

RISK DASHBOARD

January 2019¹

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	Low	↗
Market perceptions	Level	Trend
8. Market perceptions	Medium	→

Key observations:

- Risk exposures for the European insurance sector remain broadly stable.
- Given the ongoing reduction in the accommodative stance of monetary policy, macro risks stand at medium level. However, further downward revisions of economic growth forecasts remain a concern going forward.
- Credit and market risks continue at medium level, with CDS spreads for corporate bonds as well as equity market volatility increasing since September.
- Interlinkages and imbalances risks increased due to an increase in intrasectoral exposures, that can be explained by corporate actions and M&A activities by some insurance groups.
- Insurance risks also increased following the impact on (re)insurers loss ratios of the natural catastrophes observed in 2018Q3, but remain at low level. Underpricing and underreserving driven by competition could be a concern for some lines of business.
- Market perceptions are stable at medium level, with insurance stocks outperforming the market in spite of a general deterioration in equity market performance. Insurers' price-to-earnings ratios went slightly down, while CDS spreads slightly increased.

¹ Reference date for company data is Q3-2018 for quarterly indicators and 2017-YE for annual indicators. The cut-off date for most market indicators is beginning of January 2019.

Macro risks



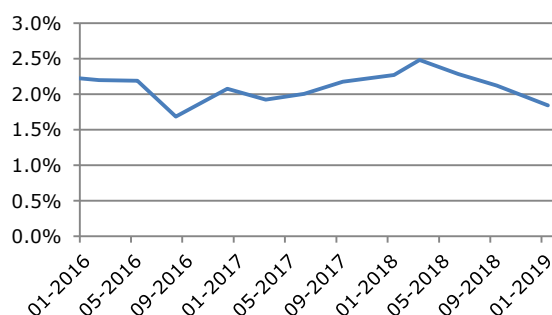
Level: medium

Trend: constant

Macro risks remain stable at medium level. Forecasted GDP growth has been revised downwards across major economic areas (Euro Area, Switzerland, US and BRICS). The constant trend for this risk category is supported by the ongoing reduction in the accommodative stance of monetary policy. Policy rates have been further raised by the US Federal Reserve and the rate of expansion of Central Banks' balance sheets decreased in the Euro Area, Switzerland and US. The level of swap rates continues to be low.

The indicator on forecasted GDP growth continued to decrease from the previous quarter, due to downward revisions of growth forecasts across most geographic areas (Euro area, Switzerland, US and BRICS).

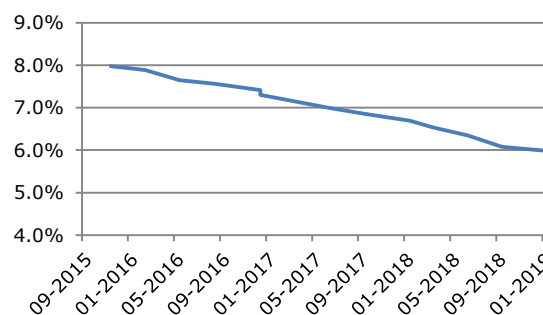
GDP consensus forecast



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 quite stable from the previous quarter (6.0%, -0.1 p.p.), potentially signaling that the labour market recovery is starting to slow down.

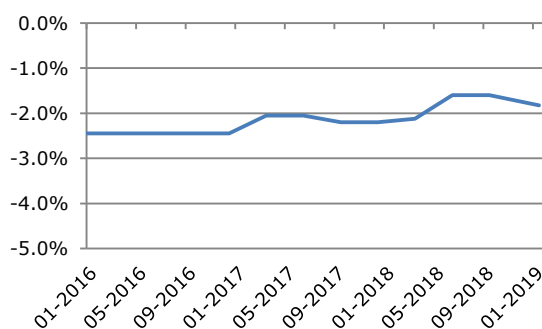
Unemployment rate



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

The indicator on fiscal balances slightly deteriorated compared to the previous quarter, due to a higher fiscal deficit in US in 2018.

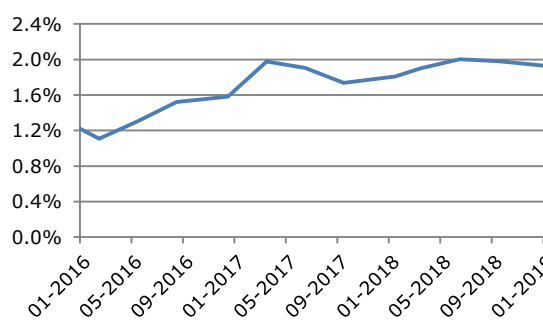
Fiscal balance



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

The indicator on forecasted inflation remained broadly unchanged from the previous quarter, at 1.92% (-0.06 p.p.).

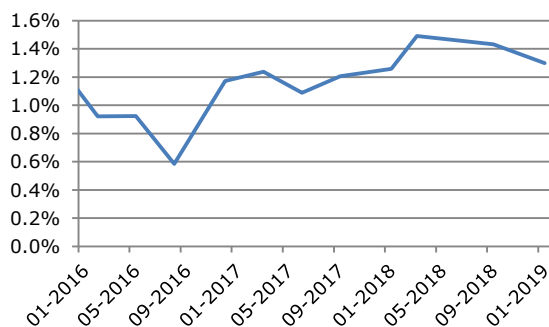
CPI consensus forecast



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 decreased by 13 basis points from the previous quarter reaching 1.3%, due to slight declines in swap rates for all the currencies considered.

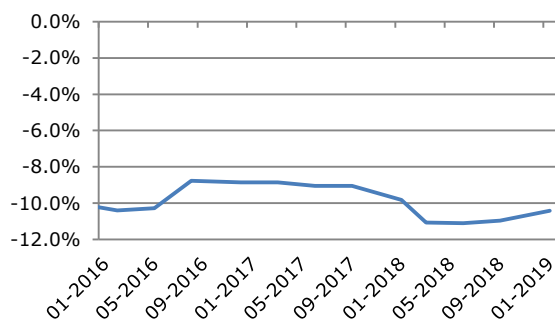
10Y swap rates



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

The indicator on credit-to-GDP gap improved slightly from the previous quarter, but remains close to -10 p.p. reflecting the still large negative credit-to-GDP gaps in the US, UK and Euro area.

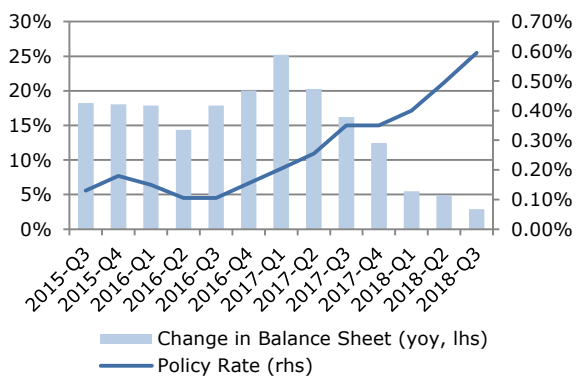
Credit-to-GDP gap



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 been further raised by the US Federal Reserve. 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 2.9% in 2018Q3.

State of monetary policy



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

Credit risks



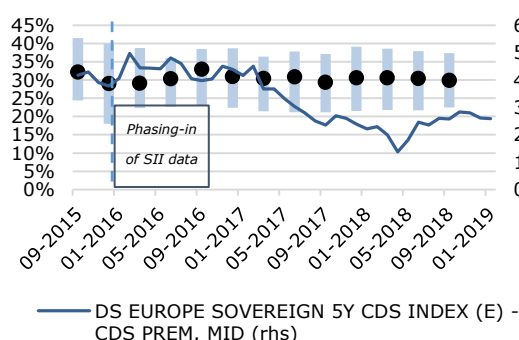
Level: medium

Trend: constant

Credit risks remain at medium level. Since the previous assessment, spreads have increased across all corporate bond segments – financials (secured and unsecured) and non-financials. Household indebtedness is high, but overall insurers' exposures to housing mortgages and other loans to individuals remain relatively low.

Overall CDS spreads for European sovereign bonds slightly decreased since September. Insurers' exposures to this asset class are broadly unchanged, with the median exposure remaining close to 30%.

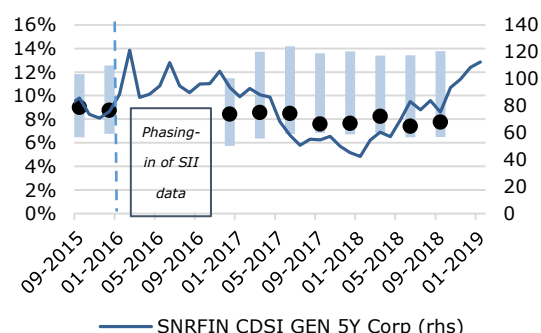
Investments in government bonds



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N₂₀₁₈ Q₃=96); QFT prior to 2016

Spreads for unsecured financial bonds considerably increased since the last quarter. Median exposures to this bond segment remain below 10%, at around 8%.

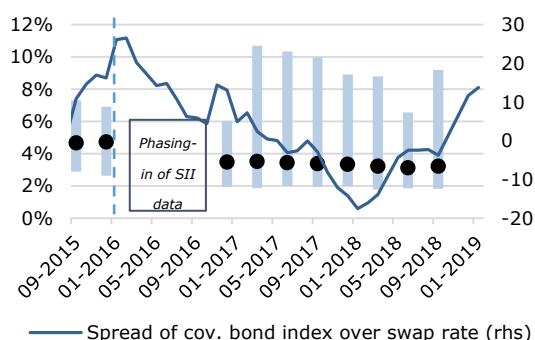
Investments in corporate bonds - financials, unsecured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N₂₀₁₈ Q₃=65); QFT prior to 2016

Spreads for secured financial bonds substantially increased since the previous assessment, turning positive for the first time since 2017Q1. This increase is in line with spread increases observed for other corporate bond segments. Median exposures remain stable at around 3%.

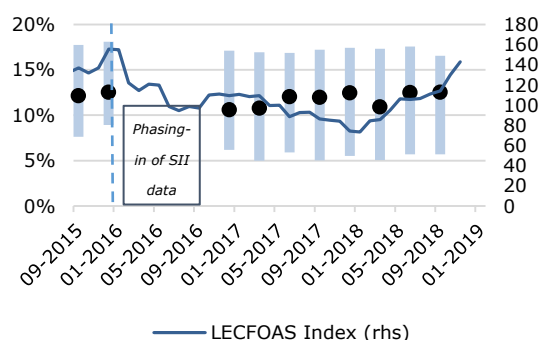
Investments in corporate bonds - financials, secured



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N₂₀₁₈ Q₃=65); QFT prior to 2016

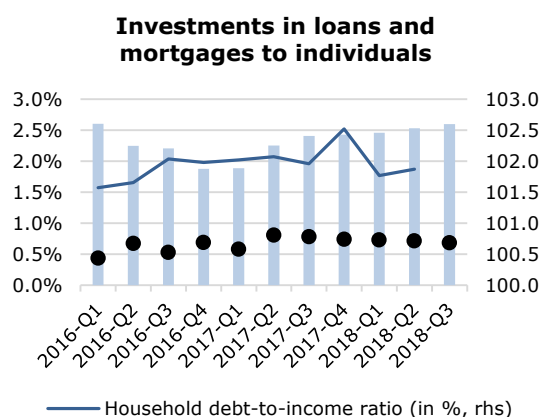
Spreads for non-financial corporate bonds followed the same trend of other corporate bonds, increasing considerably since September. Median exposure to this bond segment remains at 12.5%.

Investments in corporate bonds - non-financials



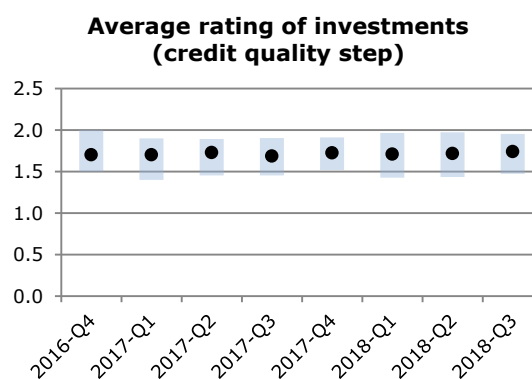
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N₂₀₁₈ Q₃=65); QFT prior to 2016

Median exposures to loans and mortgages remain stable at 0.7%. The household debt-to-income ratio increased very slightly in both the Euro Area and the UK.



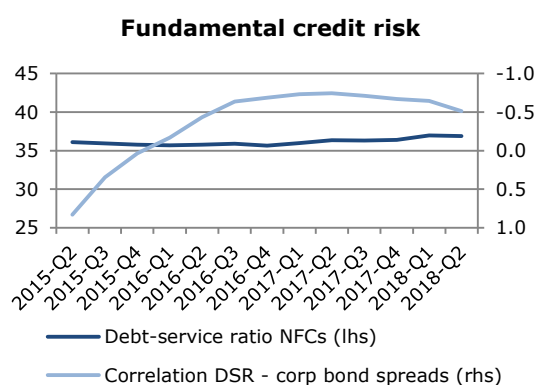
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure (weighted average of EA and UK).
Source: QFG (N_{2018 Q3}=96), ECB

The average rating of investments is broadly unchanged since the previous quarter, corresponding to an S&P rating between AA and A.



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=92)

The correlation between the debt-service ratio of non-financial corporations and corporate bond spreads continued to be negative but declined since the previous quarter, reflecting the observed increase in bond spreads.



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

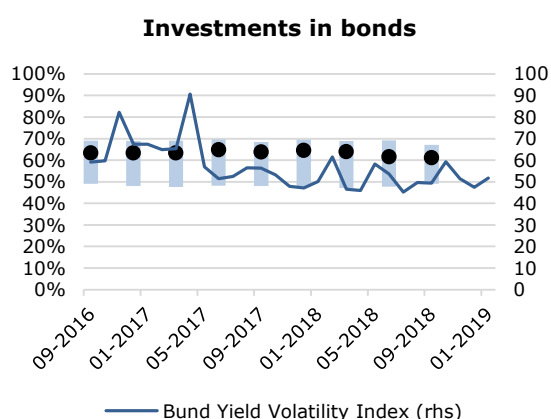


Level: medium

Trend: constant

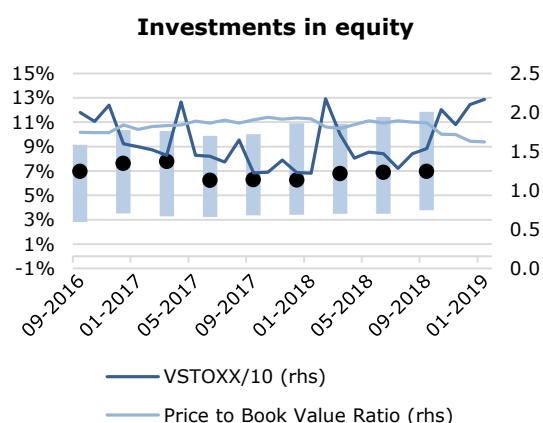
Market risks remain constant at medium level; this reflects the stable portfolio allocation of insurers. Volatility of the largest asset class, bonds, remains stable whilst equity markets' volatility continues to increase.

Bond market volatility has decreased, after a spike in October. Median exposures to bonds remain around 60%.



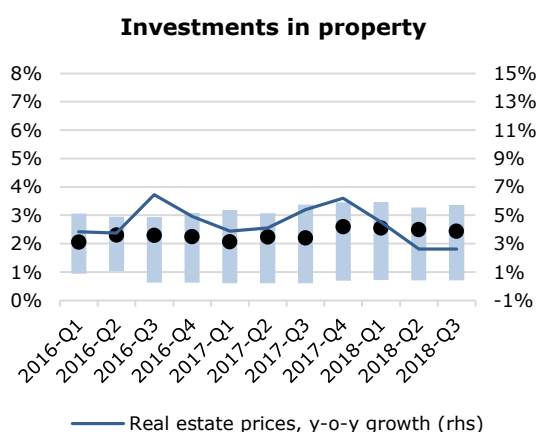
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG (N_{2018 Q3}=96)

Volatility of equity prices has further increased after a slight dip in December, while the price-to-book value declined. Median exposures to equity kept unchanged at 7%.



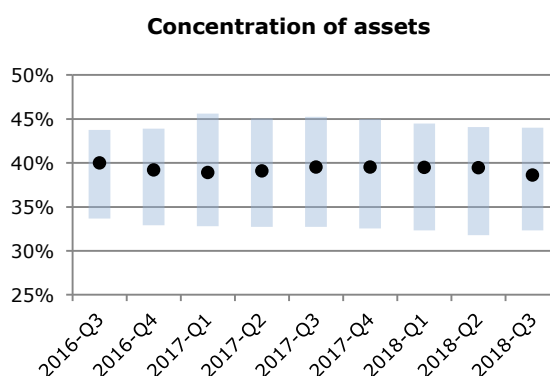
Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: Bloomberg Finance L.P., QFG (N_{2018 Q3}=96); QFT prior to 2016

Median exposures to property remained stable in 2018Q3 at around 2.4% of insurers' total assets. The indicator on annual growth in real estate prices continues close to 2.6%.



Note: Left scale shows the distribution of exposures (inter-quartile range and median), right scale the risk measure.
Source: QFG (N_{2018 Q3}=96); QFT prior to 2016; ECB

The indicator on concentration of assets remained overall stable, with the median Herfindahl index slightly declining from 39% to 38%.



Note: Herfindahl 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 Q3}=99)

Liquidity and funding risks



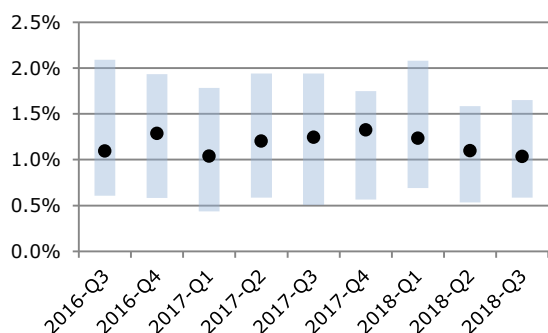
Level: medium

Trend: constant

Liquidity and funding risks remain stable at medium level. The liquid assets ratio has registered a small decrease since the previous quarter, while issued bond volumes and the average ratio of coupons to maturity also reduced.

The distribution of the indicator on cash holdings has remained broadly stable since 2018Q2, with a median value around 1% of total assets.

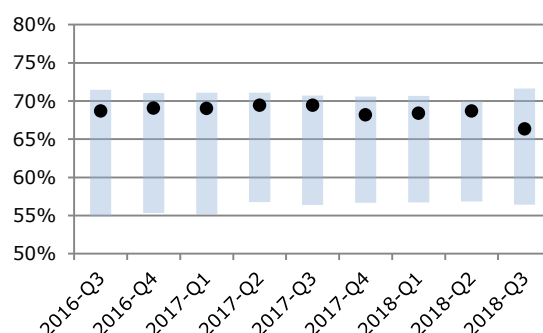
Cash holdings



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=96)

The liquid assets ratio recorded a slight decrease compared to the previous quarter with the median ratio dropping from 68.7% to 66.3%.

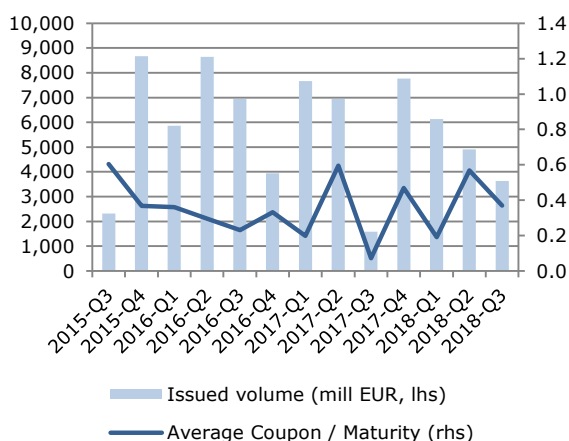
Liquid assets ratio



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=96)

Bond issuance further decreased in Q3 by almost 1.3 billion EUR to 3.6 billion. The average ratio of coupons to maturity decreased to around 0.4.

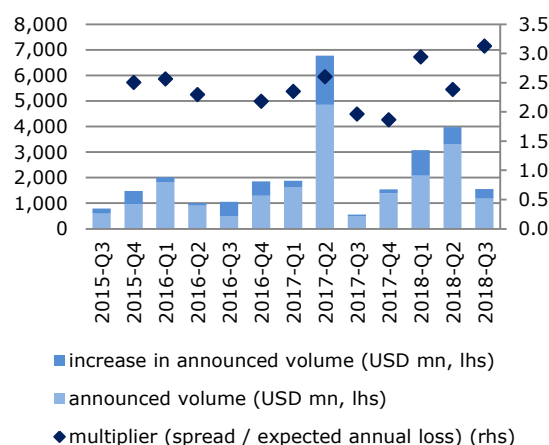
Bond issuance



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

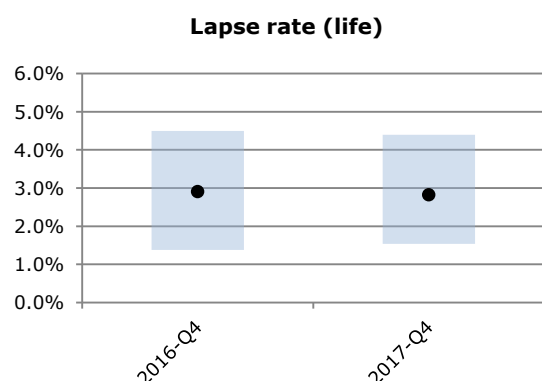
Cat bond issuance was lower than in 2018Q2 with issued volumes 32% higher than announced. The average multiplier increased to 3.1.

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 2016. Median lapse rates are still around 3%.



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2017 Q4}=91)

Profitability and solvency

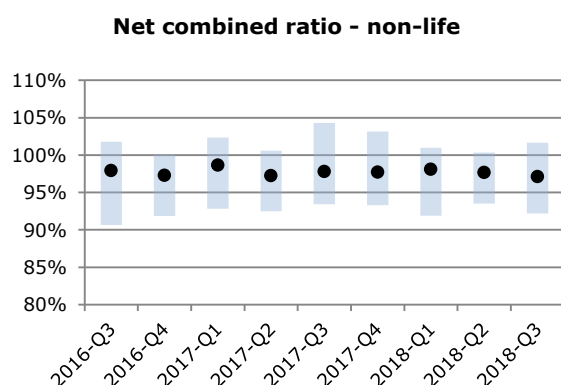


Level: medium

Trend: constant

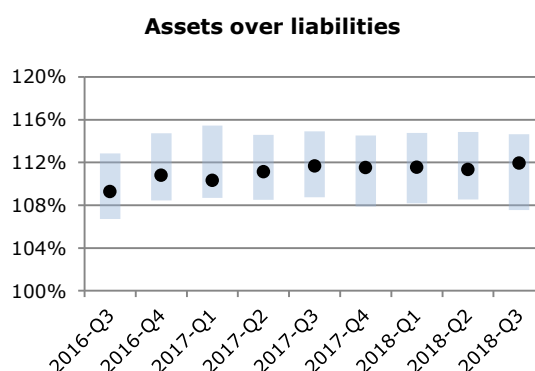
Profitability and solvency risks remain stable at a medium level. The ratio of assets over liabilities and share of tier 1 own funds have both increased slightly. Median SCR ratios for groups and non-life companies have improved whilst the SCR ratios for life companies have decreased. However, SCR ratios for all types of undertakings remain above 100%.

The median net combined ratio for non-life business has slightly improved in 2018Q3 as compared to the previous quarter.



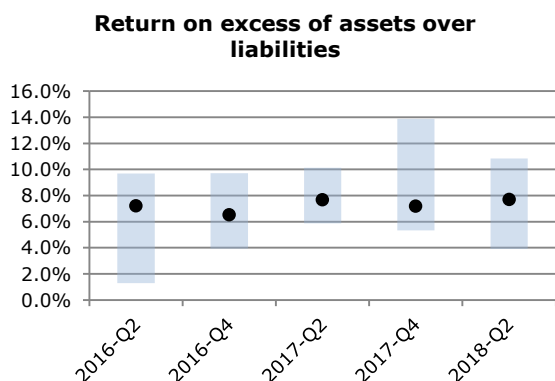
Note: Distribution of indicator (interquartile range, median).
Source: QRS (N_{2018 Q3}=1,479)

The median value of the assets over liabilities ratio improved slightly in 2018Q3 from 111% to 112%.



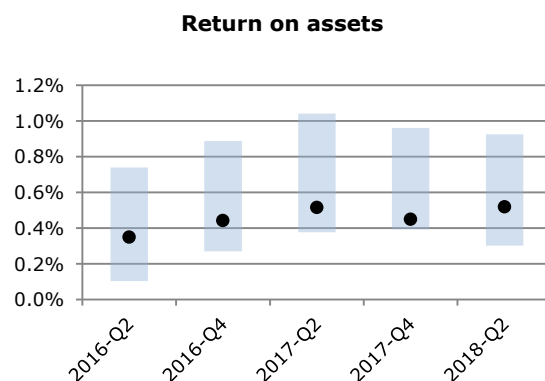
Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=96)

The median return on excess of assets over liabilities (used as a proxy of return on equity) is roughly at the same level as in Q2 of 2017, but is slightly higher than in Q4.



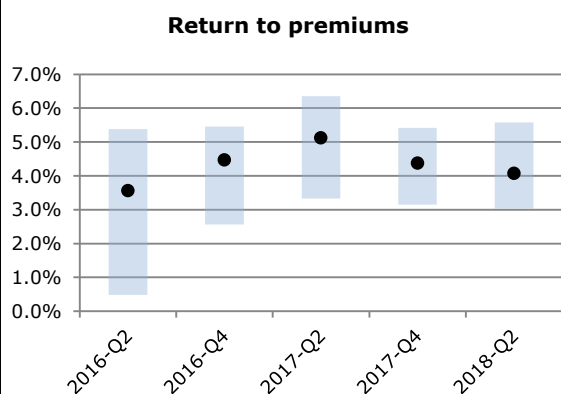
Note: Distribution of indicator (interquartile range, median).
Q2 figures annualised.
Source: QFG (N_{2018 Q2}=97)

The return on assets has barely changed since Q2 and Q4 of 2017, with the median ratio at around 0.5%.



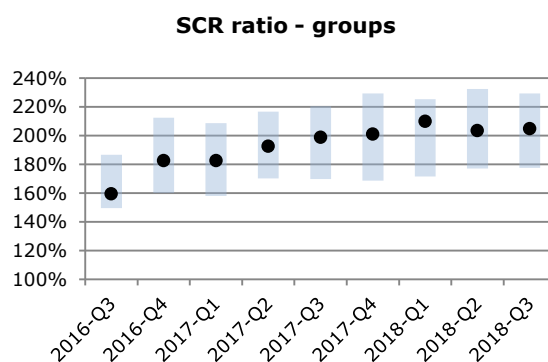
Note: Distribution of indicator (interquartile range, median).
Q2 figures annualised.
Source: QFG (N_{2018 Q2}=97)

The return to premiums indicator has decreased across the whole distribution when compared to Q2 2017, but changed only slightly since Q4.



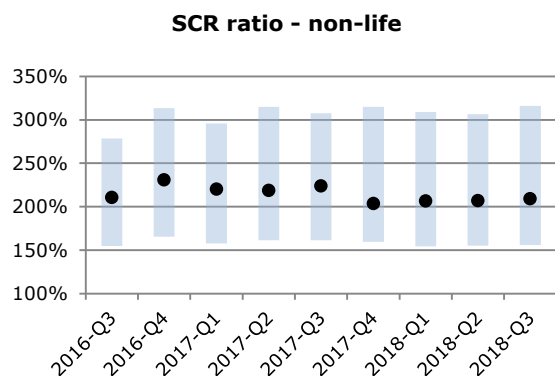
Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q2}=97)

The median SCR ratio of the insurance groups in the sample has slightly increased in 2018Q3 to 204%, while the range of the distribution has narrowed slightly.



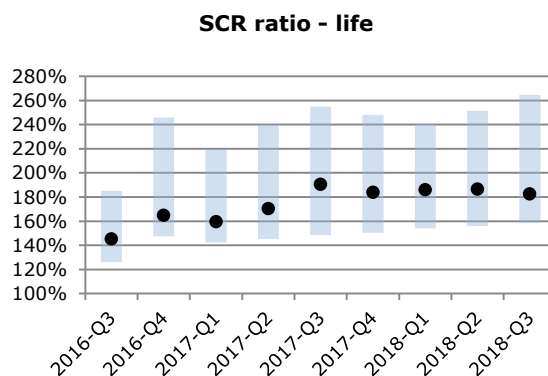
Note: Distribution of indicator (interquartile range, median).
Source: "Total" QFG (N_{2018 Q3}=97)

The SCR ratios for non-life solo companies have recorded a modest improvement since the last quarter, with a 2.5 p.p. increase in the median value to 209%.



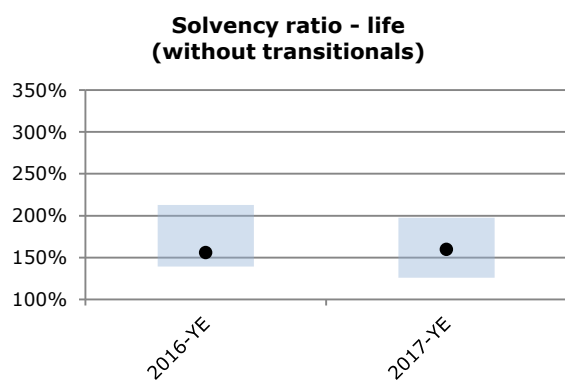
Note: Distribution of indicator (interquartile range, median).
Source: QRS (N_{2018 Q3}=1,153)

The median SCR ratio for life companies decreased by 4 p.p. to 183%, whereas the overall distribution has shifted upwards.



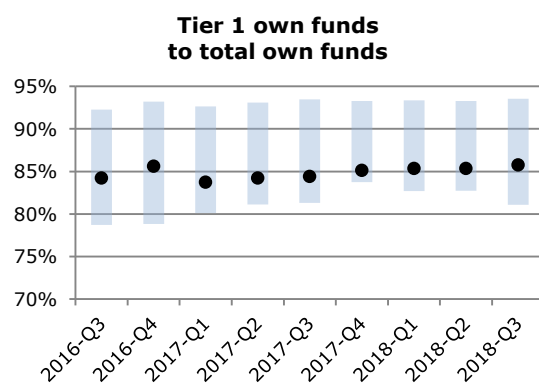
Note: Distribution of indicator (interquartile range, median).
Source: QRS (N_{2018 Q3}=483)

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.



Note: Distribution of indicator (interquartile range, median).
Source: ARS (N₂₀₁₇=299)

The median share of Tier 1 capital in total own funds has improved slightly from the previous quarter at close to 86% but the lower quartile of the distribution decreased.



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=99)

Interlinkages & imbalances



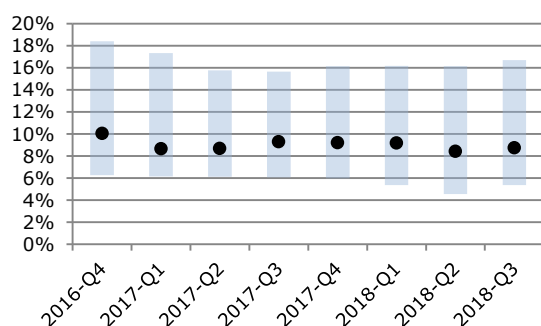
Level: medium

Trend: increase

Interlinkages and imbalances risks show an increasing trend but remain at medium level in Q3 2018. Exposures to banks and other financial institutions remain broadly stable, while exposures to insurers increased due to corporate actions and M&A activity by some insurance groups. Other indicators in this risk category report no major changes since the previous assessment.

The median value of investments in banks as a share of total assets has remained broadly stable since Q2, at around 8%. The lower and higher tails of the distribution have increased.

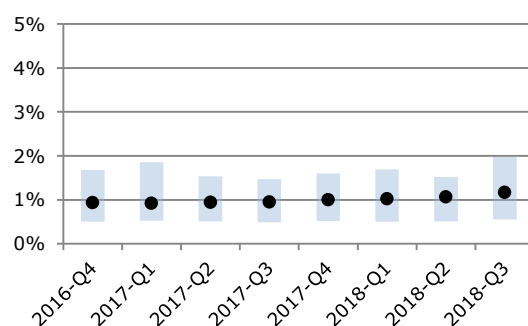
Investments in banks



Note: Distribution of indicator (interquartile range, median). Banks comprise all activities identified with NACE code K.64.1.9.
Source: QFG (N_{2018 Q3}=91)

The upper quartile of investment exposures to other insurers increased by 0.5 p.p. since the previous assessment, to 2%. This increase is related to corporate actions and M&A activity by some insurance groups. The median continues around 1%.

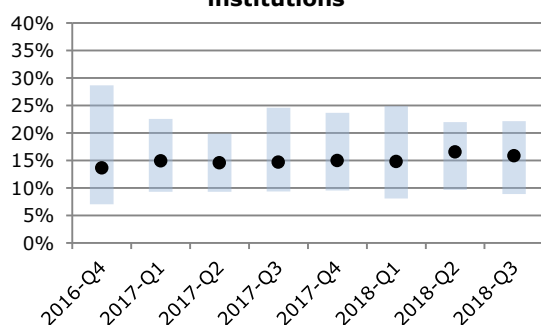
Investments in insurances



Note: Distribution of indicator (interquartile range, median). Insurances comprise all activities identified with NACE code K65, excluding K65.3.
Source: QFG (N_{2018 Q3}=92)

Median exposures to other financial institutions remained overall stable in 2018Q3, as well as the whole distribution.

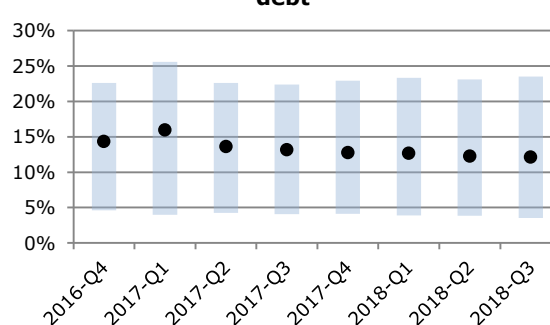
Investments in other financial institutions



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 Q3}=92)

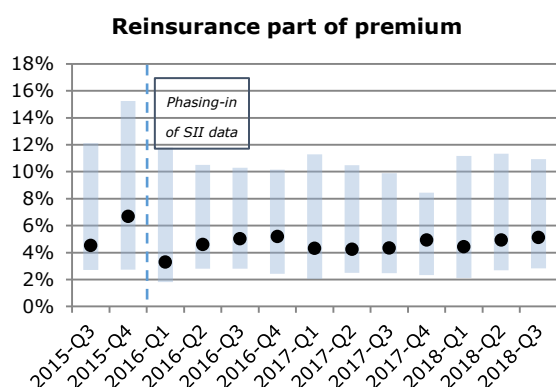
The overall distribution of exposures to domestic sovereign debt have remained stable over time, recording a median value of 12% in 2018Q3.

Investment in domestic sovereign debt



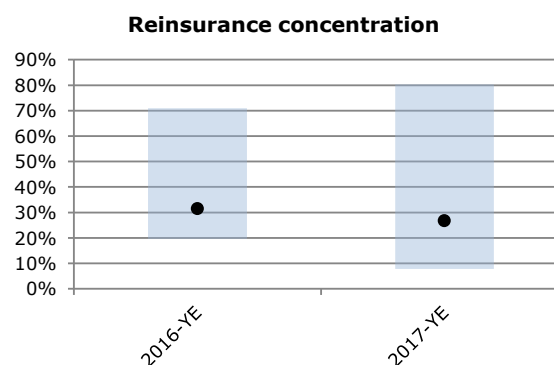
Note: Distribution of indicator (interquartile range, median).
Source: QRS (N_{2018 Q3}=1,918)

The distribution of premiums ceded to reinsurers has lightly shrunk in 2018Q3, but the median value remains broadly stable.



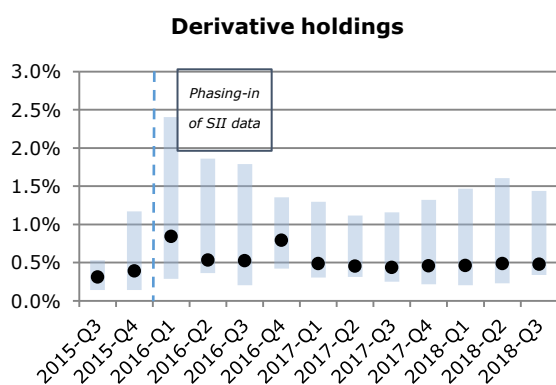
Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=99); QFT prior to 2016

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.



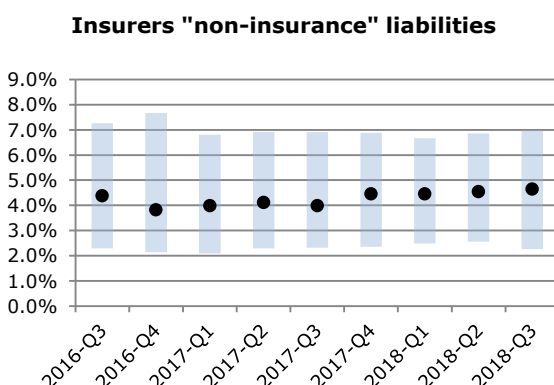
Note: Distribution of indicator (interquartile range, median).
Herfindal Hirshman index computed on the exposure towards reinsurance companies.
Source: ARS (N₂₀₁₇=1,231)

The range of the distribution of insurers' derivatives holdings slightly decreased in 2018Q3. The median exposure remains at around 0.5% of total assets.



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=96); QFT prior to 2016

The distribution of insurers' "non-insurance" liabilities remains broadly stable. The median value remains close to 4.6%.



Note: Distribution of indicator (interquartile range, median).
Source: QFG (N_{2018 Q3}=96)

Insurance (underwriting) risks



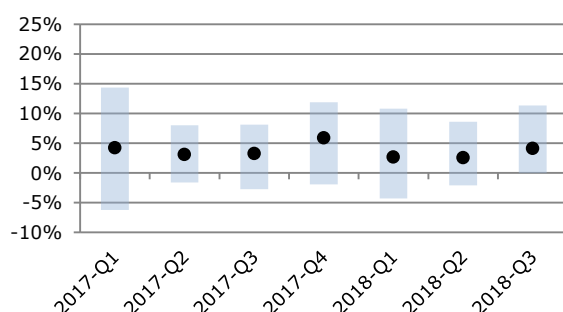
Level: low

Trend: increase

Insurance risks increased in 2018Q3 but remain at a low level. Premium growth of both life and non-life insurance business has moderately increased. An increase in the catastrophe loss ratio was observed in this quarter, contributing to the increasing trend of the overall insurance risks category. Underpricing and underreserving driven by competition could be a concern for some lines of business.

The year on year premium growth for life business has increased in 2018Q3 with a median value of 4.1%, compared to the previous quarter's median value of 2.6%.

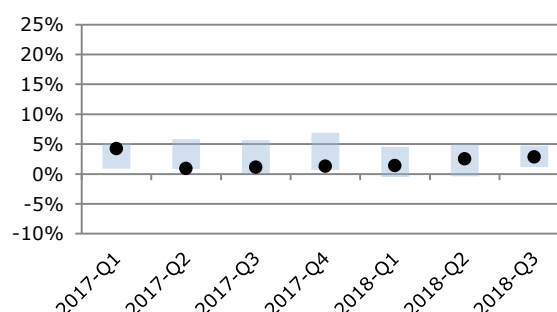
Premium growth - life



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N_{2018 Q3}=85)

Median annual non-life premium growth has remained stable in Q3. The lower quartile which had previously been reflecting negative premium growth is now displaying positive premium growth.

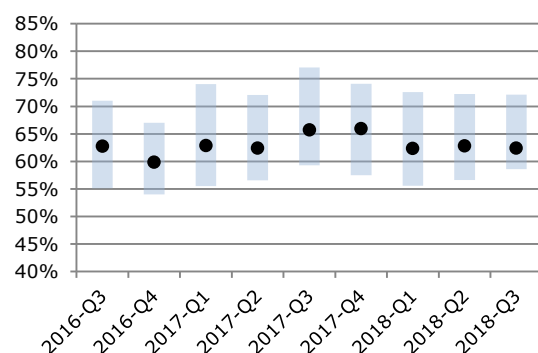
Premium growth - non-life



Note: Year-on-year change in gross written premiums. Distribution of indicator (interquartile range, median). Source: QFG (N_{2018 Q3}=81)

Loss ratios remained overall stable in 2018Q3 with a median value of 62%. The lower quartile value continues to steadily increase over the last three quarters.

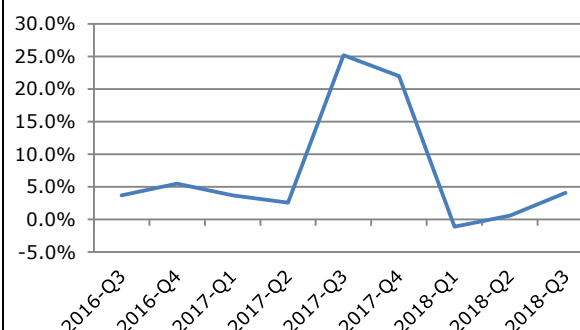
Loss ratio (gross)



Note: Distribution of indicator (interquartile range, median). Source: QRS (N_{2018 Q3}=1,474)

The cumulative catastrophe loss ratio increased from 0.6% to 4.1% in 2018Q3 due to catastrophe events occurred in that quarter (e.g. hurricane Florence and typhoon Jebi). The impact is mitigated by the absence of nat cat events in the first 2 quarters of the year.

Catastrophe loss ratio



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

Market perceptions



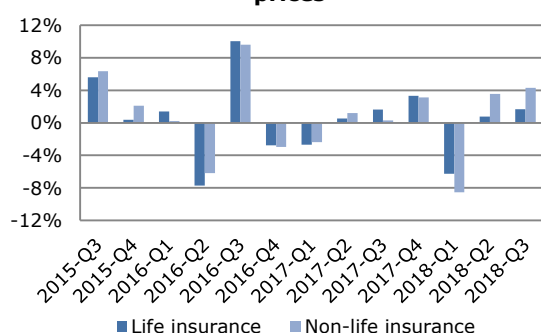
Level: medium

Trend: constant

Market perceptions remain constant at medium level. Insurance stocks outperformed the overall market. A decrease in the distribution of price-to-earnings ratios (P/E) has been observed, while insurers' CDS spreads have increased. Insurers' external ratings continue to improve.

As in Q2, insurance stock prices outperformed the overall market. The difference is especially notable for non-life insurance.

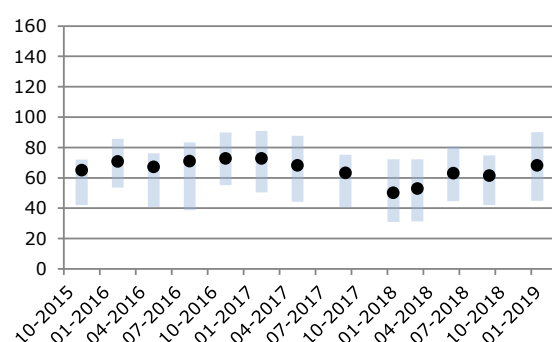
Outperformance of insurance stock prices



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

Insurance CDS spreads have increased since the last quarter. The median value has increased from 61.4 to 68.2 bps.

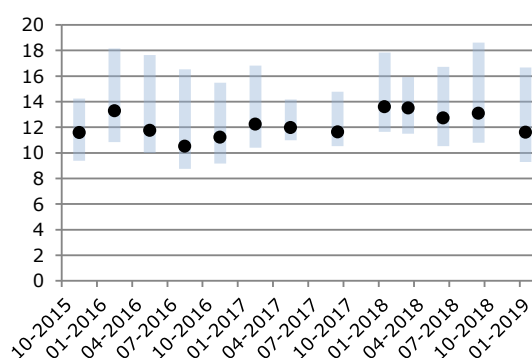
Insurers' CDS spreads



Note: Distribution of indicator (interquartile range, median).
Source: Bloomberg Finance L.P. (N_{2018 Q3}=15)

A decrease in the distribution of price-to-earnings (P/E) ratios has been observed. The median value declined from 13.1% to 11.6%.

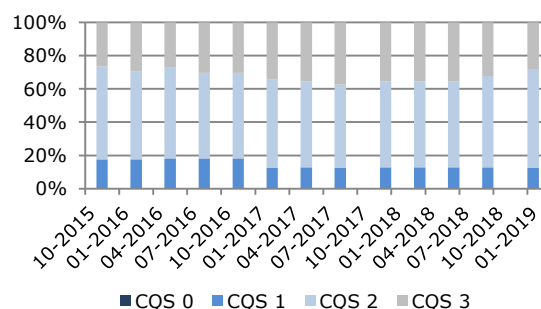
Insurers' price/earnings ratio



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

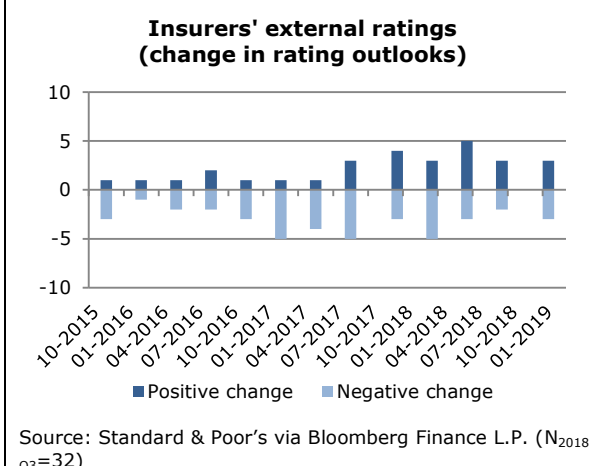
Insurers' external ratings continued to improve with a decrease in the proportion of insurers with a credit quality step (CQS) equal to 3 in favour of those with a CQS of 2.

Insurers' external ratings (credit quality steps)












Source: Standard & Poor's via Bloomberg Finance L.P. (N_{2018 Q3}=32)

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



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 January 2019

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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.

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