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In the end-game

DO sweat the small stuff

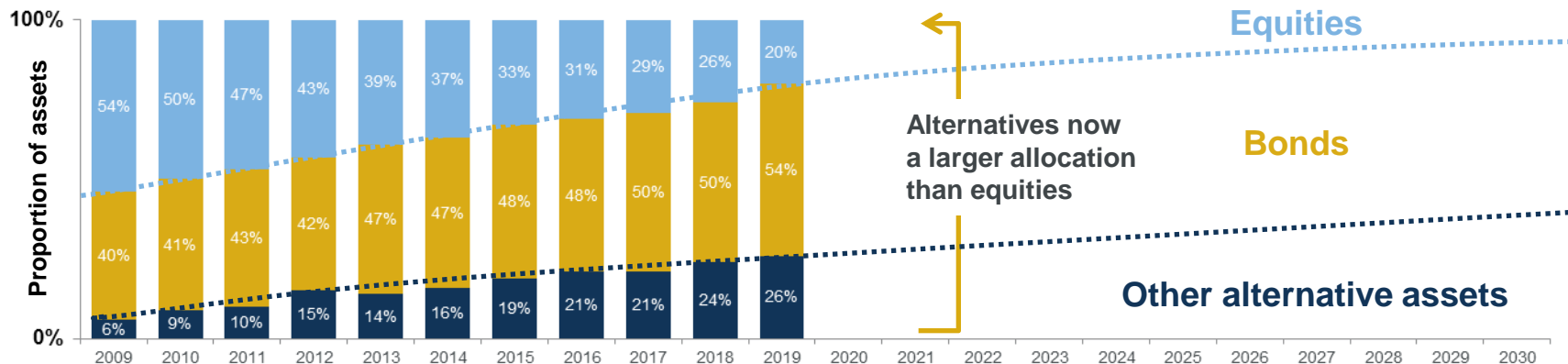
Toby Orpin
Graham Moles



Recent client trends

De-risking towards credit, real assets and LDI

Average asset allocation has become more risk-averse in recent years



“Investment strategies that take account of anticipated future cash flow needs are becoming more commonplace, with a growing number of schemes opting to invest in risk-reducing and cash flow-matching assets such as gilts, corporate bonds and illiquids.”

Pension Policy Institute

Source: Pensions Policy Institute: Approaching the endgame: The future of Defined Benefit pension schemes in the UK (October 2019), Mercer (2019).
Overlaid with illustrative trend lines (LGIM).



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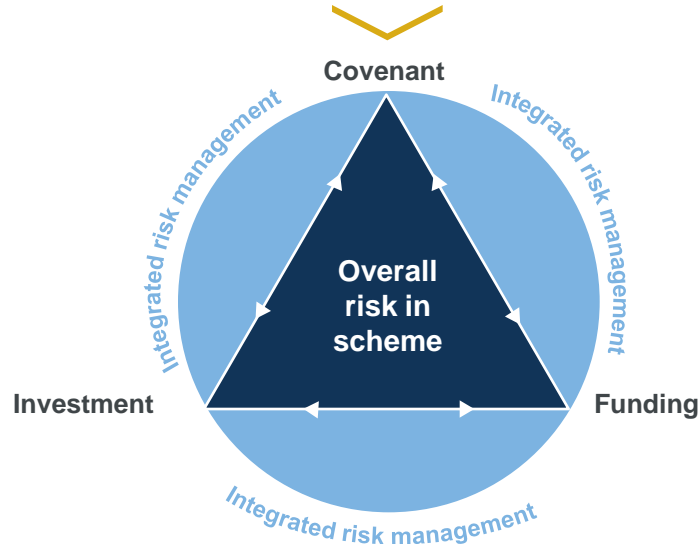
Getting the SAA right

Achieving your long-term target

To achieve a long-term target you need a long-term framework

Success = **assets outlasting the liability cashflows**

Long-term ALM framework



Reduces focus on short-term MtM moves

Source: the Pensions Regulator. ALM – asset and liability management. MtM – mark to market.

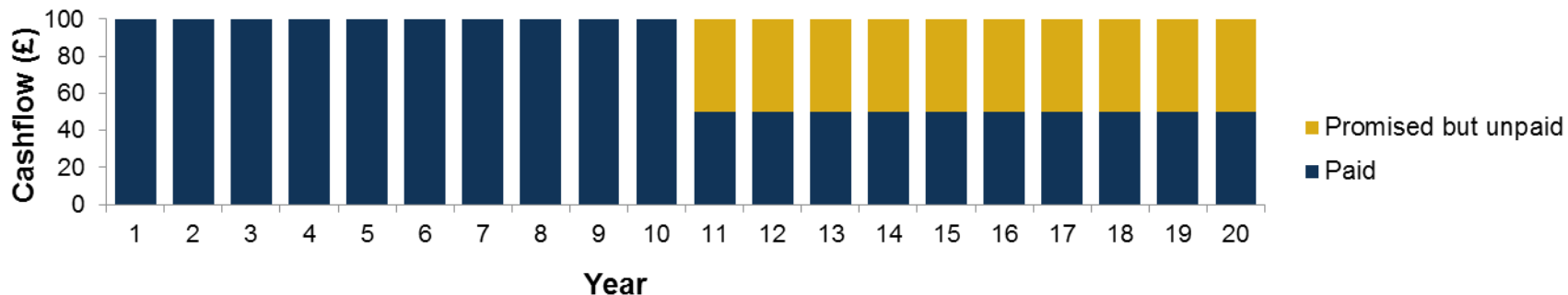


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Success is paying pensioners

$$\text{PBM} = \frac{\text{Sum of pensions paid}}{\text{Sum of pensions promised}}$$

PBM = Proportion of Benefit Met =



Sponsor default and buyout FL = **50%**

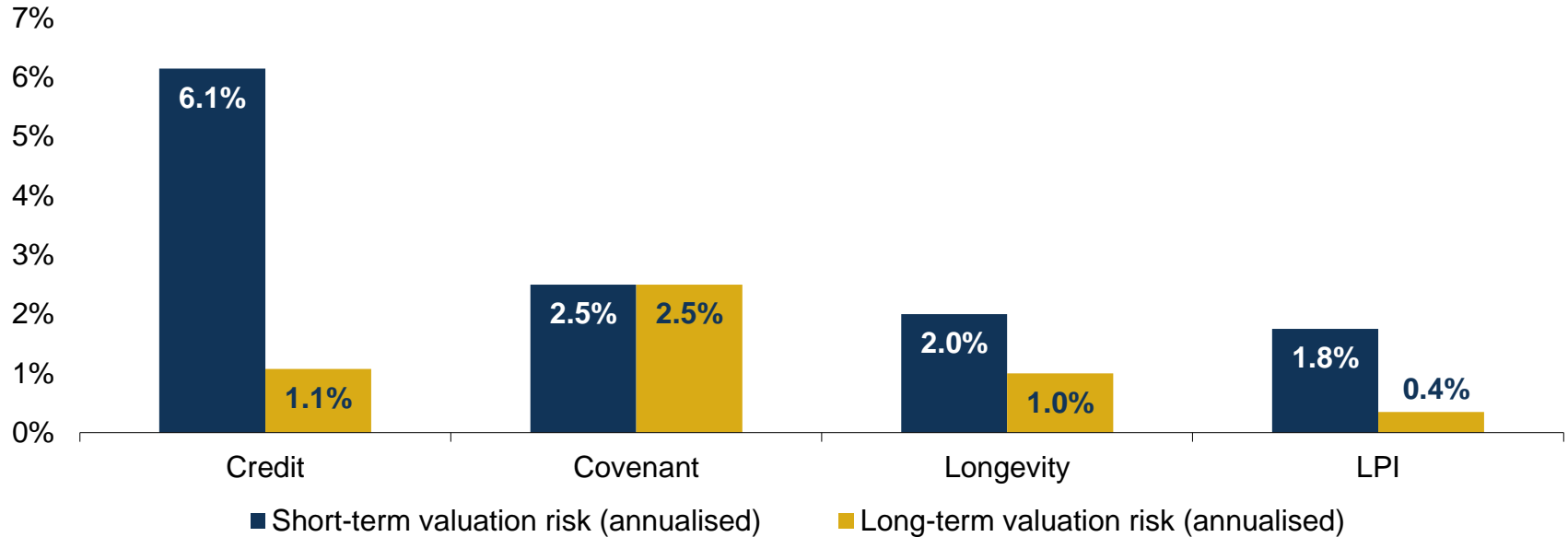
Metric	Definition
EPBM	Average proportion of benefits met over all simulations
1 in 20 PBM	Proportion of benefits met in a 1 in 20 event
1 in 50 PBM	Proportion of benefits met in a 1 in 50 event

Source: LGIM, November 2019.



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Traditional ALM tools often ignore some risks



Source: LGIM calculations, November 2019.

- Figures are purely for illustration only and are scheme dependent e.g. we have assumed a 20 year duration scheme.
- Both short and long-term risks are expressed as annualised volatilities.
- Each bar is a standalone risk that has not been scaled down e.g. 100% of assets are credit or all liabilities are LPI with a delta hedging approach is adopted.
- Covenant risk calculation assumes a BB-rated sponsor. No future contributions and an initial buyout funding level of 73%.



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Avoid reckless prudence

Buyout funding level \ Sponsor credit rating	AAA	AA	A	BBB	BB	B	CCC	CC-C
60%	65%	65%	65%	65%	65%	65%	65%	65%
65%	65%	65%	65%	65%	65%	65%	65%	65%
70%	30%	40%	40%	45%	45%	65%	65%	65%
75%	15%	15%	15%	30%	30%	65%	65%	65%
80%	10%	10%	10%	15%	25%	35%	65%	65%
85%	5%	5%	5%	15%	20%	30%	40%	65%
90%	0%	0%	0%	10%	15%	25%	35%	55%
95%	0%	0%	0%	0%	10%	20%	25%	25%

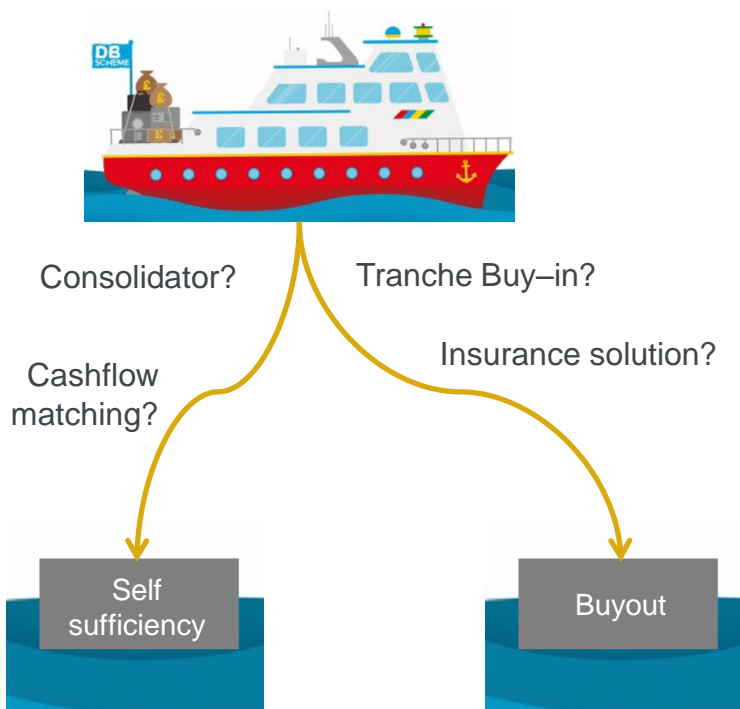
Source: LGIM, November 2019.



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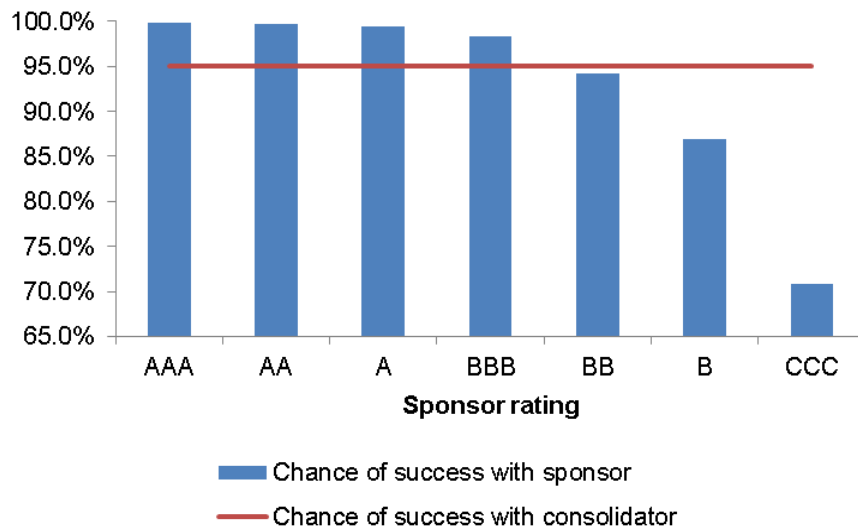
Agony of choice

How to decide between the multiple paths to achieve a scheme's goal



Source: LGIM, November 2019.

Assessing the benefits of a consolidator



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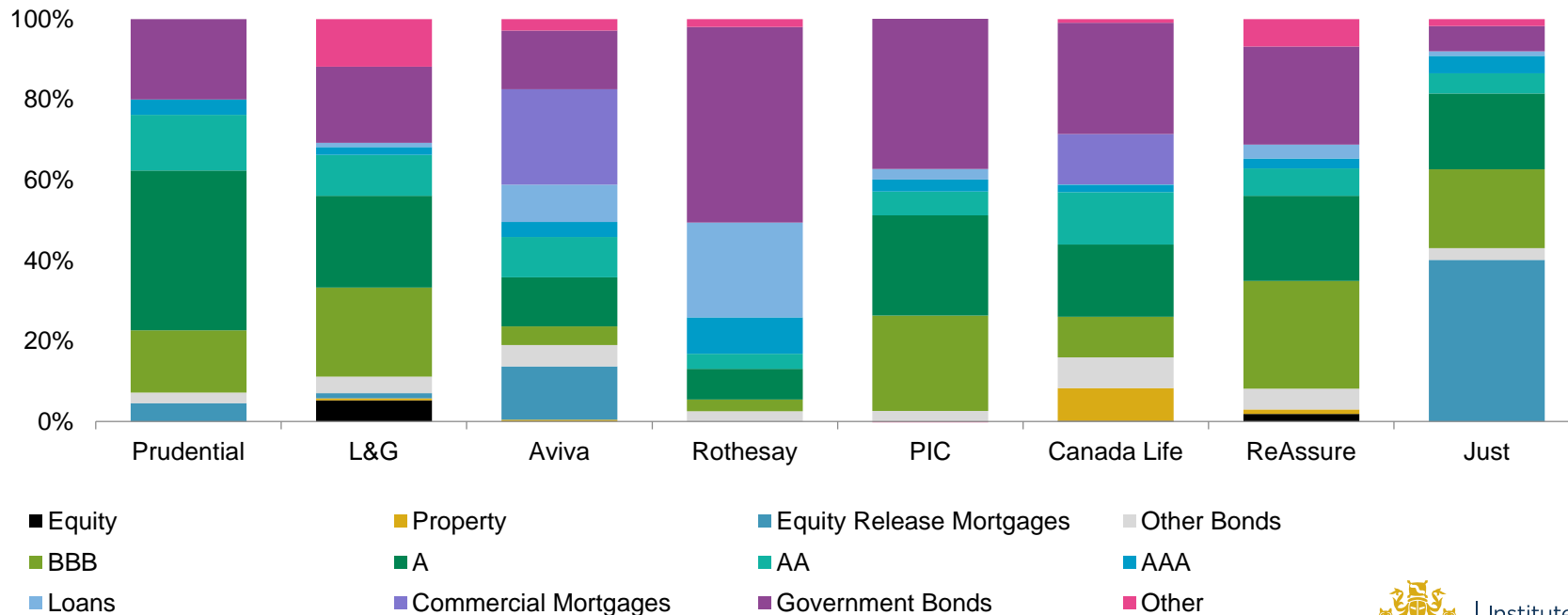
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Looking further afield

Broadening the opportunity set

As you close in on buyout, consider how an insurer invests

Snapshot of annuity investments across the market

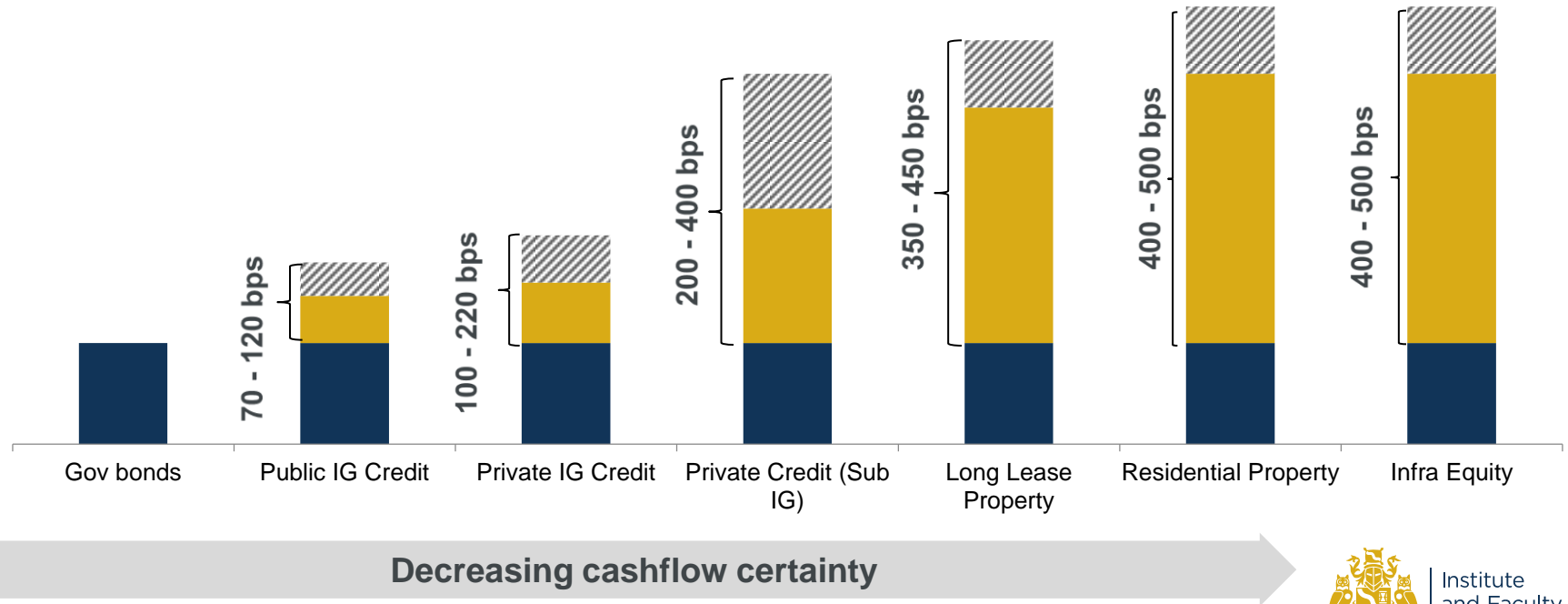


Source: LGIM, NatWest Markets annual life review 2018, allocations derived from regulatory disclosures.



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If buyout is not immediately on the horizon, broaden the opportunity set



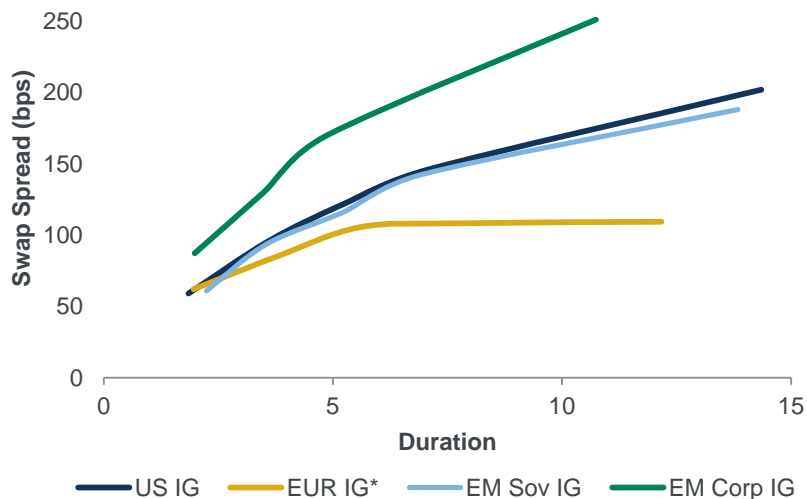
Source: LGIM estimates.



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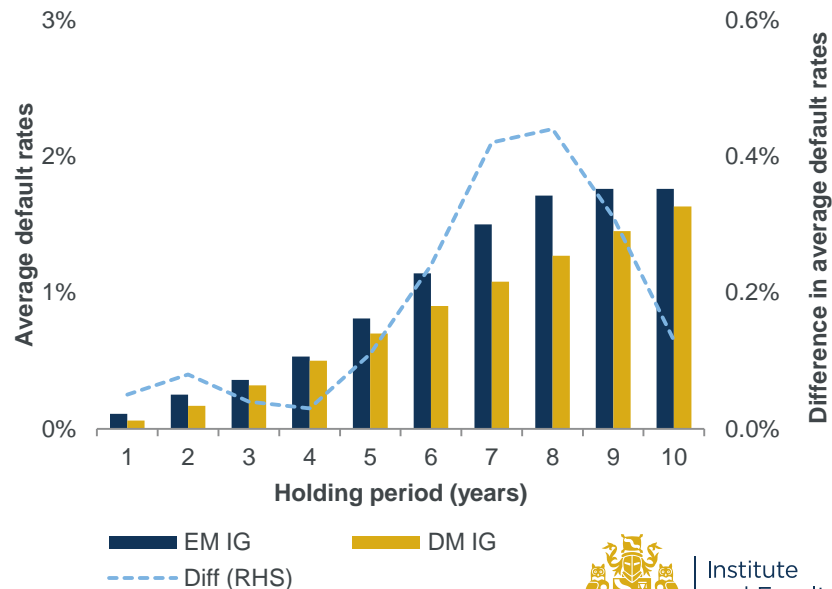
Preconceptions can lead to missed opportunities...

Improves diversification and
higher spread v DM IG



*EUR IG spread hedged back into USD terms using cross currency basis.
Source: JP Morgan, Bank of America Merrill Lynch, April 2019.
Source: Moody's Investors Services, 1995-2018.

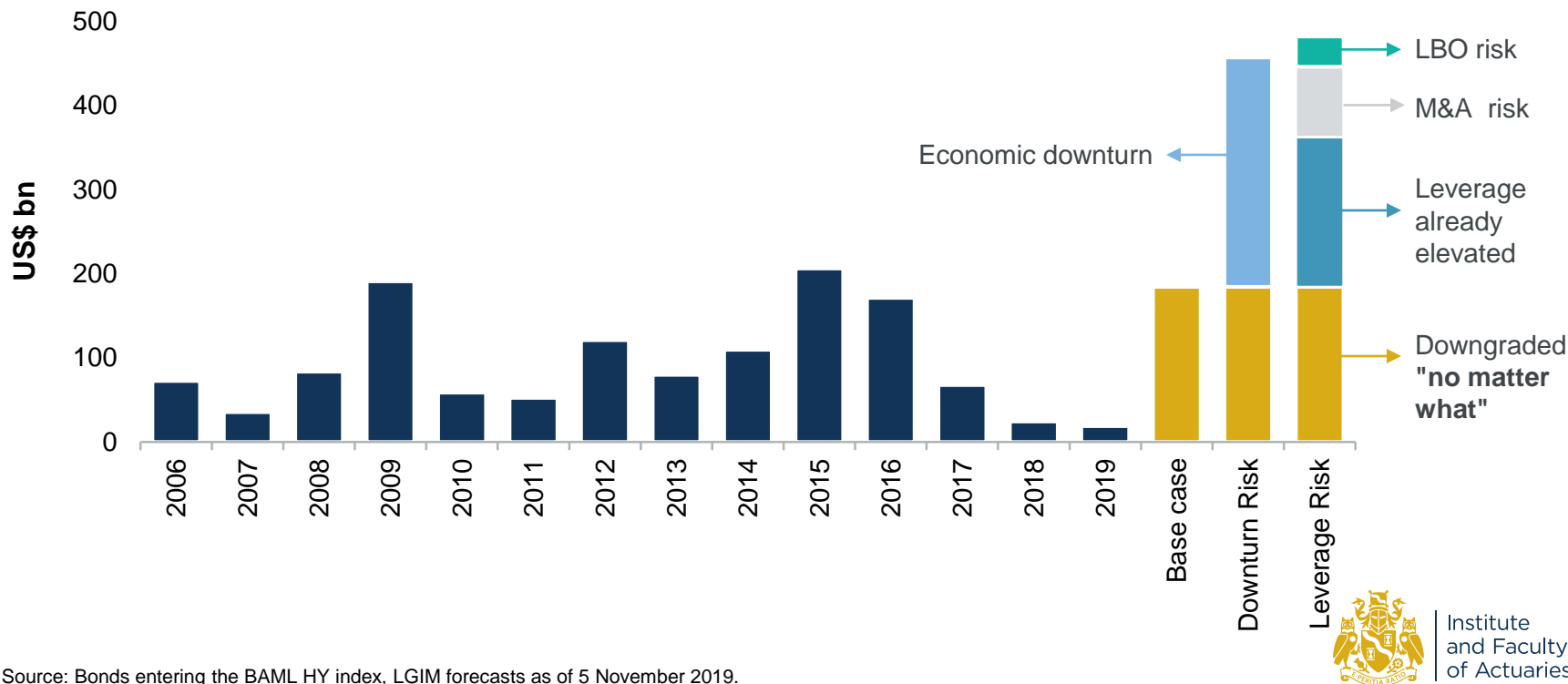
Low default and downgrade risk



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... but be careful of drifting down the rating spectrum

\$460bn of potential BBB downgrades in the next downturn



Source: Bonds entering the BAML HY index, LGIM forecasts as of 5 November 2019.



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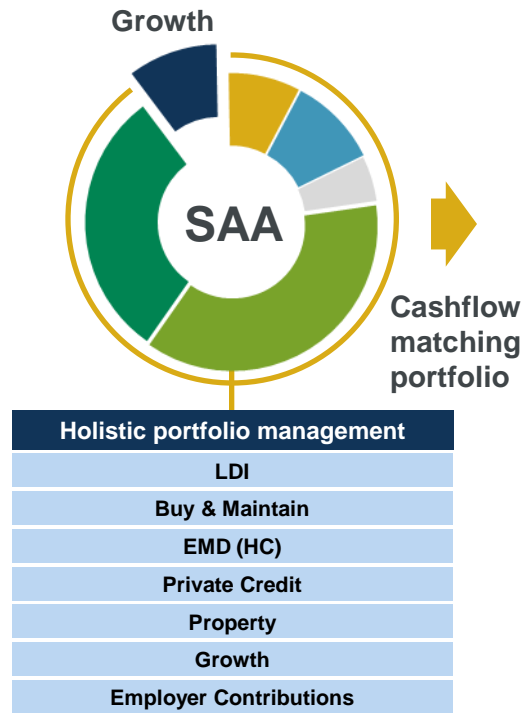
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Implementation

Mind the gap

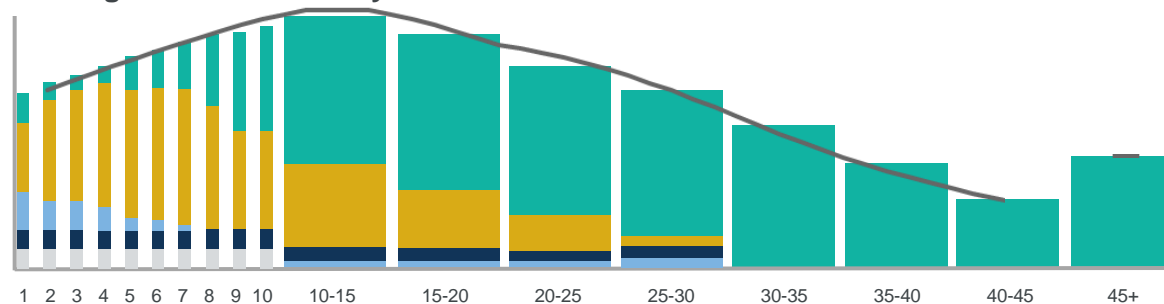
Creating a model portfolio

Translating SAA into cashflow matching profile

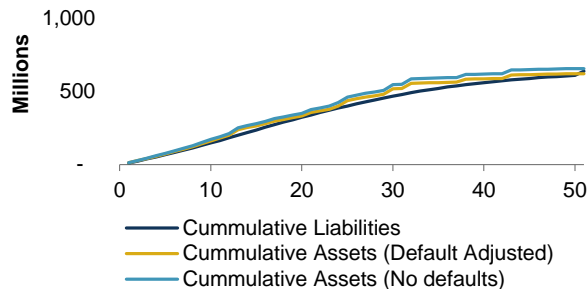


Source: LGIM, November 2019.

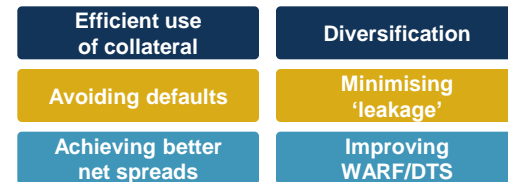
Meeting cash flows as they fall due



Success is improving cashflow coverage



Building blocks to achieve success



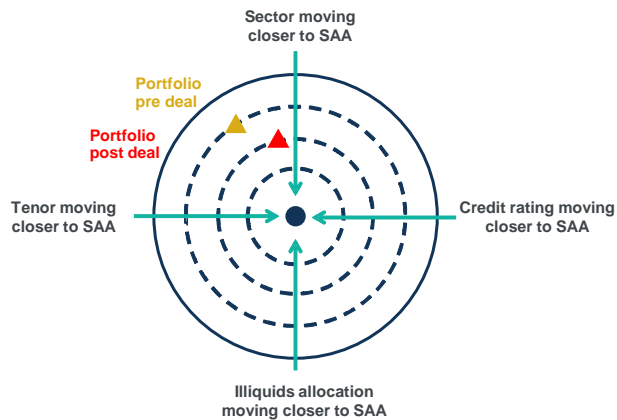
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Remain nimble and flexible

Example framework for assessing a new private credit investment

Issuer example	Private issuer	Unlisted deal	Key deal positives	Rebalancing approach
Heathrow	Yes	Yes	RPI to CPI linkage	Reduce transport exposure in listed credit and rebalance derivatives from RPI to fixed
Mars	Yes	Yes	New name	Sell out of listed credit consumer cyclicals
Utility	No	Yes	Tailored RPI exposure and increased seniority	Sell out of listed credit utilities and reduce RPI exposure in derivative portfolio

How does the opportunity impact my strategic asset allocation?



How would it affect my return if I was forced to sell the asset?

Haircuts to spread

Sponsor strength \ initial buyout FL	70%	75%	80%	85%	90%	95%
AAA	0.1%	0.1%	0.1%	0.2%	0.3%	0.8%
AA	0.1%	0.1%	0.1%	0.2%	0.3%	0.8%
A	0.1%	0.1%	0.1%	0.2%	0.3%	0.8%
BBB	0.1%	0.1%	0.1%	0.2%	0.3%	0.8%
BB	0.1%	0.1%	0.2%	0.2%	0.4%	0.9%
B	0.3%	0.3%	0.3%	0.4%	0.5%	1.0%

Source: LGIM, November 2019.



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Benefits of holistic cashflow matching management

Avoid being penny wise but pound foolish



Achieving better net spreads:
Local authority housing associations

Sector	Housing associations
Type	Senior Secured Private placement
Income Stream	Fixed coupon
Internal LGIM Rating	A
Financial Covenants	<ul style="list-style-type: none">• Asset cover (EUV-SH 105%; MVT 115%)• EBITDA to net interest payable >1.1x
Illiquidity premia	40 – 50 bps spread to comparable

Reallocating capital from low yielding public to more attractive private opportunities



Diversification:
Broadening the opportunity set to include new sectors

Sector	Renewables/ solar
Location	UK
Deal size	£48m
Income Stream	Fixed
Internal LGIM Rating	BBB+
Maturity	2035

Improving overall portfolio diversification and ESG credentials of cashflow matching portfolio



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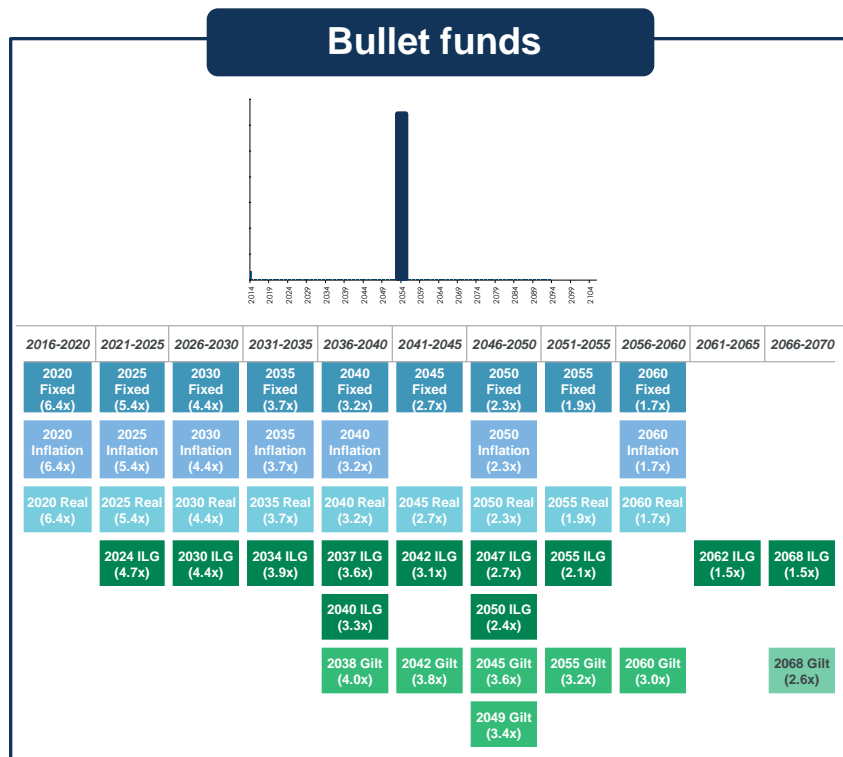


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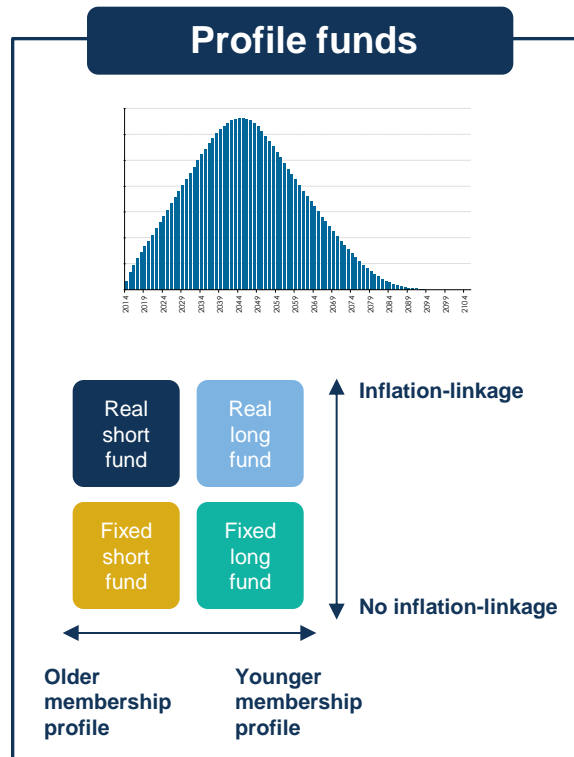
Is this available for my scheme

In short... yes

Evolution of tailored strategies – LDI



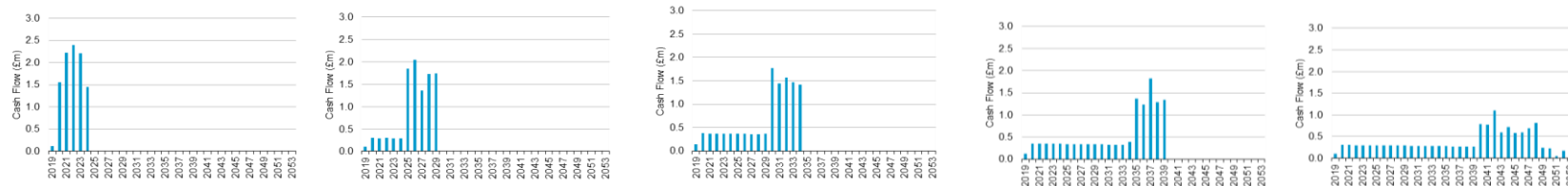
Source: LGIM, November 2019.



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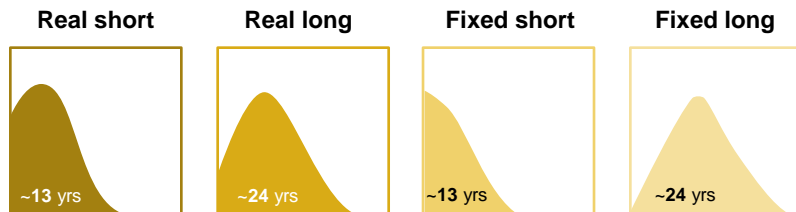
Cashflow matching pooled funds

Buy & maintain credit maturing funds



Combined pooled funds

Funds combining credit & LDI



The credit range of funds will allocate to gilts, LDI and buy & maintain credit. This is a diversified and liability-aware credit portfolio.

Source: LGIM, November 2019.

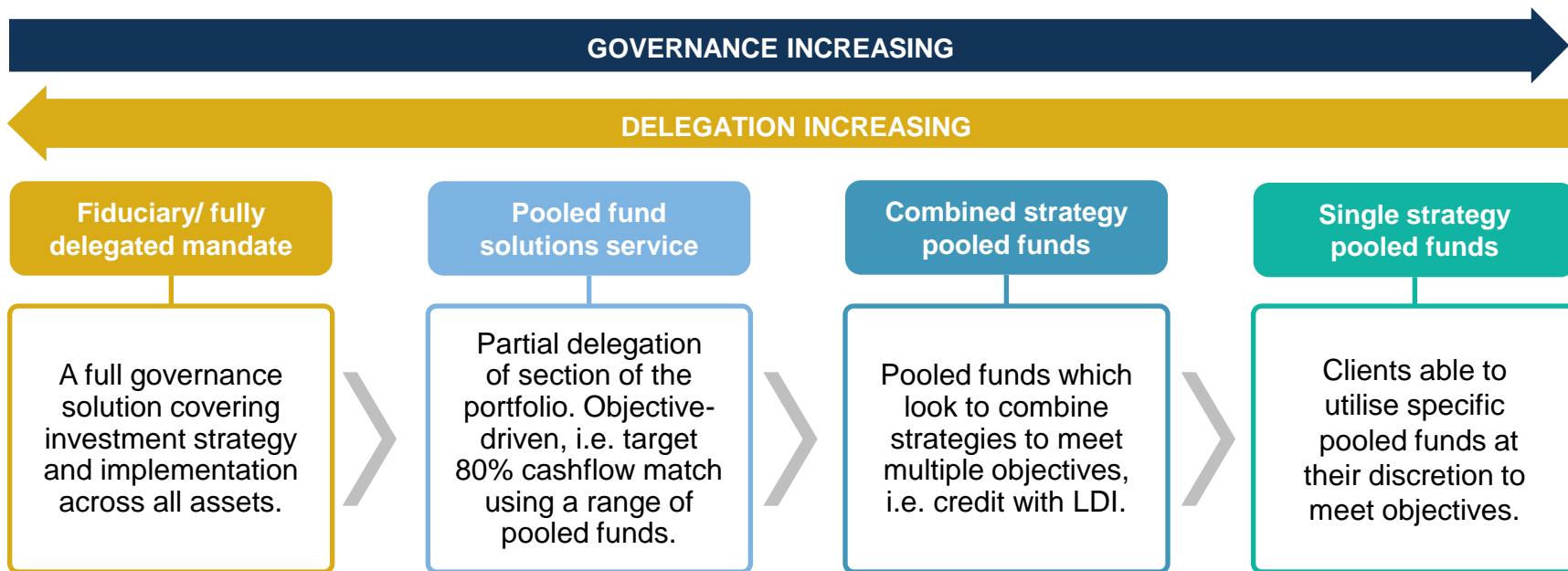
Real assets pooled funds



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How pooled size schemes can access tailored approaches

Range of options depending on preference and governance budget



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