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# Investment Strategy for Pensions

## Reflecting covenant strength in investment strategy

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14 May 2014



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### What this presentation covers

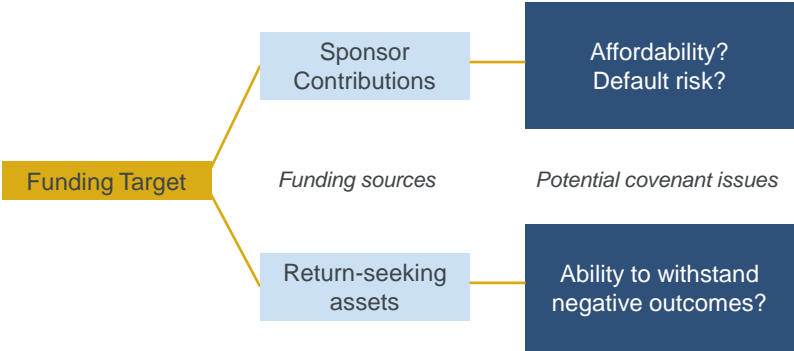
- Why covenant is important
- Problems with current approaches
- Integrated risks solution
- Implications for setting investment strategy
- Regulatory focus



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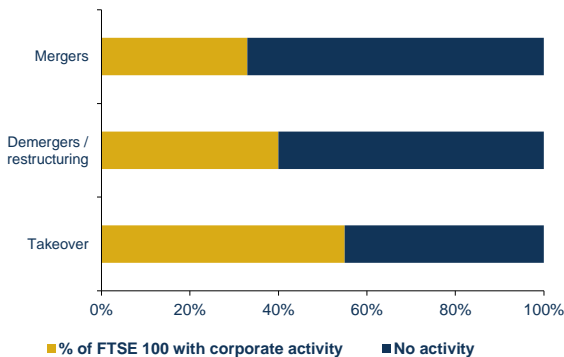
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Why covenant is important



Can covenant be ignored if the sponsor is strong?

FTSE 100 1985-2010 : Corporate activity analysis



- 85% experienced major transactions
- 26% experienced “financial stress”
- 7% defaulted



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## ALM models and contributions

- Recovery plan contributions are assumed to be paid
- Nil contributions stress test?
- No allowance for **uncertainty** of sponsor resources



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## VaR and contributions

- VaR presents a “deficit” resulting from adverse investment outcomes
- Can VaR be repaired with additional contributions?
  - *If not then we experience sponsor default or scheme default*
  - *These expose a scheme to losses*
- Is there a value for additional contributions?
  - *Current equity market value?*
  - *Ignores uncertainty, correlation between investment returns and sponsor covenant*



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## The solution is modelling sponsor financial resources stochastically

- Net cash flow modelled **stochastically**
  - *Overlaying the risk of sponsor default*
  - *Reflecting the legal structure of covenant support*
- Compare **stochastic sponsor resources** with recovery plan
- Expected contributions reflect affordability and default risk



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## Scheme funding outcomes now reflect interacting risks

- We examine metrics which reflect this:
  - *the probability of reaching a scheme funding target over time*
  - *monetary measures of scheme loss resulting from sponsor default and scheme wind-up outcomes*

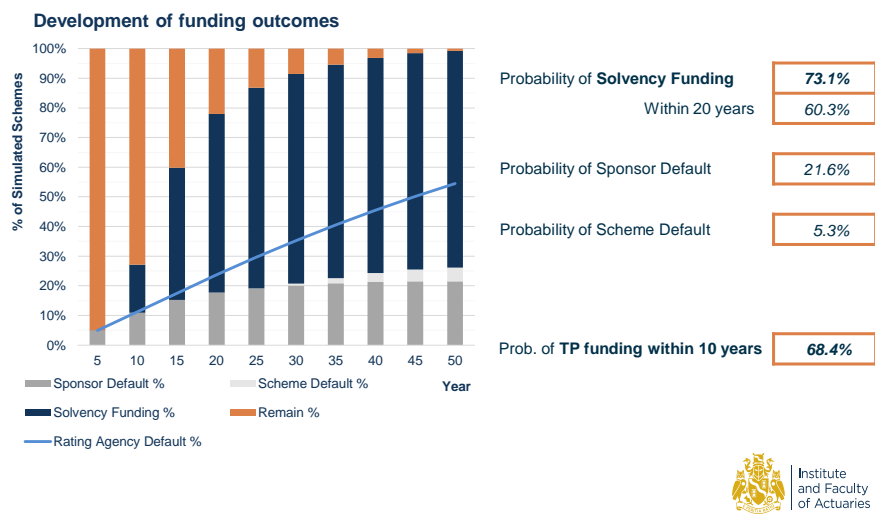


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Illustrative outputs and metrics from Mousetrap®

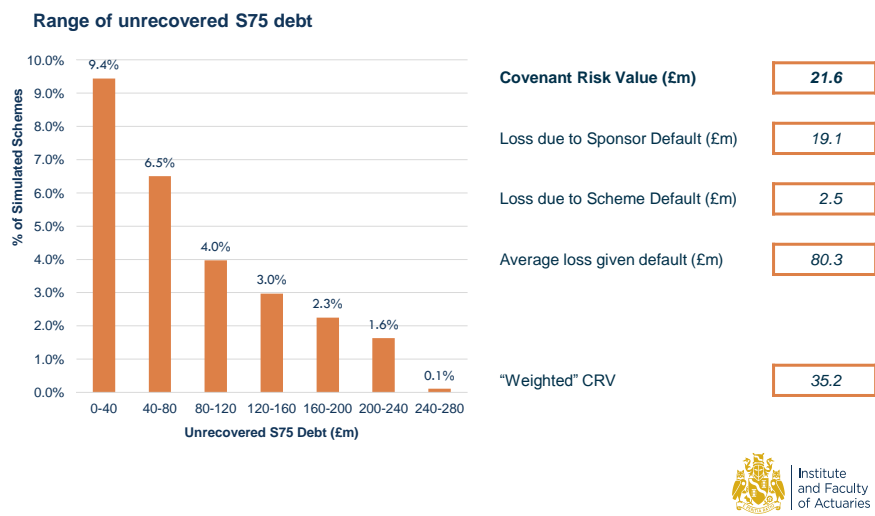
Probability of reaching funding targets



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Analysis of loss distribution



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Integrated Risk Modelling provides new insights

- A more prudent and realistic view
- Information is in a form Finance Directors can relate to
- Valuable new information is accessed:
  - *A wide range of sensitivities*
  - *Correlation between sponsor resources and investment outcomes*
  - *Affordability of contributions*

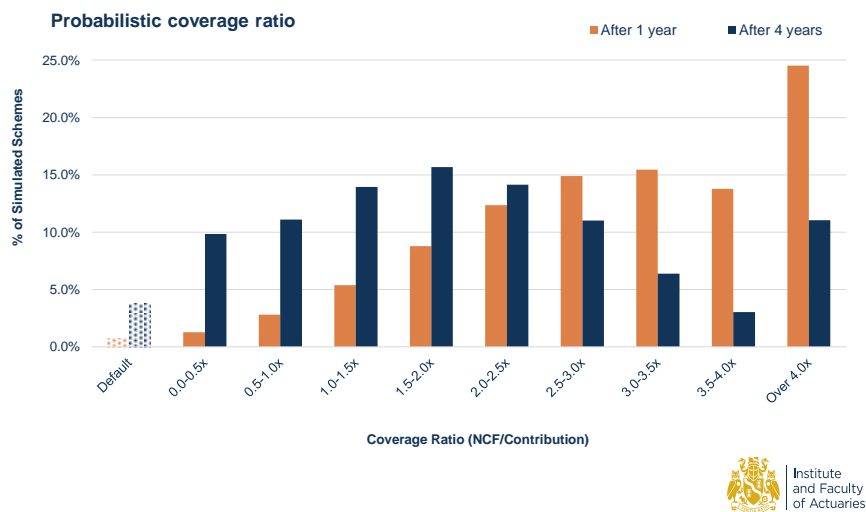
Illustrative outputs and metrics from Mousetrap®

Measuring the impact of correlation



## Illustrative outputs and metrics from Mousetrap®

### Measuring the affordability of contributions



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### The connection is now established between covenant & investment strategy

- Using these integrated risk metrics the scheme loss exposure can be examined for any given investment strategy
- This provides an **independent cross-check** on the appropriateness of investment strategy given the strength of sponsor covenant

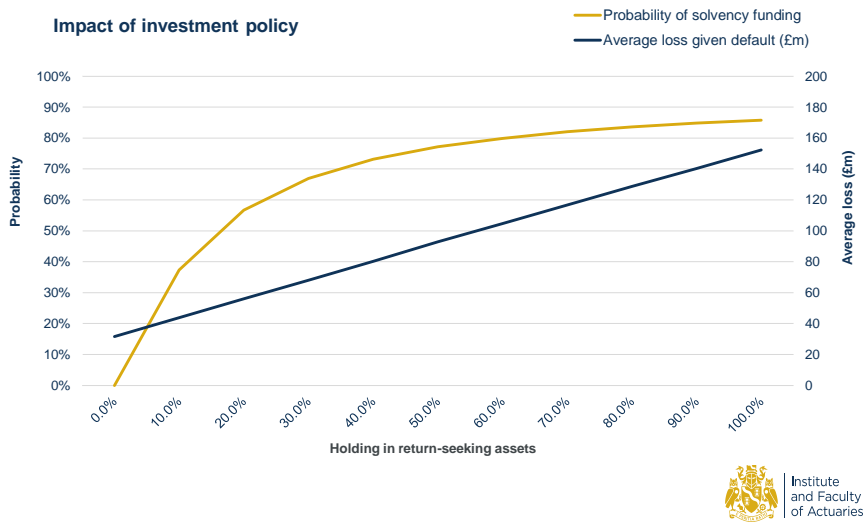


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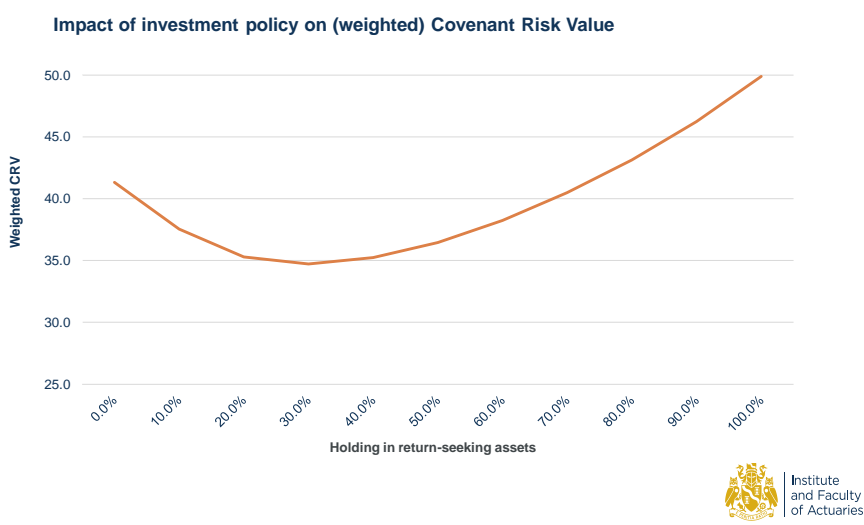
Measuring the impact of changes in investment policy



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Measuring the impact of changes in investment policy

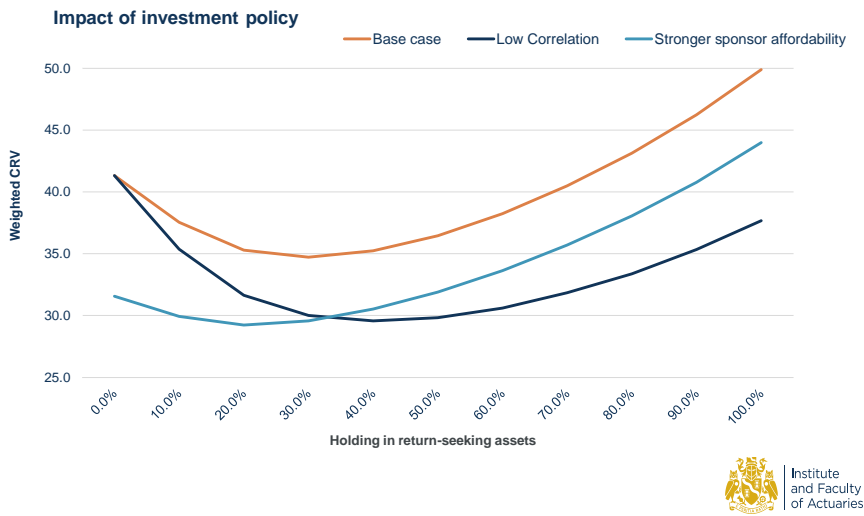


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Measuring the impact of changes in investment policy



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Our findings from using IRM so far

- Covenant strength is an important “scheme asset”. How is it best used?

| To support investment risk exposure  | To facilitate de-risking  |
|--|---|
| <ul style="list-style-type: none"><li>• Sponsor can deal with poor investment outcomes</li></ul> | <ul style="list-style-type: none"><li>• Less risk from a prolonged path to self-sufficiency</li></ul> |



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## Our findings from using IRM so far

- Covenant weakness presents issues for investment policy as the proportion of benefits members can expect to receive may be low
  - *Does de-risking reduce or increase loss exposure?*
  - *Can suitable pension credit enhancements facilitate investment risk exposure?*



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## A key area for regulatory focus

- TPR review letters now regularly question consistency between investment strategy and covenant
- Need to measure the ability of sponsors to repair large potential deficits and “evidence” this
- Risk management reports under IORP II



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## Two illuminating examples

- **Scheme A:** fully-funded on a Technical Provisions basis, fully de-risked but dependent on parent of weak UK formal sponsor to achieve solvency funding or buy-out and still exposed to material unrecovered S75 debt on sponsor default.
- **Scheme B:** high equity exposure consistent with strong multinational parent but UK formal sponsor unlikely to be able to repair poor investment outcomes



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## Example Case Study

- TPR questions sponsor ability to withstand adverse investment outcomes
- Methodology:
  - ALM provides expected investment outcomes
  - Mousetrap ® provides matching expected contributions reflecting uncertain sponsor financial resources and covenant support structure
  - Integrate ALM and Mousetrap ® to give simulated funding outcomes with correlation
- Resulting scheme loss exposure represents simulations the sponsor was unable to repair
  - Examine using statistical measures
  - Examine poor investment and poor sponsor scenarios



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**Interacting risks require integrated solutions where covenant advice and investment consultancy combine**

**Covenant is a complex risk - if integrated with ALMs it must be properly modelled with full access to detailed covenant input**



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