



SOLVENCY II AND COUNTER INTUITIVE RESULTS

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Overview

Aims of presentation

Moving Parts - impact

Examples

Changes in 2019 2020



Aim of presentation

- Solvency II has presented counter intuitive results to Boards
- Show how and why these occur



Solvency II is....

- Risk based
- Extremely “active” valuation of future cashflows
- Small changes in assumptions change the values by a large amount.



To make matters worse.....

- There are lots of moving parts
- Best estimate liability
 - Initial change due to assumption changes
- Solvency Capital Requirement gross
 - Impact of base assumption change on stresses
- Solvency Capital Requirement net of loss absorbency
 - Loss absorbency may increase or decrease depending upon the assumption, geared up impact
- Cost of capital risk margin
 - Impact of SCR net



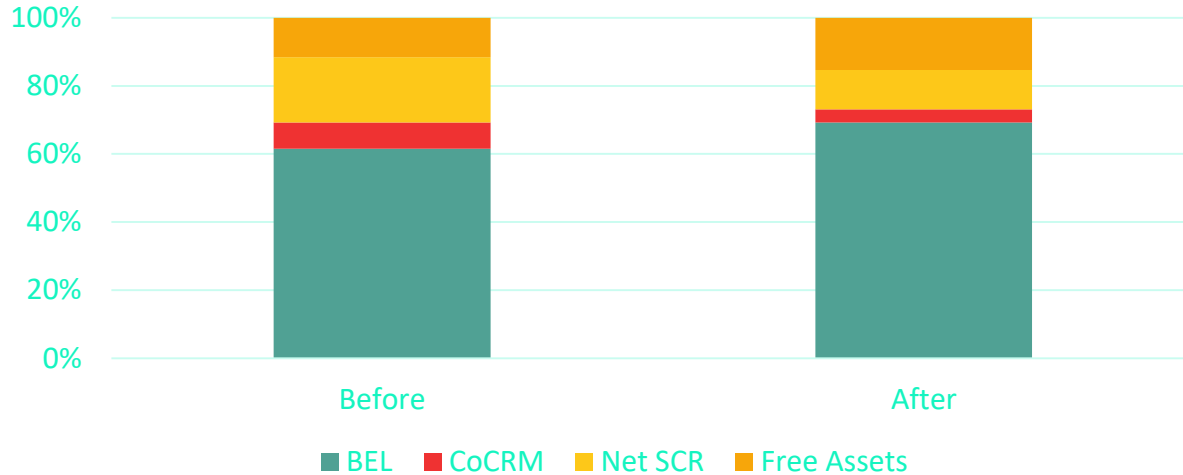
Example – With Profits provider and lapse assumption - ISAs

- Increase in lapses experienced appears permanent – increase assumption
- Reduces value of margins – increases BEL
- Reduces number in MVR free surrender
- Increases numbers of surrenders expected
- Increases loss absorbency – non guaranteed
- Reduces net SCR
- Reduces CoCRM



Graphically

Impact of Lapse Assumption Change



End year equity example and WP

- Fall in equities shortly before year end
- Initial impact on free assets.....
- Reduced amount of equities for equity stress
- Reduced SCR
- Contra-cyclical adjustment very negative
- Reduced SCR
- Gearing from loss absorbency being the same
- Lower free assets in GBP, Higher SCR Coverage



What was the reaction?

- SCR coverage was 165%, expected to be 130%, became 260%
- What happens if equities had gone up instead?
- Put aside large part of equity movement for this impact
- Good news as counters impact of equity movement
- SCR fixed for year? – need to model?



RFR movements

- Swaps and gilts not move in line
- RFR down:
 - Assets up if gilts moved in line
 - Liabilities up by more?
 - Loss absorbency down?
 - Net SCR up?
 - CoCRM up?



Care on margins on Unit Linked business

- Margin as % of FV growing at RFR
- Expenses growing at inflation - \gg RFR
- Tail end Expenses $>$ Margins
- Immediate Expenses $<$ Margins
- Lapse rate reduces
- More policies survive to tail end.....
- VIF can reduce not increase
- Impact of interest rate stress?



What can be done?

- More frequent valuation of liabilities and assets including SCR
- Latter is the hardest due to data work on assets
- Former can be made easy with modern valuation systems able to run valuations in minutes remotely
- Care on assumption changes – fully test – make sure really reflects expected future experience
- Communication from the actuary of consequences



Example

Impact on BEL

Impact on Gross SCR

Impact on loss absorbency

Impact on Net SCR

Impact on COCRM



More frequent valuations

Quicker valuations

Faster software

Asset Data

Asset SCR calculations

Better Communications



Summary

Solvency II is an “active valuation method”

There are many moving parts

Some of the moving parts may counter others

Gearing applies on some of the impacts

Can have counter intuitive results

Better communication necessary

More frequent valuation using faster software

Asset data is going to be key next step.

Changes in Solvency II 2019/2020

- UK will continue with Solvency II?
- Changes to come into effect in 2020 (estimate)
- Published 8th March.

Look through....

- 20% limit does not apply for collectives held for unit/index linked liabilities if market risk fully p/h
- Grouping allowed if target asset allocation not available
- New simplification to application of look through based on last reported asset allocation

Life Underwriting risk - SF

- Mortality risk element larger stress (25%). Longevity still at 20%.
- Simplified grouping for lapse risk

GI Underwriting Risk - SF

- Simplified calculations of catastrophe risk
- Simplified calculation for lapse risk on non life health
- Simplified calculation for risk mitigating effect of reinsurance
- New factors for risk for premium and reserve
 - Medical expenses up
 - Legal expenses up
 - Up and down on some liability lines

Market risk - SF

- Can put bonds into unrated (BBB) level if 80% have credit ratings and if bond is normal bond
- Can carry out own credit assessments if unrated. Method outlined.
- Long term equity holdings (5 years plus) plus definitions on only part of the total fund for particular technical provisions are at 22% stress. Can include collectives.
- Unlisted equities allowed subject to conditions. Long term equity holdings can include unlisted if meet certain criteria – aim to encourage equity investment in smaller enterprises
- Qualifying infrastructure equity investment at 22% stress.

Still to come....

- New interest rate stresses – pushed off to 2020



Questions



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ACTUARIES