The Actuarial Profession
making financial sense of the future

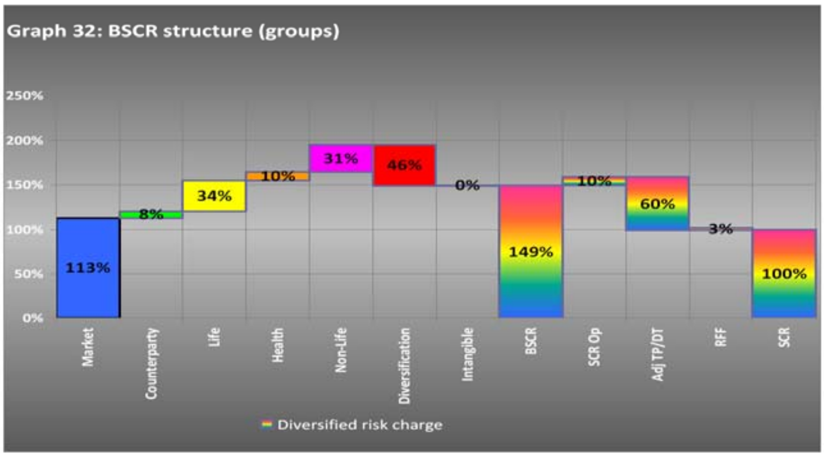
Health and care Conference 2011
Jeff Davies

The potential impact of Solvency II on the health and care market

19 May 2011

Solvency Capital Requirement

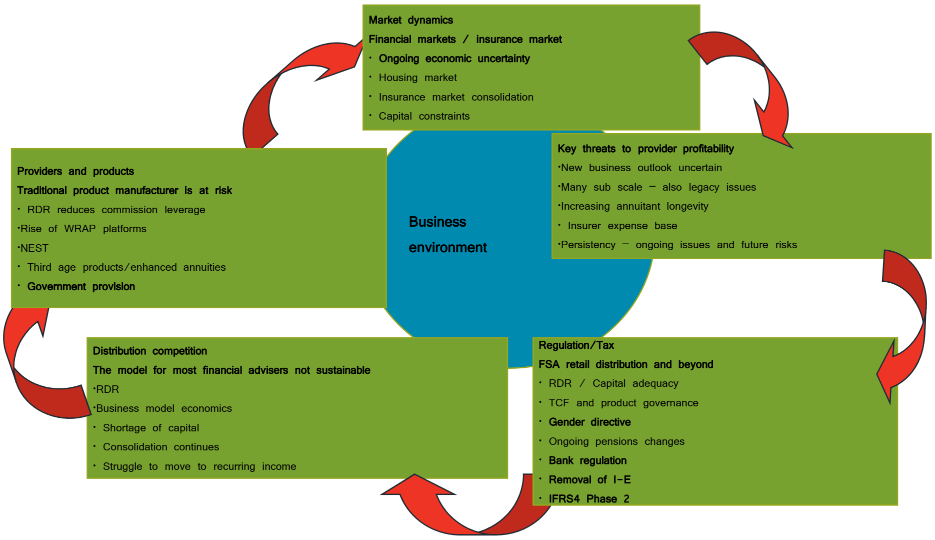
Composition of the SCR (groups)



Source: EIOPA QIS5 report, Graph 32, page 64

All percentages above are expressed relative to SCR

Solvency II: only one of many forces impacting the industry



Hungarian presidency compromise to Omnibus II

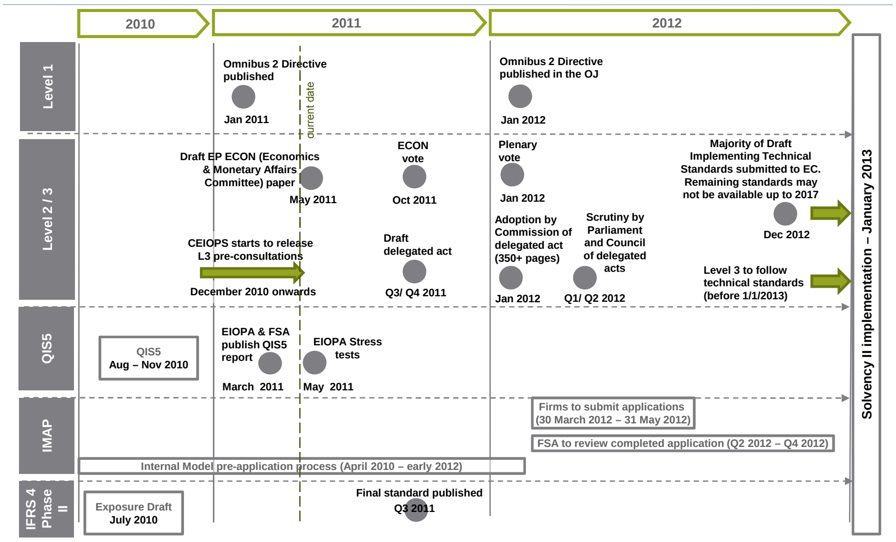
Background

- The European Council recently published the compromise text for Omnibus II proposed by the Hungarian presidency (28/3/2011).
- This proposes some **significant** delays to the (draft) technical standards which are referred to in Omnibus II (up to 2017 in some instances).
- This is currently being discussed and is yet to be agreed in the European Council.
- The European Parliament is doing its own work on the Omnibus II proposals. Council and Parliament texts will also have to be reconciled.

Summary of the changes

- **Illiquidity premium:** A potential move away from the assumption that the illiquidity premium will be granted (Article 77a)
- **Exceptional falls:** EIOPA now has responsibility for declaring (but not determining) the existence of an exceptional fall in financial markets (Article 138(4))
- **Group internal models:** EIOPA will now be involved in joint supervisory decisions on Group internal model applications (Article 231)
- **Draft technical standards:**
  - <u>Due by 31/12/2012:</u>
    - Information required for supervisory purposes (Article 35)
    - Information required for Group/solo SFCR disclosures (Articles 56, 256)
    - Applying IFRS consistent methods for valuing assets & liabilities (Article 75)
    - Actuarial methods to calculate BEs, RFRs and TPs (Article 86)
    - Classification/limits of own-fund items & ring fenced funds (Articles 97-99)
    - Integrating partial internal model results into the standard formula (Article 114)
  - <u>Due to 31/12/2014:</u>
    - Operational functioning of colleges of supervisors (Articles 248-249)
  - <u>Due by 31/12/2015:</u>
    - Alternative, IFRS compliant, asset and liability valuation methods (Article 75)
    - Calculation of TPs (Article 86)
    - SCR calculation issues (Article 111)
    - Changes to Articles 120-125 in light of the limited scope of partial internal models (Article 114)
  - <u>Due by 31/12/2017:</u>
    - Templates and structure for disclosure (Article 31)
    - Process for setting, calculating and removing capital add-ons (Article 37)
    - Internal model approval, changes, & 'six test' application conditions (Article 127)

Solvency II timeline



So where are companies and their SII projects?

Recent Solvency II quotes from some European insurers

Although Solvency II doesn’t, of itself, change the risks that insurers are exposed to it, it may have a wide range of effects on the market. This will occur through the impact on the capital required, the way firms compete and operate and the understanding needed around the risks taken on.

- **Allianz:** Solvency II doesn't increase risks, it just makes them more obvious and potentially more capital intensive. We might see subtle shifts. **Where there's less capacity, prices increase until there's more capacity and they can stabilise or drop back.** Market dynamics shouldn't be any different to the situation today. If they are there's something wrong with the legislation. There will be higher levels of transparency and standardisation across the market. This will mean there's much more of an incentive to increase efficiency and consistency of approach. Insurers will find ways to compete for business.” *Neil Clutterbuck, Director of Engineering Markets – Feb 2011*
- **AXA:** "There are issues regarding the data we receive from our intermediary partners. They don't have a risk culture; they have an intermediary culture. This can cause problems, for instance, for some, it's impossible to get the geographic risk data we require. At the moment the data we get from intermediaries is very different to that we get direct. Our direct data is real-time so we can look at the concentration and geographic risk throughout the day, moving the price to reflect any changes.” *Jean Drouffe, Group Finance, Risk and Strategy Director – Feb 2011*
- **CNA Europe:** “Although there are **areas of Solvency II that create the potential for decreased risk appetite**, for example, strongly correlated lines of business or lines with a large component of long-tail liability, it won't result in material changes in the market. We're in a period of the market cycle where there's a lot of capital availability. If this was more constrained perhaps we'd hear about more issues but I don't think it will have a major impact. An insurer would have had problems with a badly constructed portfolio of business before Solvency II. The new requirements simply make this more obvious.” *Carl Kearney, Chief Actuarial and Risk Officer – Feb 2011*
- **Generali:** “I believe we are entering in a world where decisions by individuals on their long term savings and future allocation of wealth will have to become more mature, autonomous, and transparent, and where investment risk, but also return upside, will be **increasingly shared by customers and providers**. The trade off between flat performances with guaranteed rates and the participation of savers to a dynamic upside in investment will become clearer.” *Investor day in November 2010*
- **Groupama:** “Solvency II creates the potential for change in what is offered. We're moving to more risk-based underwriting, where **both risk and capital will be more central to underwriting decisions**. There will be a potential change in the status quo with more questions asked about the implications of some lines of business.” *José Margo, Chief Risk Officer – Feb 2011*
- **Mitsui Sumitomo Insurance:** “We have already seen an improvement in understanding of risk as processes are changed in line with Solvency II. Improved data leads to better underwriting. The more data you have the better able you are to identify the risks. This is leading to refinements on ratings and pricing.” *Brian Heffernan, Chief Risk Officer – Feb 2011*
- **RSA:** “RSA believes Solvency II will encourage better risk management and improve the peace of mind of investors. The continuation of an effective regulatory voice from London will help the U.K. maintain its influence in Europe. The FSA have done quite a good job in understanding the issues associated with Solvency II, and particularly the issues arising out of the development of internal models," *Derek Walsh, Group General Counsel – Feb 2011.*

A flavour of what you told us…

“Solvency II is motoring along - but it's focused a lot on being Solvency II compliant - and NOT on products”

“No firm plans in place”

“Immediate focus is on RDR”

“Deliverables will be different; models needed will be different; information in the report will be different”

“Would have liked to be in this position 6 months ago”

“Don't want pricing models to be the same as internal model... need to be able to move quickly for commercial purposes”

“Resource is biggest challenge and there are competing priorities”

“Some plans in place but not reached product actuaries”

“Waiting for requirements to be firmed up before coming up with plans”

“Can expect more interaction as implementation date nears”

“How product sits at portfolio level likely to be incorporated, rather than just assessing each product in isolation”

“Risk is the key issue … will need a much greater understanding… Risk function will have to involve themselves in pricing”

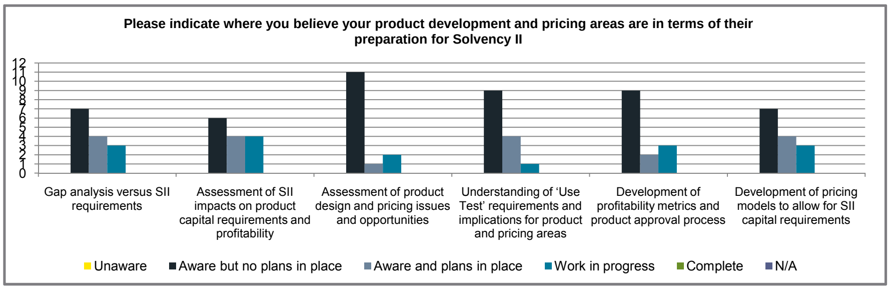
“A key issue is documentation standards”

“More onus for pricing actuaries on capital going forward more emphasis on the Balance Sheet too.”

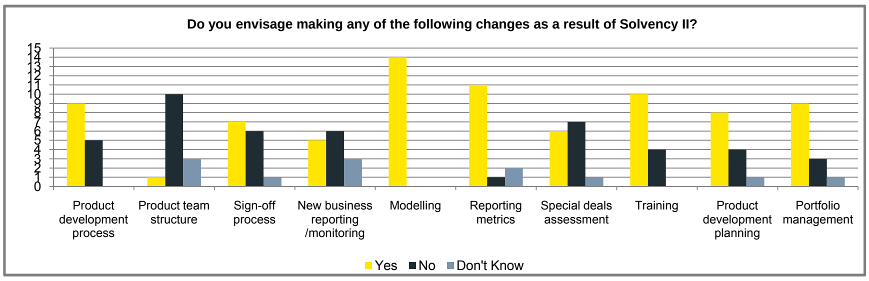
“Potential to lose business to other non guaranteed at retirement products”

“In general Solvency II... will mean the pricing process needs more controls”

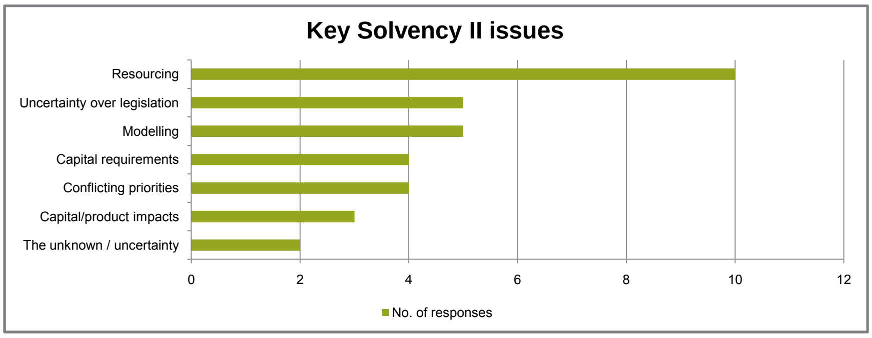
Product development and pricing – Solvency II preparation



Changes as a result of Solvency II

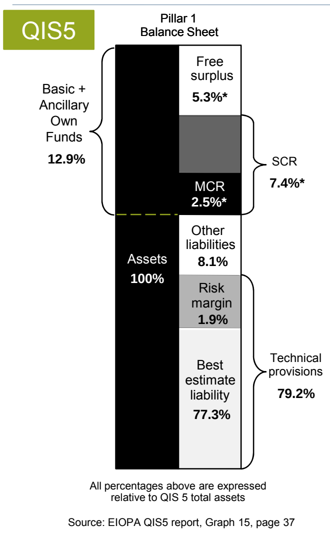


Key Solvency II issues for product actuaries



QIS5 vs. Solvency I balance sheet

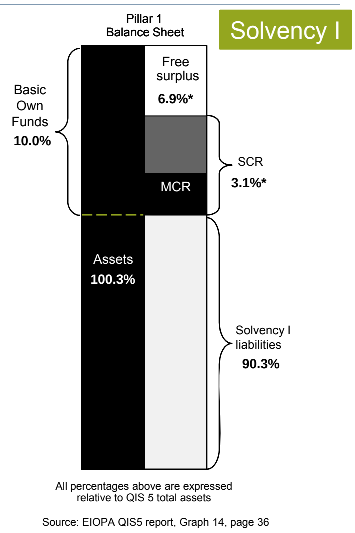
Solo



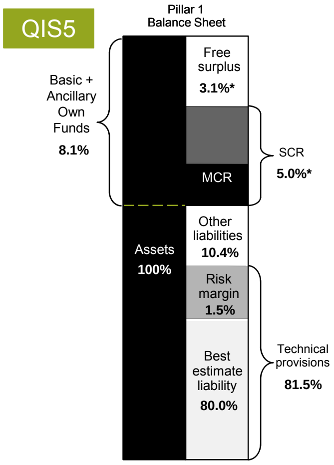
Balance sheet (solo)

- The figures presented in the graphs are inclusive of all solo undertakings (Life, Non-Life, Health, etc.).
- For solo undertakings, the surplus has decreased in the move from Solvency I to QIS5.
- This has been driven by a large increase in the SCR, despite a fall in liabilities.
- Total assets have also reduced marginally between the regimes, further reducing the free surplus.
- Own funds have increased materially by 2.9% between the regimes.

* These figures are estimates calculated from a different graph in the EIOPA report (Table 6, page 25).



QIS5 vs. Solvency I balance sheet
Groups



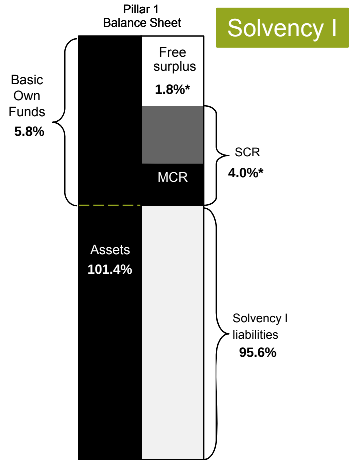
All percentages above are expressed relative to QIS 5 total assets

Source: EIOPA QIS5 report, Graph 15, page 39

Balance sheet (groups)

- The figures presented in the graphs are inclusive of all group undertakings (Life, Non-Life, Health, etc.).
- For group undertakings, the surplus has increased in the move from Solvency I to QIS5.
- The key drivers of this are a slight decrease in the liabilities, offset by a slight decrease in the assets and increase in the SCR.
- Own funds have increased materially by 2.3% between the regimes.

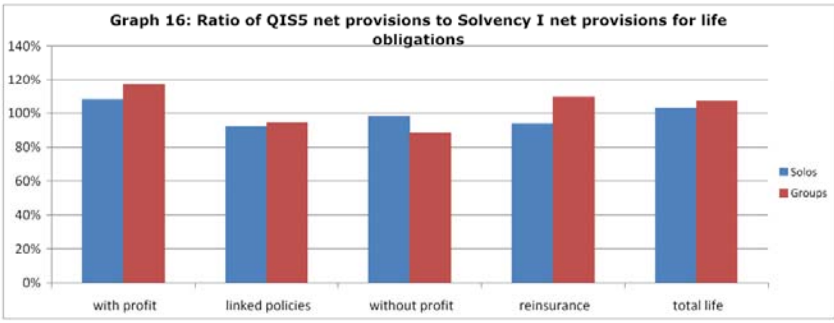
* These figures are estimates calculated from a different graph in the EIOPA report (Table 8, page 34).



All percentages above are expressed relative to QIS 5 total assets

Source: EIOPA QIS5 report, Graph 14, page 38

Technical Provisions
Life

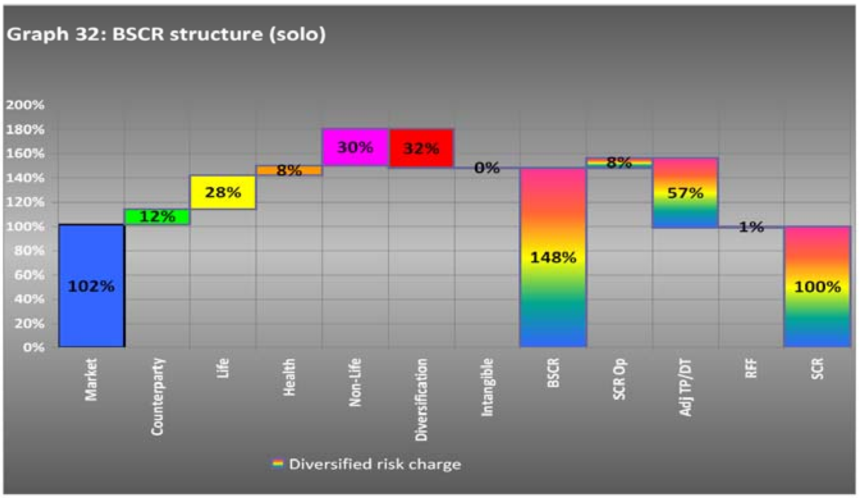


Source: EIOPA QIS5 report, Graph 16, page 45

Technical provisions

- In the graph above, total life net provisions are shown to be greater under QIS5 than under Solvency I. Reinsurance recoverables played a large role in this as a gross technical provision comparison showed a slight decrease of 1%.
- Net provisions for with profit business increased by 8% for solo undertakings under the new regime.
- EIOPA noted that the different interpretations of the contract boundaries definition led to inconsistency between undertakings and may also have led to incorrect calculation of technical provisions.

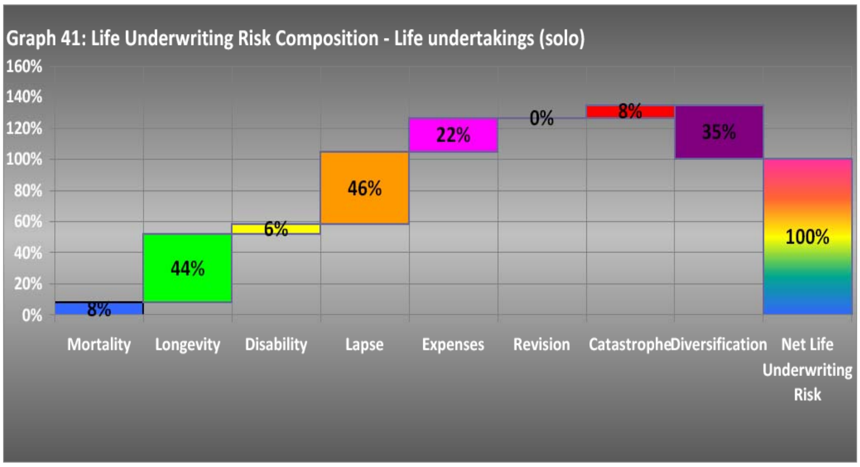
Solvency Capital Requirement
Composition of the SCR (solo)



Source: EIOPA QIS5 report, Graph 32, page 63

All percentages above are expressed relative to SCR

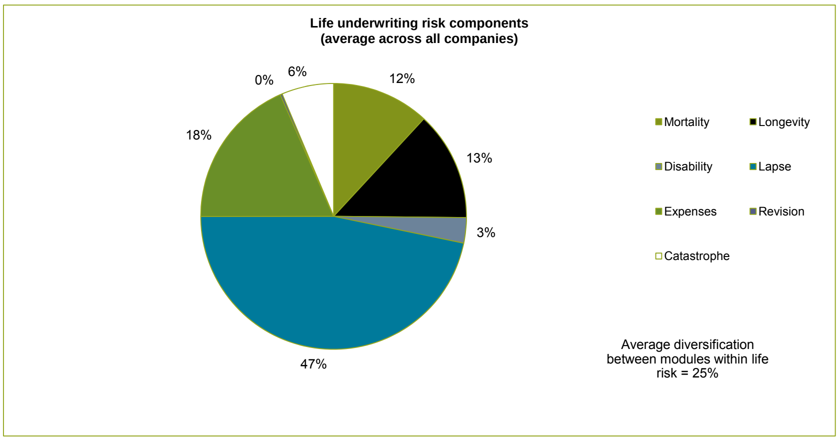
Solvency Capital Requirement
Life underwriting risk



Source: EIOPA QIS5 report, Graph 41, page 78

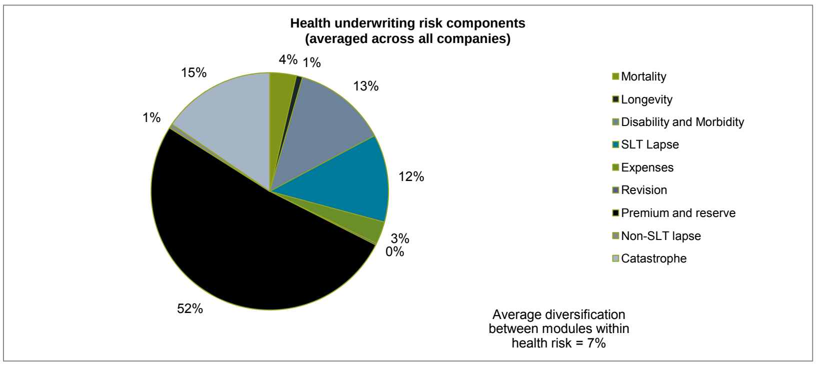
All percentages above are expressed relative to Net life underwriting risk

Solvency Capital Requirement
Life underwriting risk



Source: E&Y QIS5 sample results

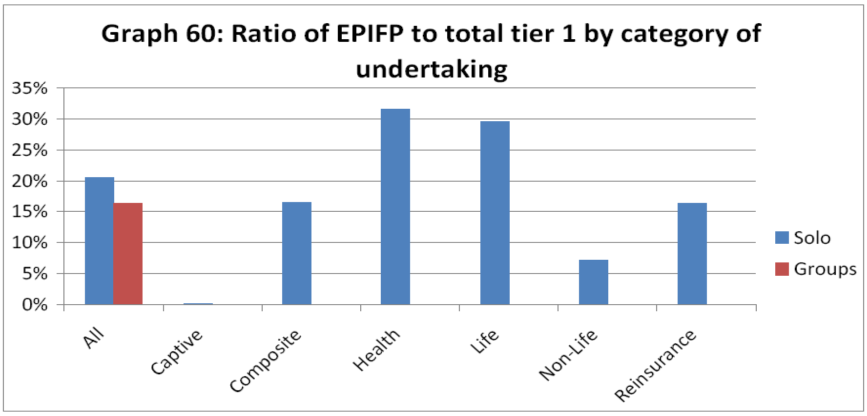
Solvency Capital Requirement
Health underwriting risk



Source: E&Y QIS5 sample results

- Some companies did not split out the health SLT business (and treated this within the life underwriting risk module).

Own Funds
EPIFP – Expected Profits in future Premiums



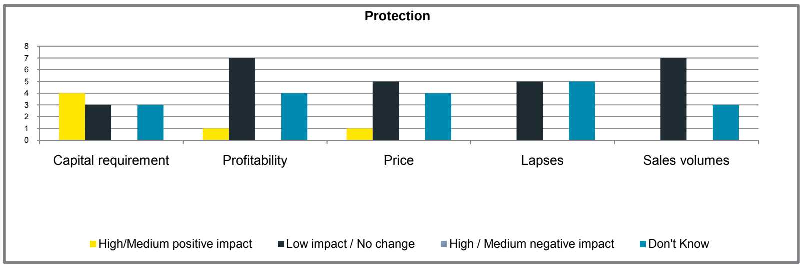
Source: EIOPA QIS5 report, Graph 60, page 132

Key drivers and uncertainties for Health business

- Key dependencies in figures and uncertainties around them:
    - EPIFP
    - Contract boundaries
    - Risk Margin
    - Diversification
    - Tax
    - Stress calibration
    - Counterparty capital
    - Health catastrophe risk sub-module

    - Reinsurance arrangements, to optimise capital at product and group level
    - Product level modelling methodology – e.g., projections of SCR and Risk Margin in profit tests
    - Product governance - use test and consistency with the Internal Model
    - Interaction with wider market developments
- Some options:
  - Guaranteed / Reviewable
  - Long-term level premium / YRT / Renewable / Convertible

Solvency II impacts - Product Impacts



Key messages

- Some positive impact on capital requirements expected, anticipated that any benefits would be competed away.
- A small number of companies mentioned the potential impact on tax as being a more significant issue than capital requirements.
- There were varied comments on reinsurance, with some seeing a reduction in reinsurance use because of less regulatory arbitrage, others seeing more use of reinsurance to access diversification benefits and manage overall capital position. There was general agreement that Solvency II was another driver for reviewing reinsurance arrangements.
- Many saying they were waiting to see impact on reinsurance terms offered.

Product Impacts Assessment to Strategy Development

1. Initial impact assessment

- Calculate Solvency II capital requirements over life of new business portfolio vs current world (H/M/L)
- Assess impact of new capital basis on key profit metrics (H/M/L)
- Initial view – does the product require significantly more capital? is the product within risk appetite? does it still meet required rate of return?
- Liaise with main Solvency II program on methodology, impacts and issues

2. Analysis to deepen understanding

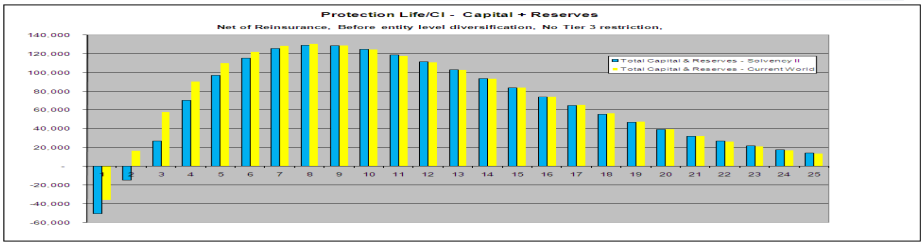
- Identify and quantify key risks and drivers of SII capital
- Assess impact of current reinsurance program
- Identify key issues and uncertainties re SII rules
- Identify sensitivity of profit metrics to risk drivers
- Identify the significance of diversification benefits to profitability (and key drivers)
- Consider likely variations across the mix of business
- Review in light of risk appetite, capital constraints, return requirements and materiality

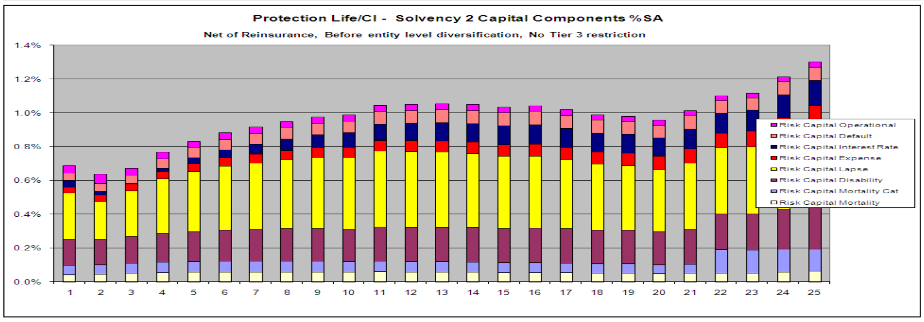
3. Product strategy development

- Decide if urgent action required to reduce capital strain or improve profitability
- Determine options for improving capital efficiency and return – e.g. repricing, product redesign, restructuring entities, reviewing reinsurance etc.
- Determine product strategy – ie, close product to new business, continue but with significant changes, continue but look for optimisation opportunities
- Update as SII rules develop and impact on market clearer.

Solvency II Product Strategy Development

Possible way forward



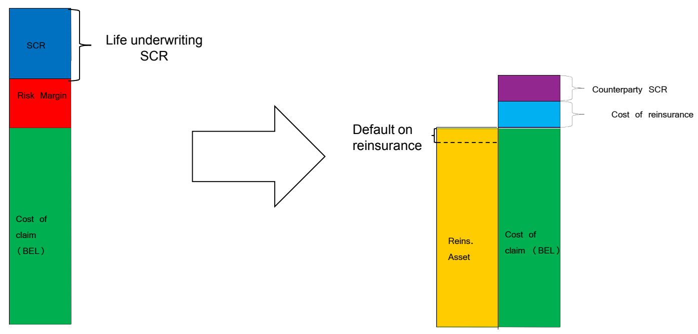


The effect of reinsurance on liabilities

Illustration of effect of reinsurance on the balance sheet. Assume 100% Quota Share. Graphs show underwriting risk element and additional charges only.

Pre-reinsurance | **Post-reinsurance**

Assets / Liabilities | **Assets / Liabilities**



Other impacts include

1. Change in own funds; capital and technical provisions released, but potentially negative reserves lost.
2. Loss of diversification against other lines, increase SCR and Risk margin for those lines.

Understanding insurer's and reinsurer's challenges – Segmentation by size

- **Large insurers:**
  - Large market risk, small insurance risk
  - Diversification opportunities
  - Think profits paid to reinsurers
  - Retain more / captives
  - But price competition in some markets
  - Require:
    - Bespoke solutions
    - Expertise / pricing benchmark
    - Cat cover

- **Medium sized insurers:**
  - Much less diversification
  - Risk lines potentially large part of business
  - Marginal capital higher
  - Wants to compete with multi-nationals
  - Experience can materially impact results
  - Require:
    - Access to diversification
    - Result volatility protection

- **Small insurers:**
  - Little diversification
  - Not using internal model
  - Lack of expertise
  - Require:
    - Material level of reinsurance
    - Expertise / pricing benchmark

- **Where do Niche players sit?**
  - High expertise, low diversification.
  - Can they survive in Solvency II world – if so what reinsurance solutions will they need?
- Will companies take a territory or subsidiary view or a global view?

Pillar 2 - Can risk be managed?

Pillar 3 – Disclosure of bases / Reinsurance arrangements?

Questions?