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Dynamic Discount Rates Considerations for pension scheme funding

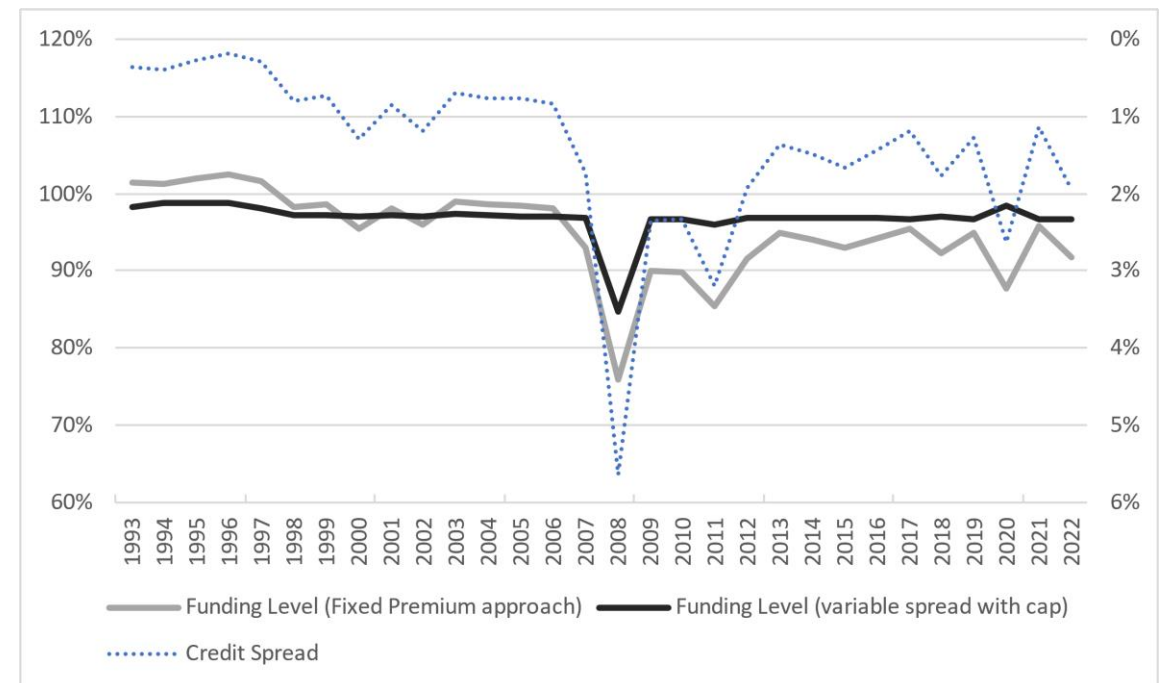
Presentation to the ACA

Gareth Connolly, Andrew Dodd and Phil Hardingham

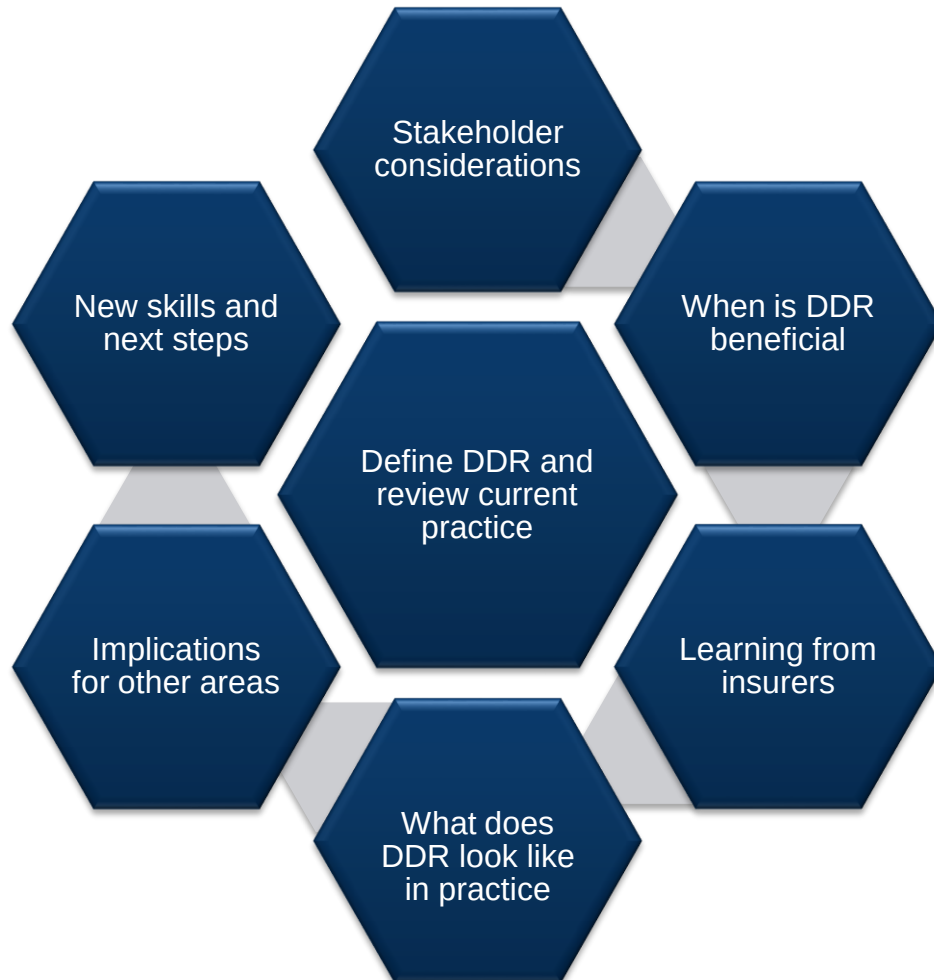
Background to the formation of the Working Party

- The actuarial profession should sponsor research into the use of dynamic discount rates for the technical provisions of schemes. This will help remove funding volatility that is artificial in nature and will become increasingly relevant for schemes with a low-dependency [Target End States] that adopt asset strategies that more closely address matching of assets and cash flow liabilities. Gilts+ type discount rates can achieve this, as long as all agree the “+” is variable.”*
- Source - Target End-States for Defined Benefit Pensions Schemes Working Party, 2021 report

The chart below (taken from the WP paper) highlights the issue of artificial volatility



Objectives and output of the Working Party

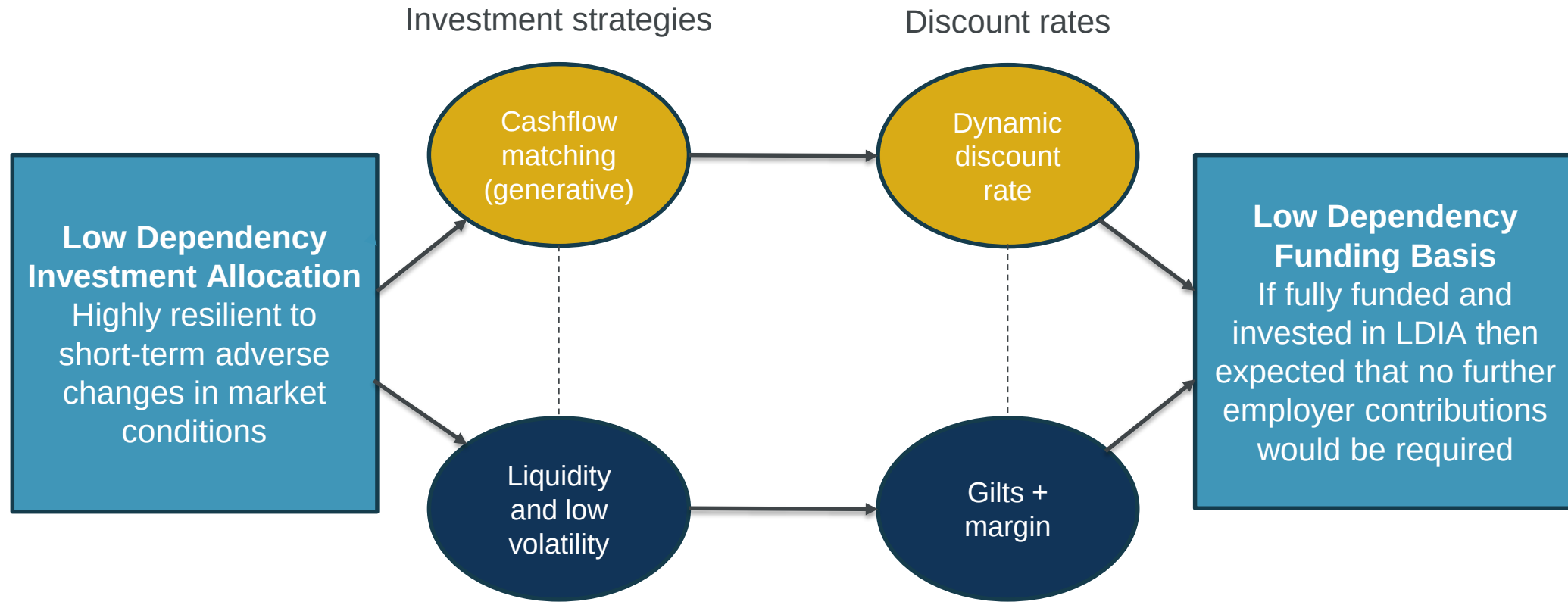


- *Dynamic Discount Rate (DDR) approach is one whereby the discount rate used for funding purposes moves in sympathy with the expected return on the asset portfolio that is backing the liabilities*
- *Primary focus of the report is the use of the DDR approach for well hedged and cash flow matched schemes*
- *WP Paper published February 2024*
- *https://vle.actuaries.org.uk/pluginfile.php/142241/mod_resource/content/1/DDR%20WP%20Paper%20November2023.pdf*

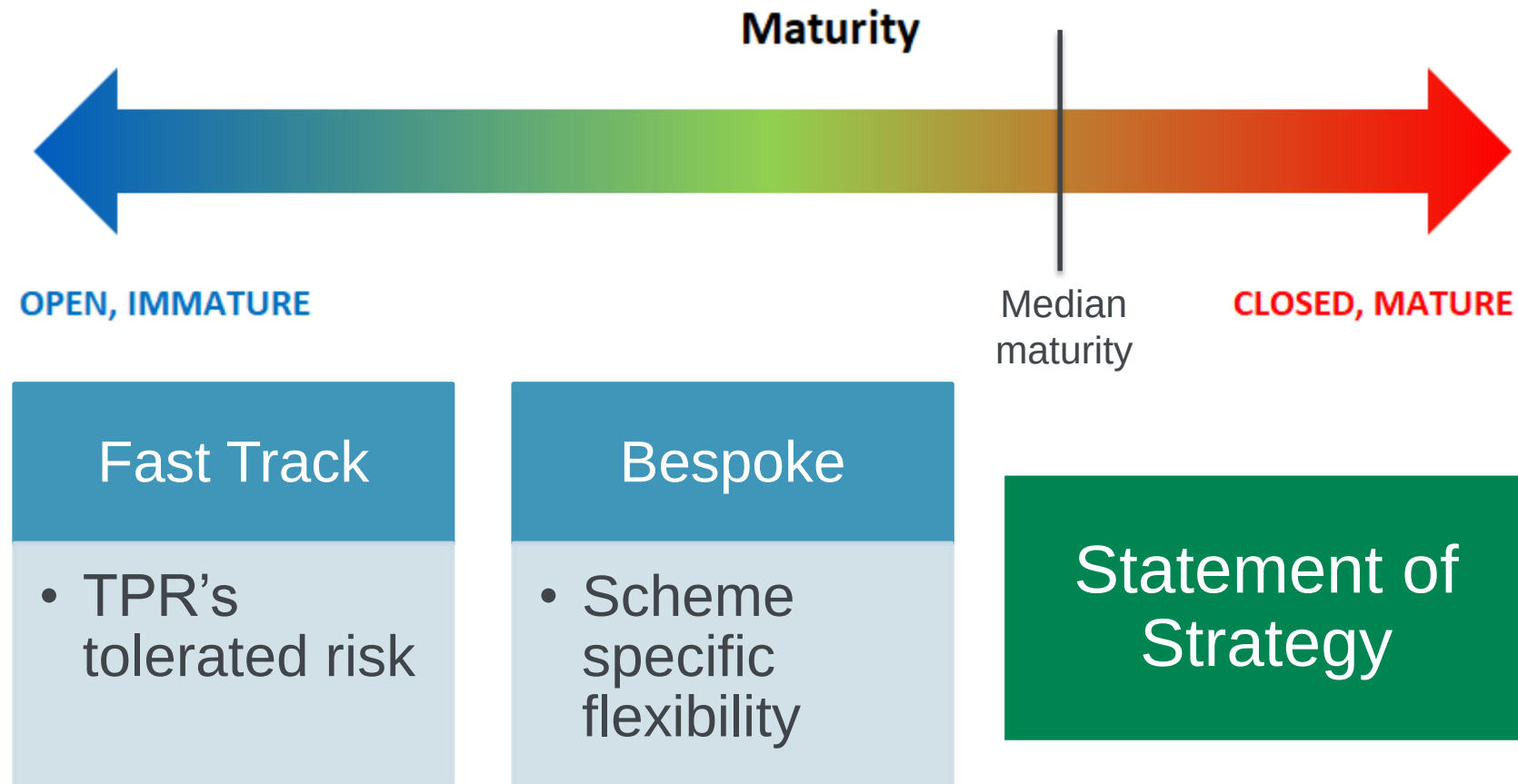
Overview of typical approaches

Changes infrequently Not directly driven by assets Discount rate derivation Greater flexibility Asset led			
	Gilts + fixed margin	Gilts + variable margin	Dynamic discount rate
Concept	Could hold gilts to match liability cashflows. Fixed margin (over time) adopted above this represents the amount of additional return that can be supported, taking into account views of covenant and investment risk in the short and long term.	As per gilts + fixed margin, but margin changes periodically in response to changes in investment strategy / market conditions / covenant support etc.	The discount rate used for funding purposes directly reflects and aims to move in tandem with the assets held to back the liabilities. Typically used where contractual asset income broadly matches the benefit payments from the scheme
How is investment strategy reflected?	- Not necessarily driven by Scheme's actual asset allocation (but resulting assumption must be supported by the current investment strategy) - Once set, margin above gilts likely to remain relatively stable	Relative margin above gilts expected to vary over time, most likely reflecting changes in the asset strategy and market conditions	Explicit allowance in discount rate for expected returns from current / future strategy, with allowance for the risks facing the strategy (e.g. defaults and reinvestment) via an appropriate adjustment
Features	- A fixed (rather than variable) margin is easy to understand - Need to agree the initial margin - Desire for stable funding level may limit the asset classes available for investment / volatile funding level if asset classes unconstrained	- More reactive to changes in market conditions and returns available on actual assets held than gilts + fixed margin - Margin may still be fixed over certain periods (e.g. intervaluation period) for practical purposes	- Typically reduced funding level volatility - Wider pool of assets available for consideration (e.g. infrastructure) - More certainty of being able to meet benefit payments as they fall due given reduced return / funding level volatility - Harder to model than "gilts +", requiring more detailed and more frequent analysis of the assets held and yields available on them

Interaction with 2024 FIS Regulations and DB Funding Code - Post Relevant Date



Interaction with 2024 FIS Regulations and DB Funding Code



Stakeholder considerations: what's the prize?

Sponsors

- Reduction in funding level volatility from moving asset yields
- An alternative way of funding a pension scheme alongside insurance risk transfer

Trustees

- A cleaner signal around a future cashflow shortfall
- More explicit alignment between the investment approach and funding methodology

Members

- If assets are invested to generate high quality cashflows matching benefit payments, there is good member security...
- ...but ongoing support from sponsor covenant is a necessary underpin

Putting theory into practice: potential DDR framework

Initial discount rate	
①	Asset portfolio based on best-estimate liability cash flows
②	Adjustment for investment costs
Buffer above liabilities discounted at initial discount rate	
③	Allowance for asset-side risks
④	Allowance for asset-liability mismatch risk
⑤	Allowance for liability-side risks
⑥	Consideration of risk diversification

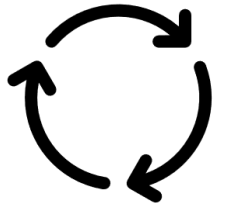
Scheme Actuary & investment consultant work together to optimise

Buffer approach considers prudence margins explicitly

Example derivation of the funding buffer and liability discount rate

Discount rate		
①	Asset portfolio based on best-estimate liability cash flows	Gilts + 1.4%
②	Adjustment for investment costs	Gilts + 1.2%
Buffer above liabilities discounted at Gilts + 1.2%		
③	Allowance for asset-side risks	9.3%
④	Allowance for asset-liability mismatch risk	9.4% (+0.1%)
⑤	Allowance for liability-side risks	11.2% (+1.8%)
⑥	Consideration of risk diversification	9.5% (-1.7%)

Optimise



Ongoing: sensitivity analysis can be used to create a formula that captures the impact on the funding basis for changes in specified parameters (e.g., credit spreads and credit ratings)

Risk measurement and decision making

- Better funded schemes means risk measurement is now more important than ever
- VaR modelling approaches typically use fix margins for liability measures, meaning that credit spread risk is overstated
- Applying different principles to measurement can significantly influence the actions taken with the potential for material financial ramifications
- For further reading, see the article in the link below

<https://www.wtwco.com/en-gb/insights/2024/06/beware-of-db-pension-risk-blind-spots-what-gets-measured-gets-managed>

(Authors are Adam Boyes and Alasdair Macdonald)

“Use [the new funding] regime change as an opportunity to lift the lid on how your scheme measures its liabilities and risks in order to identify where there is room for improvement.”



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Consideration of topical issues

Impact of the DB Funding regime

Does the new DB Funding regime make the use of DDRs more likely?

Reasons why

- Definition of LDFB (no further contributions expected) lends itself to a DDR approach
- DDR explicitly mentioned in DB Code as a possible approach
- Scheme specific flexibility maintained for immature schemes and DDR approaches can be recorded in Statement of Strategy

Reasons why not

- Majority of schemes can/will take Fast Track route for compliance, and FT parameters based on a 'gilts plus margin' approach
- For small schemes, less clear cut that cashflow matching and dynamic discount rates is best approach

Other considerations

- To meet Fast Track, capping of LDFB discount rate at gilts + 0.5%?
- Scope to flip between Fast Track and Bespoke each valuation
- More schemes tracking cost of buyout and investing accordingly

Mansion House proposals

The [previous] government's aims with respect to scheme surplus are to:

- *Support schemes to invest for surplus in productive asset allocations by making it easier to share scheme surplus with employers and scheme members*
- *Remove practical barriers to surplus extraction such as those relating to scheme rules*
- *Remove behavioural barriers by bringing surplus extraction in line with trustee duties*

Source – DWP Consultation paper published 23 February 2024

Funding level before surplus can be extracted has yet to be decided, but most of the ideas put forward relate to a percentage of the Low Dependency Funding Basis.

A Dynamic Discount Rate approach should give trustees and sponsors more certainty over the amount of surplus that might be extracted at a given date.

Do you agree or disagree with this view?



Productive Finance

- “[This Bill] will improve outcomes for savers and is likely to lead to more funds being invested for longer, giving the potential for investments in productive assets – boosting economic growth” King’s Speech, 2024

Does a Dynamic Discount Rate framework help, or hinder, this?

The case for...

- Investment drives funding measurement, rather than vice versa
- Long term multi-decade assets are a good match for long term multi-decade liabilities
- A DDR framework shifts the Trustee / Sponsor valuation conversation from a ‘strength of basis’ focus, to a ‘what investment restrictions are appropriate’ focus

The case against...

- Mechanisms already exist to invest more broadly than gilts - moving away from valuing benefits with reference to an objective risk free rate just erodes member security
- Some productive finance assets are not frequently traded and/or have uncertain cashflow and so are difficult to fit into a framework that requires up-to-date asset cashflows to be used successfully

Experiences of using DDR

- DDR “lite”
- Explicit funding buffer
- Robustness of cashflow matching

Your thoughts are appreciated!

Next steps

IFoA

- Review of curriculum
- Guidance on typical asset classes
- **Another Working Party**

TPR

- DDR information capture

Scheme Actuaries

- Understanding of benefits
- Encourage data cleansing



Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenters.

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