Willis

MARKET SECURITY

IMPACT OF THE EUROZONE DEBT CRISIS ON INSURER SOLVENCY

December 14, 2011

Impact of the Eurozone Debt Crisis on Insurer Solvency

Escalation of the European sovereign credit crisis into the core of the Eurozone poses numerous threats, implicitly and explicitly, to insurer security. In recent years, the sector has proven itself largely resilient to the exceptional stress experienced within the financial system throughout the previous credit crisis. Although the impact of the Euro debt crisis will inevitably impact insurer solvency to some extent, the consensus from market commentators, including the rating agencies, is that insurer financial strength will remain fundamentally resilient, although as a result of recent sovereign actions on December 9, Standard and Poor's ("S&P") has placed 15 European insurance groups on CreditWatch Negative. Through this paper, Willis considers and discusses the key impacts on insurer solvency, acknowledging the currently indeterminate impact of contagion risk as the Euro debt crisis continues to evolve almost on a daily basis.

Willis Market Security is closely monitoring the Eurozone situation as well as the implications on individual carrier groups. Willis Market Security provides the information contained in this report in the context of client assessment of insurance carriers only and such information should not be construed as investment advice.

Recent Developments

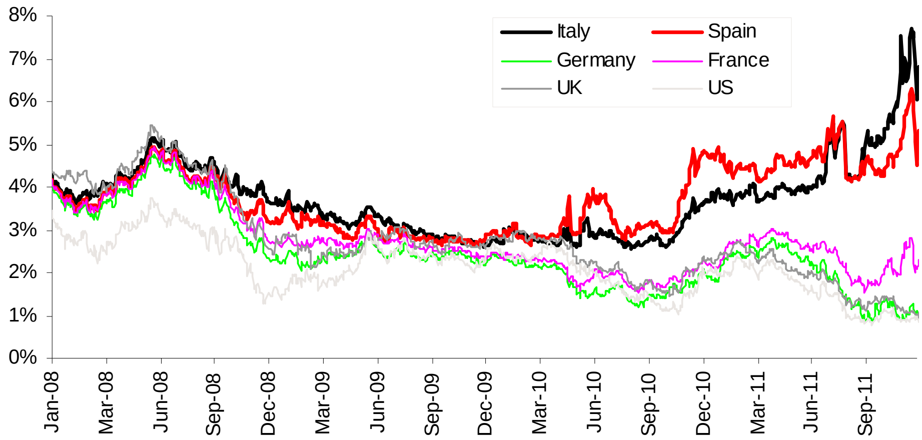
In October 2011, a summit of European leaders produced plans to restore confidence in the financial markets. The solution comprised four key components, with proposed deals for:

i) a second bail-out of Greece (EUR 130 billion);
ii) a 50% 'haircut' on Greek government bonds;
iii) a EUR 106 billion recapitalisation of the EU banking sector;
iv) a plan to leverage the European Financial Stability Fund to c. EUR 1 trillion.

However, while plans to implement each component are discussed and progressed, markets move on. As the Greek parliament prepares to vote on the austerity measures to secure the bailout deal, the spotlight has moved from the periphery to the core of the Eurozone. Bond yields demanded by investors remain high for Spain – whose new government assumes power on December 19 – and for Italy, which has EUR 30 billion of sovereign debt to refinance at the end of January. In total, Italy and Spain have EUR 300 billion and EUR 120 billion of issuance to fund next year (EUR 930 billion in aggregate 2012-2014). Of all EU countries, Italy is the largest issuer of sovereign debt, with around EUR 2 trillion outstanding.

Importantly, with markets fearing contagion into the core of the Eurozone, and awaiting decisive action from policymakers, there has been continuing reluctance on the part of funding markets to invest in Eurozone sovereign debt. Yields demanded on French sovereign debt have increased during the fourth quarter – albeit far from the levels faced by peripheral sovereigns of Greece, Ireland, Italy, Portugal and Spain "GIIPS", (see Chart 1):

Chart 1 – Yields on Five Year Government Bonds



After the October 2011 summit, commentators were speculating on the ability of policymakers to respond to the crisis ahead of a potential shock or series of shocks to the financial system, including the potential default – orderly or otherwise – of one or more Eurozone sovereigns and potential contagion within the banking system.

A key summit of European leaders took place on December 8 and 9, with France and Germany united in their determination to do everything necessary to secure stability within the Eurozone. The 17 members of the Eurozone reached a deal for a new inter-governmental treaty to increase fiscal integration, including proposals and sanctions relating to fiscal discipline. A key measure agreed was for EU countries to provide up to EUR 200 billion to the IMF, in order to tackle Eurozone debt issues.

The credit ratings of all sovereigns throughout the Eurozone are currently at risk of negative action in the near term, partly as a result of continued market volatility. On December 5, 2011 S&P placed its ratings on all Eurozone sovereigns on CreditWatch with Negative Implication (other than Greece which was already rated at CC, a level reflecting the potential for default in the near term). The agency cites that the ratings of the AAA countries are under threat of up to one notch of downgrade, except for France which faces a possibility of up to two notches of downgrade. Spain (AA-), Italy (A), Ireland (BBB+) and Portugal (BBB-) also face the possibility of a downgrade, by up to two notches. S&P has expressed its belief that systemic stress in the Eurozone has risen in recent weeks and reached such a level that a review of all Eurozone sovereign ratings is warranted. For further details on the current sovereign ratings of the key Eurozone countries please see Appendix 2.

The full extent of S&P's sovereign rating review may yet have further impact on other sectors; for example the ratings of certain banks within the Euro area may be at risk, with recent access to term funding markets restricted for many.

Insurers are different from Banks

In general – and particularly within the non-life sector – insurers cover their portfolio of underwriting reserves with highly rated investment assets that are broadly matched to their liabilities in terms of duration and currency. Highly rated, longer duration securities issued by non-financial corporates are of limited volume. Eurozone insurers are thus significant investors in Eurozone sovereign debt and in Eurozone financial sector debt, and therefore potentially have considerable exposure to the debt crisis. However, their exposure differs from banks in many key respects:

- Insurers – particularly non-life – operate with considerably less investment leverage than banks;
- A large proportion of composite and life insurers' investment risk is assumed via contracts in which their own customers (for life assurance) partake in the risk, although there are limitations on the extent of this policyholder participation;
- Much of the investment exposure of insurers to sovereign and bank debt is already marked to market value, and not carried at amortised cost, which may be the case within the banking books of banks;
- Insurers do not generally have the degree of operational debt with which banks operate in order to fund specific books of business or asset portfolios; insurers are considerably less exposed to short-term funding markets than are banks;
- Liquidity constraints tend to be lower for insurers as they are less frequently required to realise temporary unrealised loss positions on bonds;
- Insurer credit ratings rarely factor in 'systemic importance'; bank credit ratings frequently incorporate multi-notch uplift for anticipated support from the sovereign. This uplift is increasingly being re-evaluated at present. 'Standalone' ratings of banks without the uplift are typically lower than insurers.

As a result, insurance is regarded as a more 'defensive' sector than banking and less closely aligned than banks to sovereign debt.

Sovereign Credit Risk

Insurers are nevertheless potentially exposed to the Eurozone credit issues in a number of ways, including but not limited to:

- Direct exposures through investments in sovereign debt;
- Indirect exposures through investments in bank debt and other securities, including equities and bank deposits;
- Operating exposure in the sovereign territories;
- Strategic and/or ownership linkages with banking organisations or affiliates.

Other potential risks centre around one or more sovereigns exiting the Euro, with such a situation inevitably entailing a raft of potential issues, least of which may include:

- Uncertainty surrounding ongoing validity of existing contracts between policyholders and insurers;
- 'Redenomination' risk and its associated impact on the currency valuations of the exiting sovereign/s and remaining Euro members;
- Investor sentiment towards Eurozone domiciled bonds, equities and other assets, held by insurers.

Insurers' earnings are already pressured by the persisting soft market environment, catastrophes, ultra-low interest rates and mounting inflation levels. Any form of breakup or segregation of the Euro could potentially place earnings under exacerbated pressure, both on the top line as well as through investment returns.

Investment Exposures

As insurers are recognised to hold significant investments in sovereign debt it is worth considering more fully the associated risks.

The amount of Spanish and Italian sovereign debt within the sector's investment portfolios greatly exceeds that of Greece, Ireland and Portugal. The rating agencies have recently commented that the latter three represent only around 1% of the investment portfolios of the rated European insurers and that further weakness in these three would not, of itself, be likely to have material widespread impact on insurer credit ratings. However, Spanish and in particular Italian exposure represents a different level of risk, both directly and through risk of contagion. Insurer holdings of Spanish and Italian sovereign debt are likely to be of the order of 5 times greater than holdings of Greece, Ireland and Portugal combined. S&P advises that its rated insurers in Europe have EUR 60 billion of holdings in the sovereign debt of Greece, Ireland and Portugal compared to EUR 400 billion in Italian and Spanish sovereign debt. Willis' summary of key insurance groups' exposures can be found in Appendix 1.

Recent rating agency commentary suggests that aggregate investments in GIIPS sovereign debt held by rated European insurers vary from around 50% to 60% of shareholders' equity(1). Applying 'haircuts' directly to this level of gross exposure would give rise to impacts that represent a very significant proportion of the sector's capital base. However some key points must be considered when gross exposure to shareholders' equity is reported:

- The large majority of investment exposure resides within the business of life insurers. These insurers hold the large majority of the sector's total investments and, due to the nature of their business model, are more highly leveraged (investments divided by shareholders' equity) than the non-life sector;
- The large majority of life insurance assets are funded by contracts in which the life insurance policyholder bears the majority of the investment risks and rewards. Note, however, that policyholder participation in losses are typically at the discretion of the insurer, subject to various key constraints including guarantees of minimum returns to policyholders;
- Insurers may also be able to offset an element of the investment loss against future tax liabilities, thereby reducing the impact on a net-of-policyholder participation basis, where overall net profits allow.

In summary, the capital base of insurers bears the net-of-tax investment exposure from non-life and reinsurance business and a residual participation from life insurance investments. Recent analysis by Moody's of Greek, Portuguese and Irish sovereign exposure indicates that – after policyholder participation and tax - the average net impact borne by the insurer would be around 30% of the gross impact. Therefore significant write-downs of 50% or more on those bonds could be applied without fundamentally impacting the capital strength of the sector.

Regarding Italian and Spanish sovereign exposures, the relevant life policyholders may also theoretically bear the majority of the risk and rewards; however, in the event of severe haircuts for these two sovereigns, the practical ability of an insurer to share all of the loss with policyholders may be more restricted. The weightings that these sovereigns represent in portfolios may mean that guaranteed minimum returns granted to policyholders may require greater proportionate loss absorption by insurers, particularly if there is material contagion effects into other exposures – for example into bank debt, bank deposits and other asset classes. This exposure may vary significantly across insurance groups depending on their individual portfolios and policyholder guarantees, as well as on local law and regulations which may vary across Europe. Inevitably, those with investment portfolios concentrated in GIIPS securities are more likely to have higher potential exposure in this regard.

The potential for loss absorption by policyholders is significant to life and composite insurers, but key factors such as the profile of minimum rate guarantees has not always been publicly disclosed. Moody's has produced a very useful summary of typical levels of guarantee across Europe and the typical rate at which life policyholders share in the investment risk of participating contracts across Europe, as shown in Appendix 3.

It should also be noted that relevant disclosure within financial statements has been of varying quality, completeness and often reported using different accounting and valuation bases. Comparability of insurer exposure across the sector is difficult, if not impossible, especially at operating company level, where public disclosure is often less complete and usually only of annual frequency. At group consolidated level, publicly-listed companies typically provide greater and more frequent disclosure. Analysis of exposure based on publicly available information is therefore limited.

However, with the ever growing anxiety and press attention surrounding insurers' exposure to the peripheral Eurozone sovereigns, disclosure at a group consolidated level is becoming increasingly transparent and more readily available. Willis has summarised a range of key insurance groups' exposures to GIIPS sovereign bonds in Appendix 1. It is, however, worth noting that this disclosure relates to insurers' direct exposure only and does not factor in secondary or indirect impact, for example exposure via European equities or other assets. Furthermore, the varying reporting bases utilised [i.e. Gross, Net, With or Without Policyholder Participation for life assurance elements] may make direct comparison between groups inaccurate and flawed.

(1) Sources: Standard & Poor's, Nov 4, 2011: "European Insurance Credit Trends: Third-Quarter 2011 Market Movements Take their Toll On Insurers' Capital Adequacy"; Moody's, October 20, 2011: "European Insurers: EU sovereign pressures have limited impact on credit profiles so far"; A.M. Best, September 9, 2011: "European Investment Stress Test Flags Sovereign Debt Risk".

Rating Agency Responses

Each of the rating agencies has redefined and applied multiple stress scenarios to their rated insurers. This stress is applied to detailed information provided confidentially by insurers to the agencies which is not necessarily in the public domain. The scenarios applied allow for potential impacts not only on the investment portfolio but also on the underwriting portfolio and on liquidity and debt funding. The scenario analysis typically identifies varying degrees of potential stress within an insurer and this facilitates a tiered approach by the agencies for further investigation and or monitoring.

It should also be noted that certain insurance groups may be considered sufficiently diversified by the rating agencies not to be constrained by the sovereign rating of their home country, as was the case with certain Irish domiciled insurers following rating actions on the sovereign during 2010.

On December 9, S&P placed the ratings of 15 European insurance groups (including insurer financial strength and counterparty credit ratings) on CreditWatch Negative. S&P have articulated that these actions are a consequence of their December 5, sovereign actions in which 15 of the 17 Eurozone member countries were placed on CreditWatch with Negative implications. S&P state that; "depending on the outcome of our review of the ratings on the Eurozone member governments, the long-term ratings on these insurers could be lowered by one or two notches..." S&P expect to resolve these CreditWatch actions within four weeks of the resolution of the CreditWatch placements on the relevant sovereigns. A full list of the insurance groups placed on CreditWatch Negative, as well as an extract from S&P's press release, is contained in Appendix 4.

On December 13, Fitch took various rating actions on Spanish and Italian insurers after undertaking a series of stress tests in Italy and Spain. The rating actions "reflect the degree of sensitivity of the insurers' capital adequacy to stress test assumptions over the credit quality of their holdings of Italian and Spanish government and bank debt." Fitch concluded that "some insurers' large investment concentrations in sovereign debt justify/require distinction relative to similarly rated peers. The potential for these concentrations to result in poor capital performance under extreme scenarios is a key driver of the rating actions." A full list of the insurance groups affected, as well as an extract from Fitch's press release, is contained in Appendix 5.

Key observations from the rating agencies relating to the insurance sector are noted below, although some were published prior to the most recent volatility:

Standard and Poor's - October 20, 2011

We view sovereign risk as more likely to erode profits than present a capital threat to the European insurance industry... Although some of Europe's larger insurers have significant holdings of Greek, Irish, and Portuguese sovereign debt, aggregate exposure has materially reduced over the past year. Furthermore, most exposure resides within life insurance operations, where the effect of any losses may be shared with policyholders... Because of the potential for systemic/contagion risks, the high degree of interconnectedness between banks and insurers causes us some concern. Insurers often have material credit exposures to banks through their bond portfolios, bank deposits, and certain derivative contracts. They may also depend on banks for credit lines and a bank may be an insurer's key distribution or joint venture partner... We have seen evidence of insurers managing down their exposures to peripheral sovereigns and higher-risk assets over recent years. Nevertheless, we anticipate that insurers will report further realized investment losses and impairments in their third-quarter results as a result of market conditions and take further actions to reduce their exposure.

Insurers in Italy, Spain and Portugal, or with significant operations in these countries, or with exposures to banks in these countries, or with large equity exposures including those through U.S. variable annuity life operations, would be most affected.

Moody's - October 20, 2011

European insurers: EU sovereign pressures have limited impact on credit profiles so far... Our analysis indicates that most rated European insurers can well sustain a further credit weakening of the Irish and Portuguese sovereigns and higher than expected losses on Greek sovereign debt. The credit profiles and ratings of many European insurers would, however, be affected in a severe stress scenario of the EU sovereign debt crisis widening to include large countries, such as Spain and Italy...

Even if deterioration in Greece, Ireland and Portugal was coupled with modest credit weakening of other peripheral EU sovereigns and all European banks, the impact on most insurers would remain limited. However, many European insurers would be vulnerable in a severe stress scenario of a wider sovereign crisis implying significant credit deterioration of Spain and Italy. The consequences of such a scenario would differ across insurers, reflecting varying levels of exposure to these countries. (1) Insurance groups domiciled in Spain and Italy that generate considerable revenues from these markets would be most vulnerable and we would expect their ratings to follow closely those of their sovereigns; (2) a second set of insurance groups with some operating *and/or investment exposures to these countries would also be meaningfully impacted; (3) a third group of insurers with no or low investment and operating exposures would feel little if any direct impact.*

AM Best - November 21, 2011

In September 2011, AM Best stress tested the balance sheet of companies against their potential exposure to Eurozone debt and factored in the potential for contagion by applying a haircut to the equities, real estate and corporate bonds held by insurers. Since then there has been a marked deterioration in the economic situation within the Eurozone and a material increase in risk associated with Eurozone sovereign debt and financial institutions operating within this region. As a result, AM Best has been evaluating its portfolio of insurers and has based its investment risk sensitivity on third quarter 2011 financial data… AM Best is currently evaluating companies on a case-by-case basis. There is no prescribed rating action that fits all, as each company has its own profile, performance metrics and level of risk adjusted capital that supports its current ratings.

All the major international rating agencies have issued more recent commentaries focusing on wider Eurozone sovereign issues, which do not directly discuss the insurance sector.

Summary

Whilst Eurozone debt issues remain fluid, the impact on the solvency and financial security of insurance markets also remain uncertain. Although the rating agencies suggest that the insurance sector may feel only marginal impacts associated with orderly defaults of Greece, Ireland and Portugal, the risks associated with Spanish and Italian defaults are significantly greater and their consequences more unpredictable. Exposure to vulnerable assets and the possibility of contagion is certainly a key concern.

The insurance sector is less directly and immediately impacted by Eurozone sovereign developments than the banking sector. Individual insurers' credit profiles remain of fundamental consideration, although in a number of cases public disclosure of sufficient granularity is limited and inconsistent. The extent of exposure across the insurance sector varies considerably from one insurer to another and the exposure of each will depend on a number of key factors, including – but not restricted to - leverage and diversification of underwriting and investment portfolios.

Within the major European insurance groups, Greece, Ireland and Portugal typically represent only minor parts of their business profiles, however those with operations and investments weighted towards Spain and Italy face greater levels of uncertainty, although at present Spain and Italy's Sovereigns retain high ratings from all the major rating agencies. U.S. insurers typically hold relatively less exposure to GIIPS sovereign debt, but may still have contagion exposure in a scenario of more extreme financial stress.

Sovereign issues within the Eurozone and the resulting implications for insurers continue to remain under significant scrutiny by the major rating agencies. S&P's recent actions, in which 15 insurance groups were placed on CreditWatch Negative as a consequence of sovereign actions, demonstrates the close monitoring of sovereign issues by the rating agencies.

Impacts on European insurers from contagion and systemic risk associated with extreme scenarios, such as multiple sovereign and bank defaults, or even the complete break-up of the Euro, remain extremely difficult to predict but potentially severe.

Appendix 1

Summary of Key Insurance Groups Exposures to GIIPS

Major Insurance Groups - Publicly Reported Direct Exposures to Peripheral Sovereigns

Group Consolidated Data (Millions)	Ccy	Shareholders' Equity Sep 30, 2011	Shareholders' Equity Jun 30, 2011	Basis	Greece	Ireland	Portugal	Spain	Italy	Total GIIPS	GIIPS as % of Sep 30 SHE (2)	Total Sovereign Exposure	GIIPS as % of Total Sov. Exposure	Additional Notes
					Direct Sovereign Exposure - Government Bonds (As reported at Sep 30, 2011) (1)									
AIG (4)	USD	86,031	92,681	Gross & Net	0	0	7	294	114	415	0.5%	25,697	1.6%	Gross and Net exposures are the same.
Ace (3)	USD	23,750	24,113	Gross	See Note	See Note	See Note	See Note	See Note	< 165	< 0.7%	5,585	< 3.0%	As at Jun 30, 2011 no breakdown available. It can however be deduced that the maximum combined exposure to the GIIPS sovereigns does not exceed USD 165m.
Allianz	EUR	43,564	42,615	Gross	497	486	629	5,034	25,608	32,254	74.0%	144,725	22.3%	Greek government bonds written down to 38.9% of nominal value. Italian government bonds are stated at market value and c.8% below cost.
Aviva (2)	GBP	-	15,861	Gross	100	600	200	1,100	7,100	9,100	57.4%	-	-	Net of non-controlling interests.
Aviva (2)	GBP	-	15,861	Participating Fund Assets	100	400	200	700	6,300	7,700	48.5%	-	-	Net of non-controlling interests.
Aviva (2)	GBP	-	15,861	Shareholder Assets	0	200	0	400	800	1,400	8.8%	-	-	Net of non-controlling interests.
Axa (2)(3)	EUR	-	46,416	Gross	900	900	1,500	10,200	17,100	30,600	65.9%	187,000	16.4%	Market value basis.
Axa (2)(3)	EUR	-	46,416	Net	300	300	400	4,100	5,300	10,400	22.4%	-	-	Market value basis.
Generali	EUR	15,846	17,231	Gross	1,143	1,563	1,823	5,403	46,235	56,168	354.5%	125,569	44.7%	Fair value basis.
Generali	EUR	15,846	17,231	Net	200	300	500	2,200	-	-	-	-	-	Net of policyholder participation and taxes, on going concern basis. No disclosure of Italian Sovereign exposure on a net basis.
Groupama (2)(3)	EUR	-	4,289	Gross	2,075	55	755	2,934	7,228	13,047	304.2%	-	-	Fair value basis.
Groupama (2)(3)	EUR	-	4,289	Net	540	13	217	671	1,542	2,983	69.6%	-	-	Fair value basis.
Hannover Re	EUR	4,699	4,325	Gross	0	38	19	319	25	402	8.5%	5,266	7.6%	Fair value basis.
Mapfre (3)	EUR	7,062	6,837	Gross	225	354	399	7,373	835	9,186	130.1%	12,165	75.5%	Market value basis.
Munich Re	EUR	21,972	20,058	Gross	582	1,747	416	1,913	3,577	8,236	37.5%	83,190	9.9%	Greek government bonds have been written down by EUR 933m to the market value as at Sep 30, 2011; EUR 230m of that figure is attributable to the third quarter.
Munich Re	EUR	21,972	20,058	Without P/H participation (5)	83	499	0	666	2,413	3,660	16.7%	-	-	-
Munich Re	EUR	21,972	20,058	With P/H participation (5)	499	1,248	416	1,248	1,165	4,575	20.8%	-	-	-
QBE (2)(3)	USD	-	11,209	Net	0	0	0	0	0	0	0.0%	-	-	As at Jun 30, 2011 QBE has no exposure to GIIPS.
Scor (3)	EUR	4,217	4,002	Net	0	0	0	0	0	0	0.0%	-	-	As at Sep 30, 2011 Scor has no exposure to GIIPS.
Swiss Re (3)	USD	27,772	24,818	Net	0	5	32	34	3	74	0.3%	58,454	0.1%	-
Travelers	USD	25,172	25,008	Net	0	0	0	8	0	8	0.03%	-	-	-
XL Capital	USD	9,940	9,626	Gross	0	0	0	1	27	28	0.3%	-	-	-
Zurich	USD	31,874	31,153	Gross	0	500	500	5,000	5,700	11,700	36.7%	61,000	19.2%	-

Notes:

(1) All figures are disclosed on a group consolidated basis and are stated as reported in denoted currencies, millions. Exposures may not be directly comparable due to inconsistencies in reporting basis (i.e. Gross or Net) and accounting value basis (i.e. Market Value, Fair Value, etc).
(2) Where Shareholders' Equity as at Sep 30, 2011 is not available Jun 30, 2011 has been utilised in the calculation for GIIPS as % of SHE.
(3) Exposure figures for Sep 30, 2011 unavailable Jun 30, 2011 have been disclosed here.
(4) Majority of GIIPS exposure is assumed to be housed within the Chartis' segment of AIG. As at Sep 30, 2011 Chartis Shareholders' Equity was USD 44,863m.
(5) P/H denotes; Policyholder. Policyholder participation relates to insurance contracts whereby the policyholders bear the majority of the investment risks and reward, with shareholders typically only exposed to a residual proportion of investment risk.

Appendix 2

Credit Ratings of Key Sovereigns

Summary of Eurozone Sovereign Long-Term Ratings as at December 07, 2011			
Country	**Standard & Poor's (LT Sovereign)**	**Fitch (LT IDR)**	**Moody's (Gov Bond)**
Greece	CC/Neg Lowered from CCC/Neg (Jul 27, 2011)	CCC Lowered from B+/RWN (Jul 13, 2011)	Ca/Developing Lowered from Caa1/Neg (Jul 25, 2011)
Ireland	BBB+/CreditWatch Neg Outlook revised from Stable (Dec 05, 2011)	BBB+/Neg Affirmed (Apr 14, 2011)	Ba1/Neg Lowered from Baa3/Neg (Jul 12, 2011)
Italy	A/CreditWatch Neg * Outlook revised from Neg (Dec 05, 2011)	A+/Neg Lowered from AA-/ Stable (Oct 07, 2011)	A2/Neg Lowered from Aa2/ Possible downgrade (Oct 04, 2011)
Portugal	BBB-/CreditWatch Neg Outlook revised from Neg (Dec 05, 2011)	BB+/Neg Lowered from BBB/ RWN (Nov 25, 2011)	Ba2/Neg Lowered from Baa1/ Possible downgrade (July 05, 2011)
Spain	AA-/CreditWatch Neg Outlook revised from Neg (Dec 05, 2011)	AA-/Neg Lowered from AA+/ Stable (Oct 07, 2011)	A1/Neg Lowered from Aa2/Neg (Oct 18, 2011)
Belgium	AA+/CreditWatch Neg* Outlook revised from Neg (Dec 05, 2011)	AA+/Neg Affirmed (Oct 20, 2011)	Aa1/ Possible downgrade Outlook revised from Stable (Oct 07, 2011)
Netherlands	AAA/CreditWatch Neg* Outlook revised from Stable (Dec 05, 2011)	AAA/Stable Affirmed (Jul 26, 2011)	Aaa/Stable (Jan 01, 1999)
France	AAA/CreditWatch Neg* Outlook revised from Stable (Dec 05, 2011)	AAA/Stable Affirmed (May 31, 2011)	Aaa/Stable (Jan 01, 1999)
Germany	AAA/CreditWatch Neg* Outlook revised from Stable (Dec 05, 2011)	AAA/Stable Affirmed (Sep 20, 2011)	Aaa/Stable (June 01, 1999)

UK	AAA/Stable* Outlook revised from Neg (May 21, 2009)	AAA/Stable Affirmed (Mar 14, 2011)	Aaa/Stable (Mar 31, 1978)
USA	AA+/Neg* Lowered from AAA/Watch Neg (Aug 05, 2011)	AAA/Neg Outlook revised from Stable (Nov 28, 2011)	Aaa/Neg Outlook revised from Stable (Aug 02, 2011)

NB: Rating dates shown relate to rating actions, excluding affirmations.

* Unsolicited Sovereign Rating

Appendix 3

Average Guarantee and Profit Sharing Practices by Country

Country	Average Guarantee	Profit Sharing Practices
UK	0%	High flexibility in crediting returns through the use of the Unallocated Distributable Surplus, terminal bonuses and other clauses enabling insurers to reduce liabilities in with-profit funds.
France	~ 1% (~0% for new business)	A minimum of 85% of financial profits are distributed to policyholders; profit sharing can be deferred through the Provision pour Participation aux Excédents.
Italy	~2%-3% (~1.5% for new business)	85% of investments results shared with policyholders (segregated profit sharing); profit sharing cannot be deferred.
Germany	~ 3%-4% (1.75% for new business)	90% of profits distributed to policyholders; profit sharing can be deferred through the Rückstellung für Beitragsrückerstattungen reserve and terminal bonuses.
Switzerland	~ 3%	90% to 100% of profits shared.
Belgium	~ 3%	Some policies include purely discretionary profit sharing mechanisms, but most popular products include high guarantees with no additional returns.
Spain	n/a	Some products include profit sharing mechanisms, but many liabilities are initially matched with bonds and offer a return equivalent to the bonds coupons.
Netherlands	~3.5% - 4.5%	Some popular products in the Netherlands include profit sharing based on an external reference ("u-rate"), and not on the actual return of insurers' investments.

Source: Moody's Investors Service

Appendix 4

Extract from S&P's Press Release – Various European Insurers Placed on CreditWatch Negative

Various European Insurers Placed On CreditWatch Negative Following Recent Sovereign Rating Actions - December 9, 2011

Overview

- On Dec. 5, 2011, Standard & Poor's placed the ratings on 15 of the 17 eurozone member governments on CreditWatch negative.
- As a result, we are placing the ratings on certain European insurance providers on CreditWatch negative.
- Depending on the outcome of our review of the ratings on the eurozone member governments, the long-term ratings on these insurers could be lowered by one or two notches, and short-term ratings for some issuers could be lowered by one notch.

Rating Action

On Dec. 9, 2011, Standard & Poor's Ratings Services placed its ratings on the following insurers (and certain related operating subsidiaries and certain holding companies) on CreditWatch with negative implications:

- Allianz Group (including the Euler Hermes group)
- Aviva Group
- Axa Group
- Caisse Centrale de Reassurance (CCR)
- CNP Group
- Generali Group
- Irish Public Bodies Mutual Insurances Ltd. (IPB)
- Mapfre Group
- Millenniumbcp-Ageas Group
- Nacional de Reaseguros S.A. (Nacional)
- Pozavarovalnica Sava d.d. (SAVA)
- RSA Insurance Ireland Ltd (RSA Ireland)
- Societa Cattolica di Assicurazione (Cattolica)
- Triglav Group
- Unipol Group

Rationale

The CreditWatch placements come in the wake of our Dec. 5, 2011 actions where we placed our ratings on 15 of the 17 eurozone member countries on CreditWatch with negative implications (see Standard & Poor's Puts Ratings On Eurozone Sovereigns On CreditWatch With Negative Implications," published on Dec. 5, 2011). The downside risk associated with the potential sovereign rating actions is one notch in the case of Austria, Belgium, Finland, Germany, Luxembourg, and the Netherlands and two notches in all other cases.

The bias of our insurance ratings in the eurozone and Europe as a whole remains negative. Of our ratings, approximately 30% carry negative outlooks or are on CreditWatch with negative implications, 64% carry stable outlooks, and 6% carry positive outlooks or are on CreditWatch with positive implications. Before today's sovereign-related rating actions, these percentages were 17%, 77%, and 6%, respectively.

Our recent commentary "European Insurance Credit Trends: Third-Quarter 2011Market Movements Take Their Toll On Insurers' Capital Adequacy," published on Nov. 4, 2011, explained the factors underpinning our views. Our more-recent negative adjustments to Europe's economic growth prospects (see "European Economic Outlook: Back In Recession," Dec. 1, 2011) and the potentially heightened credit risk reflected in our Dec. 5, 2011 sovereign actions only serve to compound the difficulties that insurers face and would likely result in predominantly negative rating actions over the medium term.

Our rating actions can be categorized according to the criteria used in taking the action.

Government-related entities (GREs) in France and Slovenia

Ratings on France-based CCR and Slovenia-based Triglav Group and SAVA may be lowered under our GRE criteria (see "Rating Government-Related Entities: Methodology And Assumptions," Dec. 9, 2010). The downside risk associated with these ratings is two notches in the case of CCR and one notch in the case of Triglav Group and SAVA. In our opinion, the likelihood of timely and sufficient extraordinary government support in the event of financial distress is "almost certain" in the case of CCR, "high" in the case of Triglav Group, and "moderately high" in the case of SAVA.

Domestic insurers in Ireland, Portugal, Spain, and Italy

Ratings on Ireland-based Allianz PLC, RSA Insurance Ireland Ltd., AXA Insurance Ltd., Aviva Insurance (Europe) SE, and IPB, Portugal-based Millenniumbcp-Ageas Group, and Spain-based Mapfre Group are at the same level as the local sovereign and in many cases are already constrained under our insurer country risk criteria (see "Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings", Feb. 11, 2003). Our criteria use the local currency sovereign rating as a proxy for country risk.

The downside risk associated with all of these ratings is two notches. The local currency sovereign rating already limits the ratings on these companies, either because their assets include material amounts of domestic sovereign debt, domestic bank debt, or domestic bank deposits, or because they have a largely domestic customer base.

Appendix 4 Cont.

The 'BBB-' rating on Irish Life Assurance PLC is already on CreditWatch with developing implications, so is not directly affected by the Dec. 5 sovereign actions. However, the downside risk associated with the Irish sovereign rating could result in the CreditWatch implications being revised to negative.

Ratings on Spain-based Nacional and Italy-based Unipol Group and Cattolica may also be lowered under our insurer country risk criteria. The downside risk associated with all of these ratings is one notch.

The ratings on Italy-based Allianz SpA are not constrained at the Italian local currency sovereign rating level under our criteria "Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions," published on June 14, 2011. However, under these criteria, we cap our ratings on "core" insurance subsidiaries with 10% exposure or higher to the jurisdiction of domicile at three notches above our rating on the related sovereign. We could lower the ratings on Allianz SpA by two notches.

The ratings on Euler Hermes SIAC SpA are also not constrained at the Italian local currency sovereign rating level by these criteria. However, we cap our ratings on insurers with less than 70% of assets and liabilities in the jurisdiction of domicile at two notches above our rating on the sovereign when the sovereign has an investment-grade rating. We could lower the ratings on Euler Hermes SIAC SpA by two notches.

Insurers that operate across the eurozone or have a high level of exposure to eurozone risks

The rating on Generali is not constrained at the Italian local currency sovereign rating level under our June 14, 2011 criteria. Based on these criteria, the rating on Generali may be up to three notches above the Italian local currency sovereign rating because of its diverse businesses in higher-rated eurozone sovereign countries. The potential lowering of the Italian sovereign rating by up to two notches would imply a lowering of Generali's rating, although under these criteria this could be limited to one notch. However, we believe that the group could be downgraded by a further notch due to the aggregate effects of exposure to eurozone sovereign debt, related bank debt and deposits, the resulting potential impact on capital adequacy that is already stretched, and the impact of the expected slowdown in economic activity in the eurozone. In aggregate, we could lower the ratings on Generali by up to two notches.

For certain other European insurance groups (Allianz, Axa, Aviva, and CNP), the CreditWatch action relates to the aggregate effects of exposure to eurozone sovereign debt, related bank debt and deposits, the resulting potential impact on capital adequacy, and the impact of the expected slowdown in economic activity in the eurozone. We could lower the ratings on these insurers by one notch.

In our capital adequacy models (see "Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model," June 7, 2010), we have estimated the potential adverse impact on capital adequacy from the downside risk related to the eurozone sovereign rating actions. We have not included any incremental concentration risk charges on any of the 'AAA' rated sovereign debt affected by the sovereign rating action.

This charge is primarily used as a "flag" in our capital analysis, i.e., an indicator of the presence of concentration risk.

These rating actions will, in their turn, affect certain holding companies, "core," and "strategically important" operating subsidiaries as well as certain short-term ratings and issue ratings on the above-mentioned insurers.

CreditWatch

We expect to resolve these CreditWatch actions within four weeks of the resolution of the CreditWatch placements on the relevant sovereigns. Upon resolution, individual ratings may be lowered by one or two notches (see references to downside risks above) or may be affirmed.

Related Criteria And Research

- Principles Of Credit Ratings, Feb. 16, 2011
- Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Interactive Ratings Methodology, April 22, 2009
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings, Feb. 11, 2003
- Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions, June 14, 2011
- Group Methodology, April 22, 2009
- Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Source: Standard & Poor's

Appendix 5

Extract from Fitch Press Release – Fitch Takes Rating Actions on Italian and Spanish Insurers, December 13, 2011

Fitch Ratings has downgraded Assicurazioni Generali's Insurer Financial Strength (IFS) rating to 'A-' from 'AA-', Fondiaria-SAI's IFS rating to 'BB-' from 'BB+', Societa Reale Mutua di Assicurazioni's IFS to 'BBB+' from 'A-' and ITAS Mutua's IFS rating to 'BBB' from 'BBB+'. At the same time, Fitch has affirmed Mapfre SA's Issuer Default Rating (IDR)… These ratings actions also apply to the entities' core subsidiaries. The Outlooks are Negative. [Affected insurer financial strength ratings are noted below].

The rating actions follow Fitch's assessment of the insurers' pro-forma capital adequacy amid challenging investment conditions, particularly in Italy and Spain, including ongoing pressure from heightened government bond yields. Fitch has undertaken a series of stress tests in Italy and Spain, and has concluded that some insurers' large investment concentrations in sovereign debt justify/require distinction relative to similarly rated peers. The potential for these concentrations to result in poor capital performance under extreme scenarios is a key driver of the rating actions.

Current market price declines and recent pricing volatility of sovereign debt have already moderately weakened insurers' capital positions as assessed by the regulatory solvency margin and Fitch's own assessment of capital adequacy, albeit to varying degrees. Given significant market and fundamental uncertainties with regards to sovereign debt, the possibility of further deterioration in the capital market performance of sovereign debt could ultimately more materially impair the insurers' capital positions. The rating actions consequently reflect the degree of sensitivity of the insurers' capital adequacy to stress test assumptions over the credit quality of their holdings of Italian and Spanish government and bank debt.

As part of its analysis, Fitch evaluated each insurers' fundamental attributes, including various degrees of leveraging of domestic government debt relative to capital. Fitch also evaluated the existing strength of capital, and its ability to absorb future losses.

If the outlook for sovereign debt improves and stabilises, it is likely that insurer ratings could be upgraded should their actual and pro-forma capital ratios also improve.

As the agency has previously indicated, Italian insurers may not be able to pass on most of the losses incurred from an unlikely default of Italian government debt (see "Fitch: Italian Insurers Cannot Pass On All Sovereign Losses", dated 9 November 2011 at www.fitchratings.com). In an extreme scenario of a sovereign default, the ability of insurers to pass losses on to policyholders would be significantly impaired, as the return on customer portfolios may be below the minimum guaranteed to policyholders. Insurers would be liable for any additional losses.

The rating actions also reflect Fitch's view that the environment in Italy and Spain is highly challenging and rapidly changing, which means that operating profitability is likely to remain pressurised in the medium term. The agency has sharply revised down its near and medium-term growth forecasts for Italy as the economy has not recovered in line with expectations and the eurozone crisis could push Italy into recession. Fitch now expects the Italian economy to contract by 0.5% in 2012 followed by 0% growth in 2013. This could exert negative pressure on sales of insurance products in 2011 and 2012.

However, underwriting profitability in the non-life segment continues to recover as pricing and claims experience improve. In addition, life insurers' credit profiles remain solid, with technical profitability and margins expected to hold up due to a better business mix.

Affected Insurer Financial Strength ratings

Assicurazioni Generali SpA and various insurance subsidiaries lowered to 'A-' from 'AA-', Outlook Negative;

Mapfre SA- Various subsidiaries affirmed, with Outlook lowered to Negative:

- Mapfre Vida ('A+')
- Mapfre Global Risks Cia De Seguros Y Reaseguos ('A+');
- Mapfre Vida SA De Seguros Y Reaseguros ('A+')
- Mapfre Re Compania De Reaseguros S.A ('A')
- Commerce Insurance Co, Citation Insurance Co, Commerce West Insurance Co, American Commerce Insurance Co (all 'A+')

Societa Reale Mutua di Assicurazioni and subsidiary, Reale Seguros Generales, lowered to 'BBB+, Outlook Neg' from 'A-, Stable'

ITAS Mutua, lowered to 'BBB, Outlook Neg' from 'BBB+, Stable'

Fondiaria-SAI S.p.A. and subsidiary Milano Assicurazioni S.p.A. lowered to 'BB-' from 'BB+', Outlook Negative

MARKET
SECURITY

Willis Market Security provides the information contained in this report in the context of client assessment of insurance carriers only and such information should not be construed as investment advice. Willis Market Security shall not and does not give legal, accounting (including taxation), investment or regulatory advice. Specialist advice of the types described in this paragraph shall be obtained separately from a suitably qualified specialist.

How can we help?

To find out how we can offer you an extra depth of service combined with extra flexibility, simply contact us.

Begin by visiting our website at www.willis.com or calling your local office.

Willis Market Security
marketsecurity@willis.com

The Willis Building
51 Lime Street
London EC3M 7DQ
Tel: +44 (0)20 3124 6000
Fax: +44 (0)20 3124 8223