Solvency II Update

Craig McCulloch

Agenda

- SII overview
- Latest Developments
  - Legislative timetable
  - Current regulatory progress
  - Implementation measures
  - QIS4 results & implications
- Australian Implications
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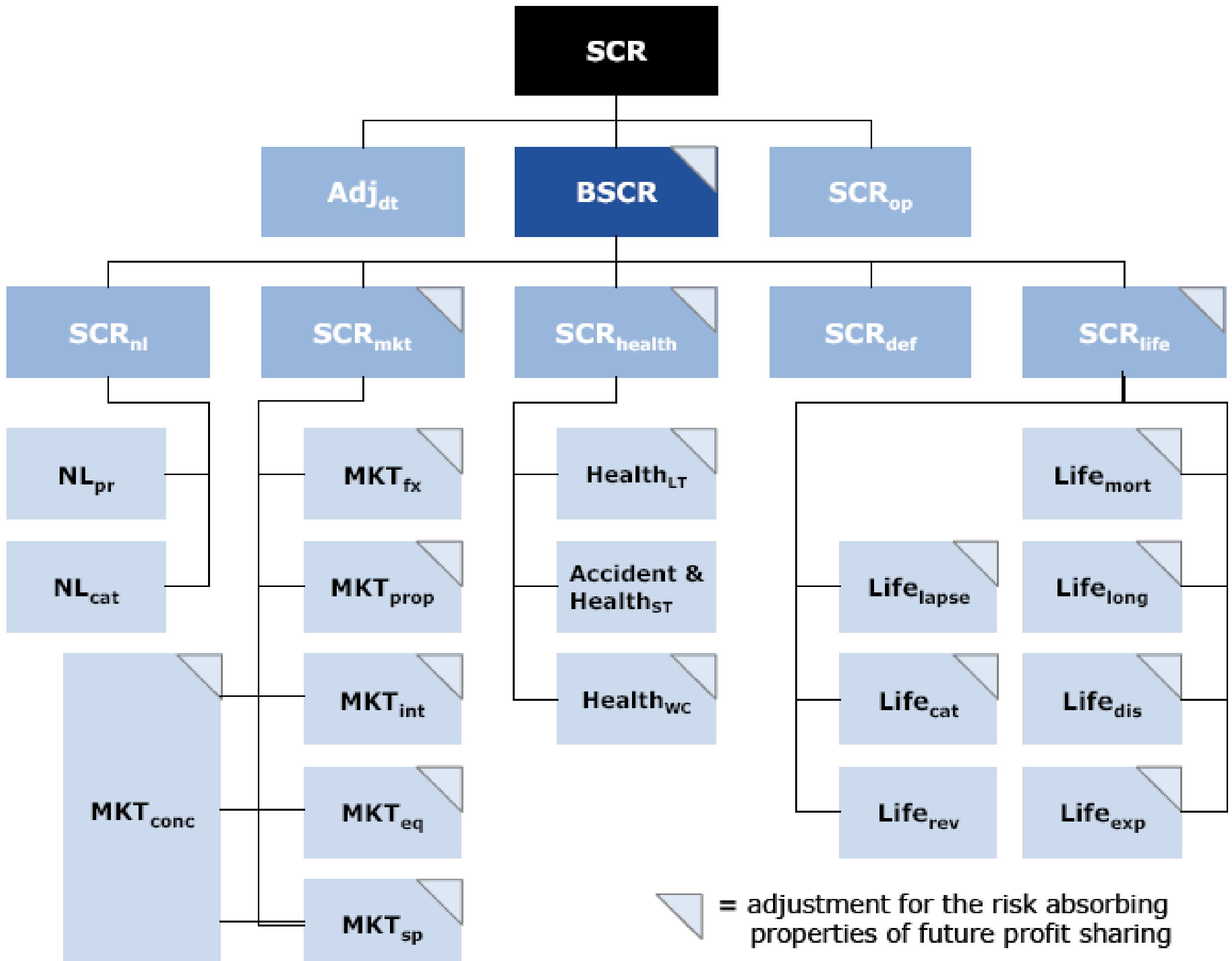
Solvency II Overview

- 3 Pillar risk-based capital and solvency framework applying to all European insurers
  - Pillar 1: Quantitative requirements
  - Pillar 2: Governance Requirements, including Own Risk and Solvency Assessment (ORSA)
  - Pillar 3: Disclosure requirements
- Risk-based capital requirements at two levels, MCR and SCR
  - MCR based on simple standard formulae
  - SCR set via internal model, or standard formulae
  - Capital can be covered by 3 tiers of eligible capital requirements

Solvency II Pillar 1

- Market-consistent balance sheet
- Tech Provisions = Best Estimate + Risk Margin
- Solvency Calcs on modular risk grouping basis
  - prescribed formulae for each risk driver correlated via simple correlation matrices

Solvency II Pillar 1



= adjustment for the risk absorbing properties of future profit sharing

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Latest Timetable

Now

April 2009

Directive
Agreed

March 2009

CEIOPS
Implementation
Consultation

April 2010

QIS5

H2 2010

Implementing
Measures
Adopted

October 2012

Directive
Implemented

Legislative Development

- Currently protracted debate in EU commission to pass bill
- Two key issues:
  - – Allowance for Group Support
  - – Procyclicality

Group Support

- Previous SII drafting included “group support” provisions.
  - Allowed subsidiaries to recognise spare capital within the Group
  - SCR in excess of MCR could be covered by group support
  - In QIS4 only 2% of tier 2 capital was defined to be group support
- ECOFIN draft (Dec ’08)
  - removed the group support elements
  - Added provisions to enable better cross-border regulation:
    - College of Supervisors
    - CEIOPS role strengthened
- Currently (as at end March 09) informal agreement reached

Procyclicality (or vive l’équité!)

- Concerns raised over potential need to de-risk following severe market falls
- Agreement reached in discussions (as at April ‘09) that would allow for an “extended dampener” on equity and bonds.

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Implementation Measures

- Few details yet on approval process
- National regulators in initial stages of preparing for implementation now
- Example: UK FSA DP08/04

DP08/4: Internal Models

"Based on the experience with the ICAS regime, we envisage many UK insurers are likely to apply for internal model approval."

"Our own work with industry suggests that even the best prepared firms are still some way short of Solvency II standards in at least some of these areas."

Source: FSA DP08/4

DP08/4: Model Approval Process

- Key areas for approval include:
  - Use test
  - Statistical quality test
  - Data standards
  - Documentation
  - Calibration
  - Profit/Loss attribution

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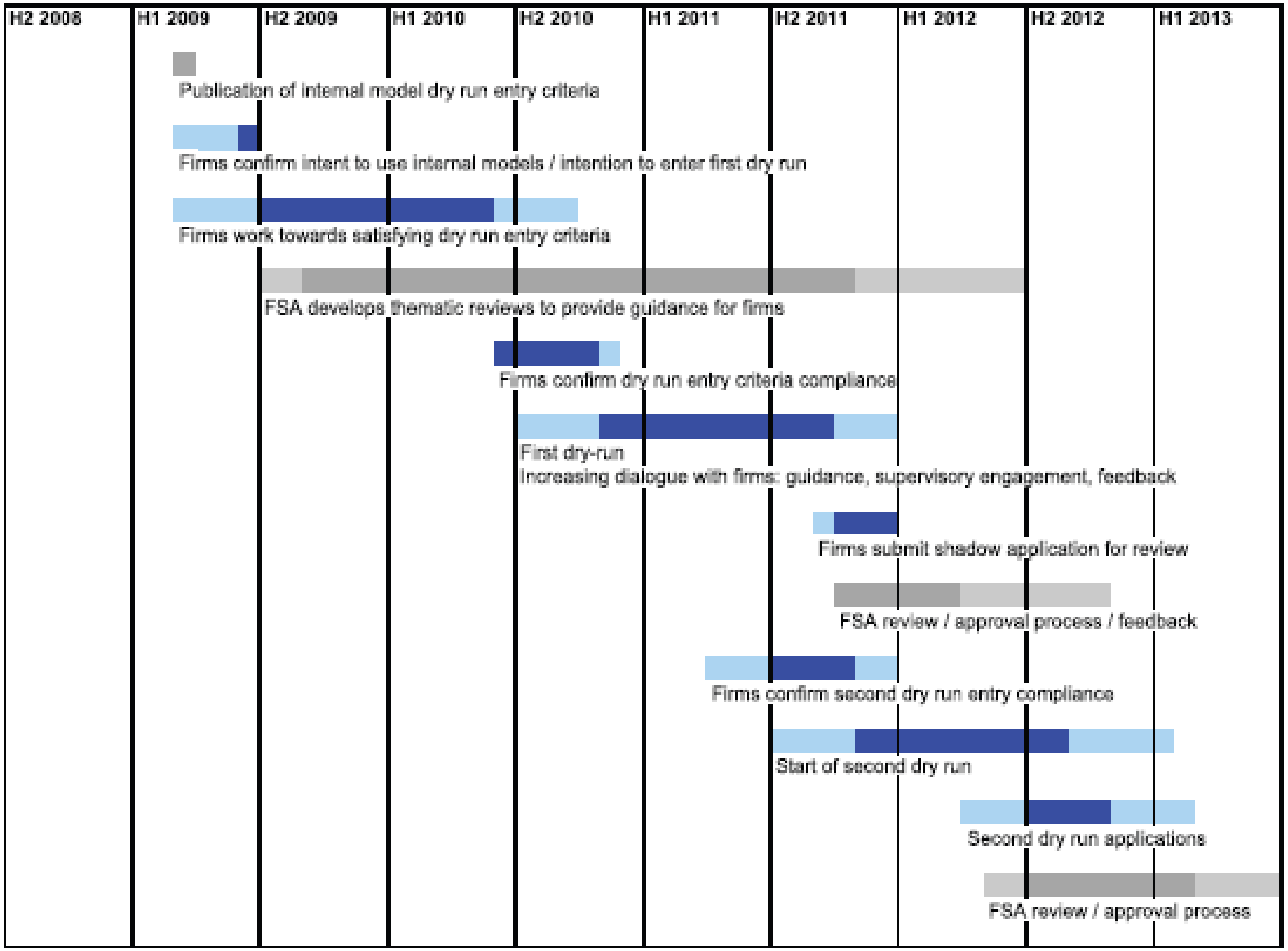
  - – Profit/Loss attribution

- ➢ Capital Allocation
- ➢ Reinsurance
- ➢ Underwriting
- ➢ Investment mgt
- ➢ Product devt
- ➢ Management Info
- ➢ Strategy/planning
- ➢ Corporate finance
- ➢ Finance Function

DP08/4: Model Approval Process



DP08/4: Pillar 2

- 2 Key requirements:
  - Risk Management System
  - Own Risk & Solvency Assessment (ORSA)
- ORSA an integral part of managing the business
  - Firms must be able to demonstrate this
  - Integration of internal model with ORSA important
- Key details still under debate

DP08/4: Key messages

Current practice	Current ICA approaches and governance arrangements will not be good enough
Internal models	There are benefits from using internal models but a lot of work to do in a short time
Firm-wide engagement	Board ownership and responsibility is required in the short term

DP08/04 serves as a wake-up call for the UK insurance industry

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QIS4

- Fourth study into quantitative results of proposed framework and implementation
- Based on draft specification set out by CEIOPS based on draft legislative framework
- Study participants:

Type of undertaking	Small	Medium	Large	Total[7]
Life undertakings	127	139	84	351
Non-life undertakings	330	272	83	686
Composites	88	95	43	227
Pure reinsurers	24	15	10	49
Captives	98	1	0	99
All respondents	**667**	**522**	**220**	**1,412**
Mutuals thereof	177	103	24	304

Source: QIS4 report CEIOPS-SEC-82/08

QIS4 - Results

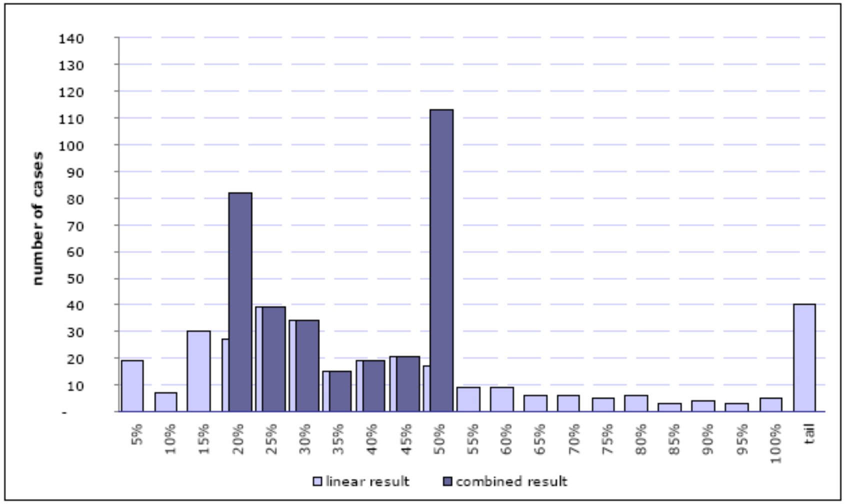
- 154 of 1412 participants would not meet SCR under QIS4 (11%)
  - 17 of 1412 would not meet MCR under QIS4 (1.2%)
- Life firms (generally) better solvency ratios than Solvency I (SI) position, GI worse

Median solvency ratio	Solvency I	QIS4
Life	200%	230%
Non-Life	277%	193%
Composite	267%	230%
Reinsurance	366%	221%
Captive	331%	167%

Source: QIS4 report CEIOPS-SEC-82/08

QIS4 - Results

- MCR based on simple calculation with cap/floor as % SCR
  - For Life firms the basic calculation considered too variable relative to SCR
  - Non-life performance better



Source: QIS4 report CEIOPS-SEC-82/08

QIS4 – Capital Composition

- Split of capital requirements (pre divers)
  - Life firms:
    market risks major contributor, insurance risks secondary (approx 70/30)
  - Non life firms:
    non-life risks dominate (approx 70/30)
- Other risks typically much less important in aggregate (primarily health risks)
  - Op Risk largely dominated by BSCR
  - Adjustment for deferred taxes sizeable in some countries

Figure 76: Overall BSCR composition (life undertakings)

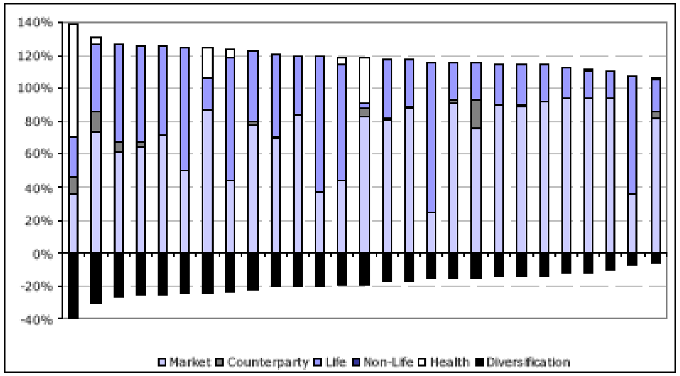
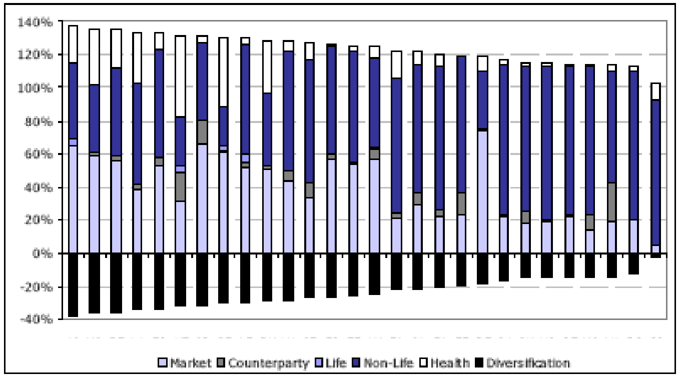


Figure 77: Overall BSCR composition (non-life undertakings)



Source: QIS4 report CEIOPS-SEC-82/08

QIS4 – Calibration Issues

- Cost of capital rate of 6% (in excess of risk free) considered by most to be too high
- Equity shock considered too low (32%)
- Correlations queried, as no quantifiable evidence for many of the assumptions made
- Life stresses perceived as lacking transparency, evidence needed for the stress calibrations
- Correlation of 100% between Op Risks and other risks disliked

QIS4 – Internal Models

- Use of internal model planned by 63% of respondents
- Limited respondents provided results from an internal model
  - ~50% respondents reported internal model would decrease SCR by >20%
  - Majority reported internal model will decrease SCR
- Areas where internal models produced lower capital requirements than standard formulae:
  - Interest rate risk
  - Life underwriting risk (longevity & lapses)
  - Health underwriting risk
- …and higher capital…
  - Operational risk
  - Equity risk (average >40% used by all firms, c.f. 32% standard shock)
  - Property risk
  - Mortality risk

QIS4 - Groups

- Group dversification effects allowed in QIS4
  - But some complaints over flaws, e.g. no group diversification for geographic life risks
- Average group reduction in capital requirements 21% of solo firm SCRs
- Group support capital used was limited
  - Classified as Tier 2 capital

QIS 4 – Practical Issues

- Difficulties in implementing some areas
- Counterparty risk SCR module considered too complex
- Study contained testing of an equity dampener
  - liability duration component widely opposed
- 3 methods of Non life catastrophe risk tested
  - Inconsistencies across methods
- Non-life “undertaking-specific” data allowed
  - Widely supported…
  - …but not widely used
- Life risk SCRs calculated on policy-by-policy basis
  - Suggested that onerous and unnecessary for Cat/Lapse risks.
- Op risk module used simple formulae, seen as not risk-sensitive enough

QIS4 - Implications

- Some possible implications:
  - Equity stress made tougher?
  - However CEIOPS concern over need to avoid procyclicality
  - Cost of Capital reduced
  - Calculation of MCR altered again

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Implications For Australian Firms

- Potential immediate impact if EU parent
- Preparation for SII instructive & applicable in broader “best practice” context
  - GI firms applying for APRA internal model approval
  - Economic capital models – methodology, governance & embedding into business
  - ERM gap analysis
- Different risk profile of European & Australian insurers
- Some recent APRA comments
  - e.g. Op Risk reserve consistency with SII,
  - counter-cylicality debate closely observed

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Conclusions

- Solvency II progress slowed, but still on track for 2012
  - Political process slow
  - Group support & procyclicality contentious
- Regulators and firms are moving ahead with SII calcs and models ahead of implementation measures
- Significant details in approach and calibration still to be confirmed
  - Cost of Capital
  - MCR
  - Risk charges