The Actuarial Profession
making financial sense of the future

Life Conference and Exhibition 2011
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Impact of Solvency II on investment strategy and the financial markets

Agenda

- Regulatory change brought about by SII
- What SII might mean for investment strategy
- Getting the most from your investment strategy
- Conclusion

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Investment for insurers – the headline issues

- Risk management and investment management are core to insurers' businesses.
- Companies have always sought to manage their assets and liability positions
- In recent years three fundamental drivers have caused insurers to re-address many key issues:

Regulatory / accounting change

Investment environment

Stakeholder scrutiny

→

- **How to better define my risk appetite**
- **How to manage mark to market volatility**
- **How to increase diversification**
- **How to improve returns**
- **How to be more responsive to opportunities**
- **How to create integrated information flow**

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Moving from Solvency I to Solvency II: Investment related aspects

Solvency I	Solvency II
Statutory basis ICA	SCR Standard formula / internal model
Prudent risk adjusted yields	LIBOR
Liquidity premium	Matching premium & countercyclical premiums
Arrow visits	ORSA
ICA not publicly disclosed	SCR publicly disclosed
Limited documentation & evidence	Lots of documentation & evidence
Asset admissibility limits	Prudent person principle
Counterparty limits	Prudent person principle
Localisation	Freedom of investment

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Prudent person principle

Asset risks
Assets backing for technical provisions
Assets backing for capital requirements
Derivative usage
Unregulated markets
Concentration risk

Largely good investment practice
Encourages a more economic approach
Should not unduly constrain

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Current matching premium proposals[1]

- Buy and hold asset strategy using “bond-like” assets that cashflow match projected liability cashflows
- Matching premium = current credit spread – fundamental spread
- Fundamental spread = expected loss on defaults + expected loss on downgrade + % of spread based on long term average spreads
- Adjustments to avoid matching premium increasing with deteriorating credit quality
- Unclear how the matching premium approach interacts with spread risk capital calculations

[1] End September 2011

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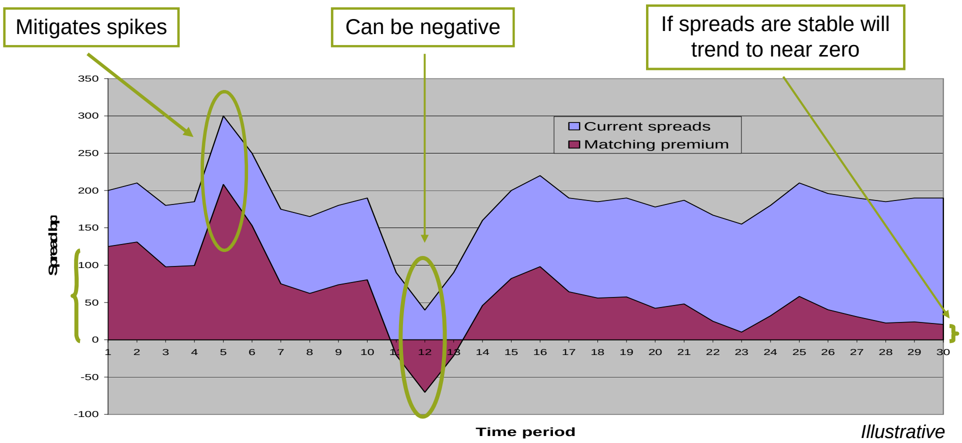
Characteristics of the matching premium proposal



Illustrative

Likely to increase demand for assets that meet the Matching Premium criteria with the converse applying

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The benefits of a more diverse investment strategy

Case study: UK WP Fund	Before		Amenable to dynamic hedging		Diversification and active management	
1. Government bonds/cash	**38**		**27**		**27**	
Govt	32		27		27	
Cash	6		-		-	
2. Credit	**27**		**26**		**28**	
Domestic corporate bonds	27		-	53%	-	
Global IG corporate bonds	-	65%	24		23	55%
Loans	-		-		1	
High yield	-		2		1	
MBS/ABS	-		-		1	
EM debt	-		-		2	
3. Equities	**32**		**35**		**30**	
Domestic equities	20		-		-	
Global equity (large cap)	10		35		23	
EM equities	-		-		7	
4. Alternative asset – med liquidity	**-**		**7**		**12**	
Reinsurance (ins-linked securities)	-		-		2	
Commodities	-		2		3	
EM Cash	-	3%	-	12%	-	15%
Basket of direct hedge funds	-		5		7	
5. Alternative asset – low liquidity	**3**		**5**		**3**	
UK property	3		-		-	
Core global property	-		5		3	
Total assets	**100**		**100**		**100**	
5 year median return over LIBOR (% pa)	2.1		2.8		4.2	
Market Risk ICA / Internal Model SCR %	8%		8%		8%	
Return/risk ratio	0.24		0.3		0.40	

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The benefits of diversification:
Why invest in non-UK bonds?

Non-UK bonds

1. Exposure to different economies
2. Exposure to different industrial sectors
3. Exposure to different entities
4. Exposure to more attractively priced bonds from UK issuers

Risks introduced:
- Overseas interest rate risk
- Currency risk
- UK interest rate risk

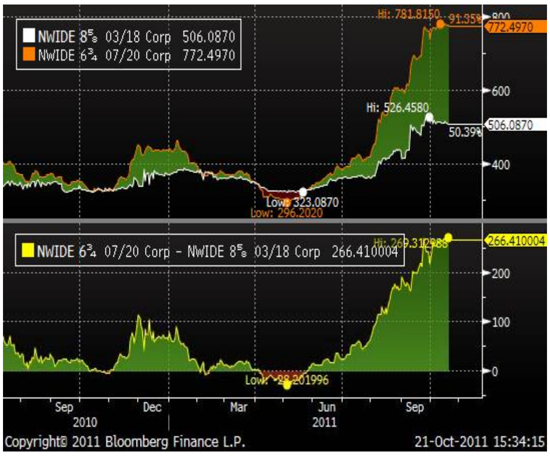
Rewarded risk?
- No
- No
- No

Hedge:
- EUR Interest rate swap
- Currency forward
- GBP Interest rate swap

The benefits of diversification:
Relative value for same risk

An example:

- Nationwide 6.75% 2020 GBP
- Nationwide 8.625% 2018 EUR
- Spread difference = +260bps
- Hedge cost = <50bps
- Net 210bps pick up for basically the same risk

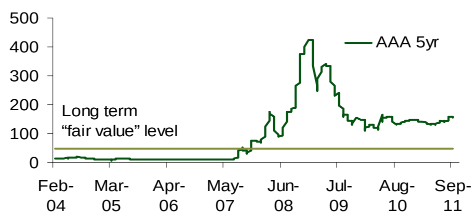


Diversification into other fixed income assets:
Asset-backed securities

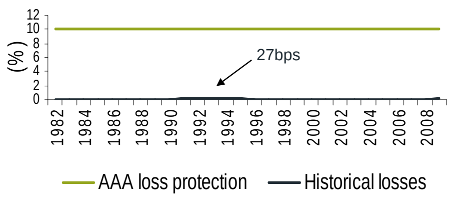
Might appeal to insurers because:

+ High credit ratings
+ Financially separate from banks and governments
+ Losses and arrears are relatively low compared to credit enhancement
+ Coupons linked to Libor provide attractive returns in a rising rate environment

AAA RMBS yield spread over Libor (bp)



Robustness of UK prime AAA RMBS: credit risk



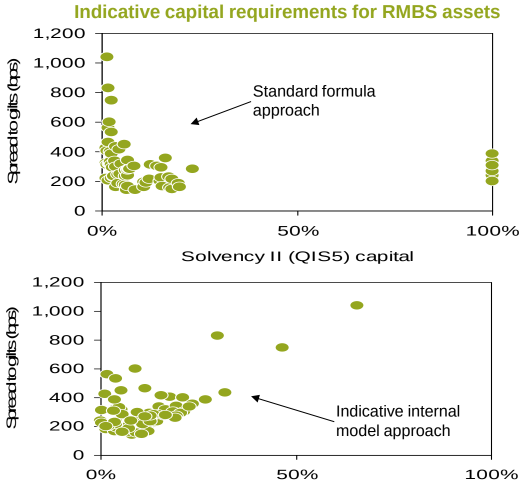
Source: JP Morgan, Merrill Lynch, Bloomberg as at 31 March 2011

Diversification into other fixed income assets:
Asset-backed securities

Might not appeal to insurers because:

- Maybe less liquid than mainstream corporate bonds
- Complexity of transactions:
  - Impact of changing economic conditions
  - Originator diligence
  - Collateral characteristics
  - Asset structure
- Insurance capital treatment (Solvency II) is complex

Indicative capital requirements for RMBS assets



Diversification into other return seeking assets:
Absolute return / hedge funds

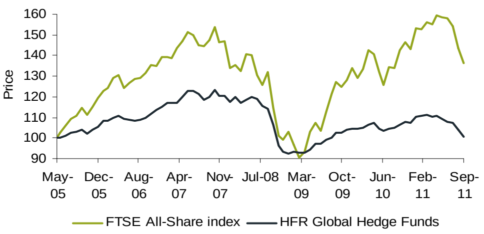
Might appeal to insurers because:

+ Low correlation with mainstream assets
+ Expected lower mark-to-market volatility
+ May be more capital efficient than equities

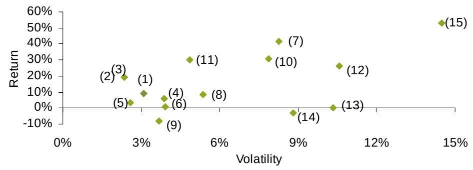
Might not appeal to insurers because:

- What happens in a crisis: are risk exposures really diversified?
- Complexity: do you really understand the risks?
- How much transparency is there (look through for standard formula approach)?

The HFR Index covers a range of strategies



Performance for different strategies can vary



Source: Lipper, as at 30 September. Performance from 31 March 2008

Diversification into other assets:
Conclusions

Diversification can provide…

+ Real world benefits: genuine reduction in economic risk
+ Regulatory benefits: depending on approach taken
+ More efficient portfolio: accessing new opportunities

…but care needs to be taken

– Need to ensure that you fully understand all the risks (and hedge those risks which are considered unrewarded)
– Some asset classes are more complex than others and may require specialist management
– Need to ensure your asset manager understands your constraints!

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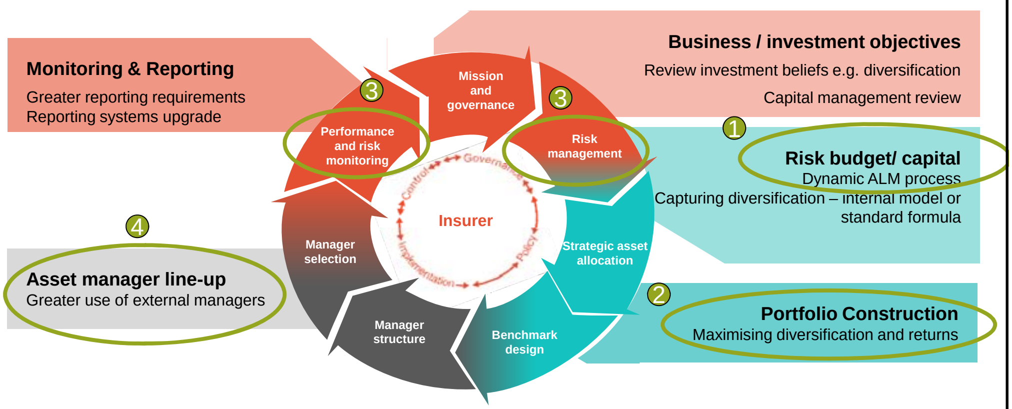
The investment cycle



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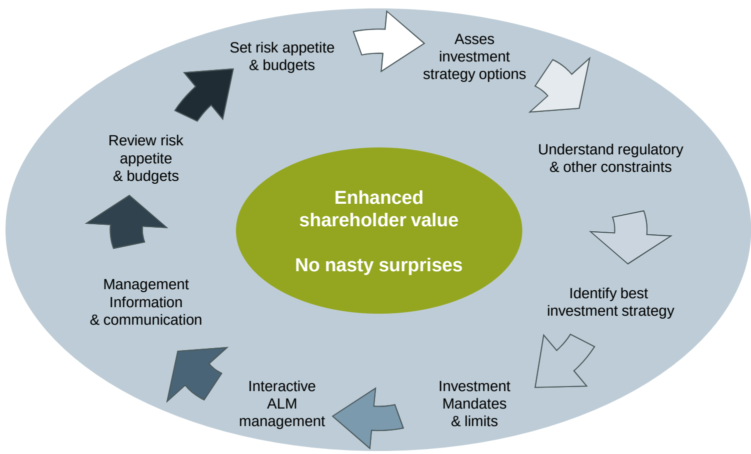
1 Risk budgeting: Dynamism, clarity and quantification



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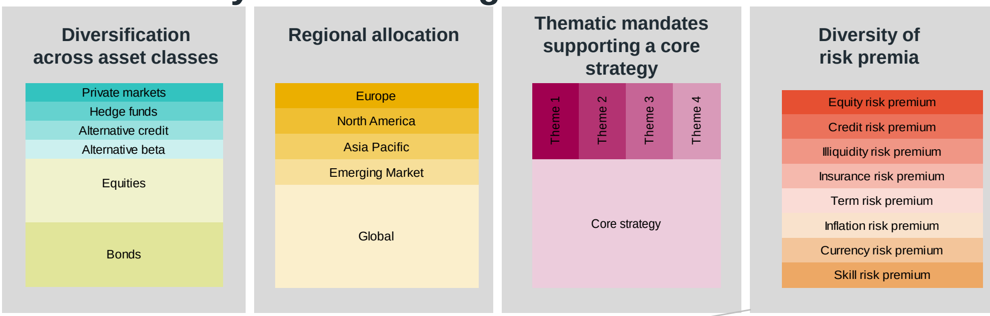
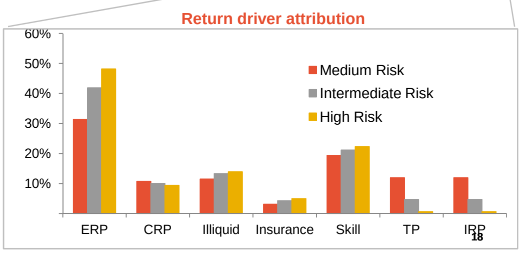
❷ Portfolio construction: Different ways of achieving diversification



Key takeaways

- Review portfolio structure under these groups?
- Are your risk drivers more correlated than you think?
- Can diversification be increased using more overseas and alternative assets?



❸ Asset manager line up: Getting the most from your fund manager(s)

In-house manager

- Clarity over objectives and constraints
- Enough flexibility to add value but not enough to do damage
- Appropriate incentives and performance targets

External manager

- Specialist skills to supplement in-house manager capability

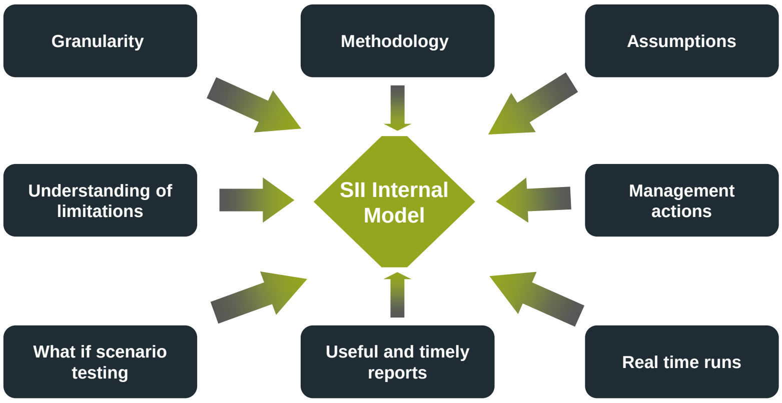
Bridging the gap

- Peer to peer conversations
- Trust and teamwork
- Challenge and insight
- Knowing when different strategies do and do not work
- Investment mandate and fee design
- Delegated approval

Insurance co

- Liability managing and hedging requirements
- Limited asset knowledge
- Need to manage risk and various stakeholders' expectations
- Making sure managers deliver good value
- Financial reporting requirements

④ Risk management: What you should expect from your internal model



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④ Risk management: Do not forgot liquidity management

Common understanding

Analysis

Mitigation

Policy and process

Avoidance not capital is the best defence

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Conclusions

Solvency II provides impetus for change
- Diversification benefits & Own model option
- Matching premium → bonds
- Relaxation of home country bias

Changes in assets
- Diversification
- Globalisation
- Externalisation

Management approach adopted
- Surrender / claw-back / adverse scenario charges
- Dynamic and/or Diversified strategy
- Current protection or future promise

Specific context
- Internal capability, and internal investment theses
- Liquidity, scalability and amenability to hedging

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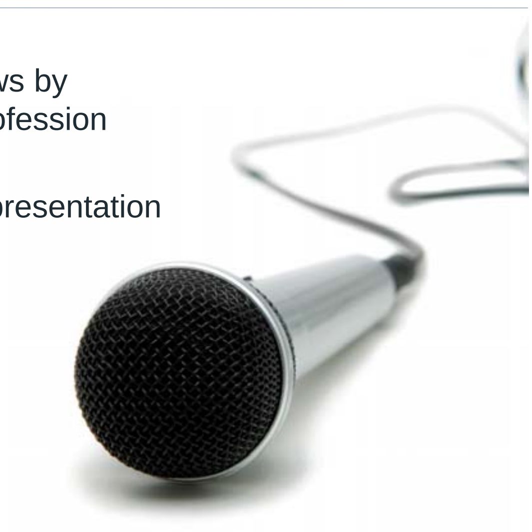
Questions or comments?

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.



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