

## **RISK DASHBOARD**

# July 2017<sup>1</sup>

Risks	Level	Trend
1. Macro risks	High	<b>→</b>
2. Credit risks	Medium	<b>→</b>
3. Market risks	Medium	$\rightarrow$
4. Liquidity and funding risks	Medium	<u></u>
5. Profitability and solvency	Medium	<i>&gt;</i>
6. Interlinkages and imbalances	Medium	<b>→</b>
7. Insurance (underwriting) risks	Low	<b>→</b>
Market perceptions	Level	Trend
8. Market perceptions	Medium	<b>→</b>

#### **Key observations:**

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- Risks for the insurance sector remained overall stable in Q1 2017 and some slight improvements were observed. Solvency II ratios remain strong and stable for groups whereas a slight deterioration has been observed for solos particularly among non-life insurance undertakings. Volatility has decreased and global inflation rates are fluctuating within the target range.
- Stable underwritten premia contribute to the moderate reduction of the insurance risks.
- Despite these positive signs, the continuing low-yield environment and the observation that market fundamentals might not properly reflect the underlying credit risk still represent important concerns for the EU insurance industry. Nevertheless, market perception is pretty stable with some signs of improvement in the CDS spreads.

<sup>&</sup>lt;sup>1</sup> Reference date for company data is Q1-2017, while the cut-off date for most other indicators is end-June 2017.

### **Macro risks**



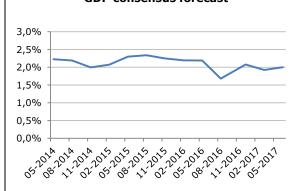
Level: high

Trend: constant

The macroeconomic environment characterised by enduring low-yields remains fragile. Inflation rates are moving within the target range, whereas unemployment rates continued to decrease. Despite slightly increasing policy rates in some jurisdictions, the balance sheets of central banks are still expanding with potential effects on the pricing of risk premia.

The GDP forecast remains around 2% expected real growth.

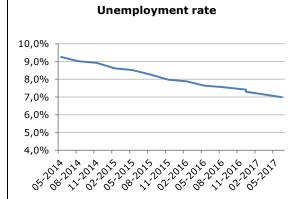
#### **GDP** consensus forecast



Note: Forecast four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS.

Source: Bloomberg Finance L.P.

Unemployment rate decreases over the last few years.

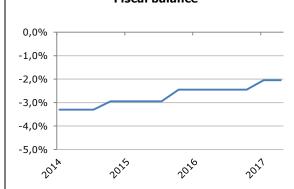


Note: Weighted average for EU, Switzerland, United States, China.

Source: Bloomberg Finance L.P.

The fiscal deficit, as an annual indicator, remained at the same level as in the previous quarter.

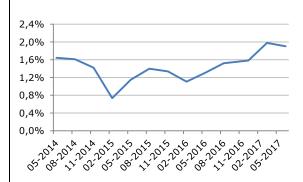
#### Fiscal balance



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

The inflation consensus forecast has decreased slightly although remains within the target range.

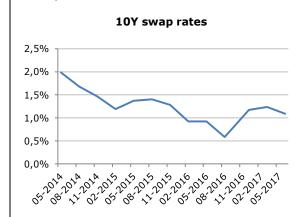
#### CPI consensus forecast



Note: Forecast four quarters ahead, weighted average for Euro area, United Kingdom, Switzerland, United States, BRICS.

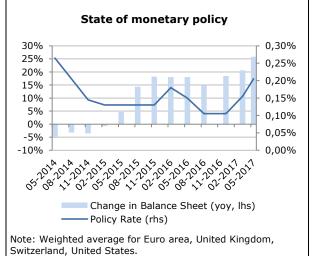
Source: Bloomberg Finance L.P.

After a slight increase of interest rates in mid-2016, the swap rates inverted the trend.

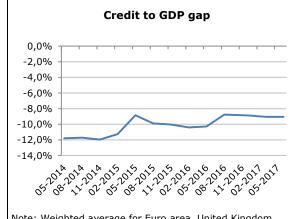


Note: Weighted average for EUR, GBP, CHF, USD. Source: Bloomberg Finance L.P.

Policy rates continued to increase following monetary policy changes in the US. Central Banks' balance sheet further expanding due to QE interventions.



The Credit-to-GDP gap is still largely negative.



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

### **Credit risks**

Source: Bloomberg Finance L.P.

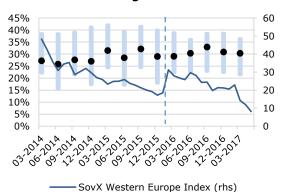


Level: medium
Trend: constant

Credit risk is still not properly reflected in market prices where the observed spreads are close to the historical low. The investment portfolio of the undertakings is largely composed of investment grade assets.

Spreads for sovereign bonds continue to decrease in 2017. The share of investments in sovereign bond dropped.

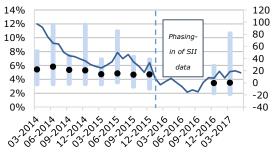
#### **Investments in government bonds**



Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2017\,Q1}$ =88); QFT prior to 2016

Spreads for secured financial bonds, still very volatile, continued to decrease in 2017 moving closer to 0%.

## Investments in corporate bonds - financials, secured

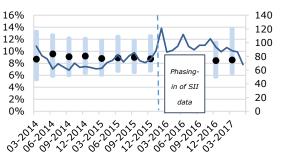


Spread of cov. bond index over swap rate (rhs)

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2017\,Q1}$ =63); QFT prior to 2016

Spreads for unsecured financial bonds decreased again in the first half of 2017. Exposures remain unchanged compared to Q4 2016.

## Investments in corporate bonds - financials, unsecured

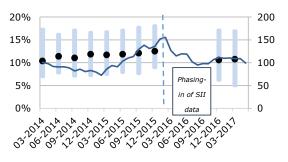


SNRFIN CDSI GEN 5Y Corp (rhs)

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2017\ Q1}$ =63); QFT prior to 2016

Spreads for non-financial corporate bonds remain stable since mid-2016.

## Investments in corporate bonds - non-financials

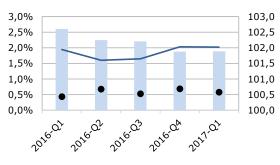


Bloomberg Barclays EUR Corporates excl.
 Financials OAS (rhs)

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG ( $N_{2017\ Q1}$ =63); QFT prior to 2016

Loans and mortgages to individuals account for only a small portion to the EU insurance sector's assets, though with national differences. Household indebtedness is elevated.

## Investments in loans and mortgages to individuals

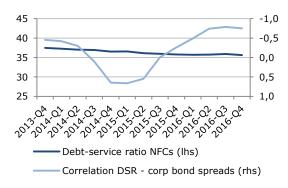


— Household debt-to-income ratio (rhs)

Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: QFG ( $N_{2017\ O1}$ =89), ECB

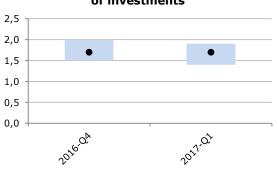
Corporate bond spreads have decoupled from underlying fundamentals, indicating distortions in the pricing of credit risk.

#### 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. Source: BIS, Bloomberg Finance L.P. Credit quality of investments slightly improved, with an average credit quality step corresponding to a rating between A and A+ (S&P).

## Average credit quality step of investments



Note: Distribution of indicator (interquartile range, median). Source: QFG (N $_{2017}$   $_{Q1}\!=\!81)$ 

### Market risks



Level: medium

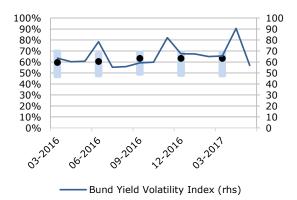
Trend: constant

Market risks remain at a medium level even against the reduction of the volatility in bonds and equity markets. Insurance specific indicators confirm the stable risk

Bond price volatility continued to decrease. Exposures After a decrease in 2016, stock market volatility has towards bonds remain stable.

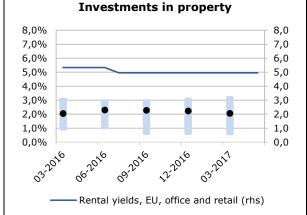
stabilised in Q1 at the lowest value since 2008. While market values increased, exposures remained stable.

#### **Investments in bonds**



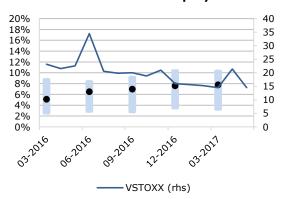
Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2017 Q1</sub>=85)

The indicator is stable due to the use of an annual risk measure and property investments are broadly unchanged.



Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2017 Q1</sub>=85); QFT prior to 2016

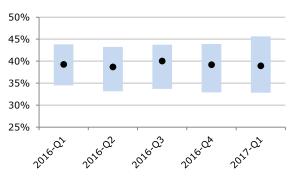
#### Investments in equity



Note: Left scale shows the distribution of exposures (interquartile range and median), right scale the risk measure. Source: Bloomberg Finance L.P., QFG (N<sub>2017 Q1</sub>=85); QFT prior to 2016

There has been a slight decrease in the median level of concentration of assets as well as a widening of the distribution. Q-o-Q the score remains stable.

#### Concentration of assets



Note: Herfindal Hirshman index computed on six balance sheet asset classes (government bonds, corporate bonds, equities, properties, cash and equivalent and loans and mortgages). Distribution of indicator (interquartile range, median).

Source: QFG (N<sub>2017 Q1</sub>=89)

### Liquidity and funding risks

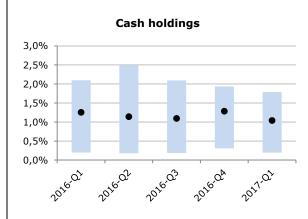


Level: medium

Trend: decreasing

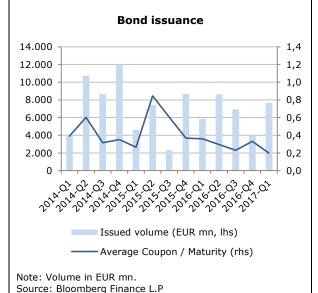
The overall assessment of risks relating to liquidity and funding has slightly improved in Q1 2017. The moderate decrease of the bond issuance indicator, despite affecting a minority of the market confirms that liquidity is not a major issue for the insurance industry.

The share of cash holdings decreased slightly.

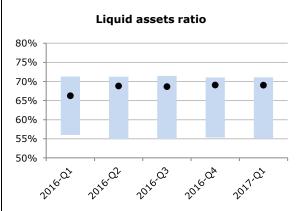


Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,O1}$ =89)

During Q1 the average coupon divided by the maturity decreased further while issuance volumes increased.



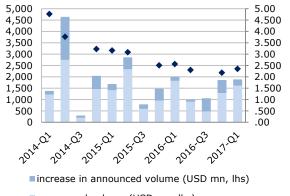
The proportion of more liquid assets in the portfolios of insurance undertakings remains stable.



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,O1}$ =89)

During the last quarter the announced volume increased more than in the previous quarter showing a slightly decrease for the upsize volume.

#### **Catastrophe bond issuance**



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

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

### **Profitability and solvency**



Level: medium

Trend: increasing

Profitability and solvency risks slightly increased.

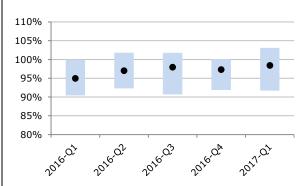
SCR ratios remain robust and stable for groups whereas a slight deterioration has been observed for solos. The reduction is large for non-life undertakings and smaller for life undertakings making use of transitionals.

Profitability of the sector has shown some positive signs in the life business.

The net combined ratio has slightly deteriorated, averaging 98%. 25% of the market is either below 92% or above 103%.

Asset over liabilities remain stable averaging above 110%.

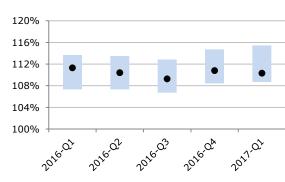
#### Net combined ratio - non-life



Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2017\,O1}$ =573)

In H2-2016 the average return on excess of assets over liabilities (used as a proxy of return on equity) was 7.4% and stable compared to the Q2 annualised figure. The lowest percentiles have improved.

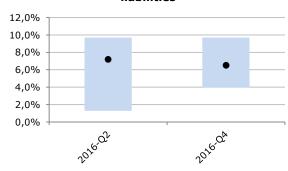
#### Assets over liabilities



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,O1}$ =85)

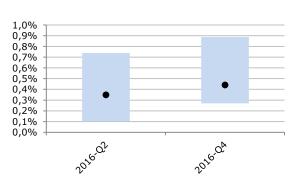
In the second half of 2016 the average return on assets is 0.6%. It has slightly improved compared to the Q2 annualised figure, as is the whole distribution.

## Return on excess of assets over liabilities



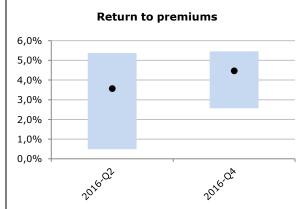
Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\ O1}$ =84)

#### Return on assets



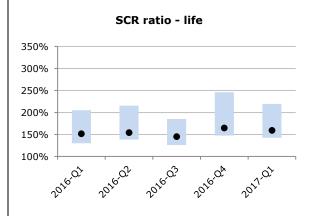
Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,O1}$ =84)

In the second half of 2016 the average return to premiums amounted to 4.5%.



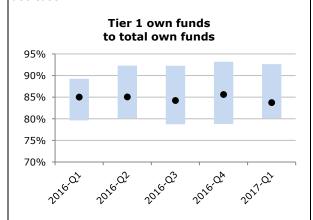
Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,Q1}{=}85$ )

Life solo firms SCR ratio decreased to 160% (-5 p.p.).



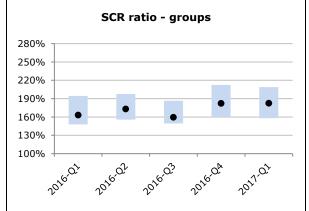
Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2017\,Q1}$ =480)

Own funds continue to have a high share of Tier 1 (on average around 87%). The time series shows a slight decrease.



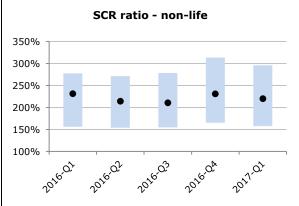
Note: Distribution of indicator (interquartile range, median). Source: QFG (N $_{2017\,Q1}\!=\!89)$ 

At group level the SCR ratio is stable averaging 198%.



Note: Distribution of indicator (interquartile range, median). Source: "Total" QFG ( $N_{2017\,Q1}$ =87)

Non-life solo firms SCR ratio decreased to 220% (-9 p.p.).



Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2017\ Q1}$ =1,021)

### **Interlinkages & imbalances**

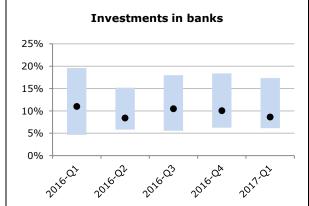


Level: medium

Trend: constant

The risk remains constant at a medium level. The investment exposures of undertakings to the different financial services industries are unchanged. The analysis shows a slight increase in the exposures towards reinsurers.

Insurers' exposure to banks has decreased. Overall, the risk score has seen a decrease from Q4 to Q1.

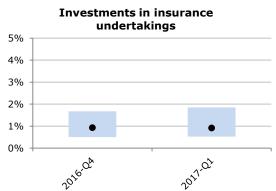


Note: Distribution of indicator (interquartile range, median). The methodology has been amended from the previous release and exposures applied retrospectively.

Source: QFG (N<sub>2017 Q1</sub>=83)

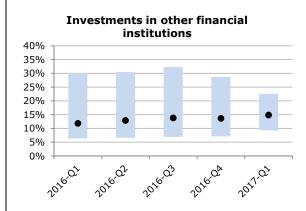
stable and low.

Exposure to other insurance companies remains



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\,Q1}{=}86$ )

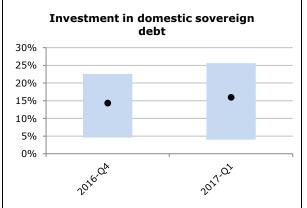
The exposure to other financial institutions remains stable.



Note: Distribution of indicator (interquartile range, median). The methodology has been amended from the previous release and exposures applied retrospectively.

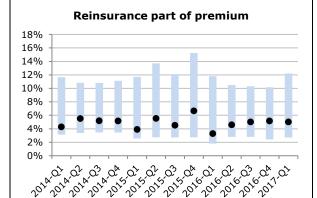
Source: QFG (N<sub>2017 Q1</sub>=88)

The exposure of insurers' to domestic sovereign bonds distribution has seen an overall increase leading to slightly heightened risk score.



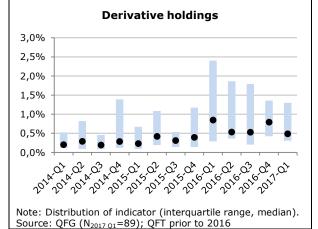
Note: Distribution of indicator (interquartile range, median). Source: QRS ( $N_{2017\,O1}$ =1,298)

The reinsurance part of premium has seen an increase in from Q4 to Q1.

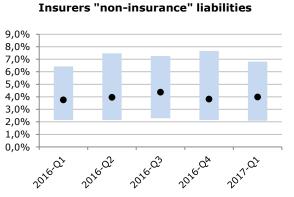


Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\ O1}$ =90); QFT prior to 2016

Insurers' derivative holdings slightly decreased from Q4 to Q1. The distribution itself has shifted to the left leading to a decrease in the overall risk score.



Non-insurance related liabilities against non-unit linked assets very slightly increased from Q4 to Q1. However the distribution remains stable as does the risk score



Note: Distribution of indicator (interquartile range, median). Source: QFG ( $N_{2017\ O1}$ =88)

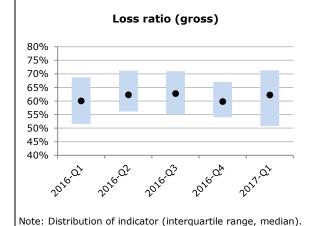
## Insurance (underwriting) risks

Level: low

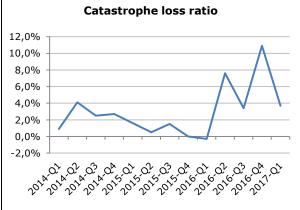
Trend: constant

Insurance risks remain constant with written premia showing a 5% increase both for life and non-life and a loss ratio that increased in particular for smaller undertakings. Catastrophe losses retracted after the peak in year-end and the ratio is almost stable.

In the first quarter of 2017 loss ratios reported a slight increase from the median company.



Catastrophe losses came down again after a volatile movement in the previous quarters.



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

### **Market perceptions**

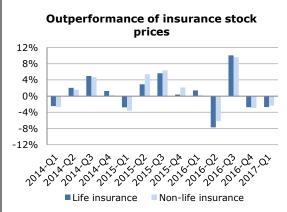
Source: QRS (N<sub>2017 Q1</sub>=1,005)



Level: medium
Trend: constant

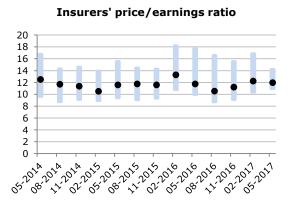
Market perception remains rather stable with the insurance stocks underperformance and insurers' external ratings unchanged. Slight improvements in price-to-earnings ratio, CDS spreads and insurers' rating outlooks are observed.

The underperformance of insurance stocks observed in Q4 2016 continued in Q1 2017.

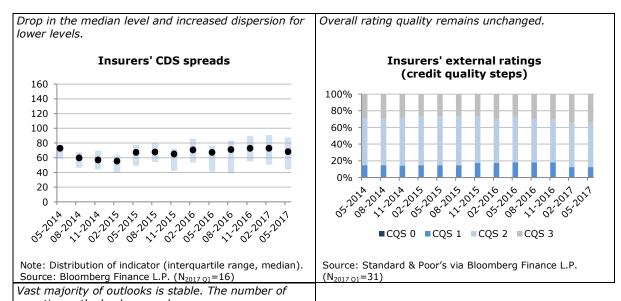


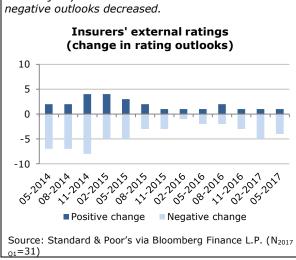
Note: Outperformance over 3-month periods vs Stoxx 600. Source: Bloomberg Finance L.P.

Price-to-earnings ratios have increased steadily over the last quarters for the median company.

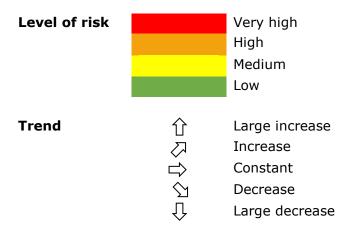


Note: Distribution of indicator (interquartile range, median). Source: Bloomberg Finance L.P. (N=40)





### **APPENDIX**



#### **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 signals the structural change in the series driven by the transition from Solvency I to Solvency II reporting.

#### EIOPA Risk Dashboard July 2017

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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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