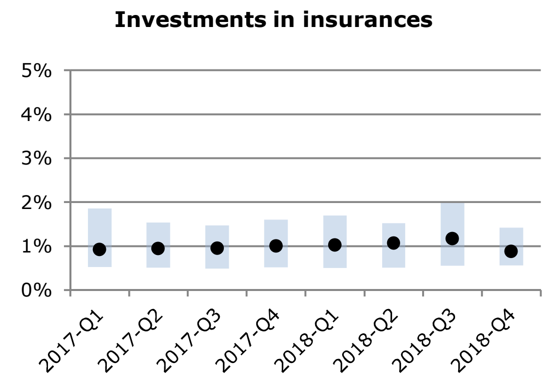
Interlinkages and imbalances risks remained at medium level in Q4-2018. No major changes have been reported over time in exposures of insurance groups to different parts of the financial sector. Other indicators in this risk category have also remained broadly stable since the previous assessment.

The median value of investments in banks as a share of total assets has remained stable since Q3, at around 9%. The lower and higher tails of the distribution have increased.



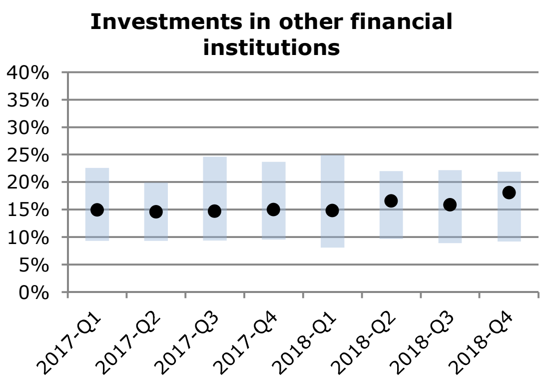
Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9.
Source: QFG ($N_{2018\ Q4}$=86)

The upper quartile of investment exposures to other insurers decreased by 0.6 p.p. after the corporate actions and M&A activities by some insurance groups observed in Q3, to 1.4%.



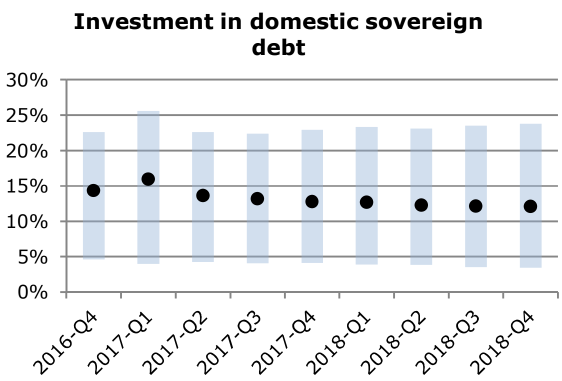
Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3.
Source: QFG ($N_{2018\ Q4}$=89)

Median exposures to other financial institutions increased by 2.2 p.p. to around 18% in Q4-2018.



Note: Distribution of indicator (interquartile range, median). Other financial institutions comprise all activities identified with NACE codes K66, K65.3 and K64 excluding K64.1.9.
Source: QFG ($N_{2018\ Q4}$=86)

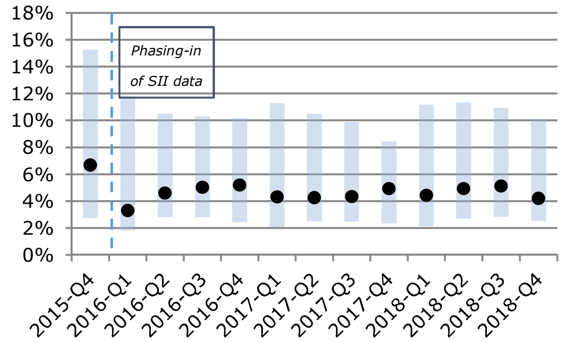
The overall distribution of exposures to domestic sovereign debt has remained broadly stable over time, recording a median value of 12% in Q4-2018.



Note: Distribution of indicator (interquartile range, median).
Source: QRS ($N_{2018\ Q4}$=1,908)

The distribution of the share of premiums ceded to reinsurers has overall slightly decreased in Q4-2018.

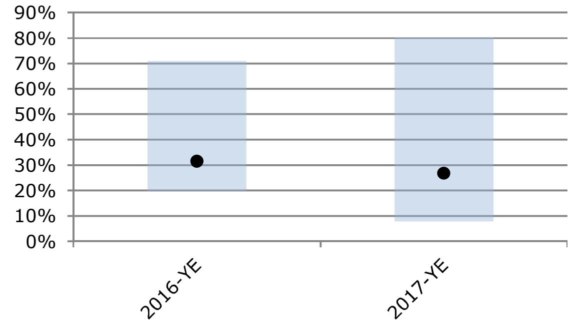
Reinsurance part of premium



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=94); QFT prior to 2016

Reinsurance concentration shows a decrease in the median (-2.7 p.p.) and an increase in the 75th percentile (+9.3 p.p.) since the previous year. The higher end of the distribution is, however, much higher.

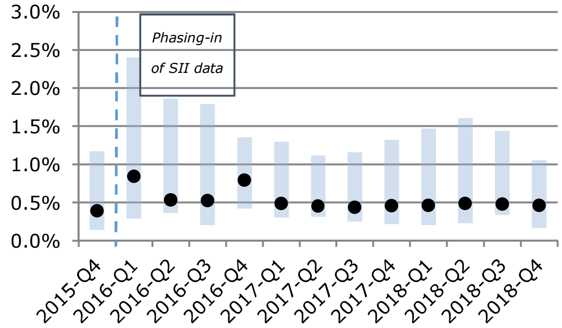
Reinsurance concentration



Note: Distribution of indicator (interquartile range, median).
Herfindal Hirshman index computed on the exposure towards reinsurance companies.
Source: ARS (N_{2017} =1,231)

The range of the distribution of insurers' derivatives holdings slightly decreased in Q4-2018. The median exposure remains at around 0.5% of total assets.

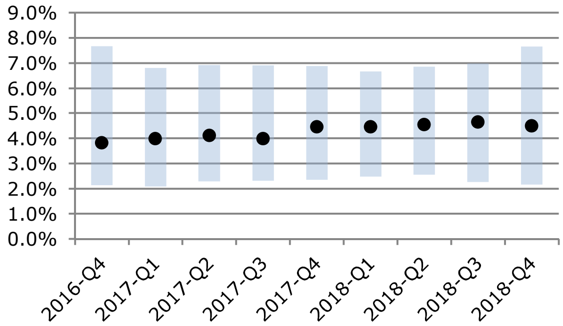
Derivative holdings



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=91); QFT prior to 2016

The distribution of insurers' "non-insurance" liabilities remained broadly stable in Q4-2018, with a median value of 4.5%.

Insurers "non-insurance" liabilities



Note: Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=91)

Insurance (underwriting) risks

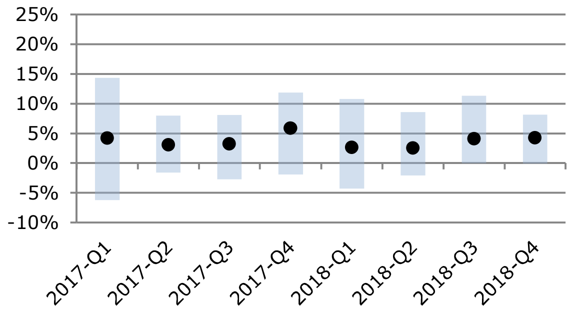
Level: medium

Trend: increase

Insurance risks increased in Q4-2018 moving to a medium level. This trend was primarily due to a further increase in the catastrophe loss ratio in that quarter driven by natural catastrophes occurred in the US with impact on reinsurer's technical results. Median premium growth of both life and non-life insurance business have remained stable.

Median year on year premium growth for life business remained broadly stable in Q4-2018 at 4.3%.

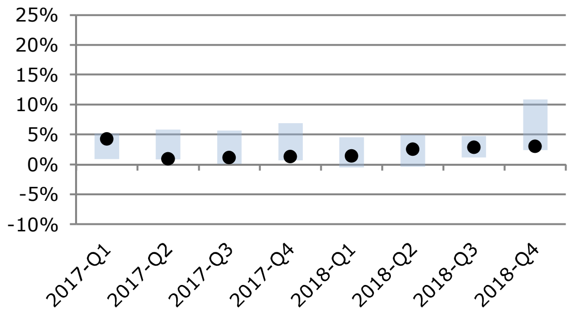
Premium growth - life



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=86)

Median annual non-life premium growth has remained stable in Q4. The upper quartile showed an increase compared to the previous quarter which is primarily driven by one group.

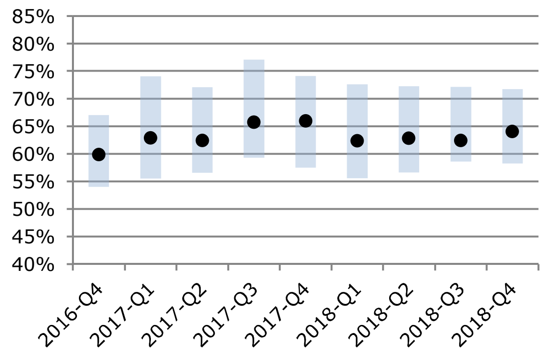
Premium growth - non-life



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median).
Source: QFG ($N_{2018\ Q4}$=79)

Loss ratios remained overall stable in Q4-2018 with a slight increase of the median value to 64% (+1.6 p.p.).

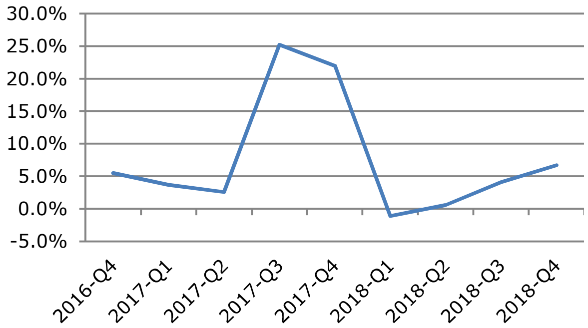
Loss ratio (gross)



Note: Distribution of indicator (interquartile range, median).
Source: QRS ($N_{2018\ Q4}$=1,460)

The cumulative catastrophe loss ratio increased from 4.1% to 6.7% in Q4-2018 due to catastrophe events occurred in the US in that quarter (California wildfire and hurricane Michael).

Catastrophe loss ratio



Note: Cumulative year-to-date loss ratio.
Source: Munich Re

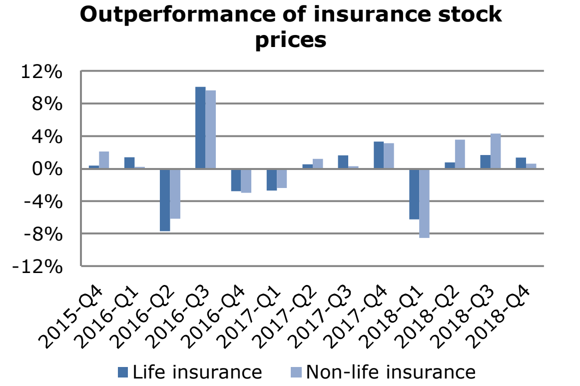
Market perceptions

Level: medium

Trend: constant

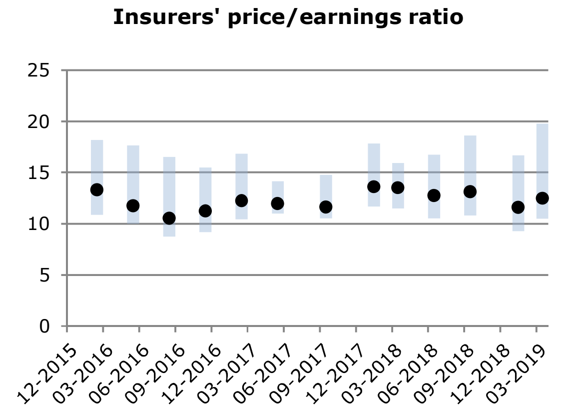
Market perceptions remained constant at medium level. Insurance stocks outperformed the overall market. An increase in the distribution of price-to-earnings ratios (P/E) has been observed, while insurers’ CDS spreads have decreased. Insurers’ external ratings remained unchanged.

Both life and non-life insurance stock prices have slightly outperformed the overall market.



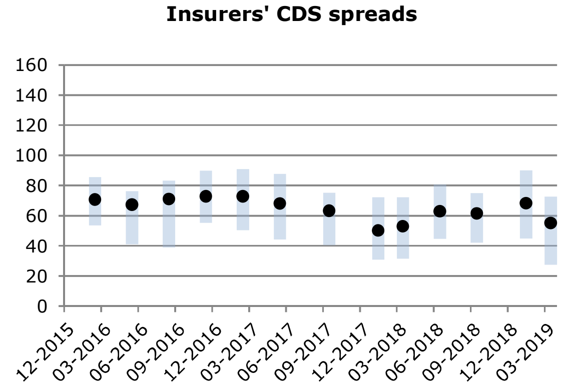
Note: Outperformance over 3-month periods vs Stoxx 600.
Source: Bloomberg Finance L.P.

An increase in the overall distribution of price-to-earnings (P/E) ratios has been observed since the last assessment. The median value has increased by 0.9 p.p. to 12.5%. This trend is in line with overall positive equity market performance in the first quarter of 2019.



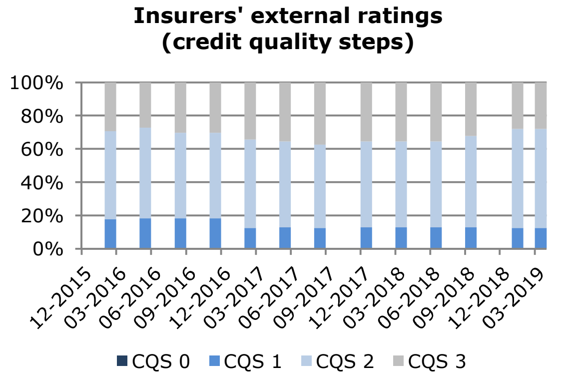
Note: Distribution of indicator (interquartile range, median).
Source: Bloomberg Finance L.P. (N=34)

The whole distribution of insurance CDS spreads has decreased since the last assessment. The median value has decreased by 13.2 bps. to 55.0 bps.



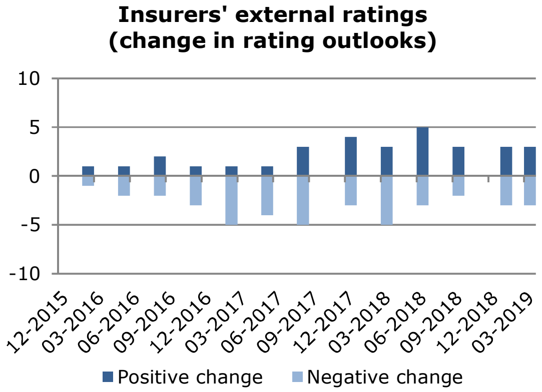
Note: Distribution of indicator (interquartile range, median).
Source: Bloomberg Finance L.P. ($N_{2018\ Q4}$=15)

Insurers’ external ratings have not changed since the last assessment.



Source: Standard & Poor’s via Bloomberg Finance L.P. ($N_{2018\ Q4}$=32)

In March 2019 an equal number of positive and negative changes in ratings outlooks are observed for insurers (3).



Source: Standard & Poor's via Bloomberg Finance L.P. ($N_{2018\ Q4}$=32)

APPENDIX

Level of risk	Very high
	High
	Medium
	Low

Trend	⇧	Large increase
	⬀	Increase
	⇨	Constant
	⬂	Decrease
	⇩	Large decrease

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. Information on claims and insurance losses due to natural catastrophes also contribute to this risk category.

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.

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 2019

This report provides an interim risk-update, updating previous Risk Dashboards. Legal basis of this report is Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), and in particular Article 32 (Assessment of market developments) thereof.