

Proactive ALM: How an innovative, well-integrated Finance function could unlock economic value

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### Straw poll 1

### Has Brexit created any opportunities for your firm in the investments space?

- 1. Yes
- 2. No





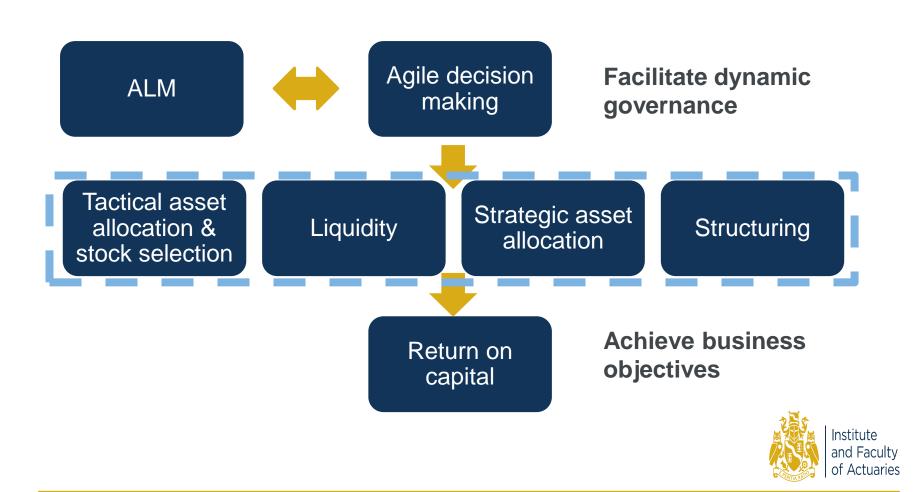


What does "good" look like?

# ALM is a key component of firms' asset optimisation agenda



# Proactive ALM is required to allow decision-makers to effectively run their businesses







Understanding relative value

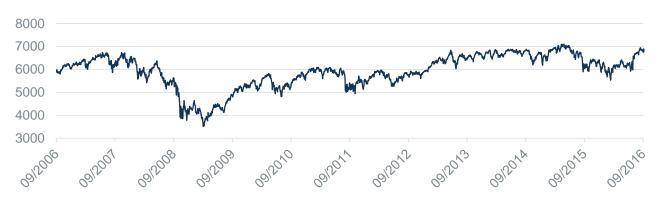
### It isn't enough to understand relative value within traditional asset classes

#### Historical bond spreads 1998-2016



We are all aware of bond spread compression over recent years

#### Historical FTSE 100 index levels

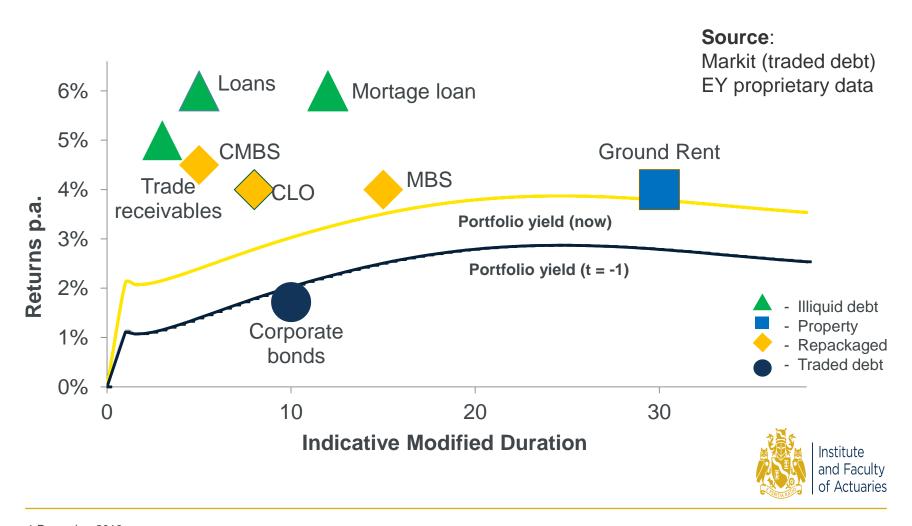


Volatile equity markets are challenging to navigate



Source: Markit

# The front office needs a holistic understanding of where markets are pricing and where potential value exists



### However, we all know there are other constraints on investment decisions

### Insurers employ a range of investment criteria

#### Return/yield

**1**%

### Capital (SCR / EC)



### Regulatory



#### Risk



Liquidity



### **Amongst others**;

- Balancing income vs. capital growth
- ► Tax implications

This isn't a case of 'one size fits all.'



# Missed opportunities can occur if firms do not have the tools they need to assess relative value

#### Example opportunity: CPI-linked debt with AA+ guarantee

Indexed debt

 Debt payments are partly fixed and partly subject to uplift with CPI indexation Source: Macquarie Specialised Investment

Solutions

**Pricing** 

RPI-CPI wedge competitive relative to post-Brexit market information

**Guarantor** 

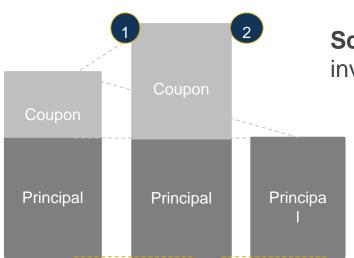
Finnish Government – Aa1 (Moody's) / AA+ (S&P)
 via Finnish Export Credit Agency – Finnvera

Macaulay Duration

9 years (using swaps, 6M LIBOR, plus 70bps)



# Lack of MI and operational flexibility prevented many firms from taking this attractive and rare opportunity



Scenario 1: Earn coupon above expected CPI

**Scenario 2:** Earn at least the principal on the investment in all circumstances

### Why is this helpful?

- Debt includes leveraged CPI-link with natural floor
- Few CPI-linked assets are in issue to match liabilities

Time t = 0 Time t = payment maturity



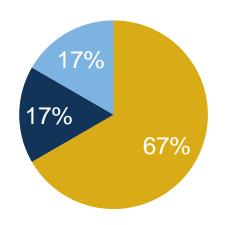




What basis should an insurer hedge?

# The first step to understanding risk appetite is to determine your primary business metrics

What is your primary optimisation metric for setting investment strategy?



- Return on regulatory capital
- Return on economic capital
- Balanced managed fund approach

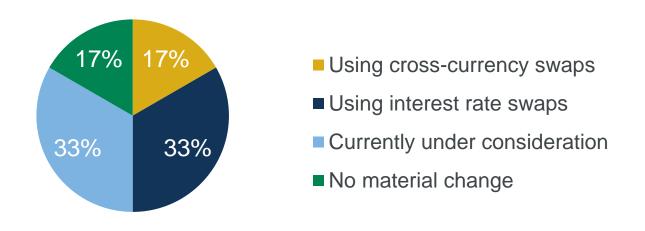
Source: EY 2016 CIO survey

The majority of respondents (67%) manage investments based on a return on capital metric, where returns are defined in terms of IFRS profit and capital is related to the Solvency II position



# Solvency II has led firms to consider whether current strategies are appropriate

What changes are you expecting to make to your hedging strategy under Solvency II?



Source: EY 2016 CIO survey

Respondents are considering a number of changes to hedging strategies covering interest rate, currency and inflation risk



# Many firms have experienced undesirable balance sheet volatility in recent months

19<sup>th</sup> September LV= solvency ratio drops 20%

10<sup>th</sup> August
Prudential SII
ratio fell by 18%
across the first
half of 2016

9<sup>th</sup> August
Low interest
rates behind
L&G's solvency
ratio 11% drop

**Source**: Insurance ERM

5<sup>th</sup> August
Allianz 'freezes'
Solvency II ratio
at 186%

 Proactive ALM should enable a firm to assess risks being run and support with hedging decisions



### Straw poll 2

### Is now a good time to hedge rates?

- 1. Yes
- 2. No



# Case study: Interest rate risk in a "simple" annuity strategy

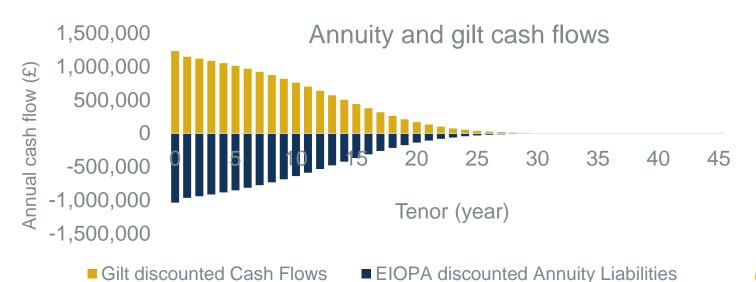
- Annuity cash-flows totaling £1,000,000 per annum
- Annuitants have an average age of 75
- Initial expenses of 5% and running expenses of 1%

- Annuity cash flows are matched with gilts without cash-flow restrictions
- Standard Formula firm, no Matching Adjustment or Volatility Adjustment
- Cash flows set to match liabilities and so solvency ratio = 100%

Institute

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of Actuaries



# Unacceptable levels of balance sheet volatility based on 10 years of historical market performance

10 year history of Net Assets, RM, SCR and Surplus

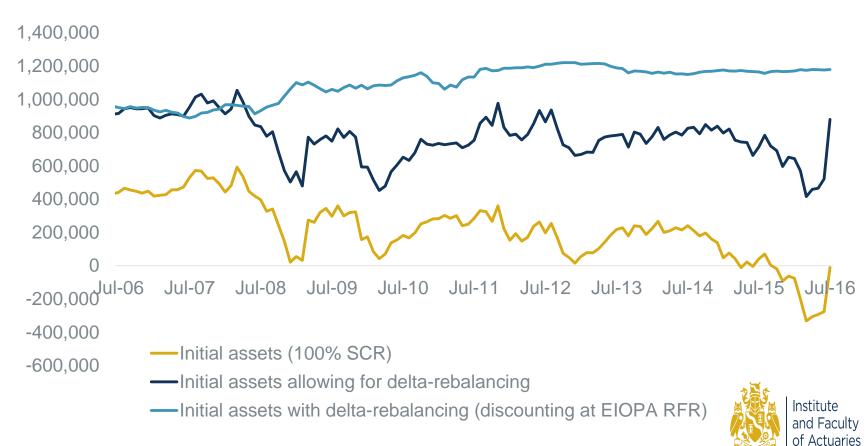


- Significant volatility in Free Assets
- Breaches of SCR and MCR
- Better management of interest rate risk is required



# Even with theoretical hedging to the EIOPA curve, volatility still exists!

### Volatility of surplus



# Proactive ALM provides strong balance sheet MI to facilitate management of the business

#### Interest rate delta exposure (£k)

Tenor	Liabilities	RM	SCR	Assets	Net
5	1,248	124	37	1,503	95
10	2,723	355	184	3,259	3
15	3,020	475	454	3,576	373
20	2,070	395	672	2,422	714
25	848	208	574	979	650
30	191	66	270	218	310
35	21	12	66	23	75
40	1	1	9	1	10
45	0	0	1	0	1
50	0	0	0	0	0

- Risk limits can be used to trigger hedging activity
- ALM processes need to provide timely information







A Finance function that provides a competitive edge

### Straw poll 3

### What is the most effective strategy to facilitate accurate new business pricing?

- 1. "Warehousing" assets to back new business
- 2. Pricing at the execution date on current market yields
- 3. Deploying assets post-trade



# New business pricing should be better than a "good guess"

- There are a number of investment bases firms might use when pricing new business:
  - "Target" corporate bond yields
  - Existing portfolio yields
  - "Live" yields in line with current investment strategy
- There are also various strategies applied to achieve deployment consistent with pricing, from:
  - "Warehousing" assets to back new business, to
  - "Wait and hope", i.e. transact after deal execution



# Many firms are still pricing new business based on yields on their existing portfolio

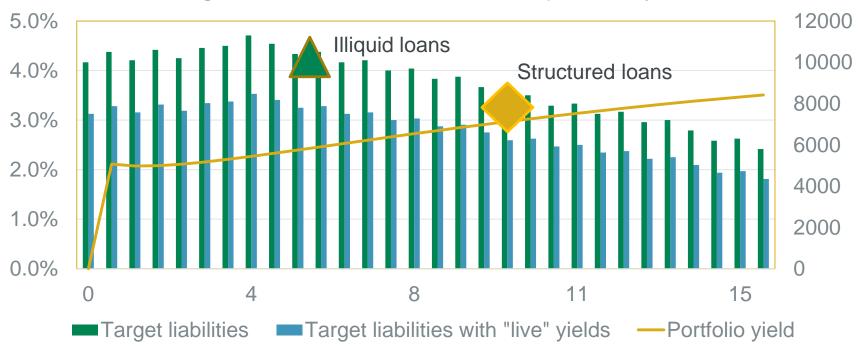
#### **Example: Bulk-annuity transactions**

Assume Solvency II Matching Adjustment / IFRS Liquidity Premium applied



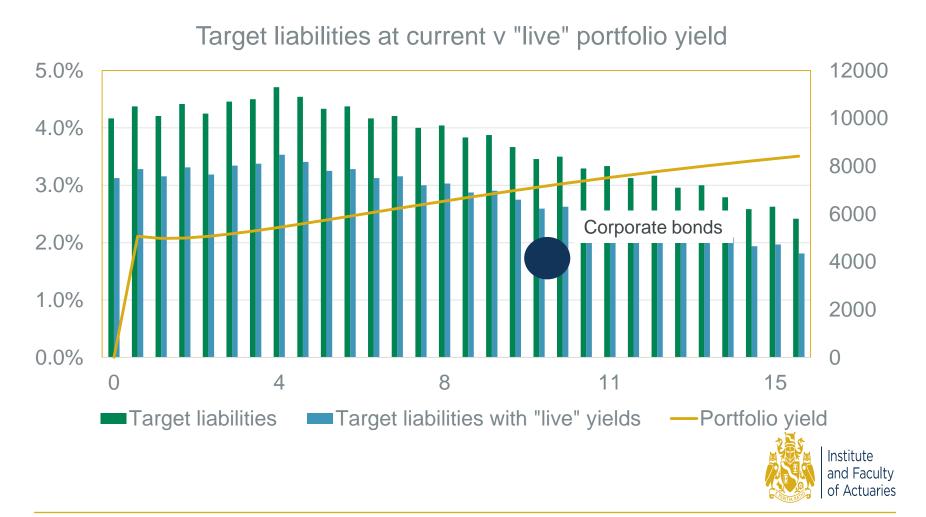
# But this might be uncompetitive based on available yields in target markets

Target liabilities at current v "live" portfolio yield





### ...or lead to losses if the yield is not there





### Conclusion

Proactive ALM can deliver value to your business

# Proactive ALM empowers better decision-making, delivering value to the business

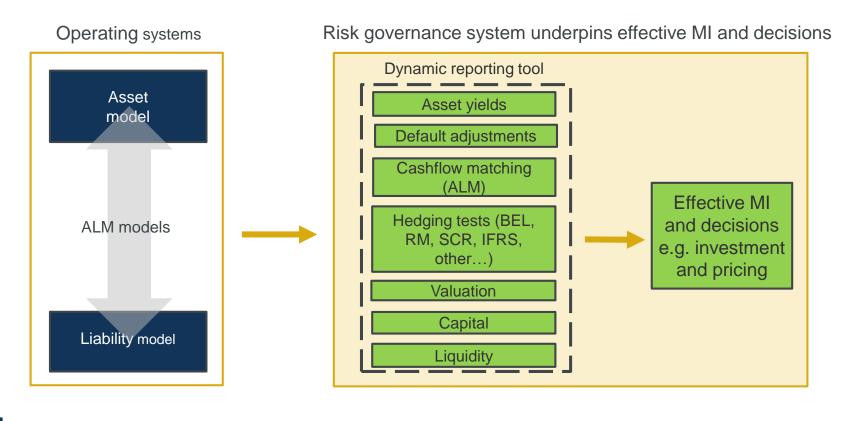
Deployment of assets

Hypothecation of assets to liabilities

Optimise hedging strategy



### Agile management driven by a nimble operating model, which provides tailored information in an efficient and timely manner



Models
Output
Risk governance



1 December 2016 30

### Questions

### Comments

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