



Institute  
and Faculty  
of Actuaries

# Cashflow based investment strategies

Hemal Popat, Mercer



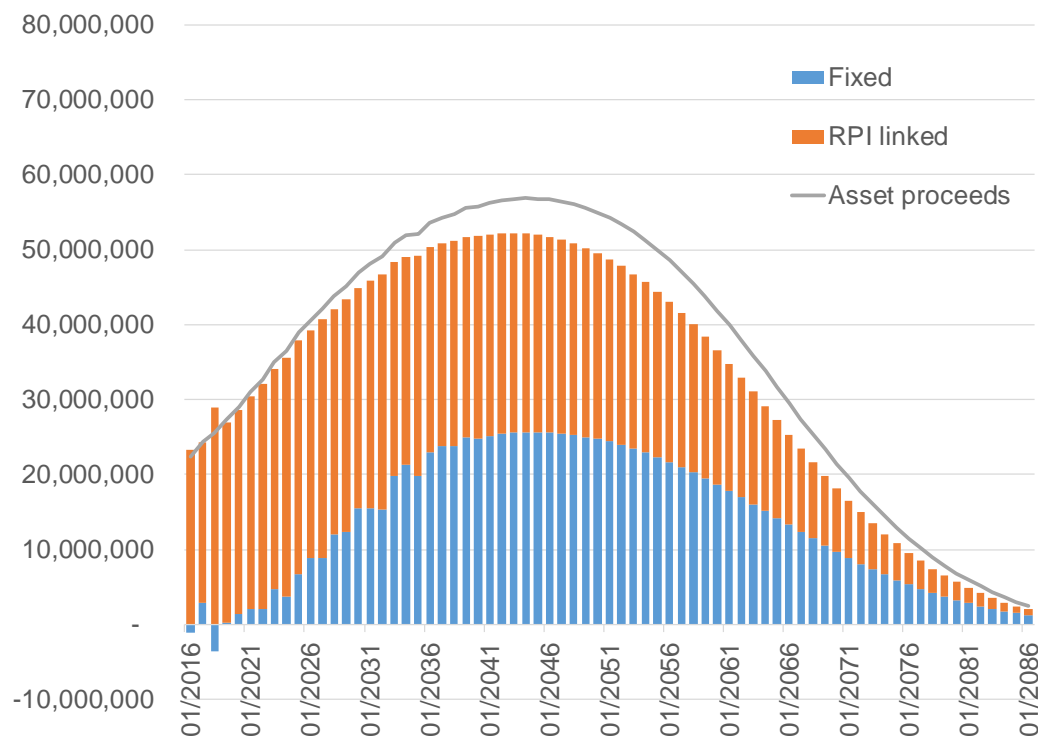
# Agenda

- What do we mean by cashflow based investment strategies?
- What do cashflow based investment strategies look like?
- How do they evolve over time?
- What are the benefits of adopting such a strategy, and the implications for funding?
- Which pension schemes are they suitable for?



# What is a cashflow based investment strategy?

- An investment strategy that aims to deliver **sufficient income and capital proceeds** to cover some or all of the expected future cashflows
- Fixed interest bonds, index-linked bonds, and other assets with **predictable future proceeds** (eg property leases, illiquid debt) are key building blocks
- Where assets have credit risk, an allowance for losses should be made



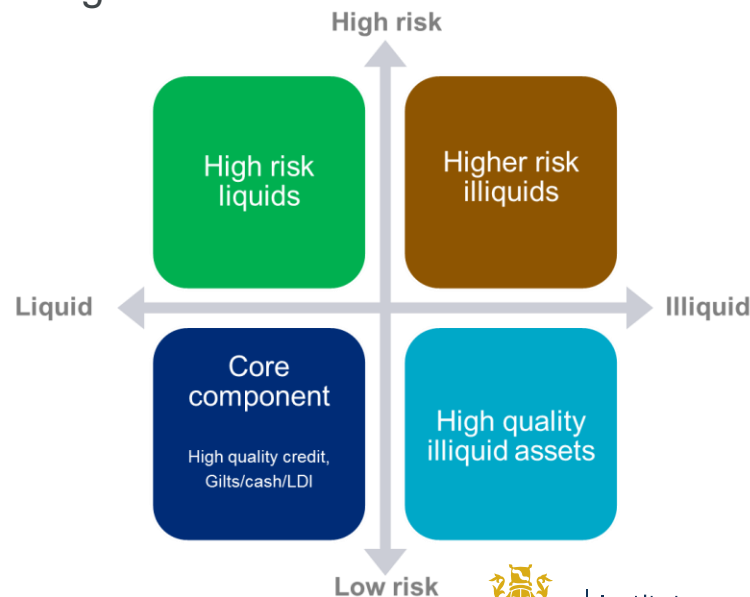
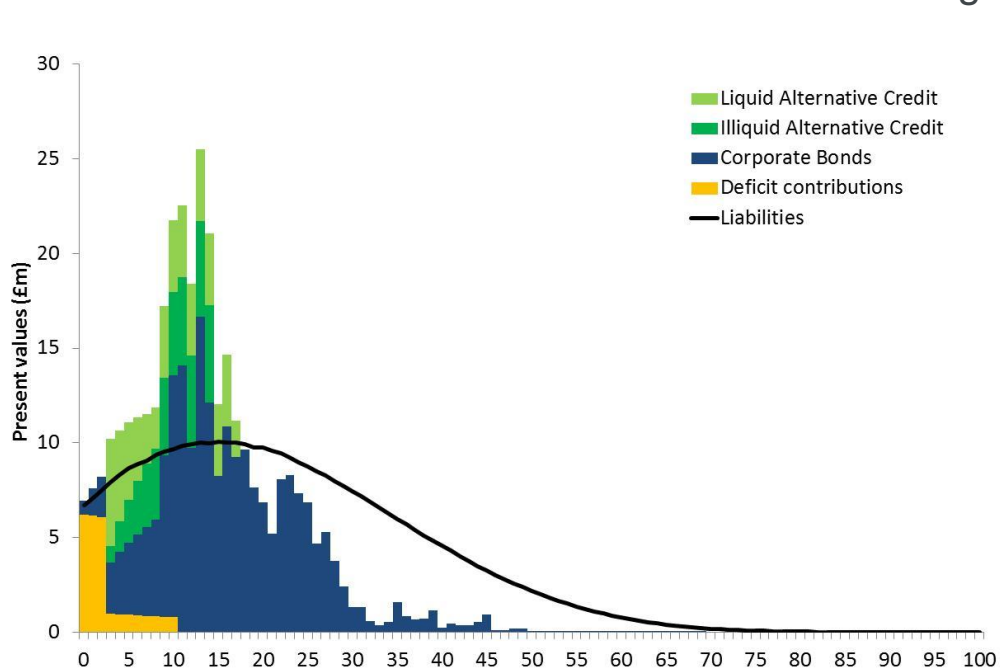
Undiscounted amounts shown



Institute  
and Faculty  
of Actuaries

# What does such a portfolio look like?

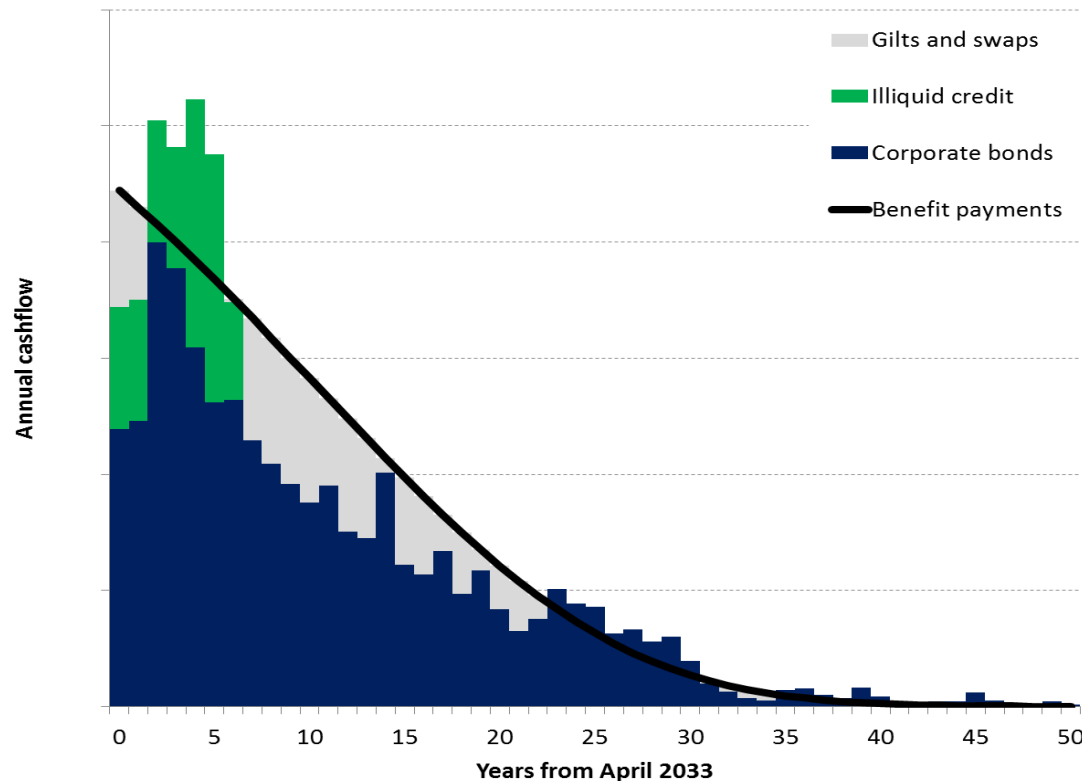
- High allocation to **investment grade** and **alternative credit**
  - These provide predictable future fixed/floating cashflows, ***if*** no losses due to defaults or downgrades
- **Equities** and **diversified multi-asset** strategies held to increase expected returns
- **LDI** needed to need to source inflation and hedge longer dated cashflows



Institute  
and Faculty  
of Actuaries

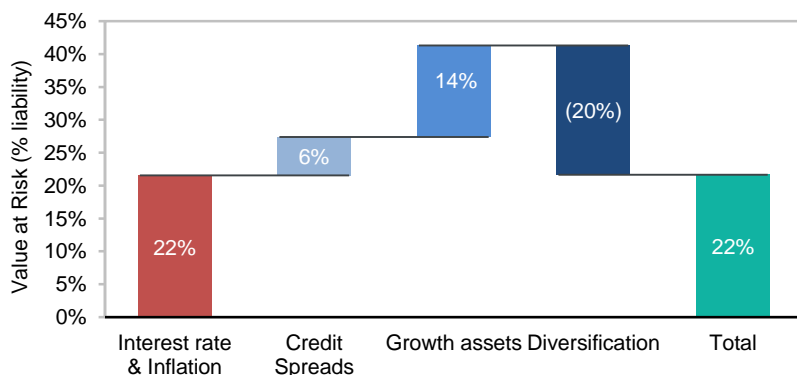
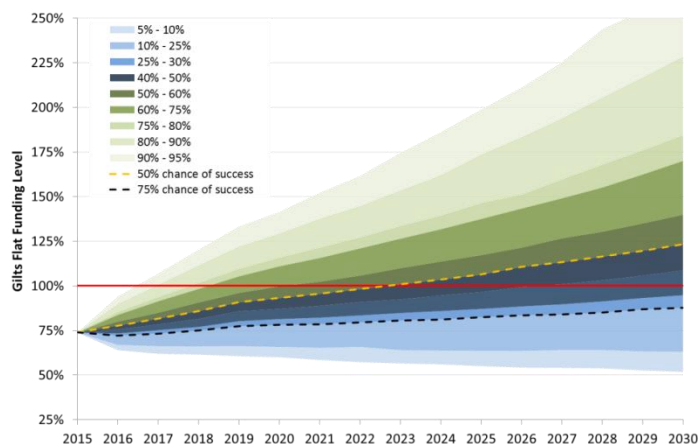
# How will the position evolve?

- If contributions *plus* achieved returns *plus* future expected returns are sufficient to cover the remaining liabilities...

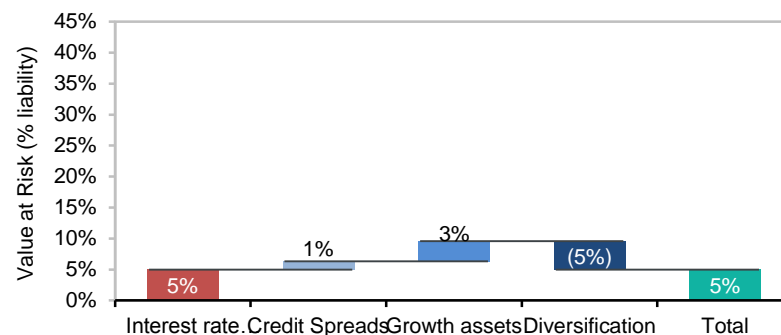
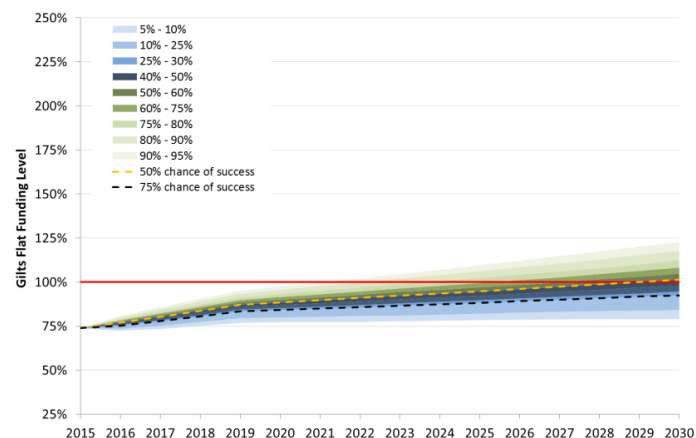


# Example risk dashboard

## Current Approach



## Cashflow matching approach



So should **everyone** be doing this?



Institute  
and Faculty  
of Actuaries

# Pros and cons

- ✓ Benefit from illiquidity premia
- ✓ VaR can be reduced
- ✓ Funding level can be more stable (especially if discount rate based on asset yield)
- ✓ More predictable contributions (but not necessarily lower)
- ✓ Less likely to overfund
- ✓ **Effective approach for fairly well funded schemes who are happy to hold bond assets**
- ✗ Assets not purely selected on economic (risk and return) grounds
- ✗ Concentration in credit (spread sensitive) assets
- ✗ Won't help much in a significant underfunding situation (and could make things worse)
- ✗ Portfolio could cost >1% to move to an insurer
- ✗ **Doesn't automatically lead to "self-sufficiency"**



# Key question – what end game is being targeted?

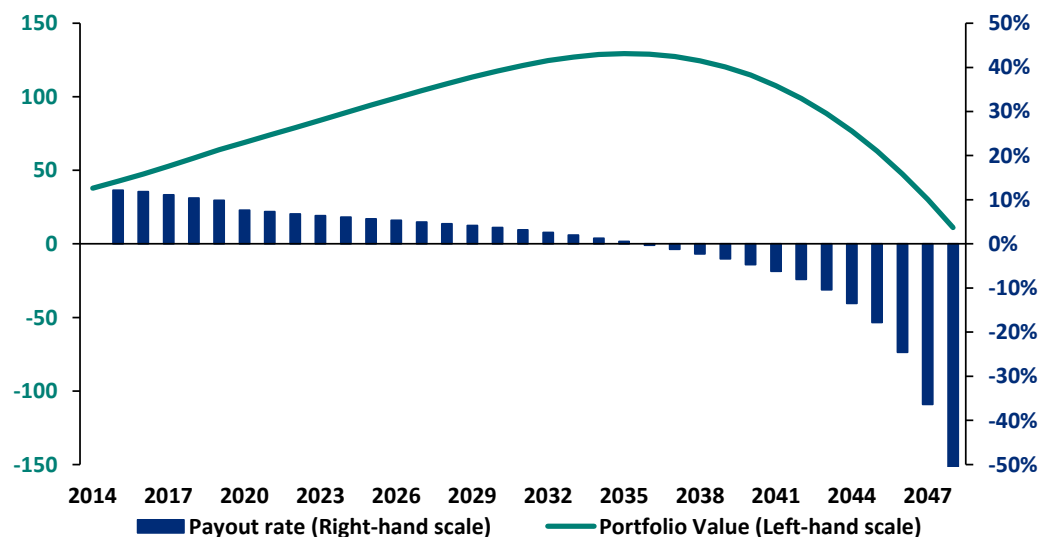
- Possible end-games for a closed and maturing pension fund:
  1. High risk run-off
  2. Low risk run-off
  3. Buy-out
- Tax and regulation rules out Option 1 in the UK private sector
- So most pension funds will be aiming for Options 2 or 3, some quicker than others (depending on affordability and resources).





# Liquidity – how important is it?

- **Buy-out:** insurer friendly assets are useful but long-term income is secondary to hedging the premium basis
- **Low-risk run-off:** aligning assets to cashflows is important. Vital to avoid forced asset sales and manage reinvestment risk
- **Other schemes:** leverage needed to manage risks so need LDI and collateral. Aim to improve funding level in a risk controlled way



# Impact of end-game on investment strategy

- Different priorities emerge as end-game is approached:
  - **Low risk run-off target:** cashflow mindset, mark-to-market risk tolerable if reinvestment risk well controlled. Focus on “money good” assets not volatility
  - **Buy-out target:** less tolerance of mark-to-market risk, need to sensitivity match an annuity premium, liquidity / cashflow matching secondary
- Investment strategy implications:

	Low risk run-off	Buy-out
Time horizon	Long	Shorter
Long-term illiquids?	✓	✗
Credit spread tolerance	✓	?
Focussed on bulk annuity premia	Not really	✓
Assets need to be transferred to an insurer at low cost	Irrelevant	✓

Key question is how far away is this?



Institute  
and Faculty  
of Actuaries

# Action plan

## Develop a plan

Review long-term objectives and develop a clear plan – buyout or self-sufficiency. There may be an extended “journey plan” phase

## Manage the journey

Add new asset classes with regard to the end-game (eg illiquid credit if targeting self sufficiency). Be flexible especially if far from end-game

## Keep it simple

Use appropriate governance & risk management arrangements

Delegate to adviser, proactive Investment Committee, fiduciary manager, etc



Institute  
and Faculty  
of Actuaries

# Questions

# Comments

The views expressed in this presentation are those of invited contributors and not necessarily those of the IFoA. The IFoA do not endorse any of the views stated, nor any claims or representations made in this presentation and accept no responsibility or liability to any person for loss or damage suffered as a consequence of their placing reliance upon any view, claim or representation made in this presentation.

The information and expressions of opinion contained in this publication are not intended to be a comprehensive study, nor to provide actuarial advice or advice of any nature and should not be treated as a substitute for specific advice concerning individual situations. On no account may any part of this presentation be reproduced without the written permission of the author.



Institute  
and Faculty  
of Actuaries