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The Impact of Macro-economic and Regulatory Volatility on Investments

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2 December 2016

Today's agenda

- Current economic environment
- Regulatory volatility and the impact for insurers
- The current investment universe and relative attraction of various asset classes
- Investment metrics and considerations
- Key front and back-office challenges

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Economic and regulatory environment

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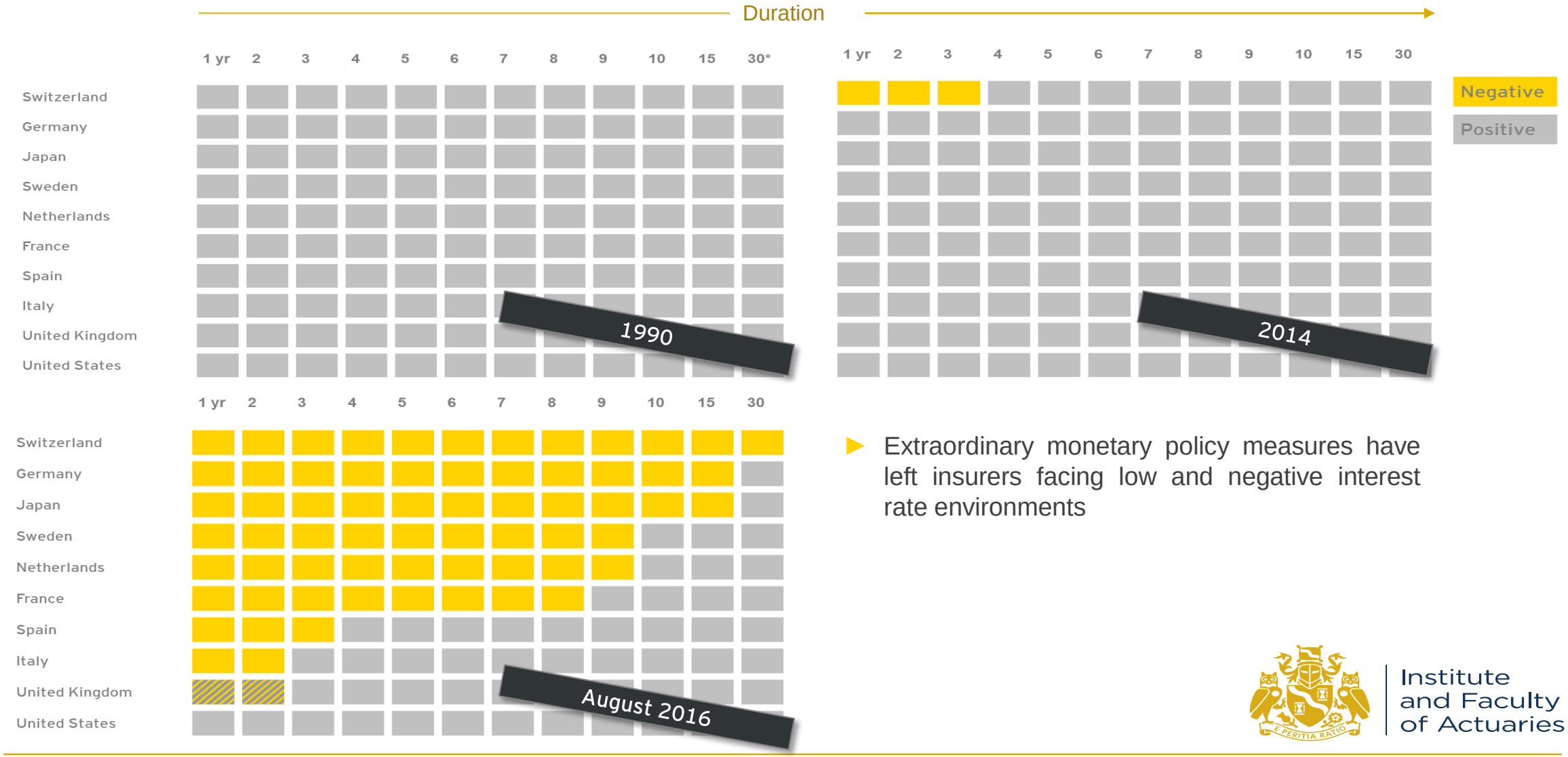
Government bond yields are at an all time low



- Extraordinary monetary policy measures have left insurers facing low and negative interest rate environments

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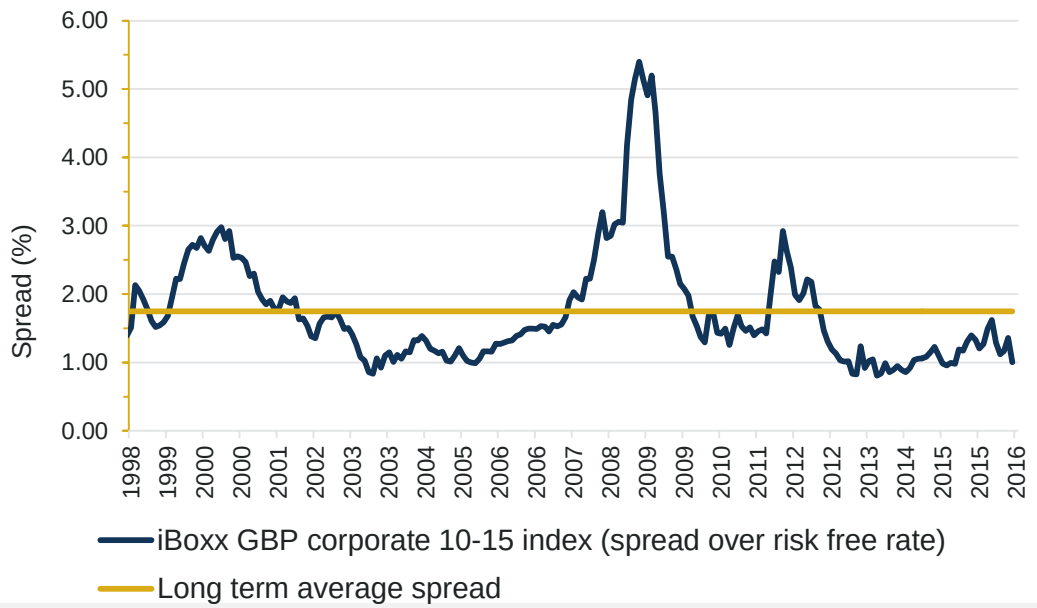
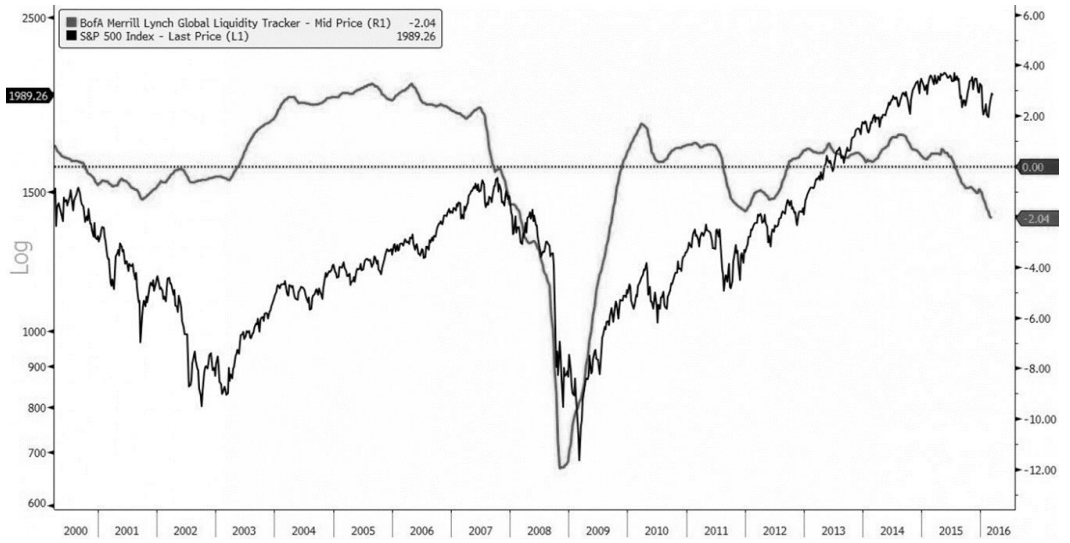
Coupled with low spreads and low liquidity...

Iboxx corporate bond spreads



Merrill Lynch Global Liquidity tracker



- Strong investor demand for yield have meant credit spreads have remained narrow

- Demanding central bank bond purchasing programmes and banking regulatory strictures have threatened bond market liquidity

Source: Bank of England Yield Curves, Markit: IBoxx indices, Merrill Lynch

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Economic disruptions are causing market volatility

There are a number of threats to political and economic stability:

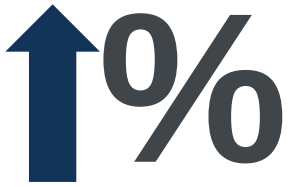
Brexit

US election

Euro crisis

Chinese economic growth

Fed interest rate hikes



Oil & other commodity prices

Uncertainty is causing extreme market volatility

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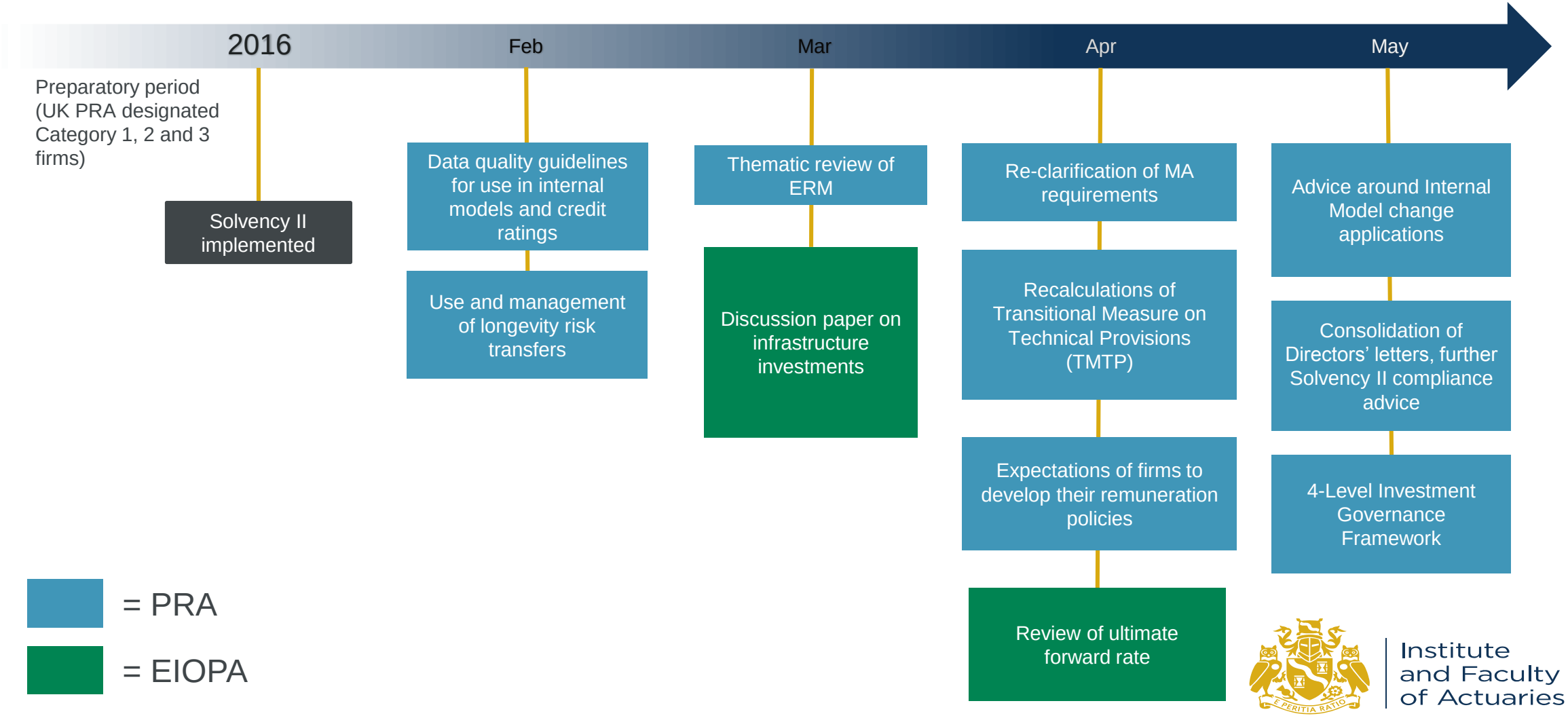
The PRA and EIOPA have kept insurers busy post-implementation of Solvency II..



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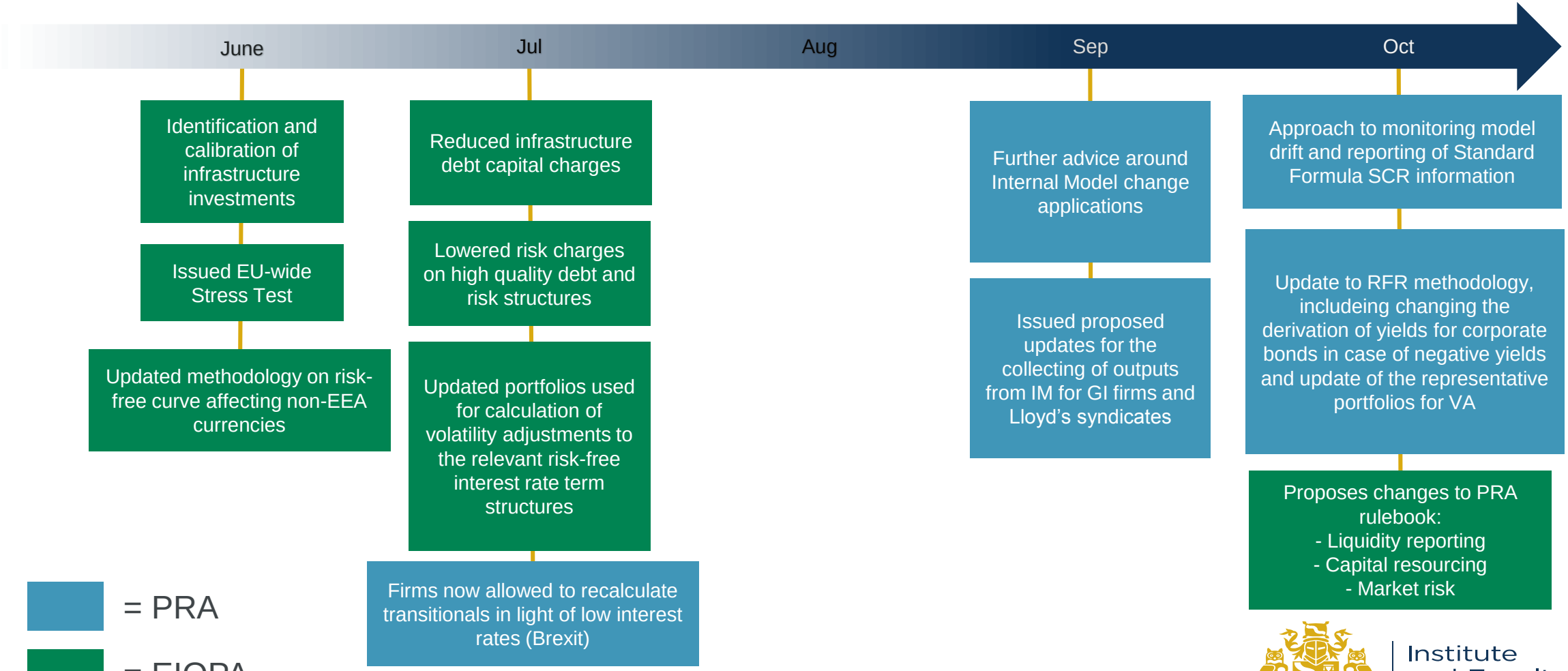

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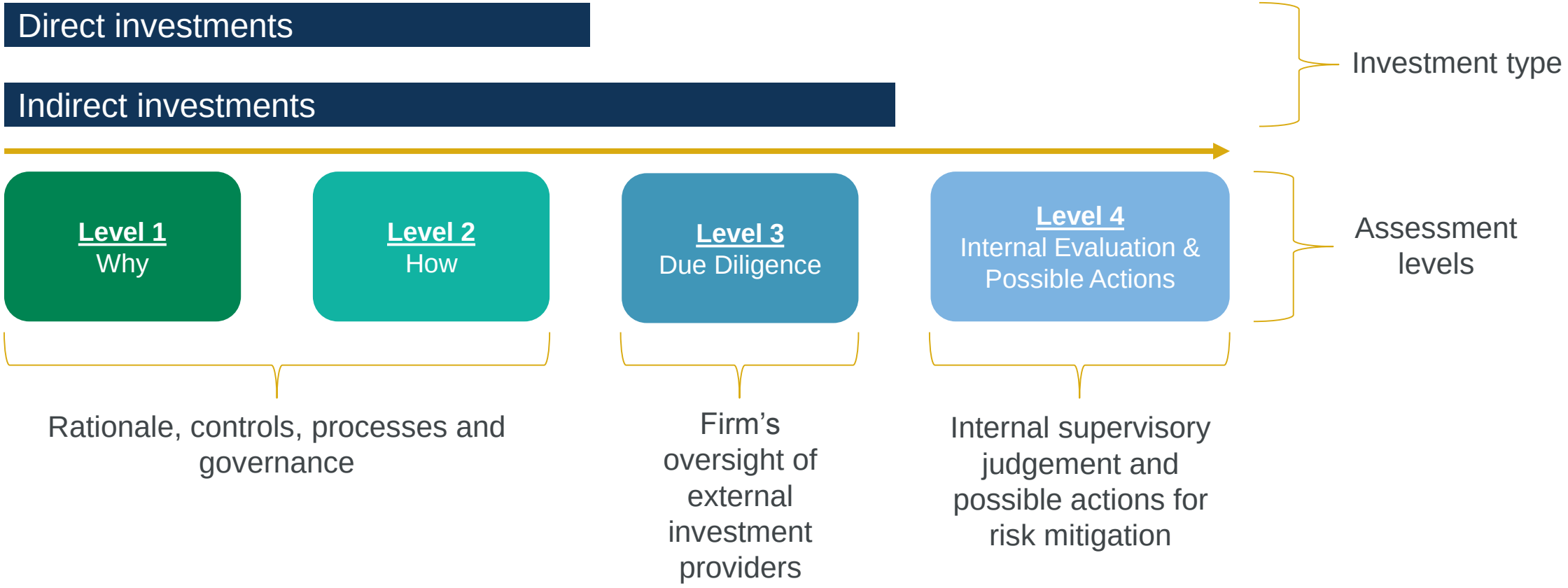
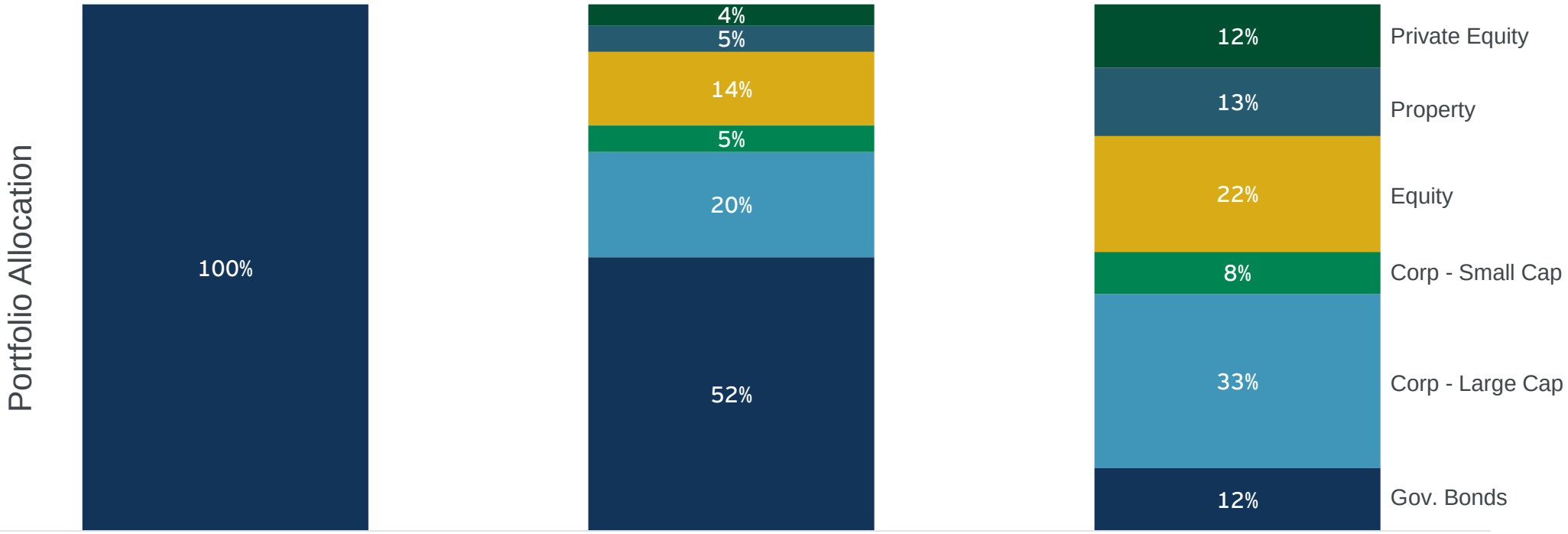
For example: The 4-level Investment Framework

The primary aim of this model is to establish a framework for how insurers could assess, evaluate, monitor and report on the investment risks they take



Despite volatility, insurers need to take on more risk to achieve the same return...



	1995	2005	2015
Expected return	**7.5%**	**7.5%**	**7.5%**
Standard deviation	**6.0%**	**8.9%**	**17.2%**

Source: The Callan Associates

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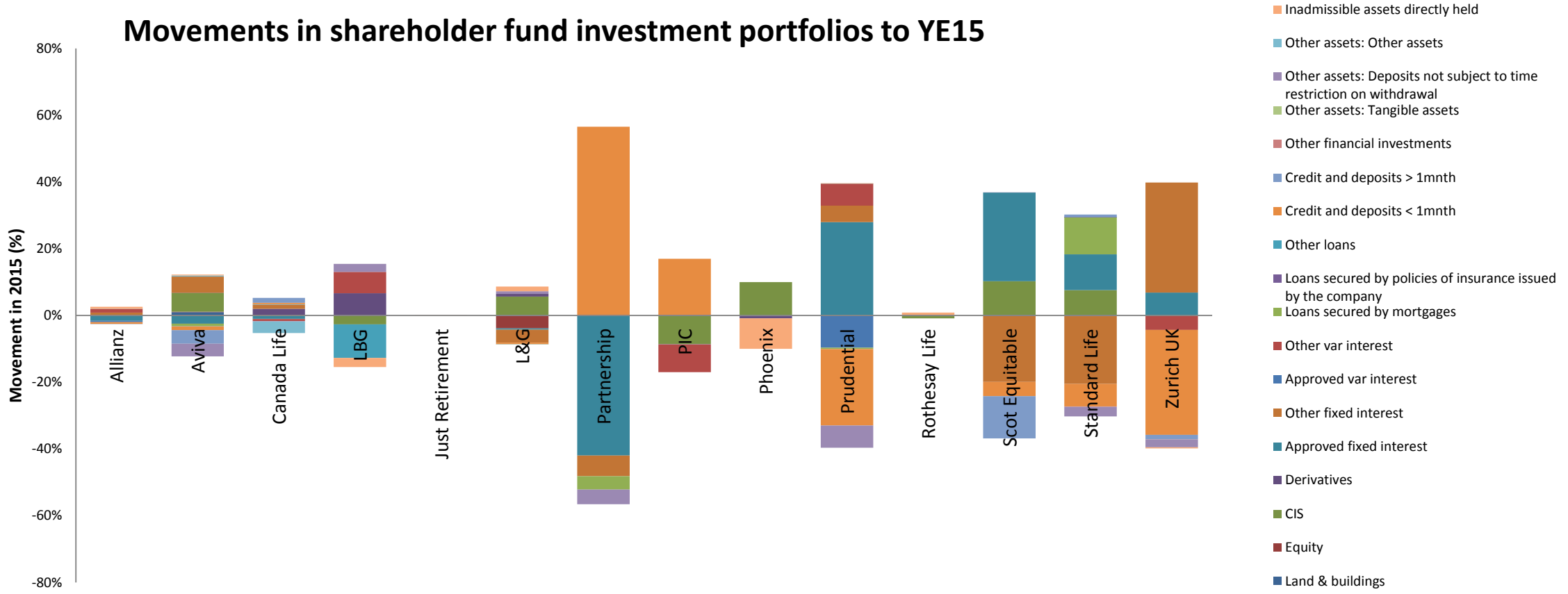
Insurers are reducing cash holdings in favour of alternatives...



- The majority of insurance firms moved away from short-term credit and deposits favouring 'other fixed income' allocations

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Key European insurance investment trends – as we see them

Key Themes	Comment	Challenges
Diversification within fixed income	**Increased yield** ► From sovereign to credit ► From liquid to illiquid ► From local to global	**Depends on internal / external AM** ► Availability of assets ► Structural challenges ► Operational complexity
Sophisticated equity strategies	**Maintain equity upside with controlled downside** ► Structured products e.g. controlled VaR products ► Capital protection products ► Wider use of risk mitigation techniques through derivatives	► Complexity of modelling ► Real advantages only come for internal model firms ► Not widely understood
Wider spectrum of RE	**Insurers understand Real Estate risk; now build on this** ► From residential to non-residential (and vice-versa) ► From direct to indirect investments ► From local to global	► Product variations in each market ► Avoiding securitisations ► Understanding other markets

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Sources of additional yield

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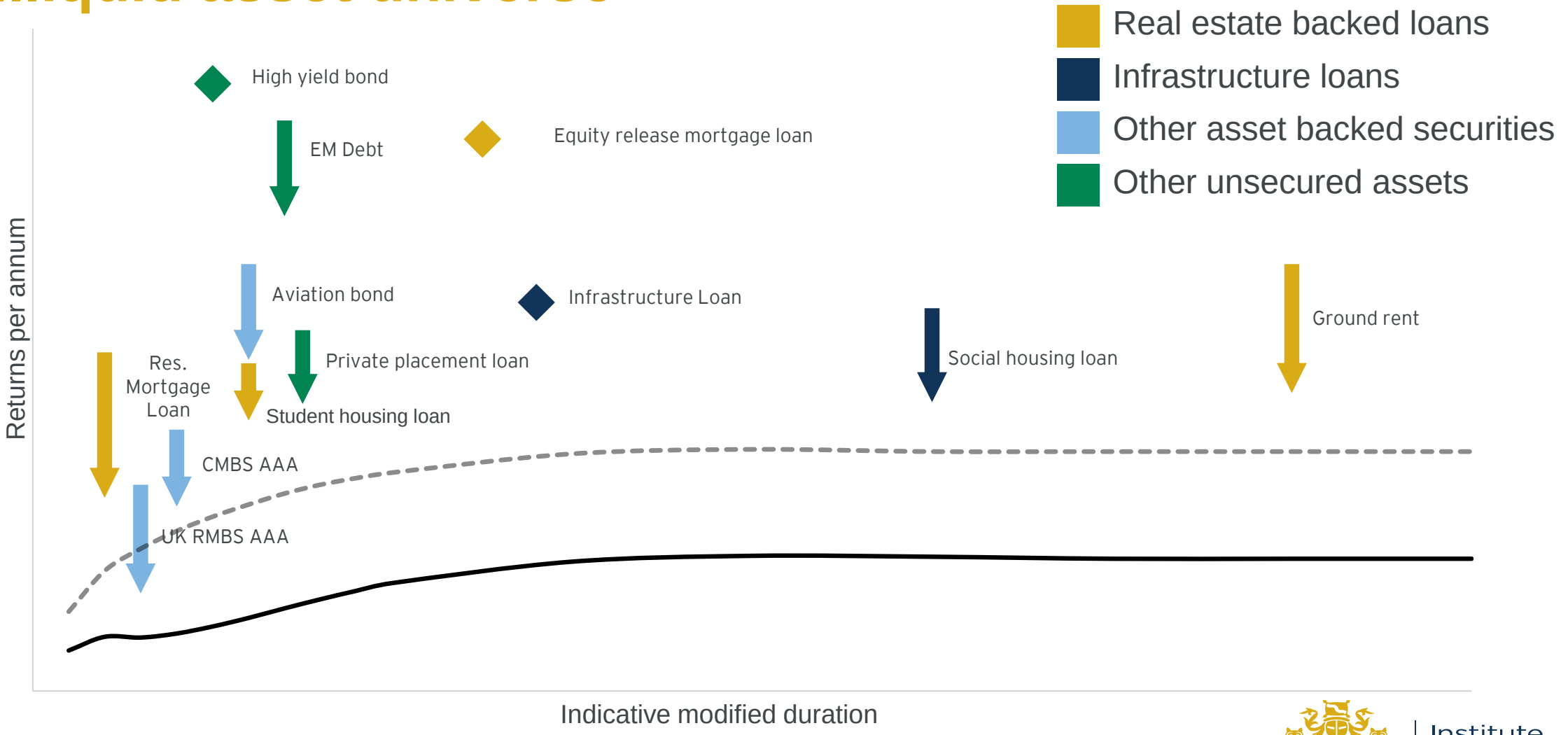
Illiquid asset universe



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Recent market transactions

‘French insurers invest in €425mn green energy infrastructure fund’

‘Royal London buys retail park for £56mn’

‘L&G lends $660mn to University of California’

‘London’s super sewer, partly owned by Allianz and Swiss Life, seeks up to £440mn’

‘Aviva acquires freehold to £74.5mn student accommodation property’

‘Zurich wants $2bn in green bonds’

All headlines sourced from Insurance Asset Risk

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Investment metrics and considerations

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It’s important to determine the primary criteria for optimisation

Insurers employ a range of investment criteria:

Return/yield

↑%

SCR/Capital

Regulatory efficiency

Risk

Liquidity

Amongst others;

- Balancing income vs. capital growth
- Tax implications

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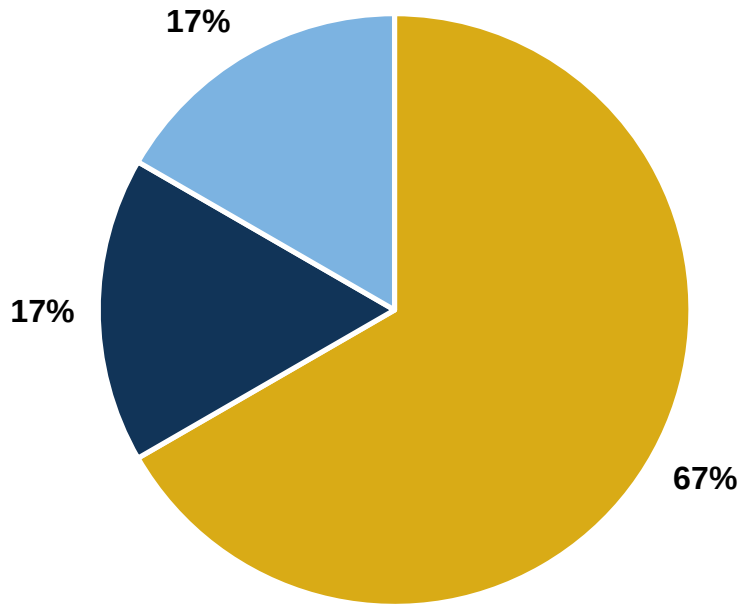
A variety of metrics are used by insurers, most favour return on capital metrics

What is your primary optimisation metric for setting investment strategy?



Source: EY 2016 CIO Survey, May 2016.

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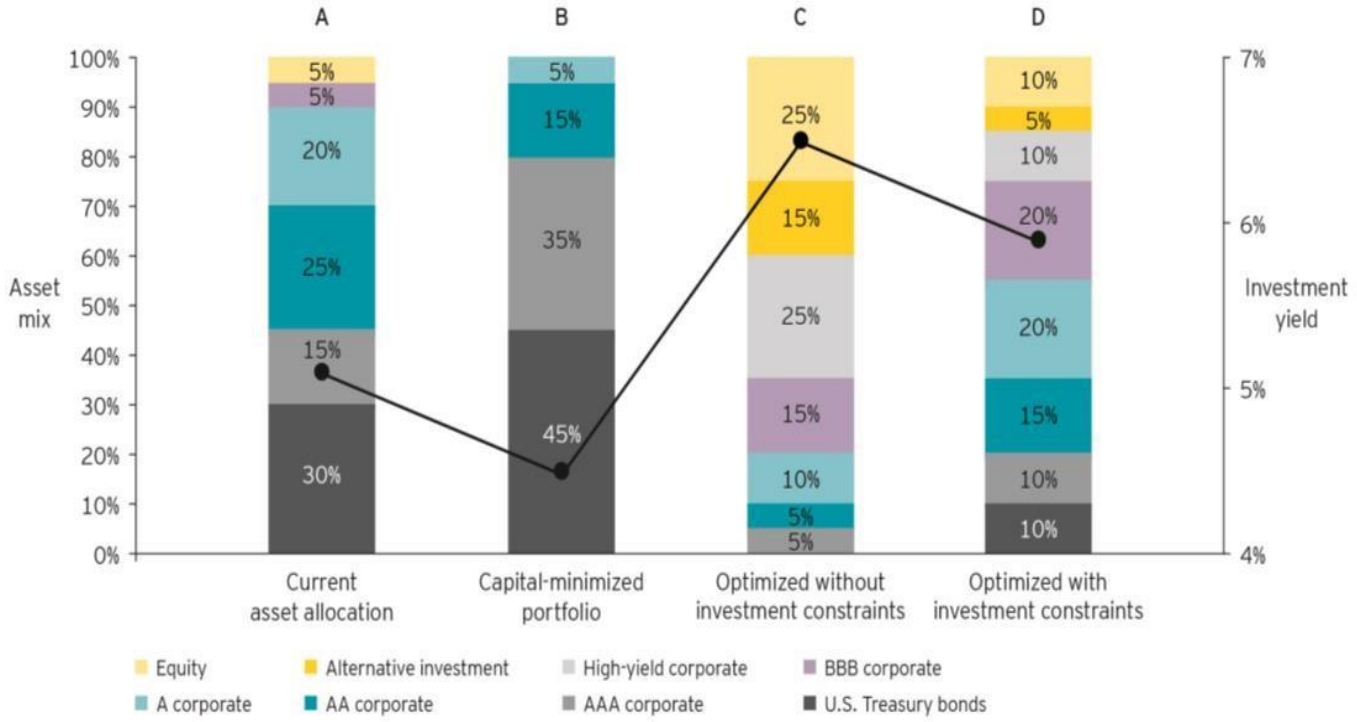
Optimizing the SAA will ensure a balanced evaluation of investment strategies



Primary (USD m)	Current	S1	S2
Embedded Value			
Economic Capital			
Available Capital			
Free Surplus			
EV / EC			
Secondary			
Long-term Expected Investment Yield			
Solvency Margin			
GAAP Profits at Risk			
EV Profits at Risk			
Dollar Duration Gap			
Convexity Gap			
IRR			
Value of New Business			
Liquidity Test			
Probability of Target Policyholder			
% of Risky Asset			
Average Credit Quality			
Rating Agency Comments			

- Many **secondary constraints** to be considered, such as investment yield, solvency margin, IFRS earnings at risk, dollar duration gap/convexity, IRR, value of NB, liquidity ratio, credit rating, etc.
- More focus on **economic view of risk**, rather than just the regulatory or accounting view

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Improved technology will allow insurers to take advantage of opportunities

	ALM strategy steps	Example
1	**Build a conceptual framework**	“I don’t think interest rate risk is a rewarded risk”
2	**Define a strategy**	Organise interest rate exposures into buckets and define constraints
3	**Implement**	Before you can transact you need to: 1. **Assess impact** on assets, liabilities and capital 2. Attain **governance approval** 3. Agree approach with **investment managers**

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Operational challenges

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Insurers need to consider the practical challenges before investing in illiquid assets

- In order to construct a high yielding, diversified and attractive portfolio, insurers study **alternative asset classes** available in the market
- In particular: different levels of **pricing trasparency, cash flows certainty, ability to source** and **on-going management**

Type of investment	Examples	Pricing transparency	CF certainty	Ability to source	Ongoing management
Infrastructure	Social infrastructure, economic infrastructure, energy (including renewables)	Low	High	Medium	Complex
Real estate backed	Residential and commercial lending, social housing, student accommodation, equity release, ground rent	Low	Medium	Medium – Difficult	Complex
Other asset backed	Asset backed securities, collateralised loan obligations, aircraft financing, shipping financing	Medium – High	Medium	Easy	Simple
Other unsecured	Private placements, SME lending, high yield, overseas (including emerging market) debt	High	High	Easy	Simple
Other	Private equity, hedge funds, insurance linked securities	Low	Low	Easy – Medium	Medium

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Managing operational constraints

Challenges for insurance investment and potential mitigants

1

Asset and liability management

The Solvency II balance sheet is significantly harder to manage.

Does one optimise the BEL, BEL + capital or other metrics (e.g. IFRS, EV, Economic Value)?

2

Valuation

Private assets don't have prices on Bloomberg / other databases.

Insurers need to be able to construct their own modelled value (in line with fair value principles).

3

Capital modelling

It's hard enough to determine a base value; how about putting distributions around these?

4

Ongoing maintenance

Now you've got the asset on the balance sheet, what happens when you need to service the asset?

5

Asset data

Requirements for asset data have grown immeasurably under Solvency II. This is true for traded assets as well as private assets.

Conclusion

- Insurers need to adapt to the harsh macro-economic environment and regulatory changes
- Whilst there is market uncertainty and volatility, insurers need to take additional risk in order to meet return targets
- Insurers need to be dynamic, and able to efficiently assess and transact, to take advantage of opportunities
- There is value to be found in illiquid assets, but there are a number of challenges that need to be considered

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Thank you!

Questions

Comments

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