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European Insurance

Pressures on Solvency II Ratios Will Drive Cautious Capital Management

Economic capital ratios are pressurised by low interest rates - European insurers' economic capital ratios[1] (computed with internal models) declined in 2014, partly as a result of decreasing interest rates. Given the further drop in interest rates in Q1 2015, as well as the high sensitivity of these ratios to interest rates changes, economic capital ratios will be further pressurised in 2015, even though this will be partly offset by retained earnings and improved financial markets.

Regulatory review of internal models is likely to result in Solvency II ratios at lower levels than the current reported economic capital ratios – Current reported economic capital ratios are based on internal models that insurers intend to use to compute regulatory Solvency II ratios. However, regulators have not yet approved these models. We note multiple modelling inconsistencies across European insurers, for example regarding assumptions on US equivalence, capital fungibility and capital charges for sovereign debt. In addition, for some insurers, the capital ratios computed with their internal model result in higher ratios than those derived by using the standard formula. Before they approve insurers' models, regulators may be willing to reduce some of these inconsistencies, either directly or indirectly, by requesting changes in calibrations or imposing capital add-ons. This process will likely result in regulatory Solvency II ratios at lower levels than currently reported economic ratios for many insurance groups.

As a result, we expect insurers to remain cautious in managing their capital, a credit positive – Because of decreasing interest rates and expected regulatory requests to adjust internal models in order to grant approval, many insurers are likely to report Solvency II ratios on 1 January 2016 which will be lower than the economic capital ratios that they reported at year-end 2014. As a result, we expect insurers to remain cautious in their capital management in 2015, for example by retaining earnings or limiting risks in their investments portfolio. This is credit positive. Some insurers could also decide to issue new debt to strengthen their solvency capital. Increasing debt levels would be credit negative, but we do not expect that insurers will resort massively to this solution.

Note: Under Solvency II, insurers will be allowed to benefit from transitional arrangements with a gradual phase-in from the Solvency I position. These transitional measures may inflate reported Solvency II ratios on 1 January 2016. However, not all insurers will apply them and therefore this report does not discuss the impact of the transitional arrangements on Solvency II ratios.

Economic capital ratios are pressurised by low interest rates

Economic capital ratios decreased in 2014

As illustrated in Exhibit 1 and in Appendix 1, European insurers' economic capital ratios[1] (computed with their internal models) declined in 2014. Although the reasons for the decrease vary by group, in most cases, lower interest rates were the main driver. Amongst the five largest insurance groups headquartered in the European Union (EU), this was particularly the case for Allianz SE (Aa3 insurance financial strength, stable), for which the decrease in interest rates and the increased volatility in interest rates had an impact of 22 percentage points in the fourth quarter alone, and for Assicurazioni Generali S.p.A. (Baa1 insurance financial strength, stable). Both groups have substantial exposure to German life insurance (which represents respectively 16% and 19% of the group's premiums) which is strongly interest-rate sensitive.[2]

Exhibit 1

Economic capital ratios reported by selected large insurance groups in the European Union decreased in 2014

Group	YE2013	YE2014	Comment
AXA	206%	201%	**21 percentage points negative impact from lower interest rates** partially offset by other positive impacts
Allianz SE	222% [1]	191%	2014 ratio included positive impacts from model changes; **negative impact of low interest rates was 22 percentage points in Q4 only** (flattening yield curve: about 5 points; parallel shift: 8 points; doubling volatility: 9 points)
Assicurazioni Generali S.p.A.	184%	151% [2]	lower interest rates led to reduced loss absorbing capacity with Germany being the biggest driver
Prudential plc	257%	218%	i**mpact from market movements ~ 8% of economic surplus** (difference between available capital and required capital)

[1] Allianz made changes in its model in 2014, which make the ratio not fully comparable with the 2014 ratio. Allianz also disclosed a restated ratio of 194% for year-end 2013, but this ratio does not include all the changes made in 2014.
[2] 157% on a pro-forma basis taking into account the sale of BSI.

Sources: companies annual reports and financial presentations, Moody's Investors Service

High sensitivities to interest rates and further decrease in interest rates place additional pressure on ratios in 2015

In addition, most groups reported high levels (and in many cases increasing levels) of sensitivity of their economic capital ratios to a change in interest rates at year-end 2014, as shown in Exhibit 2.

Exhibit 2

Sensitivity of economic capital ratios to a decrease in interest rates reported by selected insurance groups in the European Union

Group	Impact of a 100 bps decrease in interest rates		Impact of a 50 bps decrease in interest rates	
	2013	**2014**	**2013**	**2014**
AXA	-16 percentage points	-17 percentage points	n/a	n/a
Allianz SE	n/a	n/a	-20 percentage points [1]	-21 percentage points
Prudential plc	-32 percentage points	n/a	n/a	-23 percentage points
Munich Reinsurance Company	-37 percentage points	-37 percentage points	n/a	n/a
Sampo plc [2]	-14 percentage points [3]	-21 percentage points [3]	n/a	n/a

[1] Sensitivity from 222% (ratio before model changes implemented in 2014).
[2] Around 50% of Sampo's undiversified YE14 economic capital comes from its share of Nordea Bank.
[3] Sampo only disclosed the impact of a decrease in interest rates on their available capital; we assumed no change in required capital.

Source: companies annual reports and financial presentations, Moody's Investors Service

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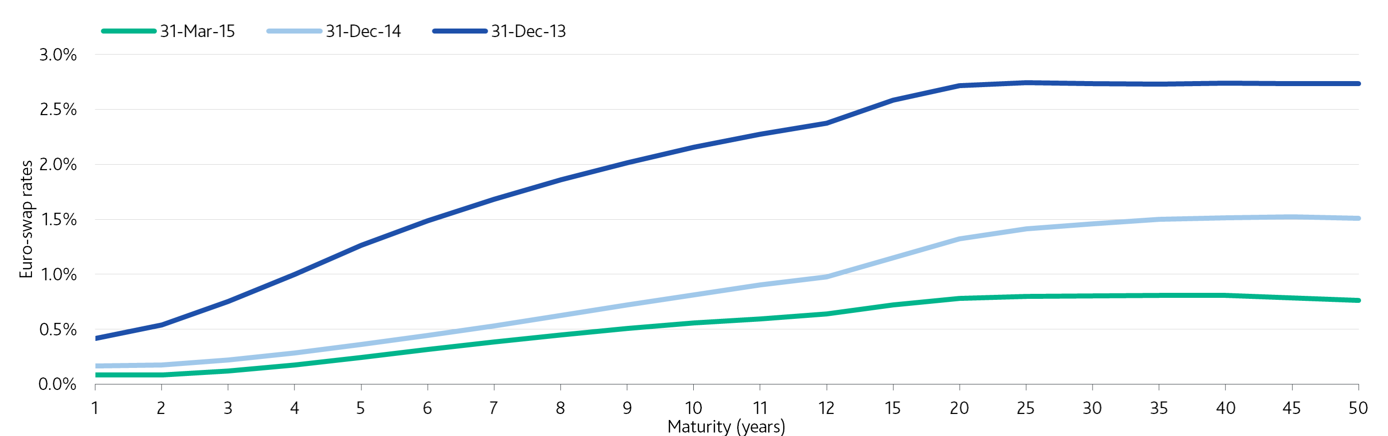
Given these higher sensitivities, and the further decrease in interest rates in Q1 2015 (see Exhibit 3), economic capital ratios will be further pressurised in 2015.

Exhibit 3
Interest rates continued to decrease in Q1 2015



Sources: Bloomberg, Moody's Investors Service

Positive impact of retained earnings and of quantitative easing policies will partly offset pressures from low interest rates

A decrease in economic capital ratios in itself is credit negative, as it shows a weakening of insurers' economic buffers to absorb adverse events. For most of the largest insurance groups, we expect however that the decline in economic capital ratios will remain moderate, despite the strong decrease in rates. Indeed, the negative impact of the decrease in rates will be offset by (1) the retained profits generated during the year and (2) the positive impact of quantitative easing policies on financial markets.

Annual profits (before dividend payments) typically represent between 10% and 25% of economic capital requirements for large insurance groups.[3]

The quantitative easing policy that the European Central Bank launched in Q1 is having positive impacts on equity markets which insurers benefit from given their exposure to equities investment (although only to a limited extent given the low weight of equities in European insurers' balance sheet at around 5% on average) and thanks to the increasing assets under management particularly related to the sale of unit-linked products. In addition, spreads are decreasing as a response to interest rate declines and increasing risk appetite in financial markets.This is increasing the value of fixed income securities and inflating insurers' assets, and ultimately has a positive impact on insurers' economic capital ratios which rely on market-consistent valuations.[4]

Regulatory review of internal models is likely to result in Solvency II ratios lower than the current reported economic ratios

Economic capital ratios are not Solvency II ratios

Economic capital ratios that European insurers have reported to date are computed with internal models. These models are based on the same principles as Solvency II (namely a market-consistent approach and capital requirements defined, in principle, as the capital needed to cover losses with a probability of 99.5%), but regulators need to approve these models before insurers are allowed to use them to compute Solvency II ratios. None of these models have been approved at this stage. Insurers can apply for internal models approval since 1 April 2015 and regulators will have six months to take their decision. We expect that no model will be approved before Q4.

Multiple inconsistencies across European insurers' internal models

There is no prescribed methodology to build an internal model, and although insurers and regulators have exchanged views and best practices,[5] many modelling inconsistencies remain.

The main inconsistencies relate to:

» assumptions regarding the equivalence of non-EU countries (notably the US);

» capital fungibility assumptions;

» capital charges for sovereign debt.

The Solvency II regime allows insurance groups operating in non-EU countries to use local capital requirements and available capital in these countries in the computation of group solvency ratios, provided that these countries are recognised as "equivalent". The equivalence of the US regulatory regime has not yet been assessed, but European insurers are allowed to consider the US as equivalent for a period of at least 10 years. Most insurance groups with significant operations in the US, namely Aegon N.V. (A3 senior debt, stable), Allianz SE (Aa3 senior debt, stable), AXA (A2 senior debt, stable) and Prudential plc (A2 senior debt, stable), do consider the US as equivalent in their internal model. However, all these groups use different assumptions:

» Allianz SE considers that a 200% US Authorized Control Level RBC (Risk Based Capital, which is the US regulatory capital requirement) ratio, i.e. a 100% US Company Action Level RBC ratio, is equivalent to a 100% Solvency II ratio

» Aegon N.V. considers that a 200% US Company Action Level RBC is equivalent to a 100% Solvency II ratio;

» Prudential plc considers that a 250% US Company Action Level RBC ratio is equivalent to 100% Solvency II;

» AXA assumes a 300% RBC required capital level (Company Action Level) in applying equivalence for its US subsidiary AXA Equitable.

Similarly, we note that some insurance groups (e.g., Old Mutual plc rated Baa3 for senior debt, stable outlook) compute their economic capital ratio as if most of the capital was fungible between entities, while some of them do include more fungibility constraints (e.g., Allianz SE).

Capital charges for sovereign debt also differ. While we understand that some groups (e.g., Allianz SE, Assicurazioni Generali S.p.A.) are including capital charges for cross-border sovereign exposures, some companies have thus far followed the standard formula approach in which no capital charges for European sovereign debts are included (e.g., AXA, although the group indicated that capital charges related to sovereign spread risk would be included in its model in the future).

European insurance groups also use varying aggregation structures and correlation assumptions which ultimately have an impact on the final output of the model.

Regulators likely to impose some form of capital add-on to the internal economic capital models

These modelling inconsistencies reduce the comparability of economic capital ratios disclosed by European insurers, and, we believe, will be a key focus of regulators when approving internal economic capital models in 2015. Hence, on 14 April 2015, the European Insurance and Occupational Pensions Authority (EIOPA) published an opinion addressed to European national supervisory authorities in order to recommend its preferred options regarding some areas where it noticed different approaches and inconsistent modelling of some risks.

While we do not rule out that some of these inconsistencies may remain after 1 January 2016, when Solvency II comes into force, even if capital models are approved, we think that regulators will strive to minimise the impacts of these inconsistencies, either directly or indirectly. Hence, we expect that regulators are likely to ask for some changes in calibrations or ultimately for some capital add-ons. Regulators will also use the results of the standard formula as a benchmark in their review, and we understand that in many cases (if not all cases), internal models generate a higher ratio than the standard formula.

Local regulators may also impose capital add-ons in specific subisidiaries, which would limit capital fungibility and reduce the overall group (i.e. consolidated) solvency ratio.[6]

Therefore, we believe that the regulatory review and approval process will likely result in regulatory solvency ratios which will be lower than what European insurers currently report in many instances.

Insurers to remain cautious because of pressure on Solvency II ratios

We expect Solvency II ratios at the start of 2016 to be lower than year-end 2014 economic capital ratios published by European insurers

As explained in more details in the previous sections of this report, we expect that many European insurers will report Solvency II ratios on 1 January 2016 which will be lower than the economic capital ratios they reported at year-end 2014, for two main reasons:

1. the decrease in interest rates during the first quarter of 2015 and the higher sensitivity of economic ratios to changes in interest rates pressurise economic capital ratios;

2. economic ratios are the output of insurers' internal capital models and regulators are likely to ask for some form of capital add-on when they approve internal models.

As a result, we expect insurers to remain cautious in capital management

Because of these pressures on regulatory solvency ratios, some insurers have recently increased their capital (e.g., Delta Lloyd N.V., unrated) or announced their intention to strengthen their capital (e.g., SRLEV N.V., Baa3 insurance financial strength rating, under review with direction uncertain), which is credit positive. Insurance groups which will feel the higher pressure on their Solvency II ratios will be those with the highest interest rate risk exposure, so typically some life insurers operating in Germany, in the Netherlands or in Norway.[7]

The majority of insurers rated by Moody's hold capital buffers well in excess of Solvency II capital requirements and will therefore not be forced to increase capital. Nonetheless, we believe that the uncertainties around the ultimate level of ratio that insurers will be able to report when the Solvency II regime will enter into force (1 January 2016), will lead all insurers to remain cautious in capital management in 2015, which is also credit positive.

For example, while many European insurance groups, including Allianz, AXA and Generali, recently decided to increase dividend pay-out ratios, we do not expect any widespread movement of extraordinary returns to shareholders in 2015. On the contrary, we expect most European insurers to preserve their capital until their regulatory position becomes more certain.

In addition, although low interest rates are affecting insurers' investment returns and profits, we believe that insurers will not be in a position to substantially modify their asset allocation in 2015 and increase asset risk to boost investment yields. Indeed, under the Solvency II regime, insurers will be asked to hold risk-sensitive capital charges for any asset they hold, and therefore an increase in asset risk would further lower regulatory solvency ratios. We note however that calibrations of the Solvency II regime are not finalised yet. Hence, EIOPA is still working on potential changes related to infrastructure assets, and more broadly, European policymakers are looking for solutions to incentivise insurers to invest in long-term "real" assets. If the Solvency II capital charges for some asset classes were to be reduced, insurers' ability to take more asset risk would be higher, a credit negative.

Increasing leverage could also be used to strengthen solvency capital

Some European insurers could issue more debt to strengthen their regulatory capital position. Indeed, under Solvency II, up to 50% of the Solvency Capital Requirement (SCR)[8] and 20% of the Minimum Capital Requirement (MCR)[9] can be covered by subordinated debt. At year-end 2013, subordinated debt represented less than 30% of European insurer's Solvency II capital requirement. Hence, certain players (e.g., Kommunal Landspensjonskasse, rated A2 for insurance financial strength rating, negative outlook) have publicly commented on their wish to strengthen capital by issuing subordinated debt.

However, many European insurers have high financial leverage (relative to their ratings) and low earnings coverage (relative to their ratings), and most of them have been or are de-leveraging their balance sheet. This is why we do not expect that European insurers will massively resort to leverage to strengthen their regulatory capital and we believe this solution will mostly be used by insurers with low

financial leverage (relative to their ratings). For issuers with already high financial leverage or low earnings coverage, we would view higher debt levels as credit negative.

Appendix 1: Economic capital model disclosure for selected Moody's-rated insurance groups

Exhibit 4

Domicile	Group	2013 economic capital ratio	2014 economic capital ratio	2014 Solvency II standard formula	Seeking regulators' approval for internal model
UK	Aviva plc	182%	178%	n/a	Yes
UK	Direct Line Insurance Group plc	149%	148%	n/a	Yes [1]
UK	Legal & General Group plc	251%	229%	n/a	Yes [2]
UK	Old Mutual pl c	216%	226%	n/a	No [3]
UK	Prudential plc	257%	218%	n/a	Yes [4]
UK	RSA Insurance Group plc	~130%	~130%	n/a	Yes
UK	Standard Life plc	n/a	n/a	n/a	Yes
Netherlands	Aegon N.V.	range of 150%-200%	range of 150%-200%	n/a	Yes
Netherlands	NN Group N.V.	160%	n/a	Within a range around 200%	Yes [5]
Italy	Assicurazioni Generali S.p.A.	184%	151% [6]	n/a	Yes
Germany	Allianz SE	222% [7]	191%	n/a	Yes
Germany	Munich Reinsurance Company	268%	242%	n/a	Yes
France	AXA	206%	201%	n/a	Yes
France	SCOR SE	231%	Marginally above 220%	n/a	Yes
Finland	Sampo plc [8]	176%	165%	n/a	Yes

Notes:
[1] Direct Line expects to adopt the standard formula for at least the first six months of 2016.
[2] L&G considers that Solvency II has elements which are inconsistent with its definition of economic capital, so there will be differences between the model used to calculate regulatory solvency requirements and the economic capital model.
[3] Old Mutual intends to apply the standard formula approach for the purpose of Solvency II because it considers it is more relevant.
[4] Prudential expects the Solvency II ratio to be lower than its economic capital ratio.
[5] Partial internal model.
[6] 157% on a pro-forma basis taking into account the sale of BSI.
[7] Allianz made changes in its model in 2014, which make the ratio not fully comparable with the 2014 ratio. Allianz also disclosed a restated ratio of 194% for year-end 2013, but this ratio does not include all the changes made in 2014.
[8] Around 50% of Sampo's undiversified YE14 economic capital comes from its share of Nordea Bank.
This table does not include credit insurers, mortgage insurers, financial guarantors, companies with holding companies outside of the European Union and Lloyd's syndicates.

Sources: companies annual reports and financial presentations

Endnotes

1 Ratio of available economic capital over economic capital requirements. Economic capital requirements are defined as the capital needed to cover overall business risks and losses with a probability of 99.5%.

2 Please refer to « German Life Insurance Industry Faces Losses If Interest Rates Stay Low », Moody's Special Comment, October 2013.

3 Based on disclosures from Allianz, AXA, Legal & General, Prudential, RSA.

4 This positive impact will however be partly offset by some increase in capital requirements. Indeed, a decrease in spreads increases insurers' sensitivity to interest rate changes and spread changes.

5 Insurers exchanged views within industry bodies such as the CRO Forum. Regulators exchanged views through the European Insurance and Occupational Pensions Authority and colleges of supervisors. Insurers and regulators had multiple bilateral discussions during the internal model pre-application phase which started in 2014 and ended on 31 March 2015.

6 Only fungible capital in excess of local capital requirements can be accounted for eligible capital on a consolidated basis.

7 Please refer to « Global Insurance Themes : Low Interest Rates are Credit Negative for Insurers Globally, but Risks Vary by Country », Moody's Sector In-Depth, March 2015.

8 The highest of the two levels of capital requirements imposed in the Solvency II regime.

9 The lowest of the two levels of capital requirements imposed in the Solvency II regime.

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