

Hedging Practices in the UK Life Industry – Taking stock Dynamic Hedging Working Party

6th January 2017

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Agenda

- Purpose
- Survey Participants
- Philosophy & Governance
- Practices by Risk drivers
- Solvency II & Matching adjustment
- Emerging Practices
- Summary

Purpose

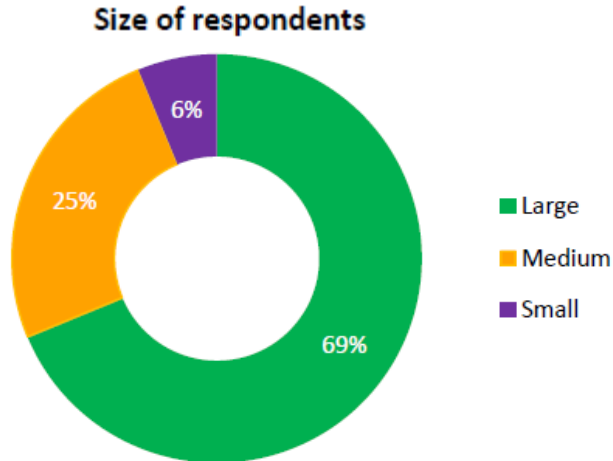
- Survey conducted in the final few months prior to Solvency II regulations coming into force
- Examine different approaches and attitudes to hedging market risks in the UK life industry
- Propose & recommend best practice

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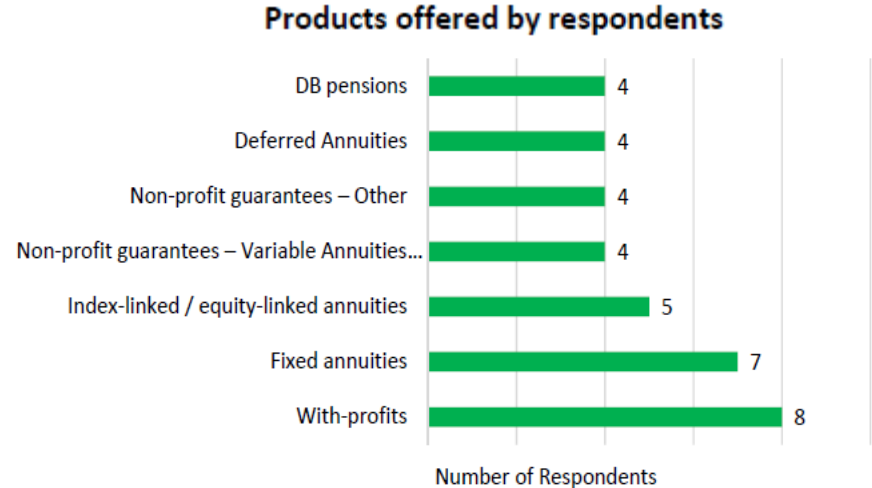
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Survey Participants

- Wide spectrum of respondents -16 responses in total



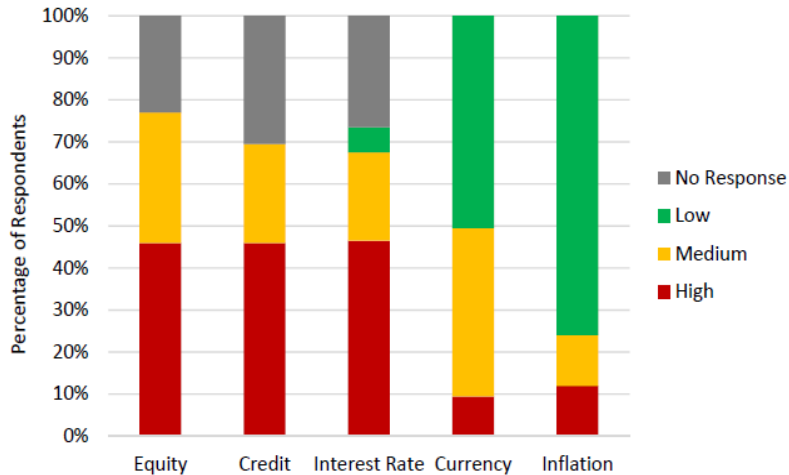
Large: Solvency 1 liabilities more than £5bn
Medium: Solvency 1 liabilities between £1bn and £5bn
Small: Solvency 1 liabilities less than £1bn



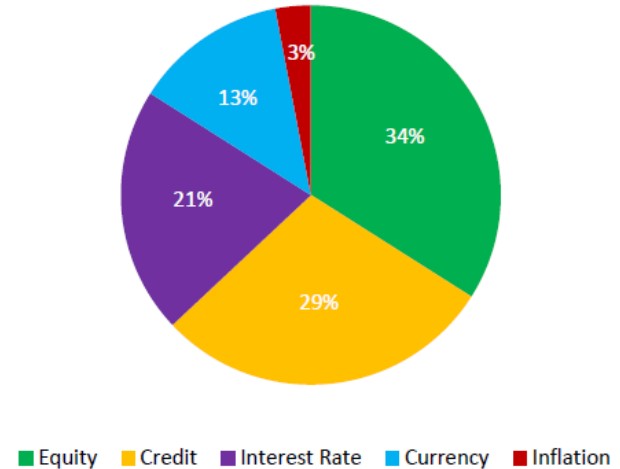
Survey Participants

- Respondents – Equity, Credit & Rates are the big market risks

Materiality of Risk Exposures



Undiversified ICA as % of market risk Capital



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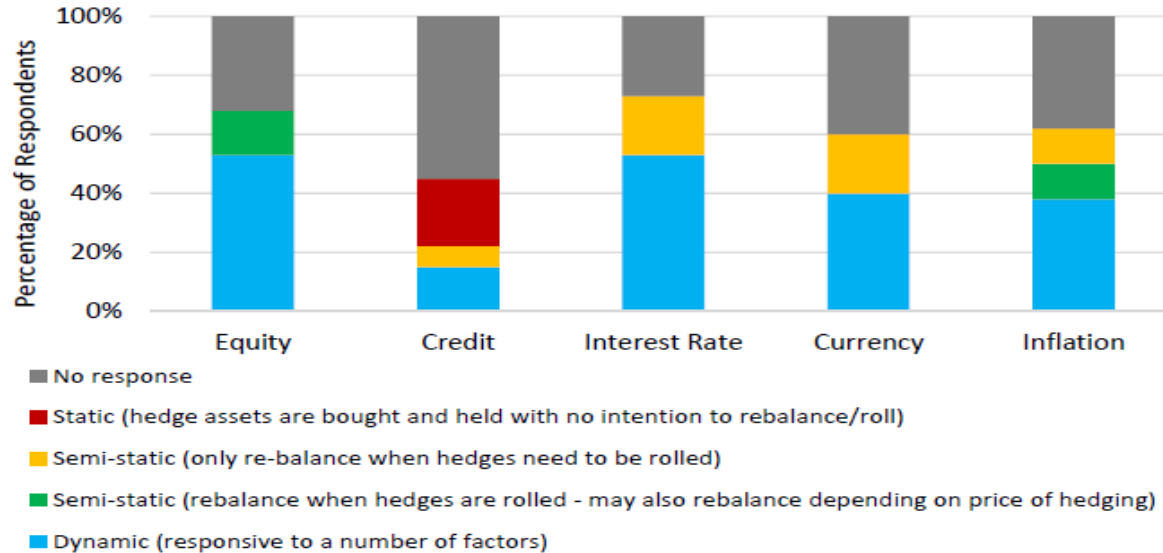
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Philosophy & Governance

- Hedging Philosophy – rationale for diverging approaches
 - Differing business models
 - Different liabilities (Variable Annuity vs. With Profits)
 - Different objectives (Economic vs. Regulatory vs. P&L hedging)
 - Different regulatory regimes (US GAAP vs. SII)
 - Different solvency positions (Healthy vs. Dire)
 - Other reasons
 - Historical/legacy factors
 - Person with the loudest voice

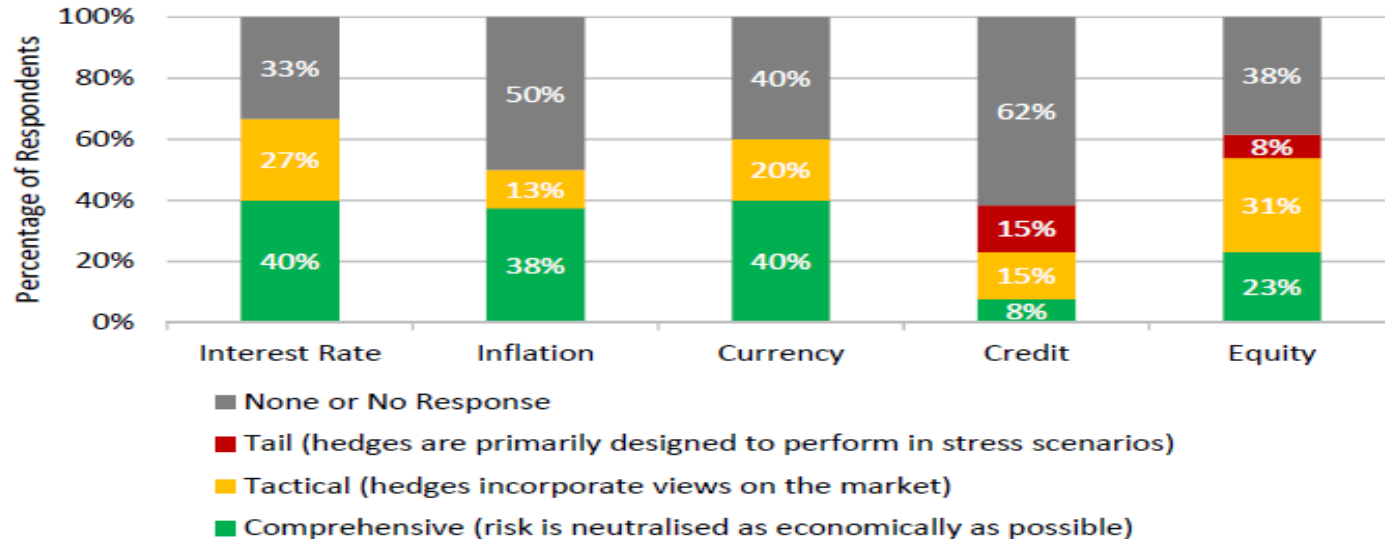
Philosophy & Governance

- Hedge Dynamism – most are hedged dynamically barring Credit.



Philosophy & Governance

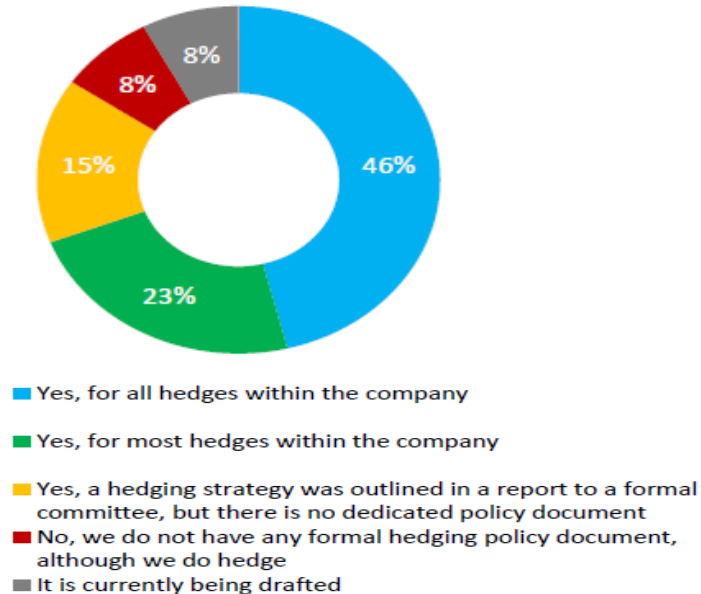
- Hedge Philosophy – Rates, Inflation & Currency largely comprehensive; Equity & Credit wider approaches seen



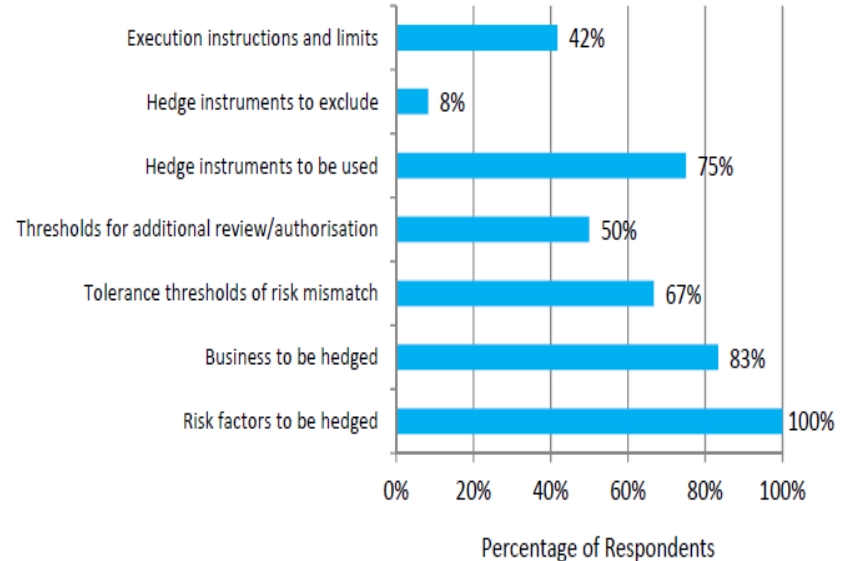
Philosophy & Governance

- Hedge Documentation – wide variation and scope for improvement

Hedging Policy Document Existence

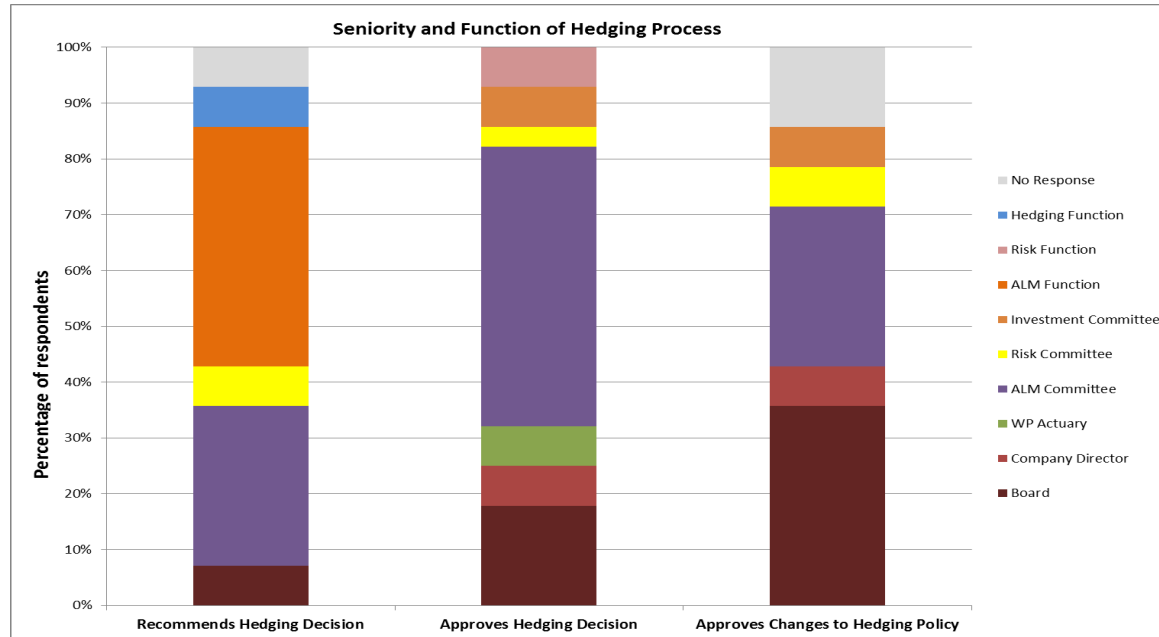


Hedging Policy Document Scope



Philosophy & Governance

- Hedge Process – scope for delegation?

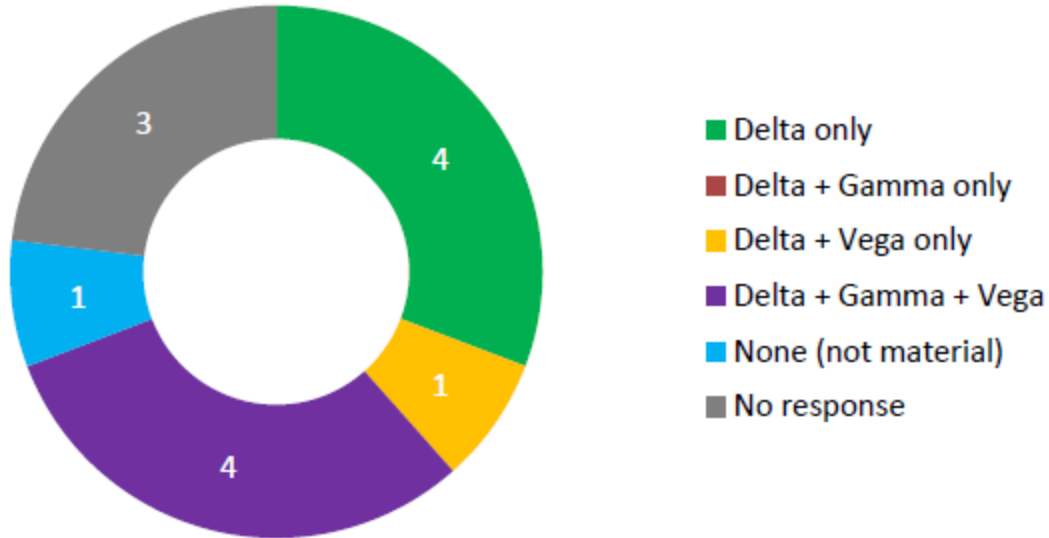


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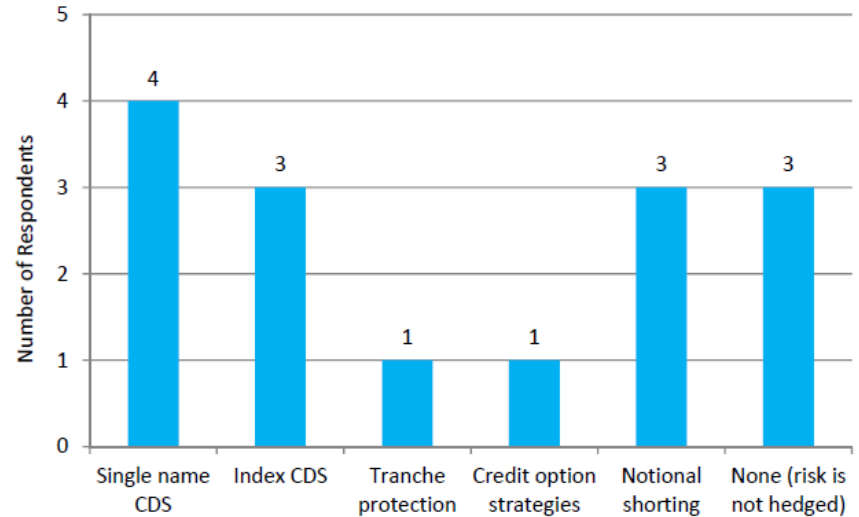
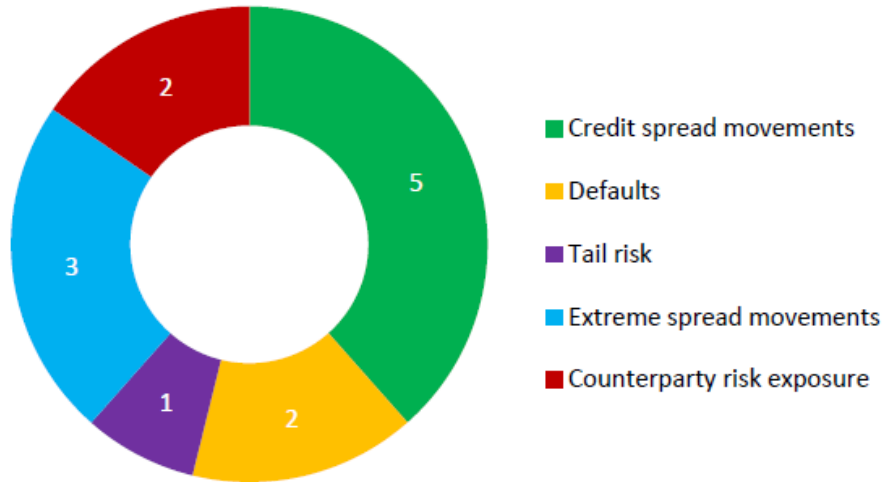
Practices by Risk drivers – Equity risk

- Roughly 50:50 split between those that choose to only delta hedge and those that additionally hedge ‘second-order’ Greeks with a bias towards Vega.



Practices by Risk drivers – Credit risk

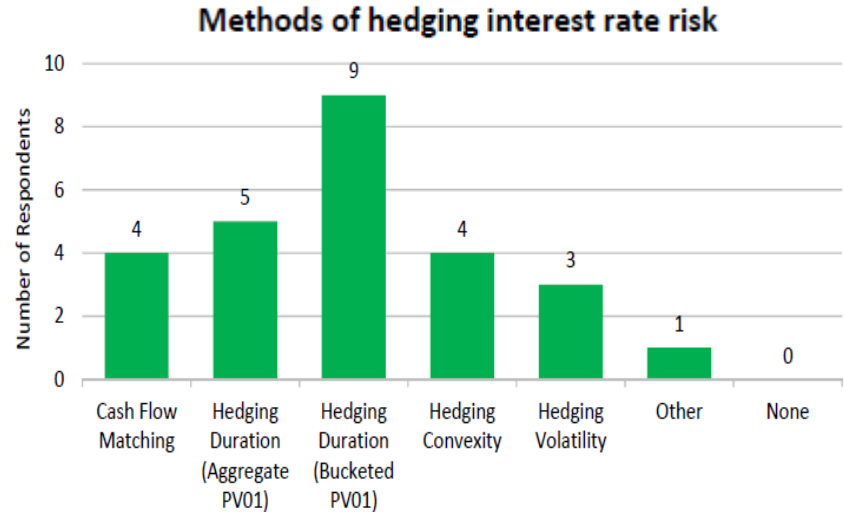
- Credit spread movements still being hedged even though matching adjustment absorbs all the non-default spread widening



Practices by Risk drivers – Interest rate risk

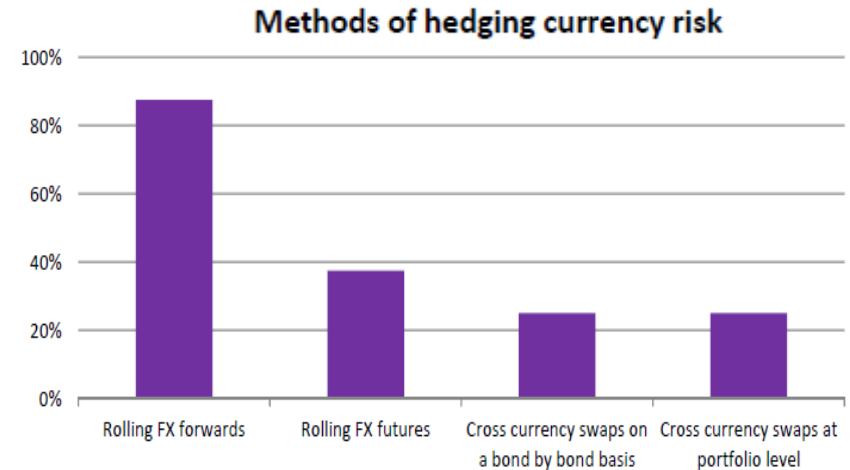
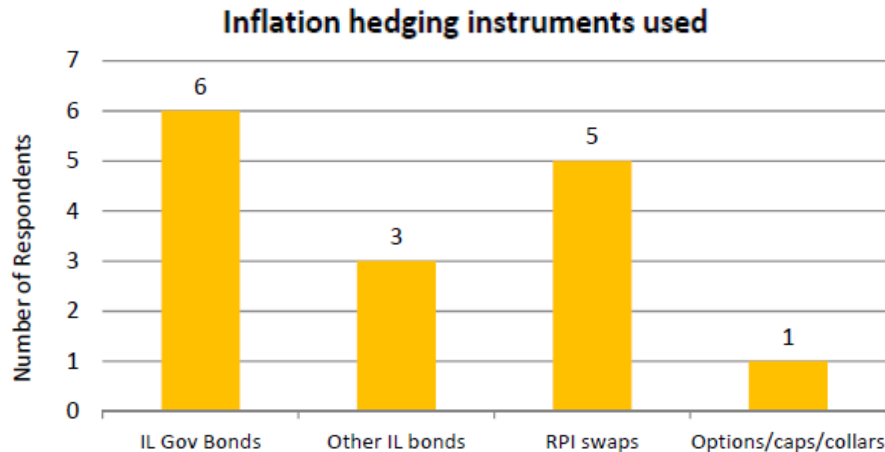
- VA firms are more dynamic hedgers of rates as compared to a traditional With Profits firm. Bucketed PV01 metric most popular.
- Some degree of tactical hedging taking place.

Product Type	Less frequently	Monthly	Weekly	Daily	More than daily	Total
Companies Selling Variable Annuity products	0	0	0	1	2	3
Companies Selling With Profits	3	2	0	1	0	6
Companies Selling Both VA and WP	0	0	0	1	0	1
Companies Selling Other Products	0	0	1	0	0	1
Total	3	2	1	3	2	11



Practices by Risk drivers – Inflation & FX

- Inflation hedged using IL bonds/RPI swaps; RPI/LPI basis risk
- Rolling FX forwards/futures most popular mechanism to hedge FX risk

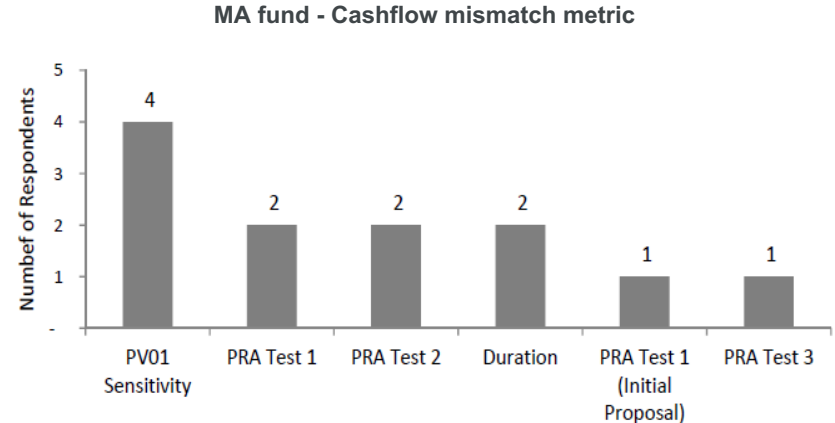
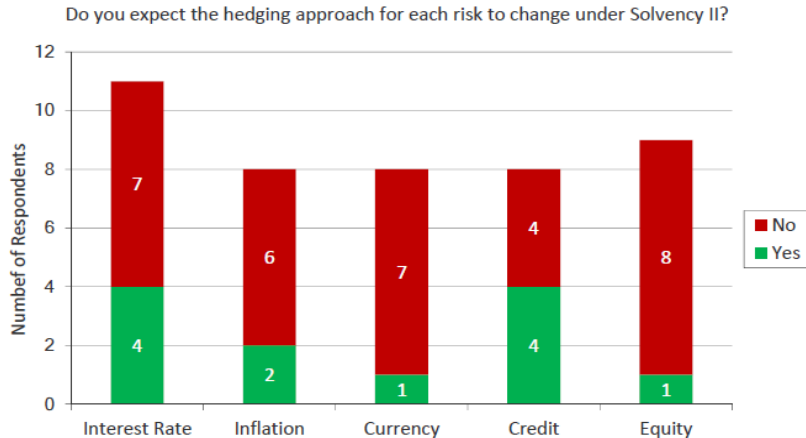


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Solvency II & Matching Adjustment

- Firms expected changes in hedging approach post SII for rates and credit – borne out by interest rate sensitivity of the risk margin and the new matching adjustment regime.
- PV01 metric most popular with MA firms to measure cashflow mismatch – warming to PRA metrics?



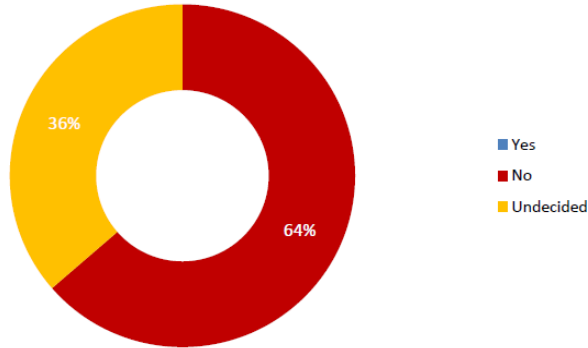
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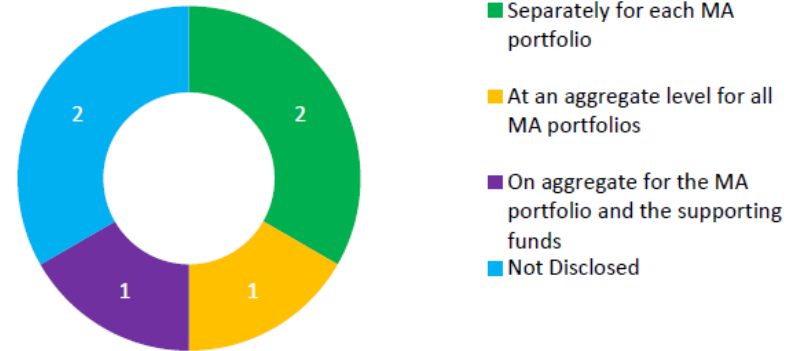
Emerging Practices

- CRA (component of Solvency II risk free curve and an add-on to the LIBOR curve) not hedged
- Varying collateral management approaches in place

Companies hedging the Solvency II Credit Risk Adjustment



How is collateral managed for derivatives in the MA portfolio?



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Summary

- Firms show variation in hedging approaches in certain areas whilst approaches converge in others
- Hedging is more dynamic and comprehensive in Variable annuity firms as compared to With Profit firms
- Areas of improvements exists around governance
- Solvency II has brought new challenges to deal with.

- Report Link: <https://www.actuaries.org.uk/documents/report-ifoa-dynamic-hedging-working-party>

Questions!