The Actuarial Profession
making financial sense of the future

Momentum Conference 2012
William Coatesworth FIA, Milliman
Nick Ford FIA, KPMG

C1: Solvency II: latest developments

4 December 2012

Agenda

Solvency II: latest developments

- Update on Solvency II
  - overview of current position
  - pre-day one use of Solvency II developments (e.g. for ICAS regime)
- Long-term Guarantees Assessment (LTGA)
  - overview of expected scope and timelines
- Impacts on Asset Strategy
- Update on Internal Model Application and Validation

Update on Solvency II

Solvency II

- New regime expected to come into force in January 2014, 2015?, 2016?
- Will apply to all insurers registered in the EEA
- No gold plating by individual state regulators – maximum harmonising Delegated Acts (Regulation).
- Solvency II is a risk-based, market consistent regime covering much more than just capital adequacy alone.

Solvency II

- Solvency II framework structured around 3 core components:
  - Pillar 1 covers the quantitative requirements, i.e. *how much capital should the insurer hold?*
  - Pillar 2 covers the governance and risk management requirements, i.e. *how is the business run?*
  - Pillar 3 relates to the reporting and disclosure requirements
- Aims:
  - Market consistency ✓
  - Harmonise regulatory standards across Europe ✓
  - Provide an early warning system to supervisors ✓
  - Strengthen policyholder security ✓
  - Promote improved risk management ✓

Solvency II: 3 pillar approach

Pillar I Measurement of Assets, Liabilities and Capital	Pillar II Governance and Supervisory Review	Pillar III Disclosure Requirements
• Technical provisions • Capital requirements (SCR, MCR) • Asset valuation • Eligible capital • Standard Approach & Internal model approach	• Internal controls • Risk management • Own Risk and Solvency Assessment (ORSA) • Corporate governance • Regulatory process: powers and scope	• Public reporting • Private reporting to the supervisor

Solvency II covers not just capital requirements, also internal management and disclosure requirements.
Makes managers aware of the risks they run

Reminder of building blocks & hierarchy

Level	Description	Purpose	Responsibility of
1	Directive	Sets out overall framework	Council and Parliament
2	Delegated Acts*	Provides greater level of detail on specifics	Commission with advice from EIOPA
3	Guidelines & Implementing Acts	EU-wide technical standards and regulatory guidelines to ensure consistency	EIOPA
(4	*Enforcement*	*Ensure full and correct implementation by Member States*	*Commission)*

*** Formerly known as "Implementing Measures"**

Omnibus II – January 2011

- Omnibus II aligns Solvency II to EIOPA regulation, replacing CEIOPS
- Proposes a number of new articles to L1 setting out further powers and responsibilities for EIOPA
  - Increased powers of intervention and mediation
  - Harmonising inputs to the Standard formula
  - Publishing information on the relevant risk-free interest rate term structure and the counter-cyclical premium
  - Defining when a “market event” has occurred and in relation to an individual market

Omnibus II / Solvency II

An omnishambles?

19 Jan 2011	Draft Omnibus II directive – European Commission
28 Mar 2011 – 21 Sept 2011	7 different Presidency Compromise (PC) texts Introduce counter-cyclical premium (PC3) Details of transitional arrangements (PC3) Implementation date 1 January 2014 (PC4) Formula for counter-cyclical premium (PC6) Recognition of issues for products with long-term guarantees (PC7)
27 Jul 2011	European Parliament proposed text Split implementation date: phasing in of requirements during 2013 with full implementation by 2014 Introduces transitional equivalence
28 Mar 2012	Consolidated proposal – European Parliament
July 2012 onwards	Trilogue discussions between all 3 parties – still on going

CONSILIUM

EUROPEAN PARLIAMENT

Progress of Solvency II - Overview

Since the outset, the Solvency II project has been beset by delays – will there be further delays to implementation?

ONGOING OMNIBUS II DELAYS

- Plenary vote on Omnibus II in the European Parliament rescheduled from November 2012 to 11 March 2013
  - Main issue surrounds package for products with long term guarantees (matching adjustment, counter-cyclical premium and extrapolation of risk-free rate)

LTGA IMPACT ASSESSMENT

- Impact assessment on the long-term guarantees package due to be conducted from November 2012 with results March/April 2013
  - Part 1 of technical specifications released mid October

01/01/2014 DELAY

- Implementation date of 1 January 2014 now looks likely to be delayed further – but no official statement of further delays to date.

Progress of Solvency II - Overview

Julian Adams, Director of Insurance at the FSA - speech at the PRA Insurance Conference in London (22 October 2012):

"…saying that 2014 is no longer the implementation date is the easy part – it is much more difficult to say what a more likely date could be. So we are left with the facts that 2014 is unrealistic, 2015 is likely to prove very challenging given the lack of agreement on the shape of the long-term guarantee package and then a range of future dates which seem to recede into the impossibly-far future"

"…you should not infer that we believe that 2016 is a more realistic implementation date for the Directive. It simply reflects the furthest end of what we regard as a sensible planning period."

Gabriel Bernardino, chairman of EIOPA, to the Wall Street Journal:

"Under the best scenario, Solvency II could start to be implemented either 2015 or 2016...At the end of the day, we'll probably go to 2016, but it is still to be seen."

When do you think Solvency II will commence?

Implications for Solvency I

- Firms with internal models may be able to use these for the current ICAS regime, under a new two-phase approach

Phase 1 – Reconcile Differences **Phase 2 – Use Internal Model**

- PRA will retain the right to apply Individual Capital Guidance (ICG) and to ensure the Solvency I capital requirements are being met

- For firms intending to use the standard formula the FSA will use its recent data request to firms to prioritise its assessment of the pre-day one appropriateness of the standard formula (e.g. for ICAS calculations)

Implications for Solvency I

- Other areas where firms may be able to use their Solvency II development work as part of the current ICAS regime include:
  - The Own Risk and Solvency Assessment (ORSA) – the PRA may allow firms to use parts of the ORSA to use to satisfy current requirements;
  - The Prudent Person Principle; and
  - Reporting – the PRA will look to see if there is a need to supplement existing reporting in areas such as stress testing or market-wide data.

- The FSA has stated that it will be looking to work with firms over the coming weeks to derive the next level of detail in relation to its approach to Solvency II implementation, allowing firms to both build on their existing implementation work and to use this Solvency II work to:

"…meet the current requirements to the maximum extent possible."

Long-term Guarantees Assessment

Long-term Guarantees Assessment (LTGA)

- Impact assessment due to be conducted to test proposed measures to address issues with products with long-term guarantees:
  - Matching Adjustment (MA)
  - Counter-cyclical premium (CCP)
  - Extrapolation
  - Transitional measures
- Will test Solvency II balance sheets based on a number of different scenarios using YE11 data
- Part 1 of Technical Specifications published by EIOPA in October
  - Updates approach firms should use for quantitative assessments from that used under QIS5 (considering latest Level 2 text)
  - Part 2 will be published in due course covering details of the discount rate and the areas relating to the LTG package

Issues for Products with Long-Term Guarantees

COUNTER-CYCLICAL PREMIUM

- Premium added to discount rate to enable the industry to cope during distressed market conditions
- Applied at EIOPA's discretion
- Based on formula but includes sufficient discretion and control for EIOPA to react to unexpected situations

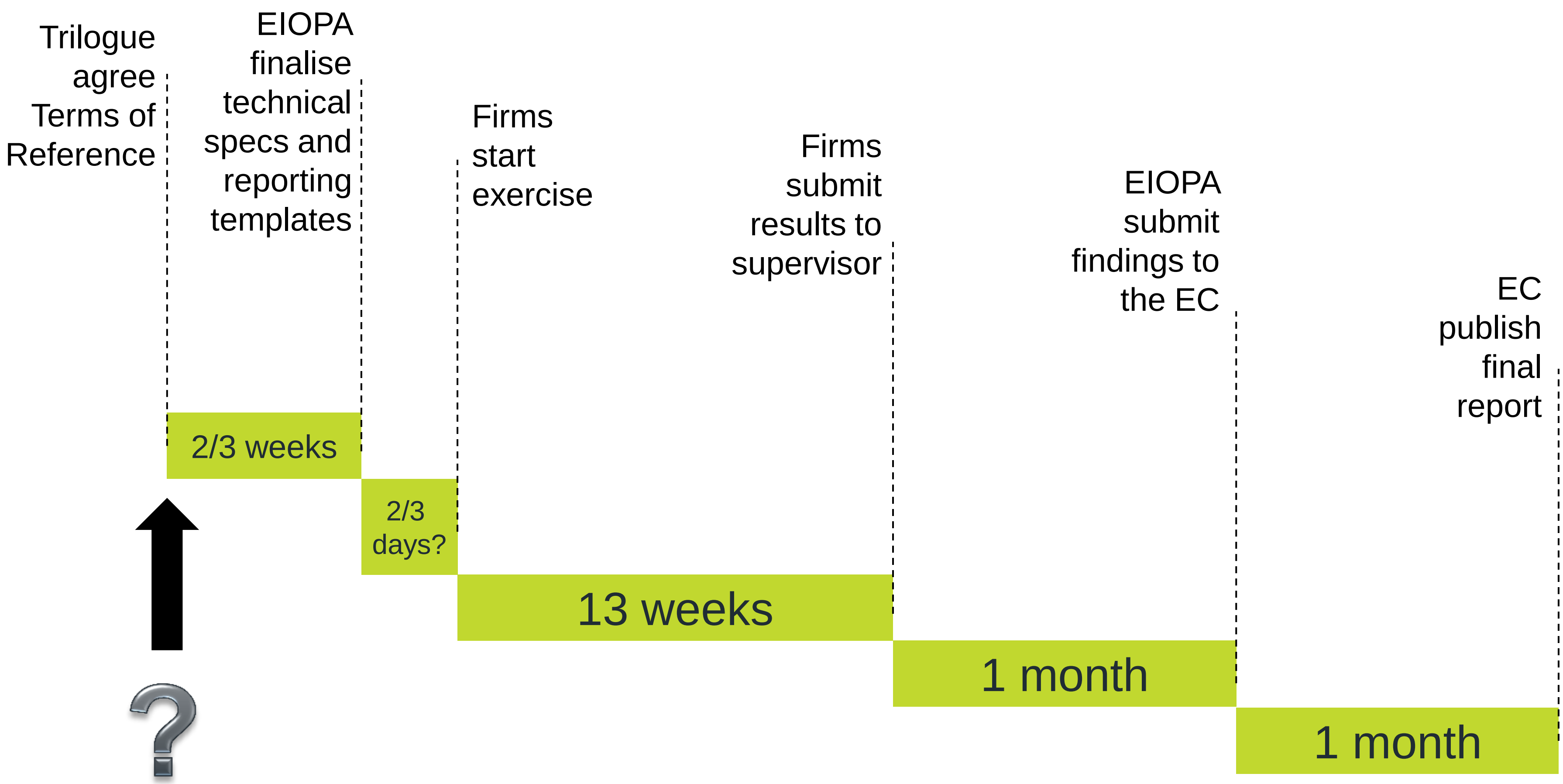
MATCHING ADJUSTMENT

- Always-on adjustment to discount rate for certain liabilities where investment strategies and product features mitigate the impact of spread movements
- Can be positive or negative depending on spread movements
- Proposal to extend to wide range of products and underwriting risks

EXTRAPOLATION METHODOLOGY

- Aims to avoid creating volatility in the value of long-term liabilities (by fixing the discount rate for the tail of the cashflows)
- Starts where bond markets are no longer deep and liquid (eg after 20 years for the Euro under current conditions) and reaches the ultimate forward rate (UFR) after 10 years

LTGA Expected Timelines

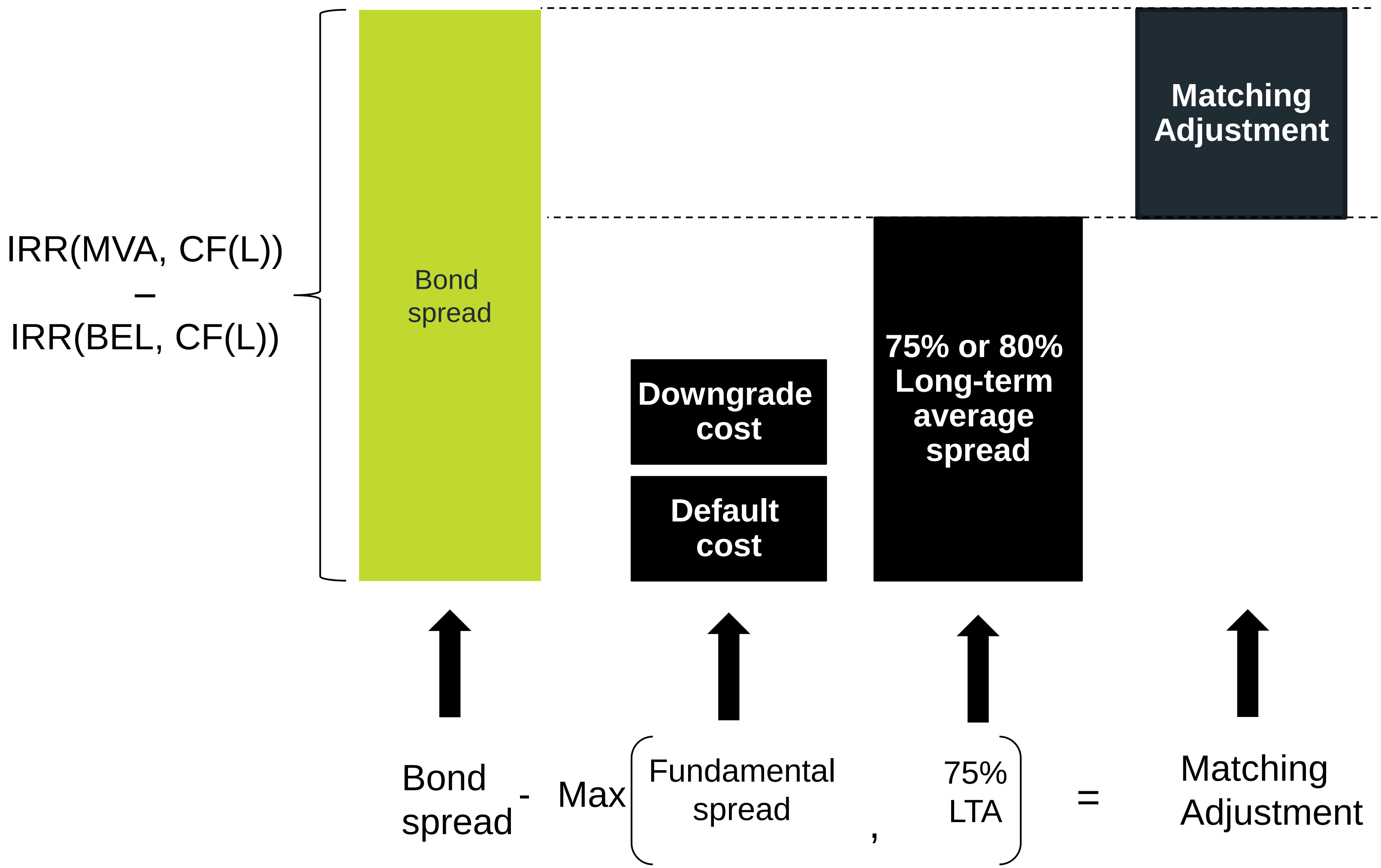


Potential (Draft) Design of the Matching Adjustment

- Recent Omnibus II drafts set out 2 versions of the Matching Adjustment
  - each member state can choose which version to apply (can only apply one)
  - likely to be set out in Articles 77c and 77e of Level 1 text
  - Article 77c - Annuity obligations (only longevity, expense and revision underwriting risks) with no options written only in the member state
  - Article 77e – Wider application covering insurance business subject to more underwriting risks

- Matching Adjustment can only be applied to liabilities provided that a number of specific conditions are met in relation to:
  - the nature and risks of the insurance obligations
  - the matching of asset and liability cash-flows
  - the admissibility of assets in the matching asset portfolio

Potential (Draft) Design of the Matching Adjustment



Potential (Draft) Design of the Matching Adjustment

- **Asset liability matching requirements**
  - Assign a portfolio of assets, consisting of bonds and other assets with similar cashflow characteristics, to cover the best estimate of the portfolio of insurance obligations
  - Asset cashflows must be fixed and cannot be changed by the issuers of the assets or any third parties
  - No assets with credit rating less than BBB (percentage limit on BBB assets – varies from 10% to 33.33% depending on text)
  - maintain that assignment over the lifetime of the obligations
  - future cashflows of the assigned portfolio of assets replicate each of the future cashflows of the portfolio of liabilities in the same currency
  - Any mismatch does not give rise to material risks
  - Assets and liabilities must be ring-fenced or identified, managed and organised separately

Impacts on Asset Strategy

Will the MA impact asset strategy?

Requirements	Impact on asset strategy
Bonds and assets with similar characteristics	Rules out numerous asset types
Cashflows must be fixed	Rules out FRNs and preference shares
Cashflows cannot be changed by issuer or third party	Rules out callable bonds and commercial mortgages?
Minimum rating of BBB (and limit on proportion of BBB)	Rules out CDS and other derivatives
Replication in same currency	Rules out foreign investment
Assets and liabilities should be ring fenced	Does not rule any asset types out, but how easy?

Will the MA impact asset strategy?

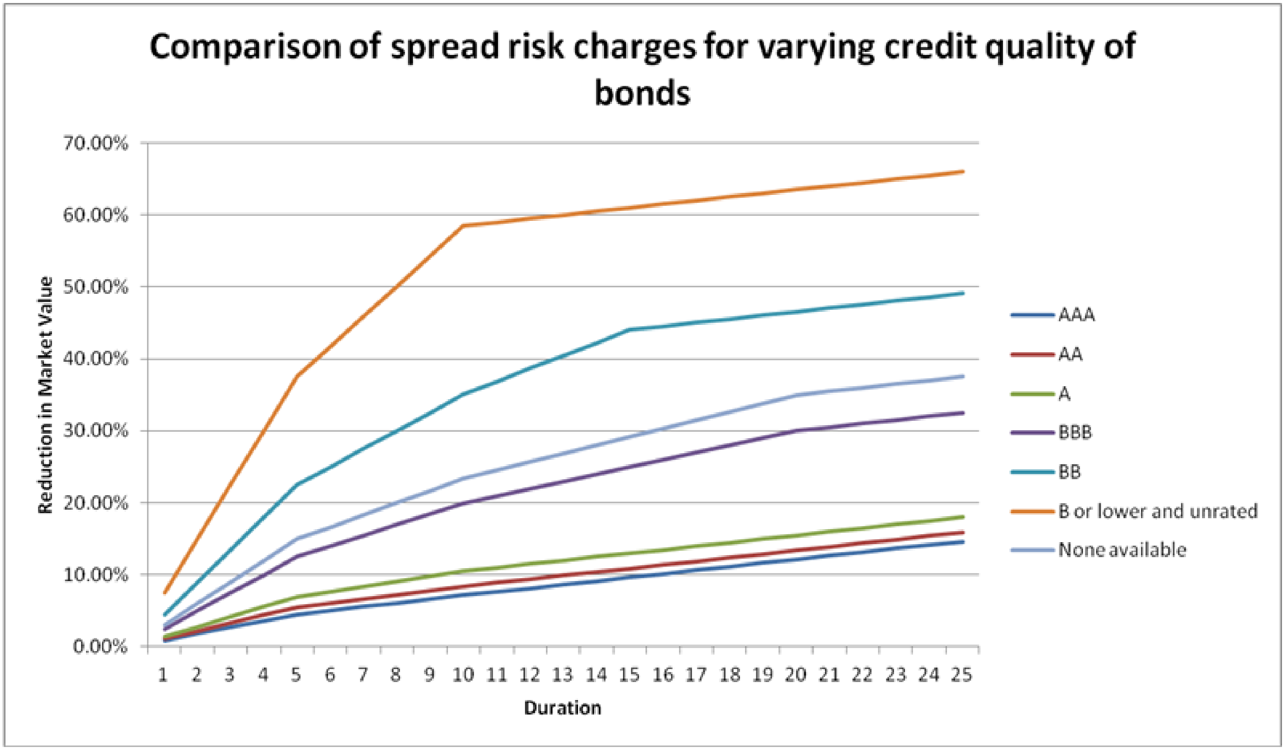
- **What are we left with?**
  - Good quality corporate bonds
  - Rental income / social housing??
- **Are there ways around this?**
  - Bifurcation of callable bonds
  - Inter-company loans
- **Additional issues?**
  - Do these potential solutions work at a Group level?
  - Uncertainty...

General Solvency II impact on assets

Asset	Charge
Private equity	49%*
Equity	39%*
Property	25%
Bonds	varied

* +/- symmetric adjuster

Source: KPMG, EIOPA

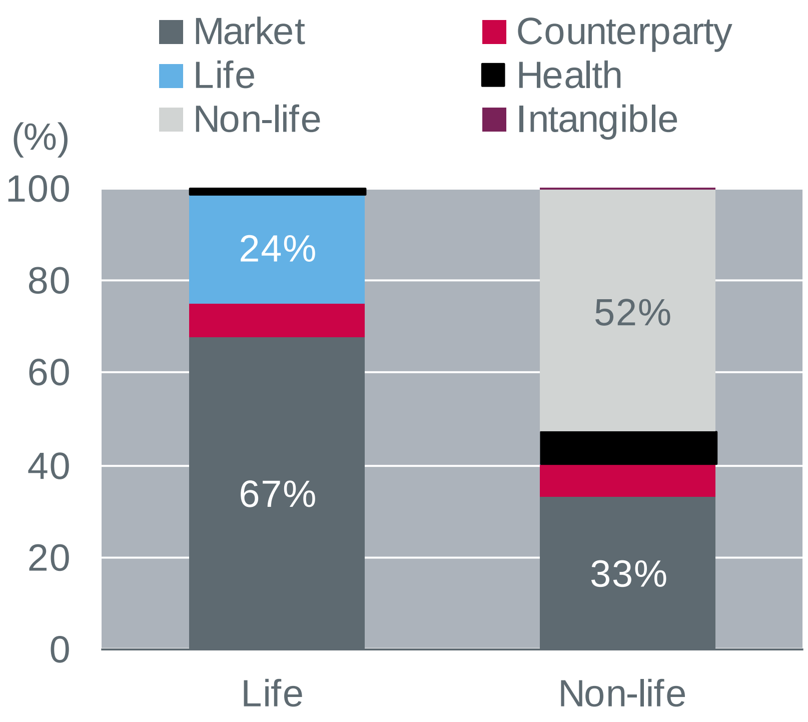


- **Long dates bonds look unattractive**
- **Move to EEA government bonds?**
- **Increase in covered bonds?**

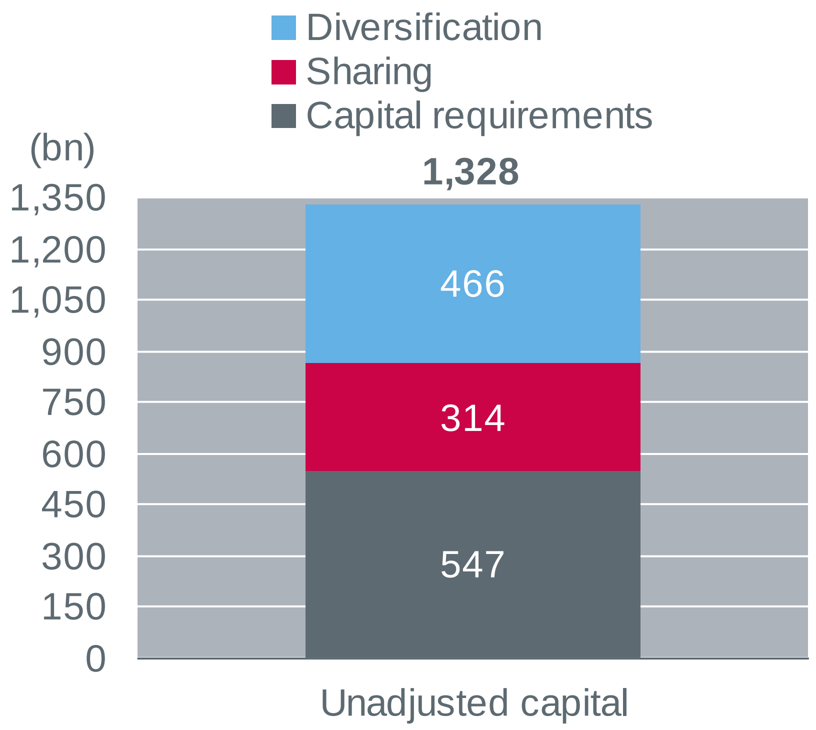
What Drives Capital Requirements Under Solvency II?

Market risk, diversification and sharing

QIS 5 Results Based on YE09 Data



Diversification and Sharing



Source: Fitch, EIOPA

Market Risk SCR Very Sensitive to Asset Mix

Solvency Capital Requirement for Typical Asset Mixes

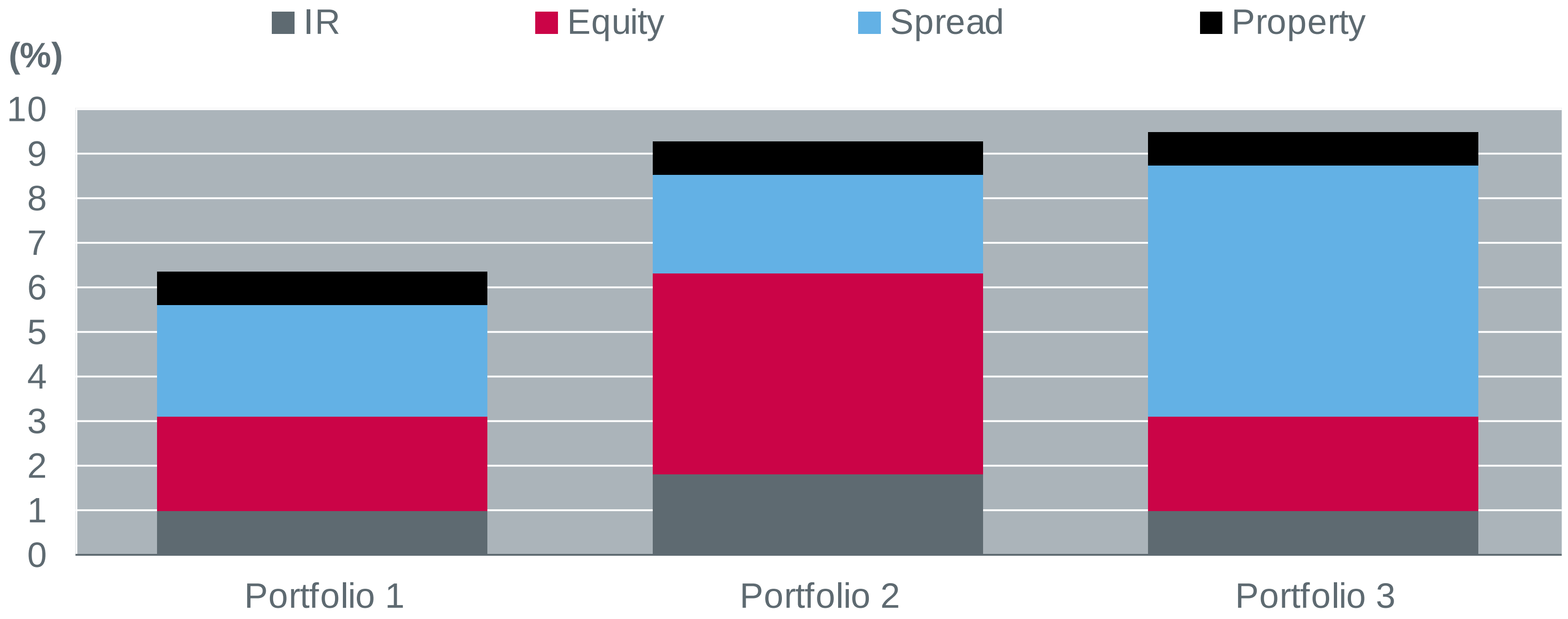
	Portfolio 1	Portfolio 2	Portfolio 3
Govies (%)	45	42	45
Corporate (%)	45	40	45
(rating, duration)	(A, 4)	(A, 4)	(BBB, 5)
Equity (%)	7	15	7
Property (%)	3	3	3
Duration gap (L – A)	1	2	1
SCR[a] (%)	**6.34**	**9.26**	**9.45**
Increase in SCR[a]		**Up 46%**	**Up 49%**

[a] Pre diversification and sharing and using standard formula
Source: Fitch

Sharp Rise in SCR for Small Change in Asset Mix

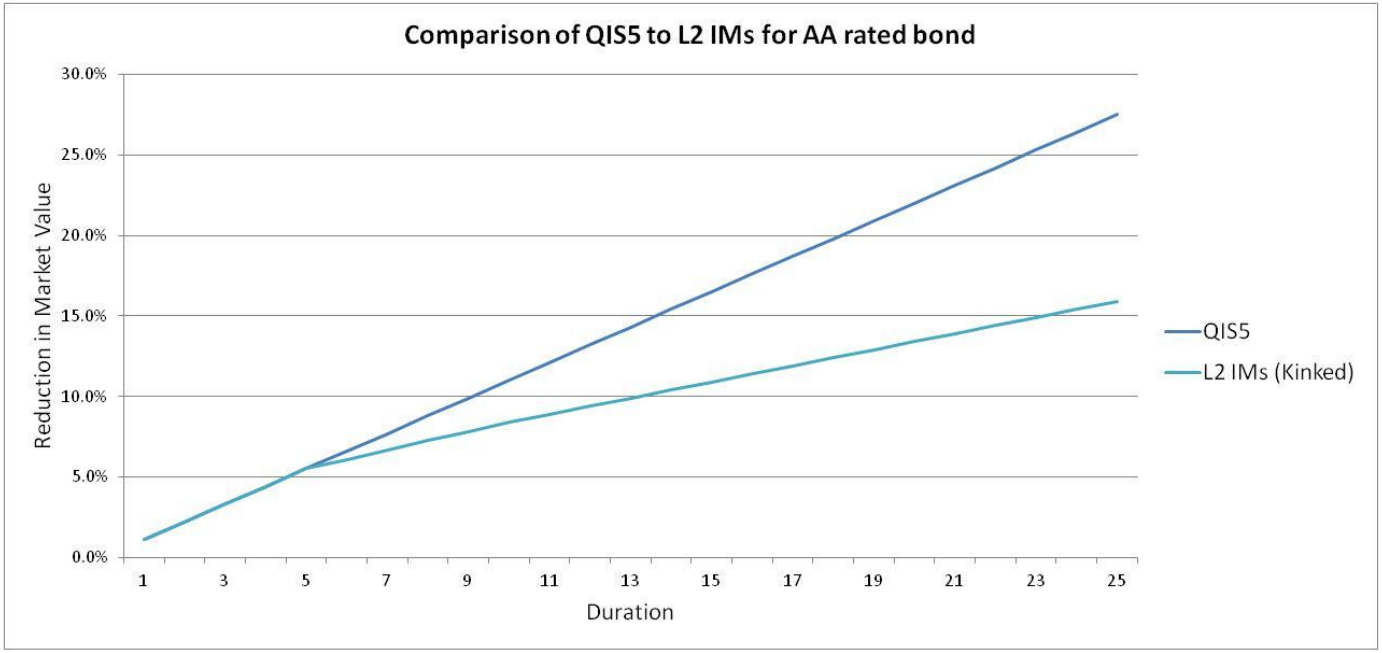
Increase Solvency Captial Requirement

Before Diversification and Sharing, Standard Formula



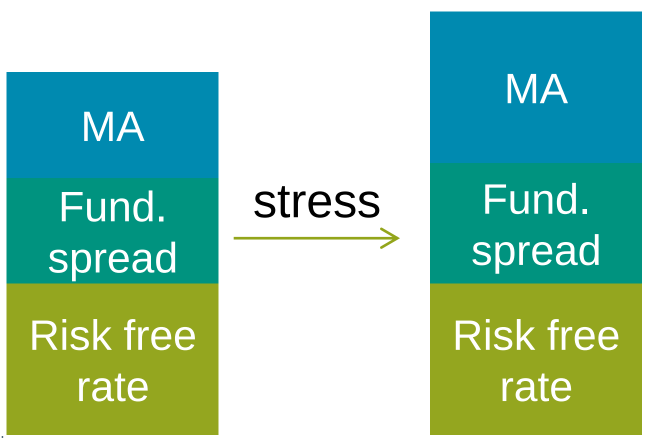
Source: Fitch

Has anything improved since QIS5?



- **Kinked stress**

- **Matching adjustment offset in liabilities**



Quality	Red. factor
AAA	45%
AA	50%
A	60%
BBB	75%
BB and lower	100%

Will the MA impact asset strategy?

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- **Are there ways around this?**
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- **Additional issues?**
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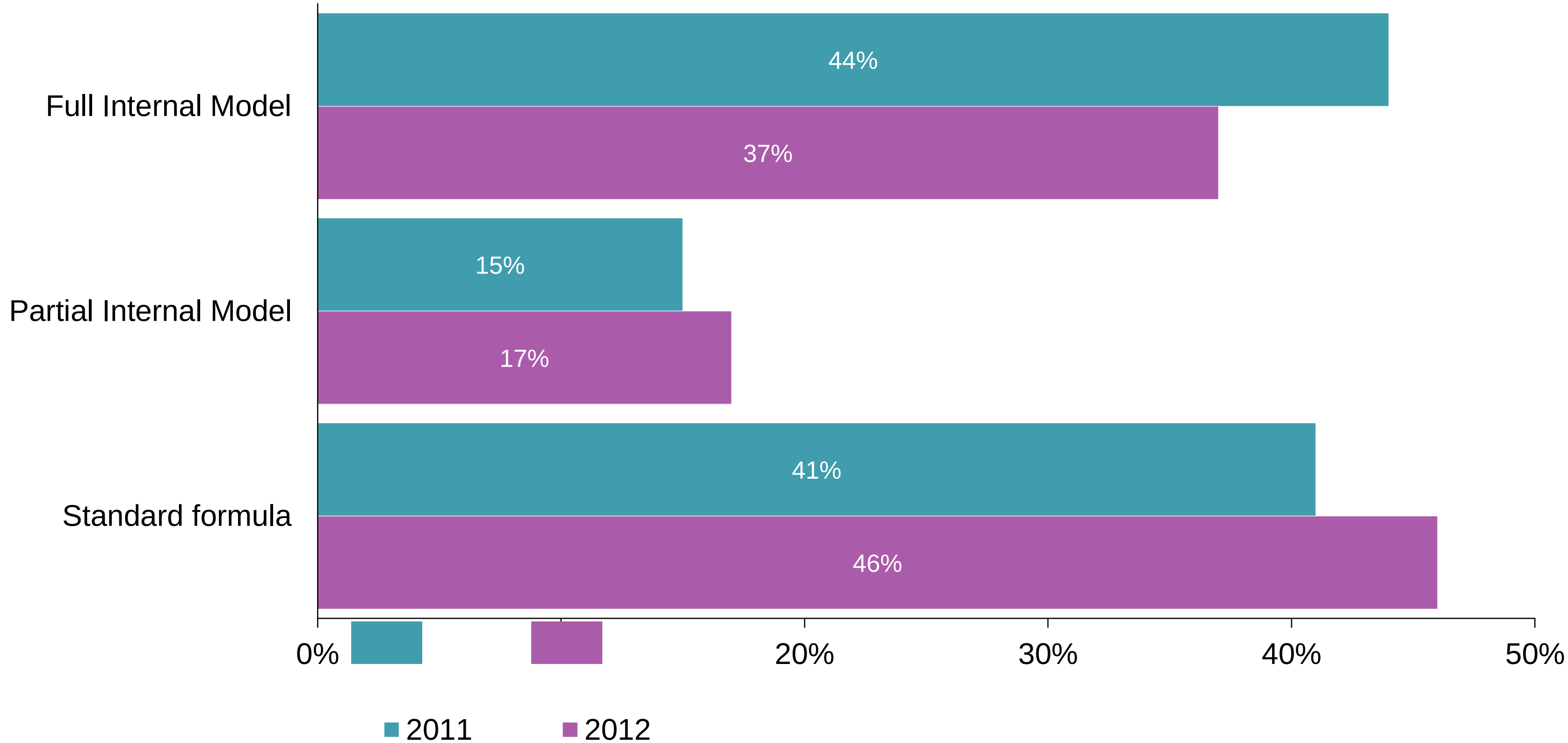
Update on Internal Model Application / Validation

Internal Model Approval Process

Comparison of methods used to calculate SCR (2011/2012)



Source: KPMG Technical Practices Survey, August 2012

Internal Model Approval Process

- FSA started to receive
- Working with firms on an individual or thematic basis
- Prefer to receive well advanced models
- Current topical issues include:
  - review of technical provisions
  - model change policy
  - FSA monitoring of ongoing appropriateness of models
  - expert judgement
  - allowance for pension scheme

Internal Model Validation

First round largely complete

- For IM companies, at least first round of validation generally complete
- In some cases, on a subset of processes

Roles of three lines

- Significant variation
- Validation evidence in first line
- Second line providing review/challenge of this
- Also used internal audit
- Is second line sufficiently independent?

FSA have highlighted current concerns

- Link to Level 1 and Level 2
- Lack of justification of granularity of validation
- Independence
- Governance
- Use of stress and scenario testing

Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenter.