




The next stage

Solvency II, the QIS5 results and
implications for the US



Solvency II and the results of QIS5 should not be viewed as a regulatory framework affecting only European companies.



The global solvency environment is about to undergo major changes, moving toward a more principles-based approach with incentives for sound risk management. In Europe, Solvency II will be the new reference regulatory framework from 2013 onward, and there is a growing recognition that data and technology are on the critical path for Solvency II development – and that the greater the risk management ambition, the greater the challenge. Despite the initial difficulties in adapting to this new regime, complying with Solvency II also provides incentives for sound risk management practices and enhanced transparency. In conjunction with the proposed changes to global solvency standards by the International Association of Insurance Supervisors (IAIS), the effects of Solvency II will be felt worldwide as external disclosure of economic capital and risk-adjusted performance become more common and stakeholders around the globe, particularly those in the US, will be requiring enhanced financial risk disclosure.

In this context, US companies should start benchmarking their current risk management framework with leading European practices and enhance their communications to stakeholders to offer more financial risk disclosure. Solvency II could also impact the geographic flow of capital and create opportunities for US insurers by assisting European companies in the improvement of their solvency capital requirement (SCR) through reinsurance solutions to mitigate certain risks. Therefore, Solvency II could have

implications with regard to the competitiveness of domestic US (re)insurance companies, and it should not be viewed as a regulatory framework affecting only European companies.

In fact, stakeholders would want to assess their capital and risk management and compare it to that of insurance companies across the globe. Solvency II public disclosure will include business overview and performance, the bases and methods used for the valuation of assets and liability together with an explanation of any major differences with other financial statements. In addition, a description of the system of governance and an assessment of its adequacy for the risk profile of the insurer should be provided. Risk disclosure will include a description of the risk exposure, risk mitigation and sensitivity, as well as a detailed description of the capital management.

The completion of the fifth Quantitative Impact Study (QIS5) by the European Insurance and Occupational Pensions Authority (EIOPA) on 14 March 2011, marks a major milestone in the full implementation of Solvency II. It is not only the end of the impact study that ran its course during 2010, but it is probably the final full-scale test of its type to be conducted prior to the establishment of Solvency II. The purpose of QIS5 was to test the practicability, implications and impact of Solvency II on the financial aspect of (re)insurers subject to Solvency II. Outlined in the following pages are the major highlights and key points noted by the study.



Almost 70% of the European insurance industry participated in the study, making it the most comprehensive test of Solvency II proposals to date. The results (which apply to insurance balance sheets at the end of 2009) indicate a reduction of surplus of €56 billion compared to the current Solvency I regime. The study shows that 15% of European participants could not cover their SCR and would prompt regulator action. Five percent of the participants could not cover their minimum capital requirement (MCR) and would trigger major regulatory intervention.

In addition, there are many areas about which firms have expressed their own concerns, ranging from the type of method to the calibration or the simple practicality of performing the calculations. Given this uncertainty, Ernst & Young supports the concept of transitional measures that will help smooth the impact and give firms and regulators time to achieve an orderly transition to the new regime.

The following pages summarize some of the key highlights from the QIS5 report, with further selected comments and supporting graphs. Note that this is not intended to be a comprehensive summary, but rather an abbreviated snapshot of the full report. Please refer to the full EIOPA report for a complete presentation of QIS5 results.

Solvency II is a regulatory project that will provide a risk-based, economic-based and principles-based framework for the supervision of European (re)insurers:

- ▶ Solvency II removes any implicit prudence embedded in the technical provisions currently existing in the Solvency I regime. The valuation of technical provisions is based on the calculation of a best estimate and a risk margin.
- ▶ The capital requirements will be determined on the basis of the risk profile of the (re)insurance companies, as well as on the way in which such risks are managed, as compared to the simplistic factor approach taken for the determination of the required solvency margin in Solvency I.
- ▶ The SCR corresponds to the Value-at-Risk of the basic own funds of an insurance or reinsurance company, subject to a confidence level of 99.5% over a one-year period.
- ▶ The calculation of the SCR according to the standard formula is divided into risk modules (market, health, default, life underwriting, non-life underwriting and intangibles, etc.). For each module and sub-module (interest rate, illiquidity, mortality, lapse etc.), a list of specifications and simplifications is defined in the QIS5 report.
- ▶ Solvency II provides incentives for sound risk management. Companies have the option to use partial and full internal models (subject to supervisory approval) to calculate the capital requirement, instead of applying the standard formula.
- ▶ Basic own funds and ancillary own funds represent available financial resources in excess of liabilities, which are able to back required capital (SCR and MCR), will be classified into three tiers depending on their permanent availability and their subordination.



Key highlights

- ▶ **Overall financial impact.** There was a decrease in the level of surplus (in excess of capital) overall. This is the combined impact of an average increase in the level of own funds compared to Solvency I; a decrease in technical provisions; and, depending on the current local accounting regime, an increase in value of assets, as well as an overall increase in capital requirements.
- ▶ **Valuation of assets.** There was a wide variety in the treatment of deferred taxes and affiliates, as well as difficulty in determining the valuation of intangibles.
- ▶ **Technical provisions.** An overall decrease of 1.4% in net technical provisions was observed for all lines of business. Key issues include broad use of simplifications in the risk-margin calculation; lack of clarity in the definition of contract boundaries; inconsistent application of the illiquidity premium buckets; and limited value from detailed segmentation by line of business for life companies.
- ▶ **SCR and MCR.** Main risk drivers are market risks (equity, spread and interest rates), followed by non-life underwriting risks. The counterparty default risk module is considered too complex when compared to materiality. Most companies will choose to adopt the operational risk standard formula module rather than develop internal models, and the preferred view from supervisors is to avoid extending the undertaking of specific parameters (USP) to all modules of the SCR formula.
- ▶ **Coverage of the SCR and MCR.** At the European level, 15% of the participants did not fully cover the SCR, and just fewer than 5% of the participants did not fully cover the MCR.
- ▶ **Internal models.** Groups' internal model results showed a capital requirement of about 80% of the size of the capital requirement based on the standard formula calculation. There is no significant capital benefit for solo entities; 96% of companies that are part of a group aim to use the group internal model. Overall, 234 companies (including solo entities and 29 groups), or approximately 10%, provided SCR results using an internal model.
- ▶ **Own funds.** Ninety-two percent of own funds were classified as Tier 1 capital. The average contribution from Expected Profits In Future Premiums (EPIFP) to the own funds amounted to 20% of Tier 1, and, in some cases, EPIFP contributed 50% or more of the own funds. This is an area where further work will be required.
- ▶ **Practicality issues.** Companies need to focus on calculation of the counterparty default risk sub-module; calculation of the loss-absorbing capacity of the technical provisions and deferred taxes; calculation of expected profits in future premiums; valuation of options and guarantees; calculation of lapse-risk modules; application of contract boundaries; and the illiquidity premium.
- ▶ **Groups.** Areas where groups have encountered major difficulties relate to the valuation and absorbing effects of deferred taxes and future discretionary benefits at group level, the treatment of ring-fenced funds and intra-Group transactions.





Further detail

Overall financial impact

Figure 1, taken from the EIOPA report, shows the main drivers of changes in surplus as a percentage of the Solvency I surplus.

For groups that submitted internal model results, an increase of 6% in the surplus was observed when moving from Solvency I to QIS5. It should, however, be noted that there is high variability in this area.

Figure 2 shows the surplus in excess of the capital requirements (in €b) under the current regime and at the two Solvency II capital thresholds under QIS5. Overall, the surplus above the MCR is twice the surplus above the SCR.

On average, the solvency ratio (ratio of the eligible own funds to the capital requirements) has changed from 310% under the current regime to 466% under the MCR and 165% under the SCR.

Valuation of assets

QIS5 showed that in those countries where a market-consistent valuation of assets and non-insurance liabilities existed for international accounting standards requirements, little difficulty was experienced in the valuation principles as specified under QIS5. Particular difficulties existed for small and medium companies where the current financial reporting basis significantly differed from market-consistent principles outlined under IFRS. QIS5 also noted wide variation in recognition and valuation of deferred taxes and treatment of affiliates.

With respect to affiliated investments, QIS5 permitted alternative measurement approaches. The adjusted net equity method was used by more than half of the entities in the study, but larger affiliates were valued using the mark-to-model approach. This suggests that timing issues may have prevented the gathering of the necessary data and influenced the chosen methodology, rather than the appropriateness of the valuation methodology. As shown in Figure 1, the impact on the asset valuation when moving from Solvency I to Solvency II is not significant.

Technical provisions

For solo life companies, the net technical provisions increased by 3%, which was primarily caused by a decrease in the reinsurance recoverable. Net technical provisions for with-profit business increased by 8%.

For solo non-life companies, the net technical provisions in general have decreased from Solvency I, mainly as a result of discounting. However, this has been offset by including a separate explicit risk margin.

The effect of the liquidity premium on the technical provisions is 1% of the technical provisions and 15% of the SCR. Several countries noted practical difficulty in calibrating the economic scenario generator (ESG) to varying discount rates and believe that further guidance is needed in this area. Also, the need for further guidance is suggested with regard to the bucketing of contracts for the illiquidity premium application, possibly leading to a binary 100%/0% approach.

QIS5 notes that a large number of simplifications were made in the risk-margin calculation. In the calculation of the risk margin, life companies often included unavoidable market risk where the duration of the liability was longer than the asset duration. Almost all non-life companies followed the simplifications, stating that it was likely this unavoidable market risk was nil for them.

For life companies, the average risk margin is 2% of the technical provisions and 2.7% of the best-estimate liability. For non-life companies, the risk margin as a percentage of gross technical provisions varies between 4.7% and 10.6%. The impact of management actions for life insurers ranged from 2% to 5% of the total technical provisions. QIS5 showed limited value from the detailed segmentation by line of business for life companies.

SCR and MCR

The main risk drivers for the SCR and MCR calculations are market risks (equity, spread and interest rates) followed by non-life underwriting risks. Figures 3 and 4 show the proportion of each risk in the standard formula SCR calculation for life and non-life companies,

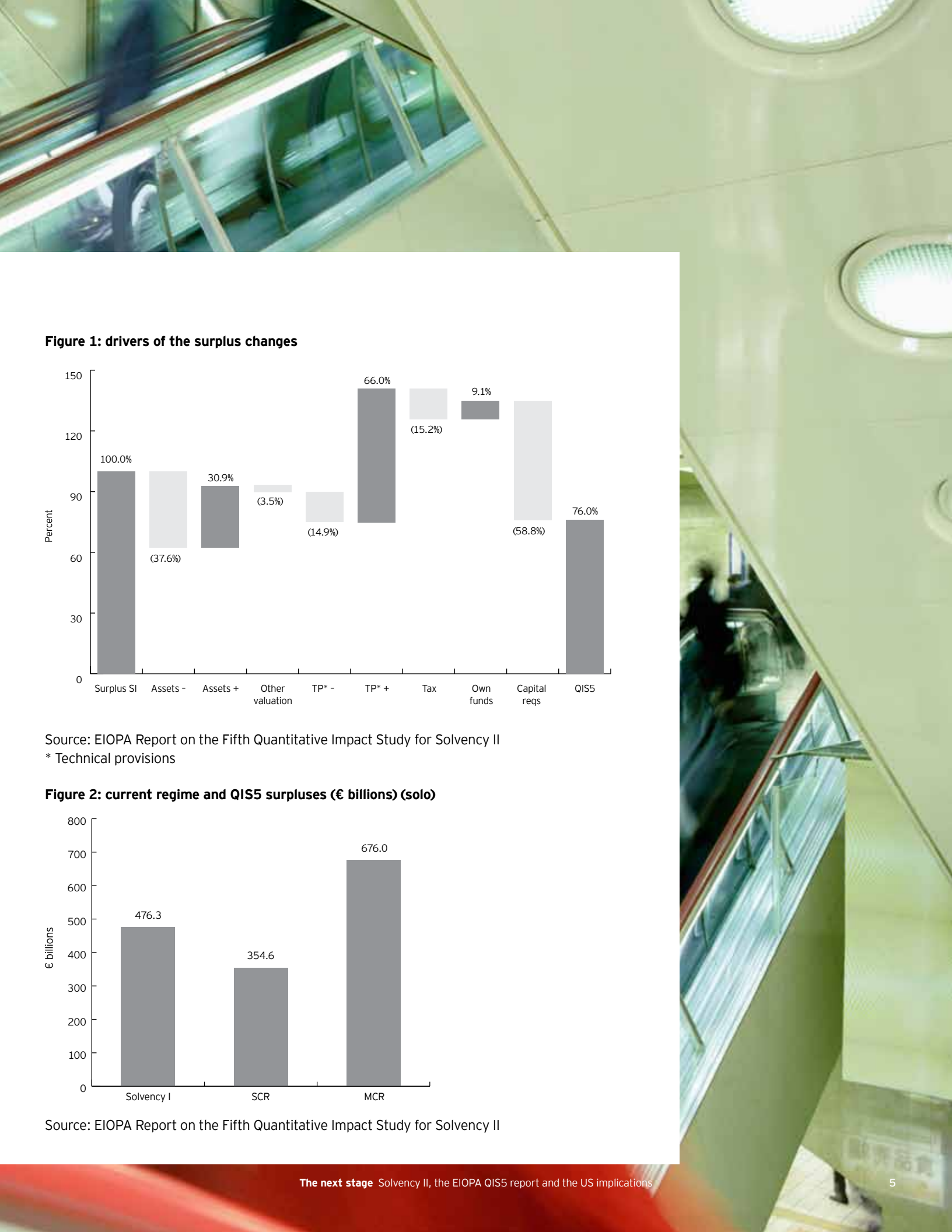
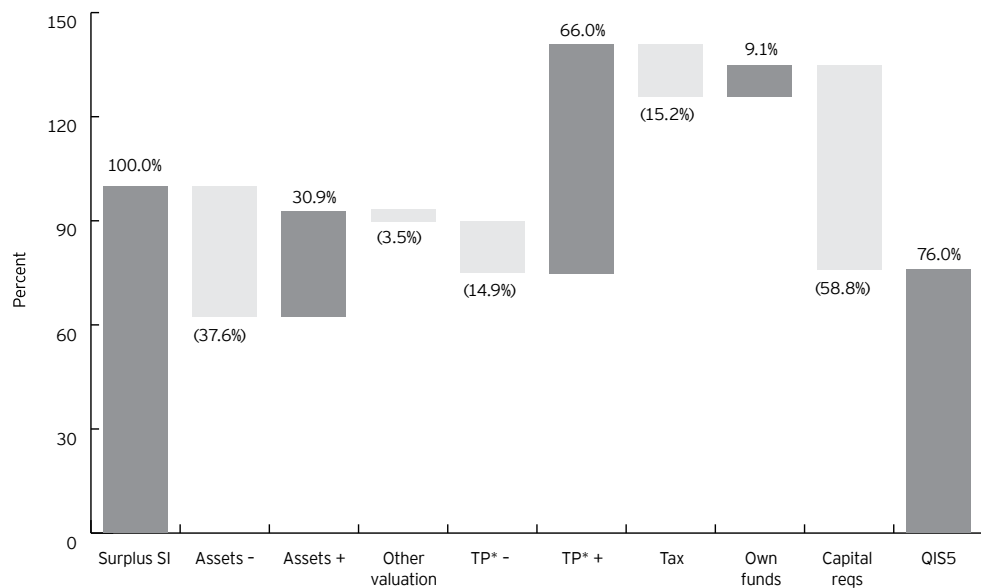
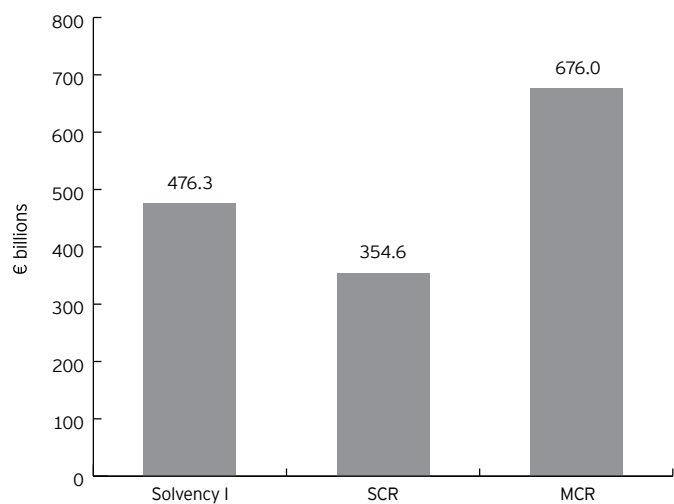


Figure 1: drivers of the surplus changes



Source: EIOPA Report on the Fifth Quantitative Impact Study for Solvency II
 * Technical provisions

Figure 2: current regime and QIS5 surpluses (€ billions) (solo)



Source: EIOPA Report on the Fifth Quantitative Impact Study for Solvency II

Effective and thorough transitional measures will help smooth the impact and give firms and regulators time to adjust to the new regime.

respectively. The key life underwriting risks are lapse and longevity risks. The key non-life risks are market and premium reserve and catastrophe risk.

QIS5 showed that, on an overall basis at the solo level (including life and non-life), the SCR reduced by 59% after allowing for the correlations between risks and loss-absorbing capacity of the technical provisions and deferred taxes. The group diversification benefit, on average, is 20%.

For operational risk, the majority of the companies indicated that they would opt for the standard formula rather than an internal model calculation.

Some of the key issues arising in the SCR modules are:

- ▶ Complexity of the counterparty default risk module
- ▶ Counterintuitive incentives in the currency risk module
- ▶ Discussion around the strategic nature of the affiliated investments
- ▶ Potential limitations on the loss-absorbing capacity of deferred taxes
- ▶ Practical considerations around policy-by-policy calculation of lapse risks

The catastrophe risk sub-module was strongly criticized by QIS5 participants, in terms of both calibration and complexity and availability of data.

Internal models

The internal models' correlation parameters showed some significant variation from the standard formula from $\pm 25\%$ to $\pm 50\%$. On average, the SCR from the internal model was close to the SCR from the standard formula. The median partial internal-model capital requirements were 86% of the SCR from the standard formula.

Own funds

Ninety-two percent of the own funds have been classified as Tier 1 capital for solo entities and approximately 82% for groups. EPIFP attracted a significant amount of comment during QIS5. Calculations were described

as time-consuming, burdensome and of questionable benefit. Companies questioned the concept, which affected the manner in which they engaged in the calculations or whether they attempted them at all.

Supervisory authorities generally concurred with these comments, and some suggested that the calculations should not be performed. However, the impact of EPIFP was significant to own funds' tiering analysis with a higher number supporting life companies disproportionately over non-life companies. Careful consideration will be required by EIOPA and the Commission as to whether EPIFP will have to be explicitly calculated and whether it will be permitted to support own funds' eligibility and tiering requirements.

Groups

Ninety-six percent of the capital requirements reported by groups came from the core insurance business. It was noted that most bancassurance groups only reported figures relating to their insurance business. Areas in which groups have encountered major difficulties relate to the valuation and absorbing effects of deferred taxes and future discretionary benefits at the group level, the treatment of ring-fenced funds and intra-group transactions.

The group surplus-eligible own funds under QIS5 were €86 billion lower than under Solvency I when the accounting consolidation-based method with the standard formula was used. However, the surplus would only be €3 billion lower if group internal models (partial or full) were used at their current stage of development, and either equivalence were granted for third-country jurisdictions or transitional measures were put in place allowing the use of local rules under deduction and aggregation for third countries.

The overall diversification benefit for groups was 20%. On average, the impact of the intra-group transactions was 9%, and the real diversification benefit (after excluding the impact of the intra-group transactions) was 13%.

Figure 3: diversified BSCR* – life undertakings (solo)

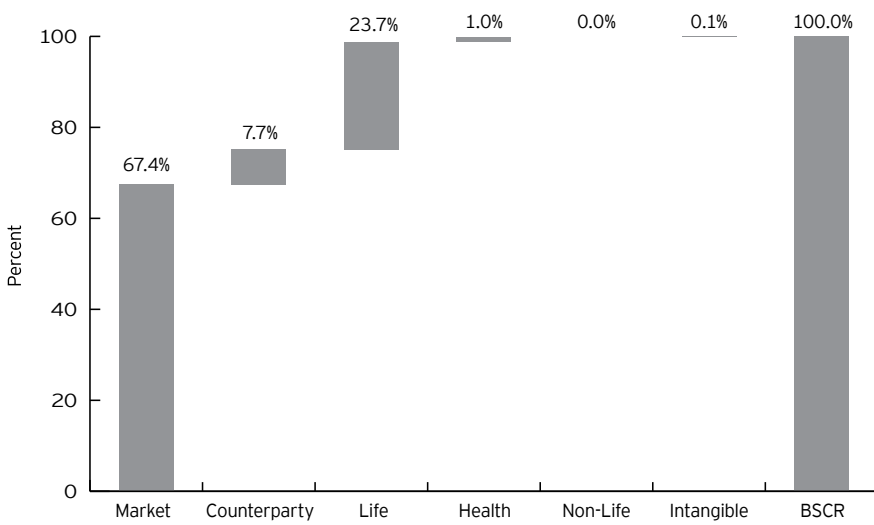
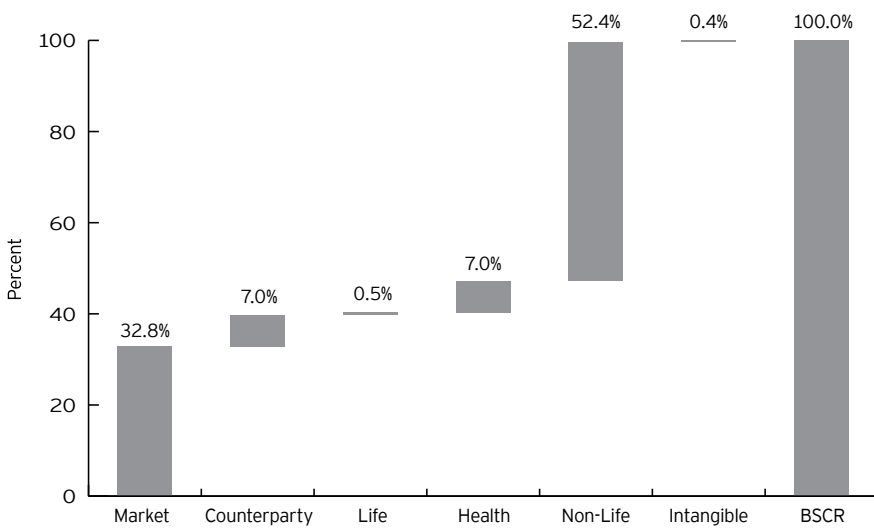


Figure 4: diversified BSCR* – non-life companies (solo)



Source: EIOPA Report on the Fifth Quantitative Impact Study for Solvency II

* BSCR refers to basic SCR, which is the SCR before operational risk and some other adjustments.



Approximately €33 billion of own funds not available to cover the group SCR (including minority interests) were reported by 109 groups. This is equal to approximately 8% of those groups' total own funds.

European Insurance Industry Feedback

Following the publication of the QIS5 report, leading representative groups of the European insurance industry issued a letter to the European Commission to highlight the objectives of Solvency II in terms of an economic and risk-based approach. They identified key outstanding issues that must be addressed, such as the full recognition of the value of in-force (VIF) portfolio and the deferred tax assets as Tier 1 capital. In addition, they stressed the need for a more balanced calibration of certain key risks, less pro-cyclicality in the Solvency II framework and to address unnecessary complexity. Finally, the representative groups stated their support of maintaining the Solvency II implementation date of 1 January 2013.

Status of Solvency regulation in the US

In 2008, the National Association of Insurance Commissioners (NAIC) formed the Solvency Modernization Initiative (SMI) task force, whose primary mandate is to work through a critical self-examination to update the insurance solvency regulation framework in the US. This includes a review of international developments regarding insurance supervision, banking supervision and international accounting standards and their potential use in US insurance regulation. The SMI's main objectives are to enhance the insurance regulatory environment in the US in the areas of capital requirements, governance and risk management, group supervision, statutory accounting and financial reporting, and reinsurance.

As the NAIC works through its SMI process, a key area of focus is the Solvency II Pillar II component of the framework. The NAIC has begun developing a US Own Risk and Solvency Assessment (ORSA) to address the insurance core principles of the IAIS and to explore companies' and/or groups' risk management processes. This also includes a prospective look at solvency and companies' ability to withstand stresses. The ORSA proposal was released as an exposure draft in February 2011. However, internal models may be required for an explicit quantitative measurement of the risks.

In addition, the SMI will have an important bearing on the matter of equivalence. The question of Solvency II equivalence will have a significant impact on the broader US insurance industry and will result in a number of implications for US companies – particularly with regard to capital requirements, group structuring and reinsurance business.

Conclusion

Solvency II is a system designed to create incentives for sound risk management; hence, many European companies are working toward building strong risk management standards. Insurance companies in the US should benefit from these best practices: to benchmark themselves against their European peers, strengthen their risk management capabilities, create sustainable products and remain competitive in the global marketplace.

The implementation of Solvency II has raised a number of challenges for European insurers, such as the availability, granularity and quality of data. In the US, insurers should review the proposed ORSA and conduct a diagnostic to evaluate their readiness and risk management practices in relation to emerging leading practices.





Glossary

Technical provision. The value that is equal to the sum of the best estimate and the risk margin.

Best estimate. The probability weighted average of future cash-flows, taking into account of the time value of money using a specified risk-free interest rate term structure.

Risk margin. The cost of providing an amount of eligible own funds equal to the solvency capital requirement necessary to support the (re)insurance obligations over the lifetime thereof.

Own funds. The basic own fund and the ancillary own funds.

Basic own funds. The excess of assets over liabilities plus any subordinated liabilities.

Ancillary own funds. Items other than basic own funds which can be called up to absorb losses, such as unpaid share capital or initial fund that has not been called up, letters of credit and guarantees, and any other legally binding commitments received by the (re)insurance company.

Tiers. Classifications for own fund items; the classification of 1, 2 and 3 depend on to what extend the item is available, or can be called up on demand, to fully absorb losses on a going-concern basis, as well as in the case of winding-up (permanent availability). Tier 1 capital is the highest valued form of capital.

Minimum capital requirement (MCR). A calculation combining a linear formula with a floor of 25% and a cap of 45% of the SCR (whether calculated using the standard formula or an internal model); the MCR is subject to an absolute floor.

Solvency capital requirement (SCR). The risk-based capital requirement under Solvency II; it is calibrated to a 99.5% Value at Risk confidence level over one year.

Contacts

Rich de Haan
Insurance and Actuarial
Advisory Services
rich.deHaan@ey.com
+1 212 773 0895

Zak Benjazia
Insurance and Actuarial
Advisory Services
zak.benjazia@ey.com
+1 212 773 7335

Kush Kotecha
Insurance and Actuarial
Advisory Services
kush.kotecha@ey.com
+1 312 879 2967

Ernst & Young

Assurance | Tax | Transactions | Advisory

About Ernst & Young

Ernst & Young is a global leader in assurance, tax, transaction and advisory services. Worldwide, our 141,000 people are united by our shared values and an unwavering commitment to quality. We make a difference by helping our people, our clients and our wider communities achieve their potential.

Ernst & Young refers to the global organization of member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit www.ey.com

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

Ernst & Young is a leader in serving the global financial services marketplace

Nearly 35,000 Ernst & Young financial services professionals around the world provide integrated assurance, tax, transaction and advisory services to our asset management, banking, capital markets and insurance clients. In the Americas, Ernst & Young is the only public accounting organization with a separate business unit dedicated to the financial services marketplace. Created in 2000, the Americas Financial Services Office today includes more than 4,000 professionals at member firms in over 50 locations throughout the US, the Caribbean and Latin America.

Ernst & Young professionals in our financial services practices worldwide align with key global industry groups, including Ernst & Young's Global Asset Management Center, Global Banking & Capital Markets Center, Global Insurance Center and Global Private Equity Center, which act as hubs for sharing industry-focused knowledge on current and emerging trends and regulations in order to help our clients address key issues. Our practitioners span many disciplines and provide a well-rounded understanding of business issues and challenges, as well as integrated services to our clients.

With a global presence and industry-focused advice, Ernst & Young's financial services professionals provide high-quality assurance, tax, transaction and advisory services, including operations, process improvement, risk and technology, to financial services companies worldwide.

It's how Ernst & Young makes a difference.

© 2011 Ernst & Young LLP.
All Rights Reserved.

This publication contains information in summary form and is therefore intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. Neither Ernst & Young LLP nor any other member of the global Ernst & Young organization can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. On any specific matter, reference should be made to the appropriate advisor.