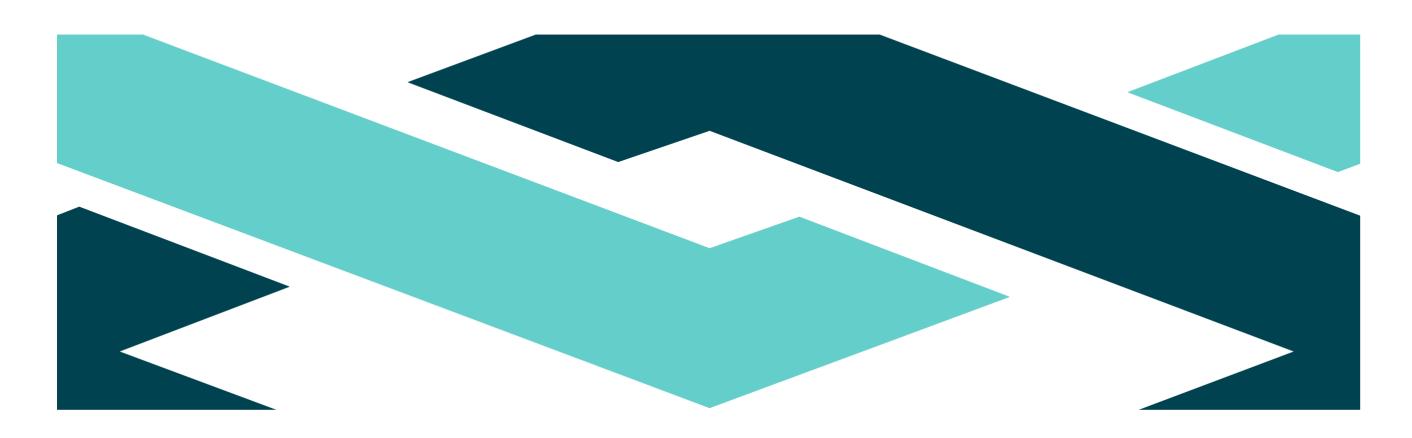


Problem? What Problem?

Carl Hitchman: Pensions Age Northern Conference 14 June 2018



Do we have a problem...



"Despite the evidence that the sector as a whole is not in crisis, there is a widespread perception that some employers are unable to sustain their contributions, that deficits are substantial, and that members' benefits are very much at risk."

DWP: Security and Sustainability in Defined Benefit Pension Schemes



...or don't we?

Stamford's view



Question	Answer
Concerned over the ability of schemes in general to deliver member benefits?	Nobut
Is there an elephant in the room?	Yes
A clear way forward?	Yes



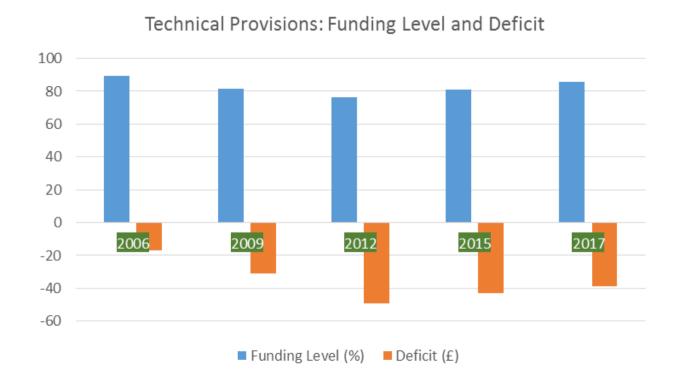
"I suppose I'll be the one to mention the elephant in the room."

Time for reflection!



One perspective

- Hypothetical defined benefit scheme, assumed to be closed to future accrual since December 2006 with a 7 year deficit recovery plan
- Dynamics designed to be broadly consistent with information provided in various TPR publications and The Purple Book¹
- Initial funding level of circa 89% at December 2006 intended to reflect "average" Technical Provisions Funding Level of schemes in deficit

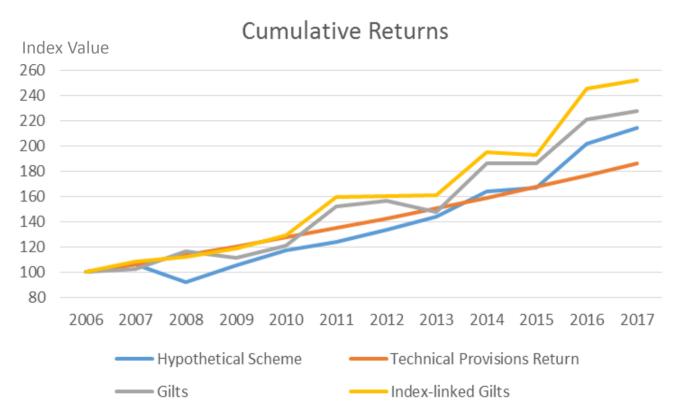


"I have paid all this money into the pension scheme and investment returns have been strong, yet the funding level hasn't changed and the deficit has got bigger. Something doesn't add up!"

1. Please see slide titled "Data Sources" in the Appendix



Returns have been strong...





Data Source: Bloomberg, for more information see slide in Appendix titled "Data Sources"

...but chasing a moving funding target that has remained one step ahead



One perspective (revisited)

Required return*	Gilts + return % p.a.
At 31/12/2006	1.1
Expected at 31/12/2017	0.9
Actual at 31/12/2017 (no further deficit contributions)	1.9
Actual at 31/12/2017 (full schedule of contributions)	0.9

• Required margin over gilts at 31/12/2017 is much higher than expected

Note: The above analysis is for illustration only and is based on a hypothetical scheme, see Appendix for more details. *Return requirements are those over the lifetime of the scheme



A more balanced picture

Required return*	Gilts + return % p.a.	Fixed return % p.a.
At 31/12/2006	1.1	5.2
Expected at 31/12/2017	0.9	4.5
Actual at 31/12/2017 (no further deficit contributions)	1.9	3.5
Actual at 31/12/2017 (full schedule of contributions)	0.9	2.6

Required margin over gilts at 31/12/2017 is much higher than expected

But...

• Required absolute return has <u>fallen</u> significantly due to strong investment returns and deficit contributions higher than expected!

Note: The above analysis is for illustration only and is based on a hypothetical scheme, see Appendix for more details. *Return requirements are those over the lifetime of the scheme



Need to distinguish between the affordability of "buy-out" and the ability to generate the returns needed to pay member benefits





- Cash flow negative schemes
- Leveraged LDI
- Legislation
- Conflicts of interest



"Unfortunately, there's another elephant in the room."

...but also a real opportunity!







Note: Hypothetical defined benefit scheme – for illustration only

Hypothetical illustration where:

- Scheme is cash flow negative
- Same time-weighted returns
- Timing of returns differs

Cash flow matters!

Leveraged LDI – the future?



Questions, questions:

- Interest rate risk is it really an unrewarded risk?
- Helps manage Value at Risk (VaR) but how does it affect the probability of paying member benefits?
- What happens when you build sponsor covenant risk into the analysis?



"If you want to know where you are taking the most risk, look where you are making the most money"

Paul Gibbons: The Science of Successful Organisational Change: How Leaders Set Strategy, Change Behaviour and Set an Agile Culture

Time frames constrained...



- Company accounting regulations
- Sponsoring employer insolvency
- Scheme funding regulations

 Irony of industry comments on long term investing whilst having created a framework that encourages a shorter term focus and associated investment behaviours



...by the impact of legislation



How Stamford addresses the challenges

- Identify how you <u>need</u> to invest to have a realistic expectation of paying member benefits over the lifetime of the scheme
- Map assets to specific cash flows, exploiting the natural characteristics of the assets to mitigate disinvestment risk
- Adjust portfolio to reflect implications of legislation, sponsor covenant risk and risk appetite

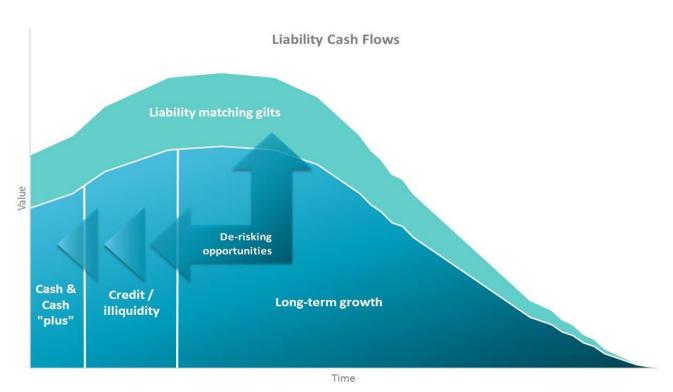
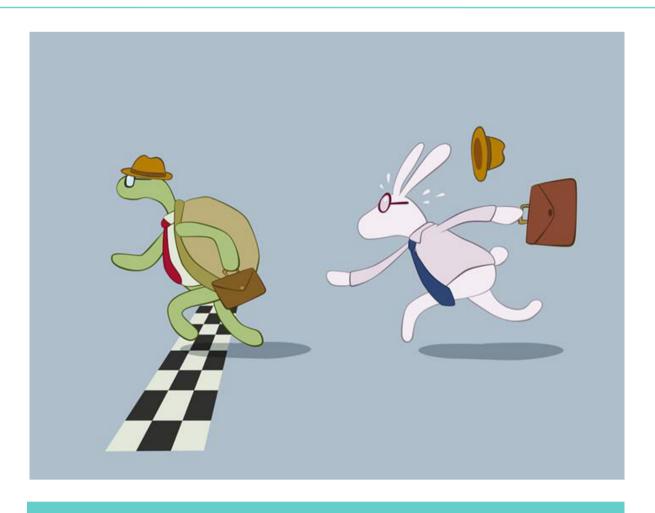


Chart is for illustration purposes and is based on hypothetical data

Understand the <u>cash flow</u> and <u>liability value</u> dynamics

A final thought!





Deliver the members' benefits

Thank You!

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Data Sources



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Slides 4.5.6 and 7

- Hypothetical scheme funding information (including historic average funding levels, size of deficit contributions, deficit recovery periods and valuation discount rates) sourced from The Pensions Regulator website. Source documents were as follows:
 - Scheme funding statistics (Annex) dated June 2017
 - Annual funding statement analysis (A review of defined benefit pension schemes with valuation dates between September 2015 and September 2016 (Tranche 11)) dated May 2016
 - Tranche 13 analysis (A review of defined benefit pension schemes with valuation dates between September 2017 and September 2018 (Tranche 13)) dated May 2018
- Gilt yield curves used to estimate Technical Provisions at various dates along with the expected Technical Provision return at 31/12/2006 all sourced from the Bank of England
- Hypothetical Scheme returns based on a weighted combination of the following indices:
 - MSCI AC World ex-UK Net Total Return GBP
 - FTSE Over 5yr Index-Linked Gilts Index Total Return Gross of Coupons GBP
 - FTSE Over 15yr Total Return Gross of Coupons GBP
 - FTSE All Share Index Total Return Gross of Dividends GBP
 - IPD Total Return All Property Index GBP (to December 2017 (est))
 - HFRX Global Hedge Fund Index GBP
 - LIBOR Total Return 3mth Index UK Cash Index
 - ICE BofAML Sterling Non-Gilt Index
- Hypothetical scheme asset allocation: based on historical weighted average asset allocation detailed in The Purple Book
- MSCI Copyright: All MSCI data is copyrighted and proprietary to MSCI, Inc.

Slide 5

- Gilts returns based on the FTSE Over 15yr Total Return Gross of Coupons GBP
- Index-Linked Gilts returns based on the FTSE Over 5yr Index-Linked Gilts Index Total Return Gross of Coupons GBP

IMPORTANT INFORMATION ABOUT THIS PRESENTATION

- The information and opinions contained in this presentation are intended for general discussion, it is not investment advice and not a recommendation to act.
- The document contains analysis based on a hypothetical defined benefit pension scheme, the assumed circumstances of which may be quite different to those of your scheme. It is important that you seek independent advice before entering into any financial transaction.
- Past performance is no guide to future performance.
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