Insurance Asset Management

Trends, Challenges and Opportunities
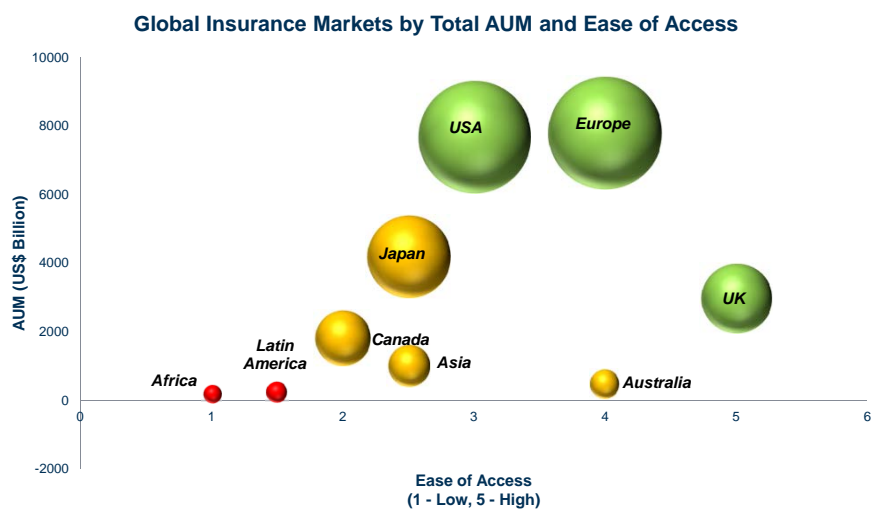
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Life Conference 2014
10 November 2014

Global Insurance Markets by AUM and Ease of Access

Global Insurance Markets by Total AUM and Ease of Access

Bubble chart plotting AUM (US$ Billion) on the y-axis (−2000 to 10000) against Ease of Access (1 - Low, 5 - High) on the x-axis (0 to 6). Markets shown: USA, Europe, Japan, UK, Canada, Asia, Australia, Latin America, Africa.

Total assets figures are as at 31/12/12. Source: The City UK, OECD and SLI analysis.

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Analysis of Insurance Asset Managers

Manager	Total AUM $bn	Insurance AUM $bn	Insurance Clients
BlackRock	3791	321	144
PIMCO/Allianz	2448	Not Disclosed	
AXA Group	1475	Not Disclosed	
JP Morgan	1431	50	
Deutsche Bank	1247	200	
Amundi	961	400	150
Goldman Sachs	854	133	128
Wellington	758	92	100
Legal & General	655	Not Disclosed	
Schroders	382	54	
Aberdeen	290	165	
F&C Asset	153	Not Disclosed	
Conning	85	85	147

Total assets figures are as at 31/12/12.
Source: Towers Watson ; Insurance assets most recent website disclosures June 2014 Source: SLI Analysis.

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Insurance Liability Aware Success Factors

- **Insurance asset managers emphasise the following elements:**
  - *Insurance experience, scale and focus*
  - *Dedicated insurance teams and thought leadership*
  - *Reporting, risk and accounting services*
  - *Partnership, listening, understanding clients' needs and objectives*
  - *Modelling and optimisation*
  - *Asset class capabilities including range of alternative/specialist asset classes*

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Global Regulatory Context

- **European Solvency 2**
    - *Will finally implement at 01/01/2016*
        - Will be on-going uncertainty in the run-up and beyond
        - Matching Adjustment, Volatility Adjustment, internal model approvals
    - *There is a political will (EC, EIOPA) to push Solvency 2 into pensions (IORPS)*

- **Non European national developments**
    - *Often Solvency 2 or similar eg China, Japan, Australia, Brazil, Mexico, South Africa etc*
    - *Or looking to global IAIS developments, or resisting change eg USA, Canada*

- **Global Insurance Capital Standard (ICS) and related G-SII developments**
    - *Financial Stability Board is driving through IAIS*
    - *G-SIIs to hold more capital*
    - *Global ICS in development – EU wants to be based on Solvency 2*
    - *Full global implementation planned from 01/01/2019*

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Economic Context – Low Interest Rate Environment
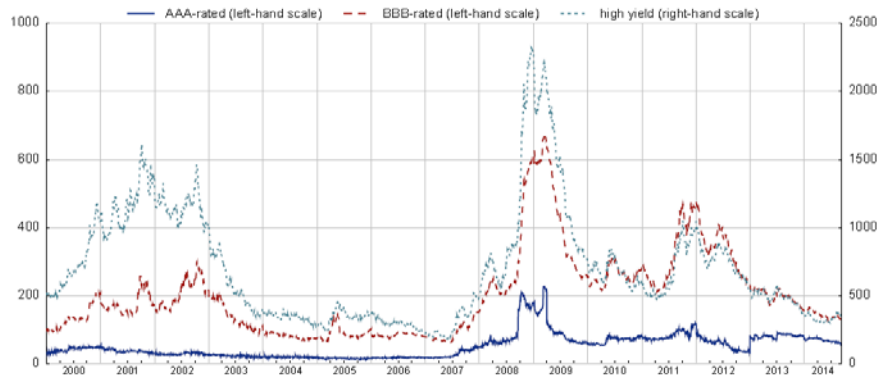*Euro Area 10-year Government Bond Spot Yields*

Source: ECB, October 2014

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Economic Context – Markers are Volatile
Spreads on Euro Corporate Bonds

3.7 Option-adjusted spreads on euro area corporate bonds
(1 Jan. 2000 - 9 Sep. 2014; percentages)

Source: Bank of America Merrill Lynch.
Note: Spreads (in basis points) over German government bonds for both vanilla bonds and bonds with embedded options (for which the value of the option is stripped using proprietary models).
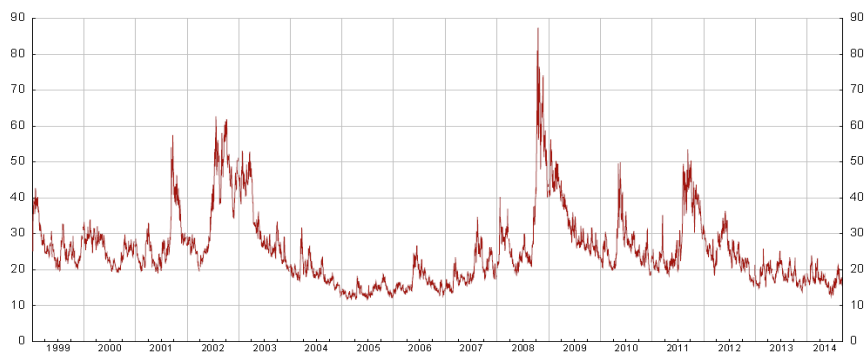
ESRB Risk Dashboard, September 2014

Economic Context – Markers are Volatile
Equity Market Volatility

b) Equity implied volatility index: Euro Stoxx 50
(6 Jan. 1999 - 9 Sep. 2014)

Source: Bloomberg.
Notes: Volatility is implied by at-the-money options observed in the market. The VSTOXX is based on the Euro Stoxx 50 Index options traded on Eurex. It measures implied volatility on options across all maturities.

ESRB Risk Dashboard, September 2014

Implications for Insurers and their Asset Managers
Low Interest Rate Environment and Solvency 2

- **Puts additional pressure on liability valuations, risk-based capital requirements**

- **Capital gearing effect on guarantees**
  - *Especially for legacy "high" guarantee insurance business*
  - *Sold under different regulatory and economic environments*

- **Search for capital efficient yield through alternative asset classes**
  - *Commercial real estate loans, infrastructure, multi-asset funds*

- **Search for capital efficient yield through ALM**
  - *Matching Adjustment plus cashflow matching*
  - *Volatility Adjustment plus asset re-allocation, basis risk hedging*

- **Need both specialist asset management skills and insurance knowledge**
  - *Asset managers and insurers need to work together closely*

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Implications for Insurers and their Asset Managers
Market Volatility and Solvency 2

- **Capital constrained firms may have to de-risk**
  - *Public disclosures will expose weaknesses*

- **Increased use of capital efficient assets**
  - *More multi-asset funds*
  - *Less securitisations, private equity, equity release*

- **Increased use of hedging and ALM to de-risk**
  - *Increased use of static and dynamic hedging ALM programmes*
  - *Matching Adjustment plus "Buy and Maintain"*

- **Need both specialist asset management skills and insurance knowledge**
  - *Asset managers and insurers need to work together closely*

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Insurance Asset Management Trends

- **Search for capital efficient yield**
  - *Multi-asset strategies*
  - *Commercial real estate loans*
  - *Infrastructure*
  - *High yield funds*
  - *Cash flow matching and asset restructuring*
  - *Outsourcing*

- **De-risking of the balance sheet**
  - *Multi-asset strategies*
  - *Diversify using alternative assets*
  - *Selling out of private equity, securitisations potentially using secondary funds*
  - *Maintenance and expansion of hedging activities*
  - *Cash flow matching and asset restructuring*
  - *Outsourcing*

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Matching Adjustment background**

  - *'(il)liquidity premium' used in many (UK) firms' ICA*

  - *Reflected in QIS5*

  - *Draft Level 2 text: 'Matching Premium'*

  - *LTGA*

  - *Latest Draft Level 2 text: **'Matching Adjustment'***

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Omnibus 2 Article 77b**

Insurance and reinsurance undertakings may apply a matching adjustment to the relevant risk-free interest rate term structure to calculate the best estimate of a portfolio of life insurance or reinsurance obligations, including annuities stemming from non-life insurance or reinsurance contracts subject to prior approval by the supervisory authorities where the following conditions are met:

a) *the insurance or reinsurance undertaking has assigned a portfolio of assets, consisting of bonds and other assets with **similar cash-flow characteristics**, to cover the **best estimate** of the portfolio of insurance or reinsurance obligations and maintains that assignment over the lifetime of the obligations, except for the purpose of maintaining the replication of expected cash flows between assets and liabilities where the cash flows have materially changed;*

b) *the portfolio of insurance or reinsurance obligations to which the matching adjustment is applied and the assigned portfolio of assets are **identified, organised and managed separately** from other activities of the undertakings, and the assigned portfolio of assets cannot be used to cover losses arising from other activities of the undertakings;*

c) *the expected cash flows of the **assigned portfolio of assets replicate each of the expected cash flows** of the portfolio of insurance or reinsurance obligations in the same currency and **any mismatch does not give rise to risks which are material** in relation to the risks inherent in the insurance or reinsurance business to which the matching adjustment is applied;*

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Omnibus 2 Article 77c 1(a)**

The matching adjustment must be equal to the difference of the following:

(i) the annual effective rate, calculated as the single discount rate that, where applied to the cash flows of the portfolio of insurance or reinsurance obligations, results in a value that is equal to the value in accordance with Article 75 of the portfolio of assigned assets;

(ii) the annual effective rate, calculated as the single discount rate that, where applied to the cash flows of the portfolio of insurance or reinsurance obligations, results in a value that is equal to the value of the best estimate of the portfolio of insurance or reinsurance obligations where the time value of money is taken into account using the basic risk-free interest rate term structure;

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Matching Adjustment practical considerations**

- **Asset admissibility**
  - *Fixed versus 'Predictable' cashflows*
  - *Callability/deferrability*
  - *Make-whole, Spens clauses*
  - *Non-domestic currency*
  - *Supply of suitable assets*

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Defining 'cash flow match'**

- **'…..mismatch does not give rise to risks which are material in relation to the risks inherent….'**

- **Reference to SCR as a measure**

- **LTGA referred to discounted shortfalls**

- **PRA Letter 15th October:**
  - *"….the PRA intends to request that firms submit certain pieces of information in a specified format, and to use this to conduct some standardised tests. This will allow the PRA to compare results across firms in a consistent way, as well as to form a view on what is an acceptable tolerance regarding the closeness of matching. "*
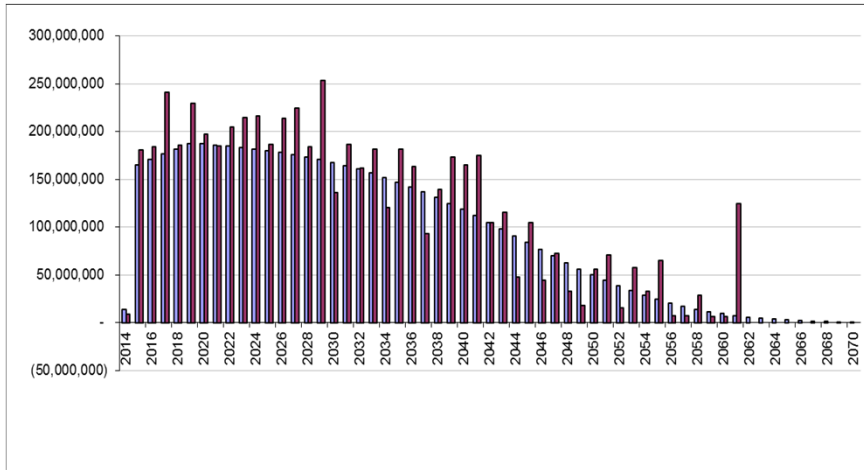
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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

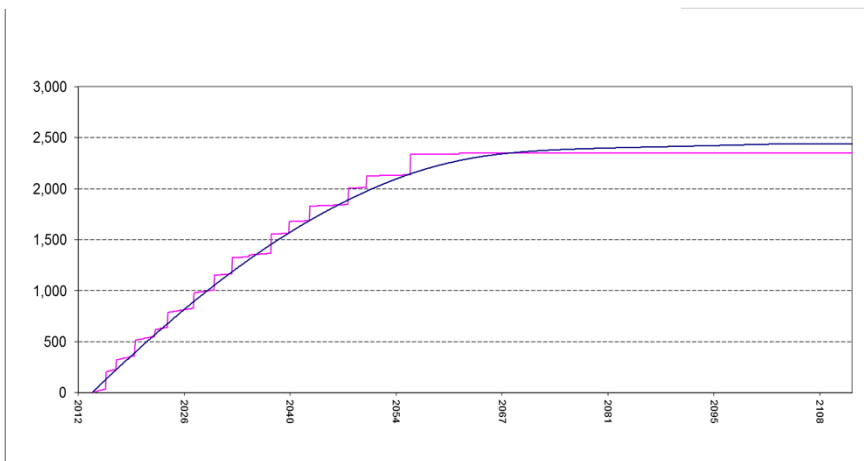- **Bucketed cash flows assets versus liabilities**

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **Cumulative cash flows assets versus liabilities**

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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

- **One-off exercise with re-balancing**

- **Multiple potential objectives**
  - *Maximising MA (minimising base BELs)*
  - *Limiting/minimising SCR impact on portfolio*
  - *Maximising excess capital*
  - *Balance sheet stability*

- **Multiple potential constraints**
  - *Quality of cash flow match*
  - *Duration exposure*
  - *Exposure to credit rating, sector, issuer, individual bonds, currency, class of asset*
  - *Behaviour in credit spread stresses*

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Insurance Asset Management - Case Study 1
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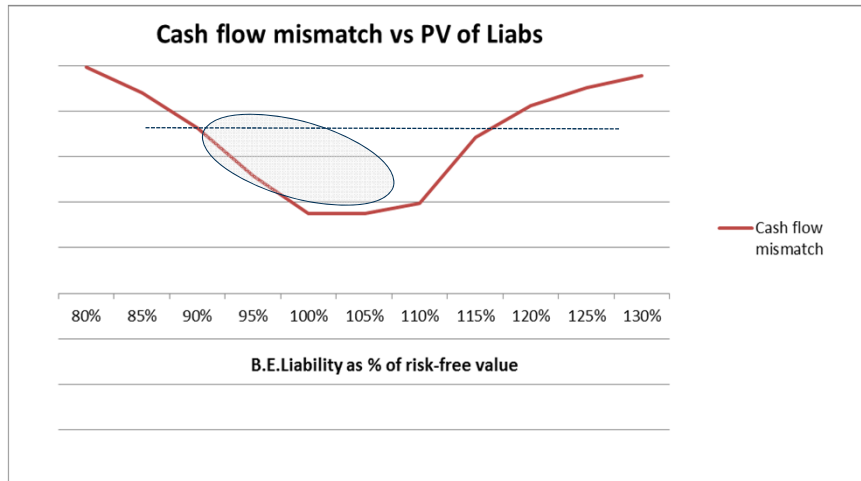
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Insurance Asset Management - Case Study 1
Constructing an Optimal Matching Adjustment Asset Portfolio

Cash flow mismatch vs PV of Liabs

Cash flow mismatch

80% 85% 90% 95% 100% 105% 110% 115% 120% 125% 130%

B.E.Liability as % of risk-free value

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Insurance Asset Management - Case Study 2
Reducing the Volatility of a With Profits Fund with a Multi-asset Fund

- **What was the insurer's business problem?**
  - *Volatile assets in the with profits fund generate large guarantee costs, capital requirements*
  - *Wanted to reduce equity exposures without compromising returns too much*
  - *Wanted a simple, pre-packaged diversification solution*

- **How was the problem solved?**
  - *Pre-existing multi-asset funds were tested to check their performance in the with profits fund*
  - *These multi-asset funds were designed to have low volatility under general market stresses*
  - *Look-through data to the underlying fund assets available within Solvency 2 timelines*

- **What was the benefit to the insurer?**
  - *The multi-asset fund has generated equity-like returns*
  - *With reduced Solvency 2 market risk volatility relative to a comparable global equity fund*
  - *The value-add is in the design and ongoing risk management of the fund*
  - *Straightforward to implement*

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Insurance Asset Management - Case Study 3
De-risking using a Private Equity Secondary Fund

- **What was the insurers' business problem?**
  - *Existing private equity assets are too capital intensive for some insurers under Solvency 2*
  - *Large and unaffordable capital requirements generated*
  - *Illiquid assets that were difficult to sell at a fair market price*

- **How was the problem solved?**
  - *A Private Equity secondary fund was created and a cornerstone investor identified*
  - *Other investors were identified, not subject to insurance regulatory capital requirements*
  - *Or insurer investors with sufficient capital resources to invest at the right price*

- **What was the benefit to the insurers and fund investors?**
  - *Insurers sold illiquid, capital intensive assets to help de-risk their balance sheets*
  - *Investors acquired private equity assets at favourable prices to generate IRRs of 20%*

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Questions?

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