

Securitisation of Non-Life Insurance Working Party

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1. INTRODUCTION

This paper is a review of Regulatory Regime for non-life insurance linked securitisations.

The proposals for international accounting standards and solvency capital requirements for insurance contracts are heading towards more of an economic valuation of assets and liabilities. EU insurers will have both International Financial Reporting Standards (IFRS) Phase II and Solvency II to comply with; this will mean a change in both the reporting requirements and assessment of solvency capital for EU firms. Solvency II in particular will set out a new, principles-based and risk-sensitive solvency regime with market consistency being the key principle at the heart of the design.

As firms look to move to more efficient capital structures with the introduction of a more risk-sensitive approach to supervision, greater convergence of regulatory capital and economic capital is expected. The recognition of other risk mitigation techniques such as securitisations and use of financial derivatives is one of the most significant changes being proposed under Solvency II. Firms will now be able to make use of such risk transfer solutions to achieve a more efficient capital allocation; insurance securitisations are already increasingly being considered by insurers and reinsurers as an alternative form of risk transfer to traditional solutions such as reinsurance.

When assessing the various risk transfer solutions and their suitability, among other things, firms will need to consider the effectiveness of the risk transfer mechanism, the extent of capital relief achieved and the overall cost of placing the transaction.

As part of this paper, we consider the background issues relating to the regulatory treatment and the capital requirements for securitisations. We start with issues relating to the current regime and then consider the impact of future developments in insurance regulation.

This paper is one of a series of stand-alone but complementary papers produced by the GIRO 2008 Securitisation of Non-Life Insurance Working Party.

The other papers cover:

- a **History of Securitisation** to date including a review of predictions made in prior GIRO papers,
- a quantitative and qualitative review of the **Zero-Beta** quality often claimed for catastrophe bonds,
- a review of the important topic of **Basis Risk** within non-life insurance linked securitisations including an example spreadsheet,
- a review of the **Lessons from Sub-Prime** and wider credit crunch for non-life insurance linked securitisation and more widely for non-life insurers,
- a review of the securitisation possibilities for **Other Non-Life Risks and Assets** other than purely catastrophe bonds.

2. CURRENT TREATMENT OF SPVs

2.1. Solvency I

There are a number of obstacles with respect to the current regulatory treatment of SPVs that prevent European insurers from more actively using insurance securitisations at present. Some of the main obstacles and considerations under the current regulatory regime are covered below.

Structuring issues and costs

Solvency I does not specifically recognise securitisation as a risk management tool in the same way as reinsurance. This results in significant and unnecessary structuring costs as the current regime does not give full credit for capital relief achieved via risk transfer through insurance securitisations.

Most securitisation transactions have required an intermediate risk “transformer” which provides a reinsurance overlay to the underlying SPV risk transfer. This is because insurance-linked securitisations to date have generally had to be structured such that the SPV is viewed as a regulated insurer, since otherwise the local regulator would not have a framework for providing capital relief.

Time delays and disclosure requirements

The lack of standardised transactions results in each securitisation having to be considered on an individual basis. Previous securitisations have resulted in a significant amount of time being spent on determining and agreeing an appropriate structure with the local regulators. In addition to this, requirements for extensive disclosure to the regulator, as well as dissemination of information to investors in the offering circular, have added to the time delays.

Some of the transactions to date, such as the AXA motor securitisation, have had to deal with the disinclination of local regulators to open the reinsurance market to the financial markets. In that instance, the French insurance regulator expressed concern that due to the large number and diversity of investors, the financial markets are far less relationship-driven than the reinsurance market and hence greater disclosure of information was required.

Counterparty credit risk

The Solvency I rules don't give a significant penalty for counterparty risk on non collateralised reinsurance. They therefore detract from one of the advantages of securitisation, namely the typical lack of any counterparty risk since this is fully collateralised up to the maximum payout of the structure.

Inconsistent treatment across member states

Another factor that has contributed to the complexity in transacting securitisations has been the differences in treatment of securitisations in different Member states. Rules regarding SPVs tend to vary by local regulator to the extent that SPVs may not be allowed by local regulators in certain jurisdictions.

The regulatory requirements for collateralised securitisation deals have generally been overly burdensome leading to calls for a separate regime for SPVs to try to remove the regulatory barrier. In the UK, this has led to the introduction of Insurance Special Purpose Vehicles (ISPVs) which together with the corresponding 'fit for purpose' authorisation regime in the UK from 31 December 2006 has resulted in lower information requirements compared to prior rules.

ISPVs must be fully funded, typically by issuing debt and the authorisation requirements place greater emphasis on self-certification and senior management responsibility. ISPVs were brought in under the EU Reinsurance Directive (RID).

Although ISPVs facilitate the creation of SPV structures in the UK and present an improvement from a regulatory perspective, taxation is another very important factor for insurers or reinsurers when selecting the jurisdiction of SPVs. This has generally resulted in more complex structuring requirements, with SPVs being set up in offshore locations.

2.2. ICAS regime

There is the need to be able to model these instruments properly in the ICAS model to get recognition for the risk transfer. The model will need to be sophisticated enough to reflect what will happen in reality which can be quite complex. For example, if a company has a cat bond with a parametric trigger it may be complex to model whether the bond has triggered under certain loss scenarios.

It is also unclear as to how to allow for different levels of funding of securitisation transactions and the extent of a potential reduction in capital charge in terms of the counterparty default risk.

A 1 year time horizon is used so no credit is giving for the multi-year aspect of some securitisations. For example, with a 3 yr catastrophe bond deal there is no repricing risk for the second 2 years of the bond.

The allowance for risk mitigation for securitisations under ICAS is an improvement on Solvency I but full recognition of the risk mitigation through securitisations may not happen due to lack of understanding of such structures in comparison to traditional reinsurance. Securitisations are currently quite bespoke making it difficult for regulators to understand and approve models within the timescales allowed.

2.3. Rating agencies

Under the current regime, the Solvency I minimum capital requirements and the ICAs calculated by individual firms determine the level of regulatory capital that is set. However, the level of capital required to maintain the firm's rating has been significantly higher in the past, so in effect, it is the rating agency requirements that are really driving the level of capital held by a firm.

Solvency II looks to address the gap between regulatory and rating agency requirements and move regulation and rating agencies closer together through a more economic valuation of the insurance firm including any securitisation transactions. The onus is on firms to have an appropriate Enterprise Risk Management (ERM) framework and calculate their own capital requirements through ORSA (Own Risk and Solvency Assessment). The framework for this is still in the discussion stages but will be firmed up ahead of the proposed Solvency II implementation date in 2012.

An important point to note is that not only are the rating agencies involved in rating the insurance entities, they also play a key role in rating the securities issued by them. This results in the rating agencies having an even greater influence on capital requirements for firms. In fact, two recent securitisations of reinsurance recoverables (Aspen and Hanover) were supposedly carried purely out for impact with the rating agencies rather than true economic value. But this should also mean that the rating agencies are better equipped to understand the risk mitigation provided by these products so allow for this in their assessments.

There is also a lack of consistency in the rating methodologies across the major rating agencies which could result in capital inefficiencies.

3. SOLVENCY II – FUTURE DEVELOPMENTS

The implementation date for Solvency II is set to be 2012; a similar timescale is currently expected for the introduction of IFRS Phase II. Solvency II is structured around a market-consistent valuation approach and aims to provide greater choice of freedom in assets. This, however, could heighten balance sheet volatility both in terms of changes in asset values and shifts in liability profiles. Failure to match assets and liabilities is likely to increase capital requirements and increased capital charges for more volatile business will also put the spotlight on capital-intensive risks.

Solvency II capital requirements are likely to increase capital requirements for firms, especially in Europe as they are currently operating within the Solvency I parameters which were much lower. If capital requirements do increase more emphasis will be placed on active capital management to mitigate these increased requirements.

The likely impact of the above is to encourage insurers to look at new risk transfer mechanisms for risky or uneconomic portfolios. One of the options available to insurers/reinsurers under Solvency II will be transferring risk off the balance sheet through securitisations. The capital efficiency of these deals will affect the demand for them.

3.1. Main changes under Solvency II

Whereas Solvency I did not explicitly consider the treatment of SPVs, the draft framework Directive under Solvency II allows firms to take credit for risk mitigation through SPVs. Hence, securitisations could be used more widely as a risk management tool.

Solvency II is fundamentally a principles based regime and is more accommodating with respect to the use of securitisations than the current prescriptive rules under Solvency I.

Article 209 (page 222) in the amended proposal for the Solvency II Directive sets out the framework for SPVs.

Other references from the proposed directive are included below.

(61) Appropriate rules should be provided for special purpose vehicles which assume risks from insurance and reinsurance undertakings without being an insurance or reinsurance undertaking. Recoverable amounts from a special purpose vehicle should be considered as amounts deductible under reinsurance or retrocession contracts.

(page 26)

Article 80 – Recoverables from reinsurance contracts and special purpose vehicles

The calculation by insurance and reinsurance undertakings of amounts recoverable from reinsurance contracts and special purpose vehicles shall comply with Articles 75 to 79.

When calculating amounts recoverable from reinsurance contracts and special purpose vehicles, insurance and reinsurance undertakings shall take account of the time difference between recoveries and direct payments.

The result from that calculation shall be adjusted to take account of expected losses due to default of the counterparty. That adjustment shall be based on an assessment of the probability of default of the counterparty and the average loss resulting therefrom (loss-given-default).

(page 100)

3.2. Implications for future securitisation of risks under Solvency II?

Although regulatory considerations may not be the sole driver behind insurance securitisations, insurers/reinsurers would certainly be attracted by the lower transaction costs and reduced complexity of structuring transactions that Solvency II could bring across Europe. A consolidated regulatory regime across Europe will also open up a number of securitisation opportunities.

With the European Securitisation Forum (ESF) lobbying for a lighter touch regime for collateralised transactions, we may even see a significant reduction in the regulation of certain types of SPVs.

It is difficult to predict exactly how Solvency II will impact future securitisation activity but some of the potentially very significant opportunities that may arise as a result in the near future are:

- Standardisation of transaction structures and documentation could bring more efficiency to the insurance-linked securities' market and encourage more innovative instrument issuance under Solvency II.
- The development of Catastrophe bond market as well as more sophisticated debt markets is bringing other classes of business onto the securitisation radar. This could lead to broader transactions such as the monetization of profits from a block of non-life business (similar to Embedded Value securitisations on the Life side).
- Solvency II looks to impose limits on the use of subordinated debt in solvency evaluations. This may increase the use of securitisations as an alternative, particularly given the additional benefit of qualifying as core Tier 1 capital.
- An increase in M&A activity may be seen as firms move towards consolidating their insurance businesses across the EU. Smaller companies across the various EU territories could be consolidated through holding companies. Smaller companies are likely to have to go down the standard Solvency Capital Requirement (SCR) formula approach given the limitations in resources and budget to build internal models – this is likely to penalise them in terms of capital requirements. Insurers wanting to take advantage of the opportunities to consolidate their business are likely to need more capital. This additional capital could be raised through securitisations in the capital markets over the coming years.
- With the consolidation of the solvency regime across Europe, it will be more feasible to structure larger pan-European transactions. This could trigger an increase in the level of activity in the securitisation markets across the EU and allow the insurance industry to access alternative sources of capital through the wider EU capital markets.
- There is scope for reducing the capital charges relating to counterparty default risk through collateralised protection under the SPV structures. There is still no credit for multi-year deals though.
- The standard formula may allow for some relief in terms of the SCR charge through the NLcat and the Mkt conc (market risk concentrations) modules.

Firms may need to demonstrate verifiable valuation and risk mitigation through the use of internal models, but these are likely to be subject to supervisory approval.

One potentially interesting issue is what treatment would be applied to an insurer who bought a cat bond or securitisation from another insurer. If this were treated as a financial investment, rather than an insurance risk, then the net effect on the insurance industry would be to reduce the overall capital held against insurance risk, albeit that this would be replaced by market risk capital depending on the rating of the instrument. In Pillar 2, one would expect that the purchasing insurer would need to look through to the underlying, depending on the materiality of the purchase. This potential reduction of insurance risk capital already occurs in relatively material size in the bond markets, since a significant proportion of hybrid debt issued by insurers is purchased by other insurers.

3.3. Learning points from the Quantitative Impact Studies

The business impact of Solvency II has been tested through a number of Quantitative Impact Studies to date. The Committee of European Insurance and Occupational Pension Supervisors (CEIOPS) is running the 4th Quantitative Impact Study (QIS4) through Summer 2008 with the results expected to be released later in 2008.

Some of the limitations highlighted by the previous QIS exercises are included below:

- The SCR calculation does not allow for management actions after the event. More complex dynamic strategies are not allowed for as the standard calculation assumes no remedial actions after the shock event. For example, it is not possible to allow for the rebalancing of the portfolio to close out positions.
- If the counterparty has a rating less than BBB then there is no risk mitigation allowance. This may affect the lower tranches of insurance-linked securities issued by the SPV.
- It is likely that the Implementation Measures (Level 2) will require stringent risk management processes around these instruments to prove they are being used in a sophisticated way.
- In order to get full relief for the risk transfer achieved through a securitisation transaction, firms are likely to have to build these transactions into their internal models. This presents a number of challenges in terms of being able to model the risk mitigation impact within the capital model and ensuring that sufficient risk management processes are in place such that the model reflects the actual exposure.
- There is still some uncertainty as to what the standard formula under Solvency II will look like and what kind of behaviours it may encourage. The previous technical specifications under QIS3 pre-specified the 1-in-200 catastrophe scenarios to consider when calculating the NLcat charge. This type of specification under Solvency II could wrongly incentivise firms to purchase standardised reinsurance products to cover a specific type of catastrophe to reduce the capital charge. The technical specification for QIS4 on the other hand encourages firms to think about their actual catastrophe exposures by considering own scenarios (if scenarios developed by the local regulator are not considered to be representative of their cat exposure) – this would tend to encourage more economic risk transfer for firms.
- Internal model vs. standard formula: The NLcat calibration may be amenable to regulatory arbitrage if a firm's internal model suggests a higher charge than the results of the standard formula. This may adversely influence a firm's SCR calculation as they may be biased towards the more favourable standard formula result over their internal model catastrophe charge (which is likely to be on more of an economic valuation basis and more representative of the actual net exposure).

The latest QIS4 rules (TS.IX.F.4 and 12) are potentially very adverse for the structured finance markets, including securitisations. Fixed income instruments that are deemed to be “structured credit” (defined as based on a tranching exposure on an underlying risk or pool of risks) are subject to much more severe stress tests than vanilla credit.

For example AAA structured credit is subject to a shock of 2.13% per unit duration. 8.5 times the equivalent 0.25% shock for AAA bonds.

This change has presumably been prompted by the problems with CDOs and sub-prime mortgages, but could have a potentially negative effect on the re-opening of securitisation markets post the credit-crunch and also on the insurance securitisation markets. The impact is likely to be more marked for very low risk securitisations, e.g. AAA, rather than the typical BB of non-life cat bonds.

4. OTHER CHALLENGES

Accounting

It is, as yet, unclear what the position of IFRS Phase II is with regards to either SPVs or securitisation in general. Unlike the discussion papers issued by CEIOPS which mention SPVs explicitly, currently neither the Discussion Paper issued by the IASB nor the written responses to it, mention or refer to either securitisation or SPVs.

If IFRS Phase II were not to consider the treatment of SPVs or securitisation, there is the potential for regulatory arbitrage e.g. a capital market instrument could be used for solvency purposes but would be off-balance sheet for accounting purposes. However, it is still very early days for IFRS Phase II and this issue may well be dealt with in future drafts issued by the IASB.

Tax regimes

The tax regime and the corresponding treatment of securitisation transactions is also another key driver, particularly given that most securitisations to date have been set up in offshore locations.

Impact of credit crunch

The insurance securitisation market is still developing at this stage and this presents a number of other challenges and concerns. Recent market developments in terms of the sub-prime losses and the credit crunch have highlighted the liquidity issues that a significant market event can bring, and could lead to further issues, for example:

- **Regulatory:** The permanence of such capital is a cause of concern to the FSA. In relation to the existing catastrophe bonds, there have been no major losses to date but there is a risk that capital could dry up if this occurs.
- **Rating agencies:** based on its rating methodology, Fitch is not expecting to grant any ILS above AA. Given the recent subprime related hits to monoline credit insurers, credit wraps may not be readily available to bolster financial rating and hence it may be difficult to issue AAA rated tranches.

REFERENCES

In preparing this paper we have made use of the following sources of information.

Solvency 2 Directive

http://ec.europa.eu/internal_market/insurance/docs/solvency/proposal_en.pdf

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QIS 4

http://ec.europa.eu/internal_market/insurance/docs/solvency/qis4/technical_specifications_2008_en.pdf

European Commission (2008), QIS4 Technical Specifications (MARKT/2505/08)

UK regulation / ISPVs

<http://fsahandbook.info/FSA/html/handbook/INSPRU>

FSA (2008), Prudential Sourcebook for Insurers (INSPRU)

IASB Phase 2

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