Leicestershire County Council Pension Fund

Annual Review of Investment Strategy and Structure

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Background and contents

- The Fund undertakes an annual review of its investment strategy and structure. The aim is to identify opportunities to enhance long-term investment outcomes, assess market developments and review the Fund's portfolio. The recommendations shape the development agenda for the Fund in the year ahead.
- A review focused on the protection assets was completed in the first half of 2024, where it also reaffirmed that the current balance between growth, income, and protection assets remained appropriate at that point, as supported by our asset-liability modelling (ALM).
- In this paper we consider the current target allocations and existing investments, with the aim to identify any exceptions or areas of concern that require closer attention, without duplicating previous work. We have carried out a more detailed analysis of any flagged areas, as well as other key issues that may arise.
- Any proposals brought forward from this review and their implementation will be guided by the outcomes and progression of the "Fit for the future" consultation (see slide 3 for more details).

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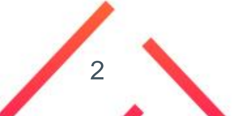


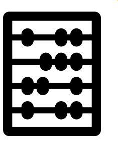
Areas of focus and the impact of the 'Fit for the future' consultation

Recent developments and this advice

- The Government has published a consultation document containing significant proposed reforms to the operation of the LGPS, following the Chancellor's Mansion House speech in November.
- The proposal, as drafted, envisaged 100% of the Fund's assets being transferred to LGPS Central ("the Pool") by 31 March 2026. Clearly, this is very different to the current 'comply or explain' regime and there would be considerable implications for the investment approach were this to occur as currently drafted.
- The consultation document - titled 'Local Government Pension Scheme (England and Wales): Fit for the future' ***("the Ongoing Consultation")*** - was published on 14 November 2024. Though the intended broad direction of travel from the Government is clear, they are consulting on the detail, with responses from interested parties to be submitted by 16 January 2025.
- The Officers of the Fund have requested that we prepare this advice as per the strategy scope already agreed (i.e. largely assuming business as usual) but acknowledging that the Ongoing Consultation is underway.
- The focus of this review is to ensure the Fund's investment approach remains suitable, including making investment allocations that are in the right areas, are appropriately sized and that money is run by high quality and sufficiently resourced fund managers.
- We have recommended that implementation work arising from this review takes place in the second half of 2025 in order to allow the Government's final position on pooling to be considered before any material new off-pool investments are made.

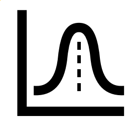
Pooling

- Identify solutions that could be realistically developed by the Pool or sourced from other pools to facilitate the pooling of additional assets.
- Provide a rationale for keeping certain assets outside the pooling structure (subject to the "Fit for the Future" consultation outcome).



Private Debt

- An update on market developments and the long-term outlook for returns.
- Consider the ongoing suitability of the current approach to private debt allocation.



Tail Risk Protection

- Consider plausible tail risk protection strategies and assess their suitability.
- Focus on mitigation to scenarios that could adversely impact contribution rates.

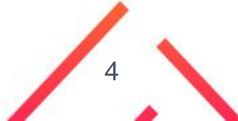
Net Zero

- Include the findings of LCC's net zero review.
- Identifying actions which the Fund could take in order to increase the likelihood of achieving their targets.

Key Recommendations

It is recommended that the Local Pension Committee:

- Approve the **changes to the 2025 target SAA allocation** as described in this report.
- Agree that the following three reviews be undertaken and presented to the ISC for consideration:
    - A **tail risk protection review** scheduled for the second half of 2025 with the scope to be defined in advance between officers and investment advisors, and taking into account the outcome of the 2025 triennial valuation and required rates of future investment return.
    - A review of two asset classes, **property** and **private global credit** with the aim to maintain exposure and take into account pooling consideration. The final scopes of both reviews to be agreed between officers and investment advisors.



Strategic Review: Executive Summary

Pooling

- **Good progress towards the 31 March 2025 'Comply or Explain' disclosure.**
- The Fund has made significant progress towards pooling, with 40% of the asset portfolio already invested via the pool, and a further 17% (Category 1) moving to a discretionary mandate with the pool.
- Around 26% of assets are not currently held within the Pool but considerations will be made to transition the assets across over the next few years (Category 2). These investments are typically illiquid and there is an intention to run-off the investment as quickly as practically possible while not incurring unacceptable transaction terms.
- The remaining balance of the Fund's assets (17%) do not have in place a plan to transfer to the pool (Category 3). These investments types are not available via the Pool, but we consider the holdings to be both complementary to the pool investments and an enhancement to the portfolio as a whole e.g. Venture Capital and private smaller company investment.
- If the Ongoing Consultation leads to all assets needing to be under pool discretion by March 2026, then Category 2 and 3 assets could likely be pooled via discretionary arrangements.

Asset Class Review

- **The Fund has not reached its target allocations in several areas. We suggest that this is remedied via adjustment to the target allocations coupled with reviews in 2025, to ensure the risk vs reward trade-off of the Fund is positioned as intended.**
- The Fund is c.5% overweight to listed equity, in part due to strong performance from this asset class. The strategic allocation to equities could be increased, subject to consideration of downside protection (see Tail Risk Protection below).
- The Fund is 3% underweight in property. This class has seen difficulties since the last review in 2022 (particularly as a consequence of UK gilt market challenges that year). We recommend the strategic weighting is reduced to closer to current weighting, and a review of the property portfolio takes place in 2025 to ensure the sub-allocations remain appropriate.
- There are significant cash holdings (around 5.5% of the portfolio) and, though some of the funds are earmarked for redeployment in private funds, we suggest that options to keep assets 'in market' are investigated.
- The LGPSC MAC fund is revisiting its manager line up over the next few months. We suggest a light touch review to confirm the new structure remains appropriate.

Private Debt

- **We recommend that the target allocation to private debt is modestly reduced, with the area revisited in 2025; the ISC having approved the current strategy in October 2022**
- The Pool are revisiting their fund offerings and it will not be possible to maintain the existing strategic allocation – nor the current level of target return – for the private debt class using the Pool's offerings alone.
- We recommend looking at the possibility of making further use of the Pool's latest private debt launches, including a high-level evaluation of their suitability.
- We recommend a review of the existing asset mix to enable the Pool's new funds to be used as far as possible, subject to consideration of the impact on the Fund's overall risk and return.

Tail Risk Protection

- **The Fund could consider mitigation against extreme market events.**
- The Fund's financial position has improved considerably over recent years, due to favourable market conditions within equity markets in particular.
- If conditions revert – and there have been numerous instances of markets falling by over 25% in recent decades – then some, or all, of the gains will be lost.
- We suggest that risk mitigation strategies are considered in 2025. Implementation of a tail risk strategy may also allow an increased strategic weighting to listed equity overall, subject to consideration of the impact on overall risk and return, and assuming some is used to fund the tail risk strategy itself.

Net Zero

- **We believe that the Fund is making excellent progress towards its Net Zero objectives.**
- The 2030 interim targets have already been achieved thanks to numerous transitions over recent years.
- Based on this the Fund is ahead of schedule in terms of meeting its Net Zero ambitions (ultimately by 2050).
- The listed equity allocations have been made via the Pool with supporting allocations elsewhere via third-party funds e.g. sustainable infrastructure and forestry.
- The Pool is providing additional detail of its engagement activities, which should be reviewed periodically by the Fund.

Strategic Review: Executive Summary

- Below we summarise our recommended changes to strategic allocation, together with comments.
- Our recommendations are supported by modelling work, as well as our current market views. The Proposed Target is expected to keep the risk and return profile of the investment approach broadly similar **at the overall portfolio level.** Equity allocations will also be revisited as part of the tail risk protection review.

Asset class	Current Allocation (%)	Current Target (%)	Proposed Target (%)	Comment on changes to strategic Target in 2025
Growth	54.0	50.0	53.5	
Listed equity	43.0	37.5	41.0 *	Increase so closer to current position (maintaining current sub-fund weightings for the time being) but subject to outcome of tail risk protection review (*).
Private equity	6.3	7.5	7.5	
Targeted return	4.7	5.0	5.0	
Income	31.6	42.0	38.5	
Infrastructure (inc timberland)	10.4	12.5	12.5	
Property	7.1	10.0	7.5	Reduce the strategic target to closer to current level. Consider strategic mix in the property review. No new commitments until review concluded.
Emerging market debt	0.0	-	-	
Global credit – public debt (sub-IG)	6.3	9.0	9.0	
Global credit - private debt (sub-IG)	7.9	10.5	9.5	Reduce headline strategic target modestly. Consider changes to strategic mix (including how to achieve the reduction) in the private debt review.
Protection	14.4	8.0	8.0	
Inflation-linked bonds	3.6	3.5	3.5	
Investment grade (IG) credit	3.4	3.75	3.75	
Currency hedge	0.9	0.75	0.75	
Cash	6.5	-	-	No change to target, but redeploy some of cash as part of review.
Total	100.0	100.0	100.0	

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Source: *"Leicestershire Total Fund Q2 2024 - Manager Summary" quarterly report*

Strategic Review: Proposed actions

2025 timeline and actions

Q1 2025
- LGPS Central infrastructure 'comfort check' (before commitments)
- LGPS Central MAC review (light touch review, post-restructure)

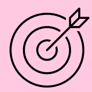
Q2 2025
- Reinvestment of cash holdings
- Equity allocation (including Tail Risk investigations)
- Property allocation review

Q3 2025
- Private debt: structure and implementation review

Q4 2025
- Annual Strategic Asset Allocation review

Note: All reviews would explicitly consider the potential impact of the Ongoing Consultation.

Objectives and Funding Position



The fund has two overall objectives:
- ✓ Stable and affordable contributions
- ✓ Sufficient funds to meet benefits as they fall due

The long-term investment strategy is reviewed annually, with the aim to maximise investment returns of the Fund whilst maintaining an acceptable level of risk.

The Committee recognises that:

- Diversification across investment classes with low correlation reduces volatility but over-diversification is both costly and adds little value.
- Environmental, social and governance (ESG) factors can enhance long term investment performance.

The table below shows a summary of how the funding level for the Fund has improved during the period from March 2022 to September 2024, as well as a number of important assumptions that underpin the Fund's investment strategy.

The improvement in position is considerable, but the position is volatile due to the informed risks being run. Any reversal in the conditions that have led to this improved position could lead to it deteriorating again, if no action is taken. We recommend that a review looking at equity tail risks takes place in 2025.

	Mar 2022	**Sept 2023**	**Sept 2024**
Funding level	105%	147%	149%
Surplus / (Deficit)	**c.£0.28bn**	**c.£1.92bn**	**c.2.22bn**
Discount rate p.a. *(expected returns over 20yr with 75% likelihood)*	4.4%	6.6%	6.3%

Source: Hymans

Projected vs Required Return (asset class)

Projected 20-year return, median, % p.a.	As at 31 March 2021	As at 31 October 2022	As at 30 September 2023	As at 30 September 2024
Listed equities	5.90	7.80	8.40	8.20
Private equity	6.80	11.40	12.00	8.10
Targeted return	4.50	5.25	5.90	5.60
Infrastructure (incl. timber)	5.90	7.86	8.50	8.30
Property	4.20	6.41	7.00	6.80
Emerging market debt	3.70	5.39	6.70	5.80
Global credit – liquid sub inv grade markets	4.60	6.67	6.70	6.10
Global credit - private debt (inc M&G/CRC)	4.90	9.27	8.70	8.10
Inflation-linked bonds	-1.40	2.08	4.10	4.00
Investment grade credit	2.70	5.07	5.60	5.20
Cash	2.00	3.70	4.30	4.10
Fund Overall				**8.4% pa**
Required Return				**4.4% pa**

Source: Hymans

The significant difference between the required return and projected return can largely be explained by changes in modelling assumptions, as well as differences in levels of prudence.

Fund Overall (8.4% pa): the median projected return of the strategy. Based on our latest long-term asset assumptions (as at 30 September 2024), which have shifted significantly in recent years largely due to rising risk-free rate expectations. This shift highlights the inherent volatility in market assumptions.

Required Return (4.4% pa): set during the 2022 actuarial valuation process, reflecting asset class assumptions at that time, and assuming a greater level of prudence than the median expectation (i.e. 75% likelihood). It is expected that the required return will increase at the 2025 valuation, for the same reasons as set out above.

2024 Progress to date

The investment strategy and current balance between growth, income and protection were deemed to remain appropriate, supported by the asset-liability modelling (ALM) output. Most of the progress made over the year focused on ensuring the Fund is well-positioned to meet its target allocations across various asset classes.

Equities portfolio review

Asset transition completed (July 2024)

- Partial divestment from LGPS Central Climate MFF
- Reorganisation of LGIM equities
- Full divestment from LGPS Central Emerging Markets
- Investment into LGPS Central Global Equity

Infrastructure portfolio review (incl. timberland)

Commitments made or in progress

- £300m commitment to LGPSC Core/Core Plus fund*
- £90m commitment to LGPSC Value Add Fund*
- Roll of interests into Stafford Continuation Fund (timberland) approved
- £25m additional commitment to Continuation fund to be made

Higher yielding credit (incl. review RST portfolio)

Allocations agreed and in progress

- MAC allocation increase progressed (but temporarily paused)
- £40m commitment to CRC CRF VI Fund, **subject to satisfactory legal due diligence**

Review of the Fund's protection assets

Review completed

- Concluded no increase in protection assets at the time
- Concluded no case for alternative protection assets given the additional governance burden
- **Tail risk protection being considered at this review**

** Spread equally over 3 years, with years 2 and 3 subject to continued comfort with the Pool offering*

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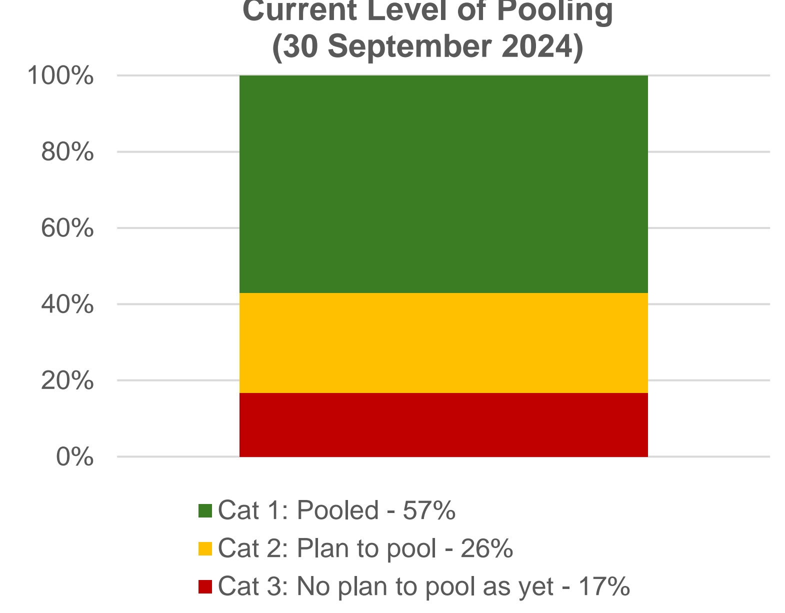
Pooling progress - summary

- There is a 31 March 2025 deadline for authorities to pool assets or explain why this hasn't taken place. The new UK government has confirmed the deadline stands. Broadly speaking, this boils down to splitting the Fund's assets into three distinct categories, as follows:

- **Category 1: Those already pooled (directly or via pool oversight):**
  Around 57% of assets are pooled, with 40% directly pooled with the Pool and an additional 17% managed under an LGPS master agreement with LGIM. These assets consist of listed equities, private equity (part), infrastructure, private debt, MAC, and investment-grade credit.

- **Category 2: Those not yet pooled (but with a plan to, post-March 2025):**
  Around 26% of assets are not currently pooled but could be in the coming years, but consideration can and will be made to achieve this over the next few years. Some of this plan may involve current closed-ended funds being allowed to mature (reinvesting the proceeds into pooled equivalents) and/or the potential transfer of more liquid investments into suitable options offered by the Pool.

- **Category 3: Those not pooled (with no plan to)**
  Around 17% of assets are not currently pooled and it is currently unclear how and when these might be pooled, as these mandates involve asset classes either not currently offered via the Pool, or illiquid in nature. These could be pooled via discretionary arrangements if needed.



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We believe this represents a solid starting position for the Fund and demonstrates your strong desire and commitment to pooling assets and supporting the Pool. The Ongoing Consultation paper stated that across the Partner Funds used by the Pool, 45% was pooled (noting that this includes both discretionary and advisory agreements; the latter not counted as pooled under government proposals).

Further progress could be made. Assuming the Category 2 assets are pooled over time then the percentage of assets pooled is expected to increase significantly over the next 5 years. This progress would be made through a combination of allowing closed-ended mandates to wind down (with proceeds reinvested via the Pool), and exploration of pipeline products/gaining additional comfort in the Pool offerings.

We recommend that options for the Category 2 assets are explored over the next year. We also recommend the Fund engages with the Pool later in 2025 on the possibility of introducing some of these asset classes within the pool. Both of these recommendations are subject to the outcome of the Ongoing Consultation; should the consultation come into force as set out then Category 3 assets effectively become Category 2 assets as ways to pool them by March 2026 are explored.

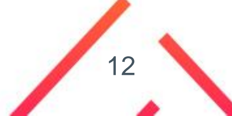
Category 1: Those already pooled (57% of assets)

On the following pages we detail each of the Fund's existing mandates and use our judgment to split these between Category 1, 2 and 3. This is for discussion with Officers and Committee and may be subject to change based on several factors.

Asset class	Mandate	Valuation (£m)	% of Total Fund	Pooled?	March 2025 position
Listed equity	L&G Total Passive Equity Fund	1,102.7	17.0	Yes - LGPS master agreement	Comply
	LGPSC Global Eq Active Multi Mgr Fund	771.7	11.9		
	LGPSC AW Eq Climate Multi Factor Fund	835.3	12.9		
Private equity	LGPSC Private Equity Fund 2018 (L)	9.3	0.1		
	LGPSC Private Equity Fund 2021 (L)	6.9	0.1		
	LGPSC Private Equity Fund 2023 (L)	1.2	0.0		
Infrastructure	LGPSC Infra Core/Core+ (L)	104.3	1.6		
Property	LGPSC UK Direct Property Fund	49.0	0.8		
Private debt	LGPSC PD Low Return 2021 (L)	150.0	2.3		
	LGPSC PD High Return 2021 (L)	33.3	0.5		
	LGPSC PD Real Assets (L)	52.6	0.8		
Global credit – liquid sub inv grade	LGPSC Global Active MAC Fund	422.5	6.5		
Investment grade credit	LGPSC Investment Grade Credit Fund	166.3	2.6		
	Total	**3,705.1**	**57.0%**		

Source: "Leicestershire Total Fund Q3 2024 - Manager Summary" quarterly report

Of the Fund's current assets, c.57% are pooled across 13 mandates, reflecting strong progress made to-date by the Fund in support of pooling. We anticipate no further action being required in respect of the mandates listed above.



Category 2: Plan to pool post March 2025 (27% of assets)

Mandate	Mandate	Valuation (£m)	% Total Fund	Comment / possible 'mapping'	Pooling consideration	March 2025 position: All below are 'explain'
Private equity	UK Private Equity Fund – Catapult	0.9	0.0	*LGPSC have available a private equity offering.*	Within 5 years	*Mandates are closed-ended with liquidation difficult and costly. Expect to reallocate proceeds gradually as mandates mature.*
	Patria Capital Partners SOF III Feeder LP	21.5	0.3			
Infrastructure	JPMorgan Infrastructure Fund	166.4	2.6	*Fund has already committed to LGPSC Infra Core/Core+ fund but holds these as well-performing diversifiers.*	Within 10 years	*Mandates are well-established and performing well. Third-party infrastructure mandates allow the Fund to avoid over-reliance on the relatively new LGPSC Core fund. There may be trade costs associated with exit. However, ongoing allocation to funds will be considered and revisited once additional LGPSC commitments are in place.*
	IFM Global Infrastructure Fund	157.2	2.4			
	KKR Global Infrastructure Fund	42.4	0.7	*LGPSC offers a Value-Add/Opportunistic Infrastructure Fund, which the Fund is committing to.*	Within 10 years	*Mandate is closed-ended with liquidation difficult and costly. Expect to reallocate proceeds gradually as mandate matures.*
	Infracapital Infrastructure Fund	29.3	0.5		Within 2.5 years	*Assets will be realised by end of 2026, with proceeds expected to be reallocated to the pool.*
Property	Colliers Property	93.2	1.4	*LGPSC offers both direct and indirect property funds.*	Within 2 years	*Contains both direct and indirect property holdings. Assets are being moved under direct Pool control.*
	LaSalle Property Fund	267.0	4.1	*LGPSC offers both direct and indirect property funds.*	Within 5 years	*The Pool do not currently offer an overseas property mandate, but one was in the pipeline (pre-consultation) so this could be explored if the consultation does not go ahead as set out*
	Aegon Capital Property Funds	49.2	0.8	*LGPSC offers both direct and indirect property funds.*	Within 5 years	*Mandate is closed-ended with liquidation difficult and costly. Expect to reallocate proceeds gradually as mandate matures.*
Private debt	M&G DOF Fund	42.4	0.7	*The Pool are not currently planning to launch a "High Return" PD sleeve.*	Within 2.5 years	*Assets expected to be realised by the end of 2026, with plan for proceeds discussed in 2025.*
	Partners Group Private Debt Fund	147.9	2.3	*The Pool have a Direct Lending offering, which the Fund is committing to.*	tbc	*A diversifier for Central offering. Plan for private debt allocation to be discussed in 2025.*
Inflation-linked bonds	Aegon Index-Linked Fund	232.9	3.6	*The Pool is considering the launch of an index-linked fund in FY 24/25.*	Within 2 years	*The Pool do not currently offer this, but one was in the pipeline (pre-consultation) so this could be explored if the consultation does not go ahead as set out.*
Cash	Cash Fund	455.8	7.0	*Reinvestment plans to be considered in 2025.*	Within 2 years	*LGPSC currently do not offer any cash funds. Pooling cash assets would introduce unnecessary layers of complexity and governance without delivering significant benefits to the Fund.*
	Total Category 2	**1,706.1**	**26.3%**			

Source: "Leicestershire Total Fund Q3 2024 - Manager Summary" quarterly report

Category 3: No plan to pool as yet (16% of assets)

Mandate	Mandate	Valuation (£m)	% of Total Fund	March 2025 position: All below are 'explain'
Targeted return	Ruffer Fund	198.8	3.1	*LGPSC currently do not offer any targeted return funds. Targeted return funds offer unique capital preservation and steady return benefits; however, LGPSC has no even broadly comparable strategy. Collaborate with LGPSC regarding fund offerings.*
	Fulcrum Diversified Core Abs Ret Fund	127.7	2.0	
Private equity	O'seas Private Equity Fund - Adams Street (L)	361.6	5.6	*LGPSC offer private equity funds, but none comparable to Adams Street's strategy given its bias to Venture Capital and smaller companies, plus use of secondaries. Closed-end structure with a tailored overseas strategy. Whilst LGPSC offer private equity funds, they cannot replicate the focus or diversification benefits of Adams Street.*
Infrastructure	Stafford Timberland Fund (L)	128.5	2.0	*LGPSC currently do not offer any timberland funds. Timberland assets often serve dual purposes: generating returns and contributing to carbon sequestration or biodiversity goals; however, LGPSC has no comparable fund. Collaborate with LGPSC regarding fund offerings.*
	Quinbrook Net Zero Power Funds (inc Co-Inv)	54.7	0.8	*LGPSC offer infrastructure funds, which may include renewable energy projects, but they do not provide the same focused exposure to NZ power infrastructure or co-investment opportunities. The focus on NZ-aligned infrastructure involves bespoke projects that do not align with LGPSC's broader pooled infrastructure strategy. Pooling may dilute the Fund's targeted approach to climate solutions.*
Private debt	Christofferson Robb & Company (CRC) Funds	61.1	0.9	*LGPSC currently do not offer funds aligned with risk-sharing transaction (RST) or 'special situation debt' strategy. The fund's niche focus on RST requires specialised expertise that the Pool do not currently offer. CRC provides exposure to unique credit markets, serving as a diversifier within the Fund's 'special situation debt' allocation, which is not represented in LGPSC's broader credit mandates.*
Investment grade credit	Aegon Global Short Dated Climate Transition Fund	62.7	1.0	*LGPSC currently do not offer a short-dated bond fund with a climate transition focus. The Fund could consider distributing the holding across Corporate bond mandates available at Central; the specific climate focus would be lost in doing so but the holding is relatively modest. Collaborate with LGPSC regarding fund offerings.*
FX hedge	Aegon (formally Kames) Currency Hedge Fund	90.2	1.4	*LGPSC currently do not offer any currency hedging approach that can be applied on the overall portfolio level.*
	Total Category 3	**1,085.3**	**16.7%**	

Source: "Leicestershire Total Fund Q3 2024 - Manager Summary" quarterly report

Note: These categories reflect the framework prior to the Ongoing Consultation. If the Ongoing Consultation proceeds as planned, all Category 3 assets will likely require plans to be pooled via discretionary arrangements i.e. these effectively become Category 2 assets.

Asset class review: Actual vs Target

The table below sets out the Fund's investment strategy and actual asset allocation as at 30 June 2024.

Current versus strategic allocation

Asset class	Current Allocation (%)	Current Target (%)
Growth	54.0	50.0
Listed equity	43.0	37.5
Private equity	6.3	7.5
Targeted return	4.7	5.0
Income	31.6	42.0
Infrastructure (inc timberland)	10.4	12.5
Property	7.1	10.0
Emerging market debt	0.0	-
Global credit – public debt (sub-IG)	6.3	9.0
Global credit - private debt (sub-IG)	7.9	10.5
Protection	14.4	8.0
Inflation-linked bonds	3.6	3.5
Investment grade (IG) credit	3.4	3.75
Currency hedge	0.9	0.75
Cash	6.5	-
Total	100.0	100.0

Source: "Leicestershire Total Fund Q2 2024 - Manager Summary" quarterly report

Projected 20-year return, median p.a.	8.4%
1 year dispersion (volatility; relative to gilt-based liabilities)	11.3%

Note: Although the Fund's liabilities are not gilts-based, the volatility figure provides a general indication of how volatile the Fund's assets are relative to its liabilities.

- **Growth** assets (comprising of c.54% of the Fund's current allocation) are largely invested in listed equity, with small exposures to private equity and targeted return strategies.
- Strong asset class diversification though several investments in **Income** generating assets. The current allocation is, however, significantly underweight target due to:
  - Time lag between capital committed and assets drawn for infrastructure and public debt assets.
  - Property commitments deferring due to weak market outlook.
  - Existing private debt investments being realised, with agreed new commitments yet to be called.
- Small allocation to **Protection** assets. The Fund is overweight to cash, owing to cash reserves for income generating assets and realised investments. This position is expected to reduce over time as new commitments are made and funds draw down capital.

Asset class / performance: exceptions analysis

No exception noted
Exception flagged

- We have conducted a high-level assessment of each asset class, with the results summarised below. For asset classes flagged with exceptions or issues, further details are provided in the next slides or sections.
- Exceptions in allocation indicate the asset class is either materially overweight or underweight to target.
- Performance-related exceptions point to concerns regarding the performance of specific funds or the asset class as a whole.

Asset Class	Allocation	Performance*	Comments	Recommended action
Listed equity	Exception flagged	No exception noted	Performance remains in line with target but the Asset allocation is currently overweight.	**Review in 2025.** No immediate action i.e. maintain the overweight position as an adjustment to the Strategic Asset Allocation and complete a Tail Risk review in 2025 (Section 6).
Private equity	Exception flagged	Exception flagged	Underweight allocation and recent performance has lagged the benchmark.	**No immediate action required.** Review Private Equity strategy once the Ongoing Consultation has been completed but not before.
Targeted return	No exception noted	Exception flagged	Underperformance of Ruffer relative to its cash plus benchmark over recent periods.	**No action required.** We have investigated the reasons for Ruffer's underperformance (later in Section 4) and recommend they are retained.
Infrastructure	No exception noted	Exception flagged	Three of the seven managers have underperformed.	**No action required.** These include early-stage investments and others that are winding down but the allocations are proceeding as planned. Continue to monitor managers.
Timberland	No exception noted	No exception noted	Asset allocation and performance in line with target.	**No action required.** The allocation is proceeding satisfactorily.
Property	Exception flagged	No exception noted	Underweight allocation relative to target.	**Review in 2025.** Review the property target allocation, restate the Strategic Asset Allocation target, and review managers (first review in 3 years).
Global credit: Public debt (sub-IG)	Exception flagged	Exception flagged	Underweight allocation and recent performance has lagged the benchmark.	**Review in 2025.** The allocation is underweight as the Pool is revisiting the manager line-up. We support a light touch review in 2025 to obtain comfort with the new approach.
Global credit: Private debt (sub-IG)	Exception flagged	No exception noted	Underweight allocation relative to target.	**Review in 2025.** Covered in this review (Section 5).
Inflation-linked bonds	No exception noted	No exception noted	Asset allocation and performance in line with target.	**No action required.** Relatively modest allocation in line with target.
Investment grade (IG) credit	No exception noted	No exception noted	Asset allocation and performance in line with target.	**No action required.** Relatively modest allocation in line with target.
Currency hedge	No exception noted	No exception noted	Asset allocation and performance in line with target.	**No action required.** Operating in line with expectations.
Cash	Exception flagged	No exception noted	High cash reserve	**Review in 2025.** Though some of the cash relates to commitments, a proportion can reasonably be invested, e.g. by reviewing options with existing funds or via the Pool.

** Performance typically considered over the last 1 to 3 years; where we have delved into performance in more detail later in this paper we consider longer time horizons, bearing in mind the long-term nature of many of these investments*

Asset class review: Proposed strategic allocation changes

Below we summarise our recommended changes to strategic allocation, together with rationale. Additional detail can also be found in this section.

Asset class	Current Allocation (%)	Current Target (%)	Proposed Target (%)
Growth	54.0	50.0	53.5
Listed equity	43.0	37.5	41.0 *
Private equity	6.3	7.5	7.5
Targeted return	4.7	5.0	5.0
Income	31.6	42.0	38.5
Infrastructure (inc timberland)	10.4	12.5	12.5
Property	7.1	10.0	7.5
Emerging market debt	0.0	-	-
Global credit – public debt (sub-IG)	6.3	9.0	9.0
Global credit - private debt (sub-IG)	7.9	10.5	9.5
Protection	14.4	8.0	8.0
Inflation-linked bonds	3.6	3.5	3.5
Investment grade (IG) credit	3.4	3.75	3.75
Currency hedge	0.9	0.75	0.75
Cash	6.5	-	-
Total	100.0	100.0	100.0
Statistics	**Current Allocation (%)**	**Current Target (%)**	**Proposed Target (%)**
Expected return **	8.1% p.a.	8.4% p.a.	8.4% p.a.
Risk **	11.2%	11.3%	11.6%

Recommendations: Strategic asset allocation

- We recommend that the target allocation to equity is increased and that the property and private debt allocations are reduced slightly.
- This recommendation is supported by the modelling analysis we have carried out as well as our views on markets, as explained below.
- The equity allocation would also be revisited as part of the Tail Risk review taking place later in 2025.
- **We are of the view that the risk and expected return of the revised Target allocation is appropriate i.e. based on analysis carried out in 2024 and updated risk numbers that we have prepared using our high-level risk and return model.**

65

- **Equity.** We support maintaining a modestly higher equity allocation that the current target, subject to exploration of tail risk protection options. This is supported by our modelling and our views of markets (see later material).
- **Property.** This as an asset class has struggled over recent years, particularly post-Covid (in sectors such as offices and retail) and since the gilt crisis of 2022. Closure of the underweight here has been deferred recently. We recommend that the target is reduced to closer to the current weighting. Further rationale for this is set out later.
- **Private debt** is an asset class which we retain conviction in. However, we see a case for modestly reducing the allocation to this class, likely within the higher risk / return sub-allocations. Again, further rationale is set out later.
- Overall, we expect these changes to leave risk and expected return levels similar to the current Target.

Source: "Leicestershire Total Fund Q2 2024 - Manager Summary" quarterly report
*** Expected return = Projected 20-year return, median. Risk = 1 year dispersion (volatility; relative to gilt-based liabilities)*

Equity and Cash overweights

Reasoning

- The Fund is currently overweight Listed Equities and Cash.
- Mainly due to justifiable delays in the implementation of strategic weightings elsewhere in the portfolio, such as slow deployment of commitments to illiquid investments and a pause in investment to the MAC fund.
- Secondary to this is the strong performance of listed equities, relative to other classes.
- **We are comfortable with the overweight positions to these asset classes at present.**
- Reasons for this position include:
    - Our modelling supports a higher equity weighting (explained in this Section).
    - In the short term, holding some of this in liquid assets such as listed equities and cash can be considered a suitable holding place for money waiting to be deployed in illiquid assets, as this could be called at short notice.
    - In the case of cash, rates of interest are considerably higher now following increases in base rates, therefore the Fund is now earning a reasonable level of short-term return on these holdings.
    - Further, a combination of listed equities and cash can be considered broadly similar (in high level risk and return terms) to some of the classes the funds are earmarked for, such as MAC / private equity / infrastructure, at least in the very short-term.

Liquid holding places

- Given the ongoing delays in implementation in some areas of the portfolio, together with the uncertainty around the consultation (which may lead to further delays in implementation of new ideas), we think it would be sensible to identify 'liquid holding places' for these assets i.e. liquid vehicles which offer similar risk and return characteristics to the assets in which they are waiting to be deployed.
- We would be able to identify liquid holding places which are also compatible with the consultation direction, i.e. through managers / funds which are considered pooled (the Pool products or through discretionary agreements).
- Examples include:
    - Listed equity fund equivalents for undrawn private equity commitments.
    - Liquid, floating rate credit funds for private debt commitments.
    - High yield bond funds for MAC commitments on hold.

Recommendation: Review equity / cash overweights in 2025

- We recommend that we carry out a short investigation into which asset classes we need liquid holding places for and recommend funds which would be suitable for that purpose.
- This should take place in conjunction with the Tail Risk review, which could make use of the equity overweight assets.

Equity: market views

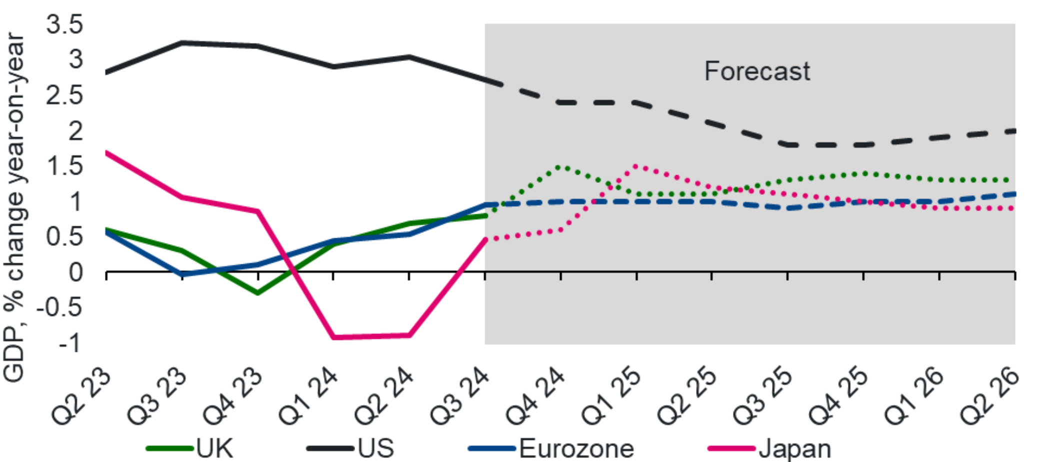
Economic background

- Global growth in 2024 surprised to the upside, with forecasts rising from 2.2% in January to 2.6% in December. To an extent, loose fiscal policy, particularly in the US, has offset tight monetary policy.
- Tax cuts and deregulation under President Trump may lend further support to US growth in the near term. And huge fiscal and monetary stimulus in China, as the economy battles chronically weak domestic demand and deflation concerns, potentially lends upside risk to near-term forecasts there, too.
- Global manufacturing weakness continues to weigh on the eurozone economy, which has faced dual threat of weak Chinese demand for exports alongside increased competition from low-cost imports due to excess production in China. Meanwhile, UK growth unexpectedly deteriorated in Q3 after a strong pace registered in H1 2024.

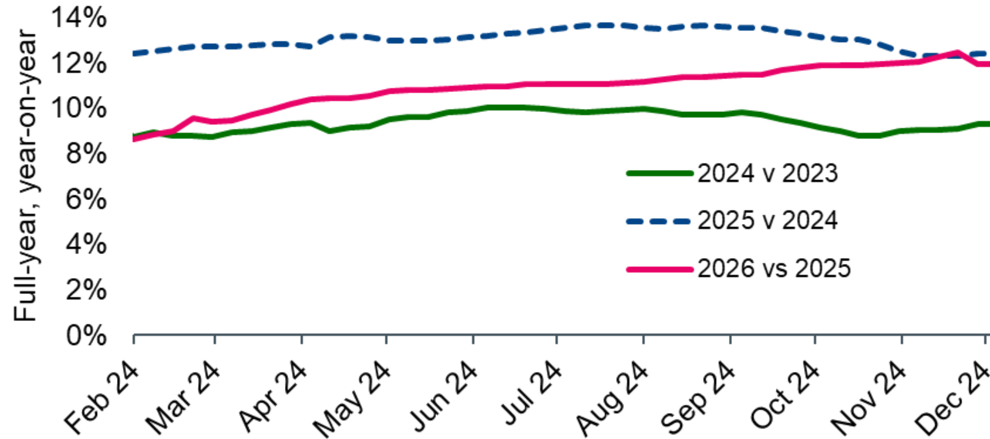
Fundamentals and technicals:

- MSCI ACWI full-year earnings growth forecasts for 2025 and 2026 stand at a robust 12% for both 2025 and 2026. Although the 2025 forecast has drifted down since September as positive sentiment around rate cuts moderated.
- Earnings momentum, or the extent to which upgrades outnumber downgrades, is negative but starting to improve, providing a tentative indication that downgrades are bottoming out.
- Option-implied equity volatility increased in December after hawkish commentary from the Federal Reserve but remains low relative to historical averages.

Global economic growth forecast to maintain a solid but unspectacular pace



MSCI ACWI Index - full-year forecast earnings growth remains intact



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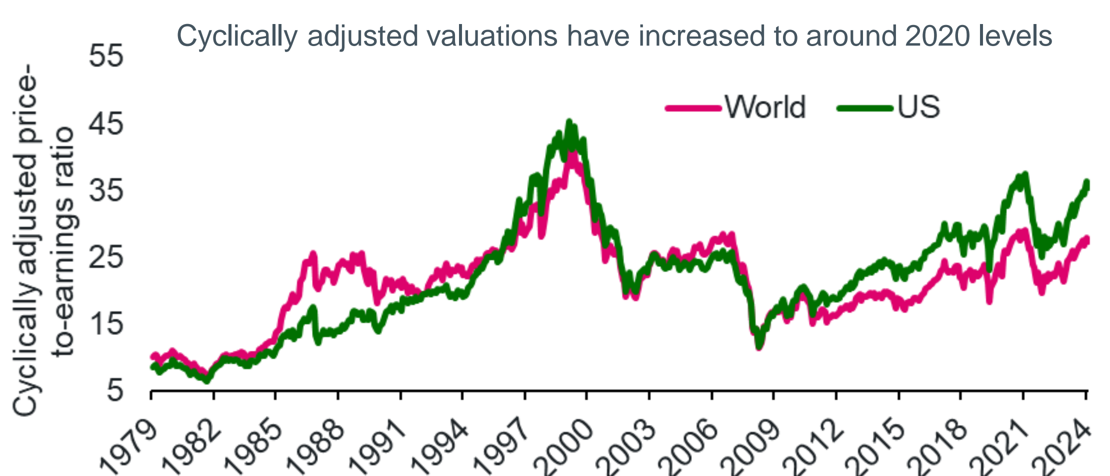
Equity: market views

Valuations:

- Global equities rose 1.3% in Q4, despite a selloff in December as investors cashed in on the strong equity rally seen in 2024. US equities continued to outperform following Trump's presidential victory, buoyed by expectations of tax cuts, reduced regulation and a more nationalist trade policy.
- A rise in stock prices since the beginning of the year has taken the global equity price-to-earnings ratio above long-term averages, while above-trend earnings mean cyclically-adjusted valuations are even higher.
- US outperformance in recent years, particularly that of the 'Magnificent Seven' tech stocks, means the concentration of global equity markets has increased: the US makes up almost 70% of global market capitalisation and, given the relatively narrow market leadership within the US, the top 10 stocks make up almost 40% of the S&P 500.



Recommendations: Strategic asset allocation (Equity)

- We are relatively neutral on equity, despite some risks to valuations being acknowledged.
- The economic background is supportive of maintaining allocations, with global growth forecast expected to remain solid in the near term, and expected actions from US and Chinese governments potentially supportive of growth.
- This supports maintaining the current equity allocation and **re-stating the Strategic Asset Allocation target to current levels** in our view.
- However, as highlighted later in this paper, we are mindful of extreme equity downside risks given the levels of equity exposure and gains in funding position seen in the last 2-3 years. Re-stating the strategic allocation to equity is therefore **subject to further investigation of tail risk protection**, with a view to offsetting the additional risks associated with a higher equity allocation through such tail risk protection.
- Decisions relating to sub-allocations within equity will be considered as part of the recommended tail risk protection review, with the current (actual) weightings being retained for the time being. This will include regional considerations, and take into account the form of tail risk protection asset to be adopted.

Private Equity

Private Equity: Underweight to target

- The Fund's private equity allocation is 1.2% under target as it awaits over £180m in uncalled commitments (split between the Pool and Adams Street). Whilst these will help close the gap once drawn, there remains an ongoing need to continue committing to this asset class as capital is returned and the Fund's assets grow, as well as to ensure vintage year diversification.

Performance

- The Fund's private equity allocation has returned 15.3% since inception, slightly lagging the benchmark. However, performance over the past year was notably poor (the second-lowest-performing asset class in the portfolio), with all funds lagging the benchmark and Adams Street and LGPSC vintage 2021 performing particularly poorly in absolute terms.
- Given the inception dates of the funds, they would still be in the J-curve phase and hence lower performance may be expected at this stage. We would expect that the funds should start outperforming once they move into the distribution phase.

Is performance relative to benchmark of FTSE All World + 3% concerning?

- Most private equity funds target 3 - 4% above a global equity index, so FTSE All world +3% is more of a target rather than a benchmark. The funds will likely underperform this benchmark until the vintages mature. Particularly in light of strong recent performance in listed equity markets, which are driven by different factors including market sentiment towards areas such as AI.

Should the Fund maintain an allocation to private equity?

- Given recent performance, plus presently high interest rates which have driven up the returns potential for other asset classes such as bonds and direct lending, it is sensible to question the relative attractiveness of private equity – particularly given the illiquidity and relative risks being taken on.
- We believe that despite the challenges, the long-term potential for returns from primary funds is still intact.
- We favour managers who can maintain a disciplined investment process and are specialists in their areas - both of which should give them an advantage in being able to generate returns over the long-term. Manager selection remains the key to limiting downside risks.
- It is also sensible to continue allocating to the class (rather than for example missing a year). This is because it maintains vintage year diversification; it is also incredibly difficult to time allocations given the lags in market impacts coming through to returns.
- Further, we continue to believe that it is useful to obtain exposure to secondaries and co-investments, as a way of capturing opportunities as and when they arise. These exposures are available through Adams Street but not yet through the Pool; Adams Street is therefore a useful complementary offering to what is available through the pool for the time being.

Recommendation: No refinements to approach and reconsider post the Ongoing Consultation.

- We recommend that the Fund continues to maintain its allocation to private equity.
- A decision needs to be made as to where and when to make the next round of commitments; we recommend this decision is taken once the outcome of the consultation is known, as that will inform on what is possible.

Targeted Return (including Ruffer)

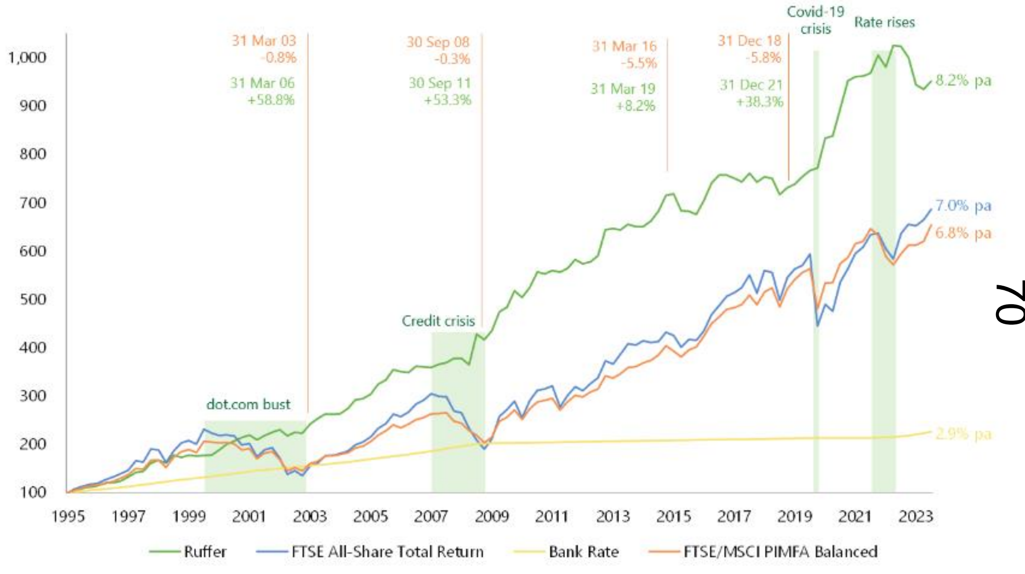
Overview:

- Over 2023 and the first half of 2024, the Fund made strategic adjustments to their portfolio by divesting from Pictet and Aspect funds, reallocating the proceeds into Ruffer and Fulcrum funds to meet the 5% target allocations. As at June 2024, the allocations are broadly in line with targets.

Ruffer:

- Ruffer has significantly underperformed relative to its cash plus benchmark over recent periods. Underperformance is largely down to its performance in 2023, when it failed to meet its objectives above.
- The fund entered the year cautiously, expecting a recession and tighter liquidity, but when neither materialised, its protective strategies ultimately weighed heavily on performance. Although some gains were made in growth assets such as equities, oil, and copper, they failed to offset the costs of these protections. Furthermore, given its cautious stance, the fund held minimal exposure to the large US tech stocks that drove much of the market rally, while its focus on China's post-pandemic reopening underperformed expectations. In summary, the growth side of the portfolio fell short of expectations and could not offset the cost of protection as it had in previous years.
- While Ruffer's performance in 2023 fell short of its objectives, if we take a step back and look at the long-term picture, the Ruffer Fund has a proven track record as a valuable diversifier within the portfolio. In particular, prior to its place in the portfolio it has a track record of holding up well in market downturns (see opposite), which is part of the rationale for holding.

Chart 1 – Ruffer's Performance During Major Market Crises



Source: Ruffer

Recommendation: No action for the time being

- Given the Fund's long-term investment horizon, the outcome of recent modelling work and the addition of Fulcrum (a complementary Targeted Return manager), we remain comfortable with Ruffer's role within the overall strategy.
- We recommend the next review for the Target Return portfolio (including Ruffer) takes place in 2026, 3 years after the last review (April 2023).

Global Credit: Public Debt

Underweight allocation

- Following the 2024 strategy review, the Committee agreed to increase the MAC allocation to achieve the target weight of 9%, funded by disinvestments from listed equities/targeted return and the LGPSC standalone Emerging Market Debt fund in a phased manner over 2024.
- This has been part-implemented, however the implementation has been paused temporarily while the Pool consider changes to the underlying fund manager line-up. As a result, the allocation to this asset class currently remains 2.7% below target.

Our Views

- Our view of MAC as an asset class has not diminished. We believe there is long-term appeal in the class, particularly in improving portfolio diversification and income potential. Continued use of the Pool product also demonstrates support of pooling.
- We recommend closely monitoring the fund's performance post-restructure to ensure it remains aligned with its objectives and adapts to evolving market conditions.

Tactical considerations

- From a more tactical perspective, we currently slightly favour equities over high-yield bonds (owing to presently low credit spreads) and as such, given the existing equity overweight, we would feel comfortable retaining the MAC underweight in the interim. We discussed the equity overweight earlier.

Performance

- The 3-year performance has been below benchmark, primarily driven by the sharp yield increase in 2022, which made the short-term cash target difficult to achieve. Given the structural risks inherent in the strategy - particularly its exposure to interest rate and spread duration - some level of underperformance was inevitable.
- Comparing the current underlying managers, Western Asset Management (WAM) has underperformed by more than Columbia Threadneedle (CTI). Both managers adopted a cautious stance, heavily investing in high-quality, low-yielding assets, which proved to be a drag on returns in a rising rate environment.

Recommendation: Continue current approach of pausing allocations subject to future review

- We are supportive of the decision to pause further investments, until the Pool reviews the managers used.
- We recommend that a light touch review is carried out in 2025 once the changes have been agreed, to ensure that they have not led to material changes in approach or risk / return profile of the fund. This can be carried out whilst implementation is ongoing at the Pool.

Infrastructure and Property

Infrastructure (incl. timberland)

Recap of Infrastructure Review

- In July 2024, the Fund undertook a review of its Infrastructure assets, concluding that the underweight should be closed in the following way:
  - A £300m commitment to the LGPSC Core / Core Plus Fund.
  - A £90m commitment to the LGPSC Value Add Fund.
  - Both of these to be phased in over 3 years and subject to satisfactory progress in several areas.
  - A smaller amount to be invested in timberland (later concluded that this should be a £25m additional commitment to Stafford's Continuation Fund).

Infrastructure Performance Outliers:

- **Infracapital:** Performance trailing benchmark since inception in 2017, following downward re-valuations of multiple holdings. As a result of a vote against continuation, the remaining assets are expected to be sold before end 2026.
- **LGPS Core/Core +:** Performance has been well below target over the short period since inception, though a CPI target has made for a tough comparator given recent high inflation and the fact the fund is still building its allocation.
- **Quinbrook**: Performance has been negative over the short period since inception. However, this is to be expected in the early years of value-add investments, which typically involve high upfront costs.

Recommendation: Maintain the current approach to infrastructure

- The recent review and new commitments will move the allocations towards targets with which we are comfortable.
- Overall, we remain content with the current managers and targets, including the comfort check (prior to further commitments) agreed as part of the 2024 infrastructure review.

Property

Underweight to Target:

- Following the last property review in 2022, the decision was made to:
  - Commit to the LGPSC Direct Property Fund.
  - Approve the appointment of LGPSC (DTZ) to manage the existing direct portfolio.
  - Retain LaSalle as indirect property manager.
- The Fund still has an underweight to property. At the 2023 SAA, we recommended deferring the closure of the underweight.

Is now the time to close the underweight?

- We have seen some improvement in several of the fundamental indicators for UK commercial property.
- However these improvements come off a particularly low base. Transaction volumes still remain low relative to recent history, and selling pressure remains. Further rationale can be found overleaf.

Recommendation:
Reduce the property weighting; review the sub-allocation in 2025

- Rather than continued deferment of closing the underweight, we recommend reducing the strategic weight to closer to the current weight, at 7.5%. formalising the current weighting of c7% as the strategic weight.
- It has been close to 3 years since the last property review, and the market has changed considerably over recent years. We recommend a review to consider the suitability of the sub-allocations and managers in place. This would take into account relative views of different parts of the property market (which are very divergent) as well as pooling requirements / availability of solutions via the Pool.

Property: market views

Fundamentals:

- We have seen some improvement in several of the fundamental indicators for UK commercial property. The latest Royal Institute of Chartered Surveyors survey, which provides a quarterly guide to trends in commercial property investment / occupier markets, highlights improvement in occupier demand, rent expectations, and capital value expectations.
- At the same time, real rental growth has now been positive for 7 months. While vacancies remain elevated, particularly in the office sector, some of this may reflect planned refurbishment works to improve environmental performance. Capital value declines have moderated, albeit these were particularly severe in the 2 years following the gilt crisis (September 2022).

Valuations:

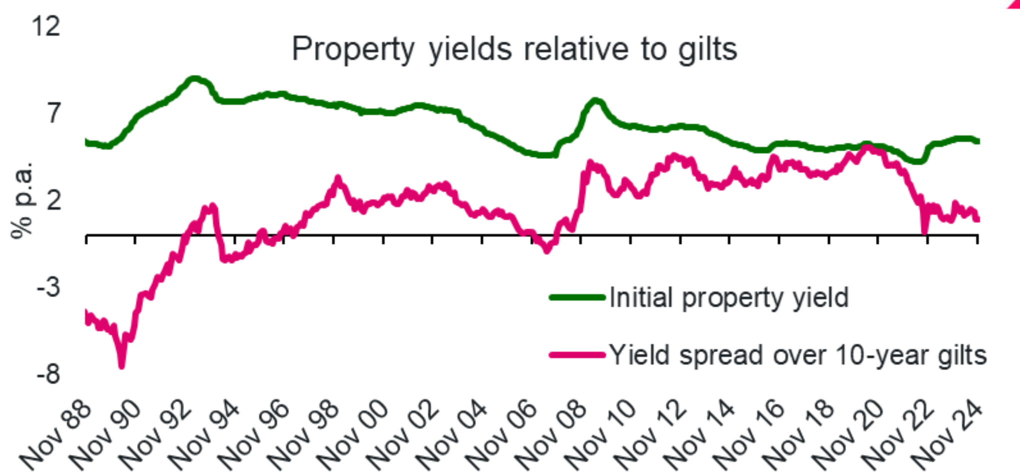
- Yields remain close to as high as they have been in 10-years. However, this should be taken in the context of the rising yield environment.
- Relative to UK equities, UK property's yield premium has returned to levels we would consider neutral. However, relative to gilts, the premium remains low (see chart top right opposite).

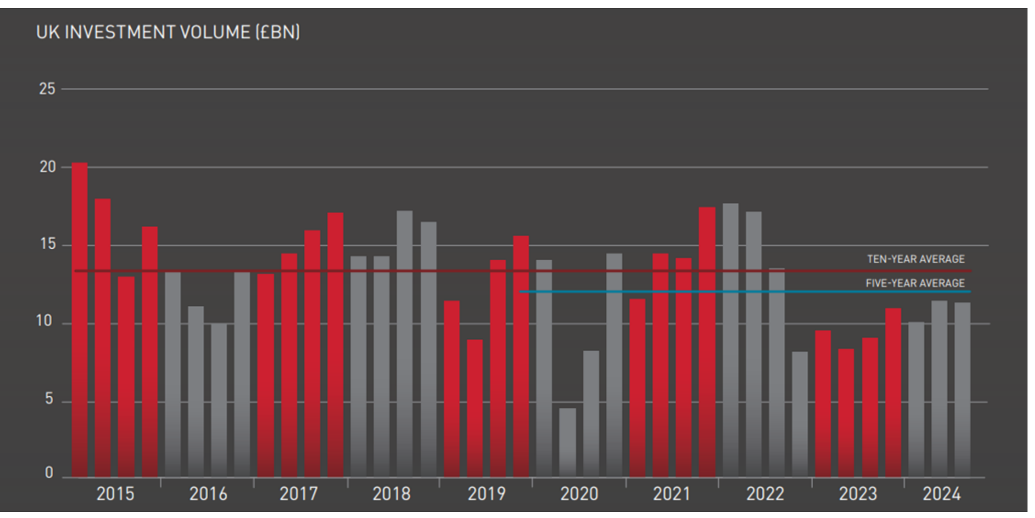
Technicals:

- The technical landscape has been challenging over the last 2 years. Investment volumes have been improving but remain below the 5- and 10-year averages (see chart bottom right opposite), both weighed down by the pandemic and the lack of activity over the last 2 years.
- Redemption pressure remains on several UK pooled funds, so selling pressure will continue into next year. The volume of secondary market transactions also remains low, albeit more deals are being negotiated and discounts are not as large.

Recommendations: Strategic asset allocation (Property)

- Whilst the property landscape has seen some improvement in recent months, in our view the outlook remains challenging, particularly in certain sectors.





Other areas

Private debt

Private debt

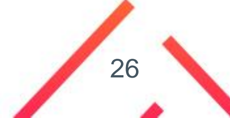
- The Fund's allocation to private debt remains underweight relative to its target.
- A review of the fund's RST component was completed over 2024, which is part of the broader private debt allocation, where a further £40m commitment to RST was agreed.
- Additional commitments are still required to address the remaining underweight within the private debt allocation.

Recommendation: Review in 2025

- **This topic is covered later in this paper.**
- We consider the appropriateness and suitability of private debt in the overall portfolio and look at current market opportunities.

Note: Asset class recommendations and the Ongoing Consultation

- Given the nature of the Ongoing Consultation, it is inappropriate to recommend that new allocations to off-pool investments are considered until the outcome of the consultation is known.
- The reviews recommended in this section would consider investment approaches (rather than specific funds) that may be beneficial to the Fund's approach to investment. The intention is that the material would be relevant and helpful in discussions with the Pool in the event that the Ongoing Consultation proposals remain similar to those proposed by the Government.



Private debt: Continued suitability and recommendations

Should the Fund maintain an allocation to private debt as an asset class?

Yes. This asset class allows the Fund to benefit from illiquidity premia and enhance credit portfolio returns. Also, the allocation provides diversification from the Fund's other investments, strong expected returns with an element of inflation protection through contractual floating rate cashflow income, as well as an illiquidity premium that is not captured with the remainder of the Fund's credit assets.

Is the sizing of the Fund's holdings appropriate?

Stubbornly high inflation has caused a higher-for-longer interest rate environment over recent years, meaning floating rate fixed income has seen an increase in returns. Also, inflation has started to ease throughout 2024, as the market re-adjusts to expectations of the timing of possible interest rate cuts. This is likely to boost transactional activity across private markets, where M&A has been muted. This cost easing effect should positively impact borrowers too.

We feel the prospects for the asset class therefore support a meaningful allocation. However we think there may be a case for reducing the strategic allocation to the higher risk/return elements of the allocation (which form a modest part of the overall private debt portfolio).

Are there new opportunities within private debt that can be considered?

There are new developments that are attractive, yes. Private debt as an asset class is benefitting from the reduced role for banks in the broader economy, meaning that this is a rich time for potentially attractive new opportunities. We provide an overview of recent market developments on the following pages, including detail of new (to the Fund) classes of private debt that we believe would enhance the Fund's private debt portfolio.

Importantly, however, it may be desirable to make use of the Pool's offering and forgo some of the opportunities detailed on the coming pages. Such an approach would be possible, potentially subject to some refinements to the overall allocation of the Fund (e.g. depending on what is available via the Pool going forward). We suggest that such an approach is investigated by the Fund in 2025.

Private debt: Recommendations

- The current strategic allocation to private debt contains sub-allocations to the following classes:
  - Senior corporate debt: 65%
  - Real asset-linked debt : 20%
  - Special situations debt: 10%
  - Distressed debt: 5%
- Though all the above classes are typically found in well diversified private debt portfolios, only the first two are currently available to invest in further via the Pool.
- Subject to extensions, the Fund will no longer have exposure to non-Pool private debt funds beyond 2030. This would reduce distressed debt and special situations debt allocations to close to zero.
- Further, the Pool is revisiting its approach to private debt more generally and currently has no plans to launch a new vintage of the High Return Private Debt Fund (in which the Fund currently invests), although this could change should sufficient partner fund demand materialise.
- **Whilst we support an allocation to private debt, we recommend modestly reducing the strategic allocation.** The strong funding position, and current lack of availability of higher returning private debt options via the Pool, lend argument to reducing the strategic allocation to these higher risk/return elements, whilst new opportunities within private debt warrant some consideration in order to enhance diversification of returns. However a review in 2025 (taking into account the latest position on the Ongoing Consultation and fund availability from the Pool) would determine the appropriate sub-allocations.
- Given the prevailing environment, the Fund could consider putting in place a sub-allocation that is wholly implementable via the Pool. Note it would be possible to include ranges within the target allocation, enabling some flexibility to take advantage of any attractive investment opportunities that arise. This could have risk and return implications, which would be considered in the 2025 review.
- **We propose a review of private debt sub-allocations takes place in 2025.**

Private Debt: Market Developments

- The sub-classes below are relevant to the Fund, given the current investment approach.

Direct corporate lending
(Current investment, available via the Pool)

- Macro uncertainty and wider market volatility contributed to the broadly syndicated loan (BSL) market shutting down over 2022/23, but the direct lending market was still open for new deals. Spreads widened significantly over 2023, partly due to constrained capital supply.
- Early 2024, the European BSL market showed signs of normalisation in issuance, in part due to the robust Collateralised Loan Obligation demand and expectations of rate cuts. Some deals previously done by direct lenders have been refinanced by the public market. This competition between the private and public market is felt mainly with upper mid-market and large-cap borrowers.
- Higher debt service burdens (incl. other higher costs relating to inflation, sometimes doubled with softer revenues) has impacted performance of more levered assets; there has been more differentiated performance of funds, although stress has not been as bad as previously thought.
- Margins have come down toward historical averages and we see leverage starting to tick back up on the assumption of lower rates in the future.

Infrastructure debt
(Current investment, available via the Pool)

- Infrastructure debt continues to benefit from high demand, particularly for cross-over or sub-investment grade rated assets. Assets pertaining to the energy transition remain in high demand.
- The higher interest rate environment has seen the asset class become a more compelling opportunity on a relative value basis, both in comparison to core infrastructure and other private debt (where infrastructure debt has traditionally lagged returns). Infrastructure assets have generally demonstrated resilient valuations, unlike property.

Real estate debt
(Current investment, available via the Pool)

- 2023 was a troubled year for transaction and financing volumes in the UK real estate market. Pricing, demand, and rents were polarised to specific sectors as well as those assets with attractive ESG credentials, a trend which has continued into 2024.
- Transactional activity (and valuation) may be positively impacted as interest rates come down and inflation settles. In the UK, whole loans are more attractive in terms of deployment opportunities and overall returns.

Opportunistic credit
(Current investment, not currently available via the Pool)

- Despite continued low corporate default rates relative to history, there are pockets of stress in the market. Challenges relate to cashflows where companies are paying floating rate debt and where companies are approaching refinancings.
- There is an increased opportunity for lenders to provide bespoke solutions for companies requiring liquidity or refinancing, although this is widely seen to result in 'creditor-on-creditor violence' causing losses for existing debt holders.

Regulatory Capital Relief
(Current investment, not currently available via the Pool)

- The RegCap market continues to be active, mostly in Europe but with increased issuance in the US. European banks are exploring more programmatic issuance with different collateral types.
- With the regulatory changes, the RegCap market has seen new entrants, particularly those transacting on a tactical basis and in the US, translating to tighter spreads in the more widely syndicated deals.

New Opportunities in Private Debt

- **Asset backed lending (ABL)** provides diversification to the corporate risk of a direct lending portfolio. ABL is financing secured on a pool of assets, very similar to publicly traded Asset Backed Securities (ABS). The debt is underwritten on the quality of the asset collateral rather than the earnings (EBITDA) of a corporate entity.
- Our researchers believe there are interesting opportunities across areas of ABL. We list examples below. Note none of these approaches are available via the Pool currently, although incorporating these classes into future vintages is something that could be explored with LGPSC.

Specialty finance

Fund financing

- Fund finance relates to GPs of private markets funds using extra finance ranging from leverage, subscription lines to NAV lending.
- Subscription line facilities are used to deploy capital or pay expenses without calling capital frequently from LPs. Secured by LP commitments. Banks are most common providers.
- NAV lending loans are secured on a strategy's underlying portfolio (i.e. the NAV). Typically have a low loan-to-value, and the lender has recourse to the underlying portfolio assets in the event of a default.
- Typically, NAV lending is used to accelerate distributions to LPs or invest after the investment period is over.

Royalties

- A royalty is ownership over a specific asset (e.g. intellectual property and patents), which receives cashflow when a third party uses the asset.
- May involve lending against a counterparty's royalties or buying royalties to receive the contractual cashflows directly.
- Present across a variety of sectors, e.g. pharmaceuticals or music.
  - Owning a music royalty entitles the holder to receive a percentage of the revenue generated each time a song is played.
  - Owning a pharmaceutical patent entitles the holder to receive a percentage of the revenue generated each time a drug is sold by a pharmaceutical company.

Working Capital Finance

- Working capital is necessary for businesses to operate day-to-day to meet ongoing expenses, such as inventory or salaries.
- Working capital can be constrained by unexpected expenses or delays in receiving payments from customers.
- Finance is available to support working capital needs, most often secured on invoices (receivables) or inventory.
- Lots of underlying types but typically bridging competing interests between buyer and seller – i.e. a buyer wants to pay as late as possible, and a seller wants to be paid as early as possible.

Assessment of Current Strategic Mix

Target allocation by market segment

Market segment	Target (%)	Range (%)	Current (%)
Senior corporate debt **(Available via LGPSC)**	65	40-90	67.2
Real asset-linked debt **(Available via LGPSC)**	20	10-30	10.7
Special situations debt **(Not Currently Available via LGPSC)**	10	0-20	12.9
Distressed debt **(Not Available via LGPSC)**	5	0-10	9.2

Target allocation by geographic region

Region	Target (%)	Range (%)
Europe	45	30-60
North America	45	30-60
Developed Asia & RoW	10	0-20

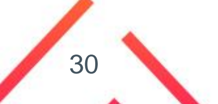
- The tables above show the target split across market segments and geographic regions we believe are most suitable for an LGPS fund. The Fund has a range of market segment exposure with the largest allocation to senior corporate debt.
- **It is not possible to allocate new money in the proportions set out in the table above using only investments offered by the Pool. We recommend that the possibility of adjusting the allocations above to be implementable via the Pool be considered in 2025.**

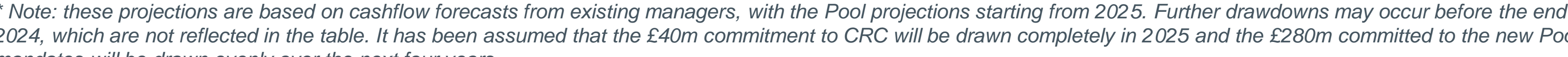
Private Debt – target allocation considerations

- As at 30 June 2024, the total estimated allocation to private debt was c.7.9% of the total Fund's assets - c.2.6% below target. Some commitments have already been made to address this:
    - c. £180m remains committed but undrawn – the majority of which (c.£163m) is within the LGPS Central 2021 Private Debt mandates. This is forecast to be drawn over the period to the end of 2028.
    - Fund has committed a further £280m across two new LGPS Central mandates - £180m to the new Central Direct Lending fund and £100m to the new Central Real Assets fund.
- If no further commitments are made beyond those stated above, the underweight position is expected to persist in the near term, as shown in the table below*:

Year	2024 H2	2025	2026	2027
Capital drawn (1)	-	-192.1	-108.3	-82.7
Distribution (2)	56.2	126.0	98.6	93.9
Net CF to Fund (£m) (1+2)	56.2	-66.1	-9.8	11.2
Year-end PD Shortfall (£m)	224.6	158.5	148.7	159.9

- **We recommend that the target allocation to private debt is modestly reduced, to 9.5%.**
- **We recommend a review of the make-up of the private debt allocation takes place in 2025, considering the characteristics of the Pool private debt options (a high-level review of which should form part of the review).**
- **In particular, modifying the sub allocations to reduce target allocations to special situations and distressed debt could be considered, subject to consideration of impact on risk and return.**

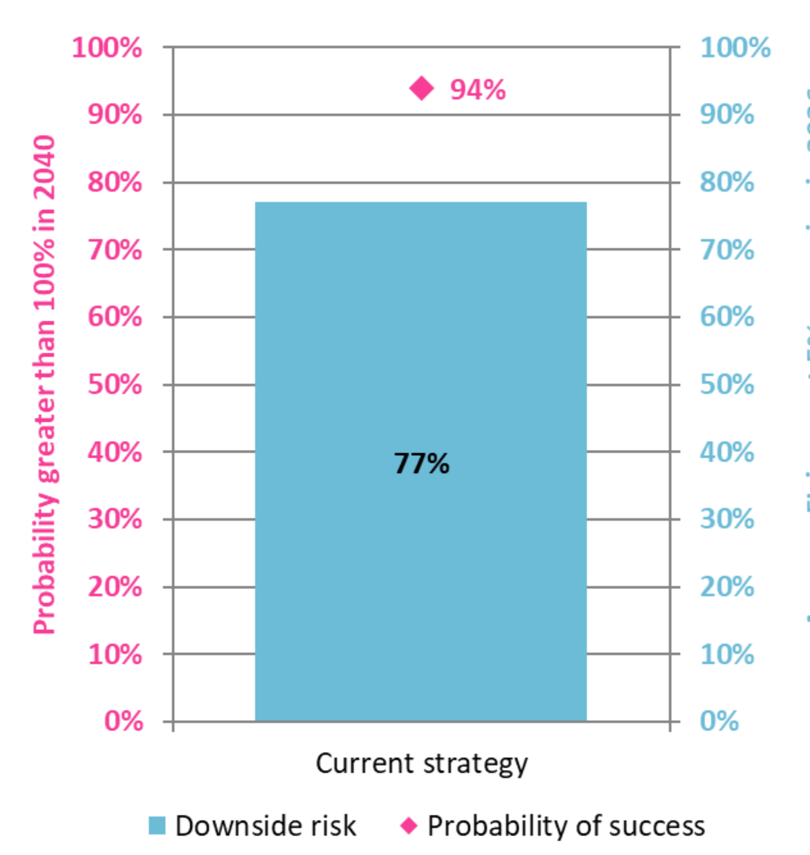




** Note: these projections are based on cashflow forecasts from existing managers, with the Pool projections starting from 2025. Further drawdowns may occur before the end of 2024, which are not reflected in the table. It has been assumed that the £40m commitment to CRC will be drawn completely in 2025 and the £280m committed to the new Pool mandates will be drawn evenly over the next four years.*

Refresher: 2024 Protection Assets review

- Our Protection Assets review of April 2024* used our Asset-Liability Modelling (ALM) software to provide an updated view on:
  - Probability of Success (the chance of being more than fully funded in 2040).
  - Downside Risk (average of worst 5% of outcomes in 2026).
- **Key metric 1: Probability of success**
  - The results indicate that the current strategy gives the Fund a **c.94% chance of remaining fully funded in 2040**.
  - **This is a very strong position and materially above the 75% expectation set in 2022 (noting this may be revisited as part of the 2025 valuation).**
- **Key metric 2: Downside Risk**
  - The average of the worst 5% of scenarios suggests the **funding level could fall to c.77% in 2026 under an extreme downside scenario.**
  - The Fund is exposed to downside risk and volatility, and particularly so in the shorter term. **The Fund has made tremendous gains over recent years and there is a strong case to investigate methods to avoid the funding level falling to less than 100% in adverse conditions.**
- Our Protection Assets review did not give a compelling argument for investing more in traditional protection assets, e.g. bonds. **The review did however highlight that the Fund is particularly exposed to a sharp fall in the value of listed equity investments, due to the high proportion of equity and equity-like (i.e. economically sensitive) investments held relative to other more defensive classes, together with the tendency of the class to be highly volatile.**
- There are ways in which to better protect the Fund against downside equity risk, and we investigate these ‘tail risk protection’ options further here.



** Output repeated from our April 2024 Protection Assets review. Please see this paper for further information and additional detail on our modelling approach.*

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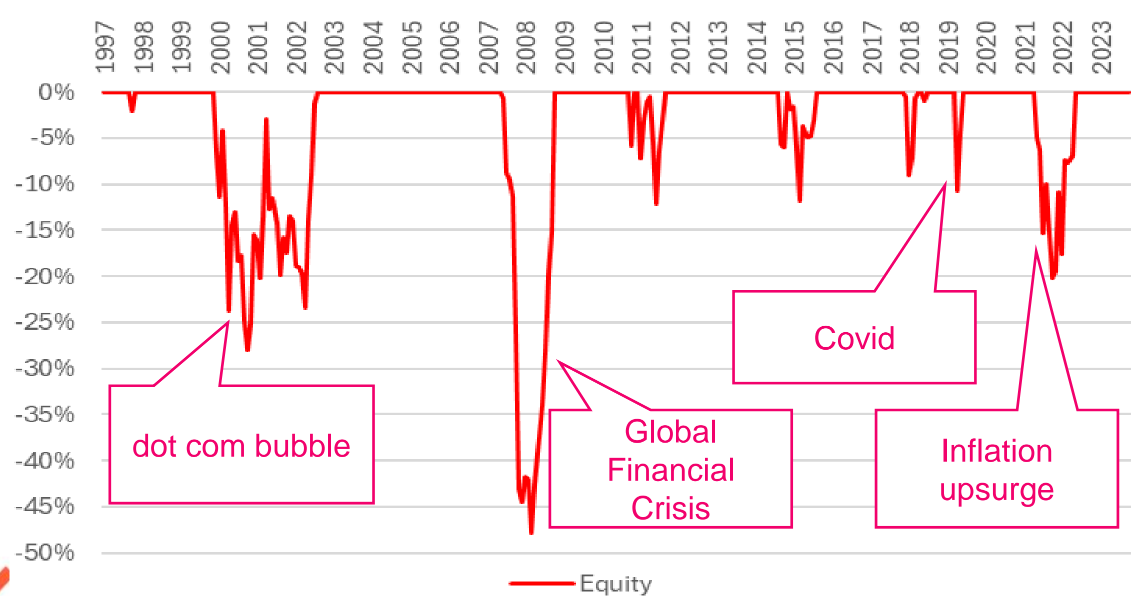
Tail risks: Why consider market shocks?

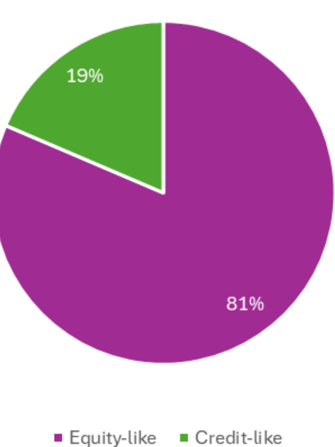
What defines a 'tail risk' event and how often do they occur?

- There is no single definition; it is dependent on the investor and their objectives. However, here we are considering particularly large falls in equity markets.
- Examples of sharp declines during extreme market stress are shown below. In some cases they are very short-lived (e.g. Covid) and in others it can take several years and there can be no certainty as to when market levels will return to previous levels.
- Were such a downturn to occur in the coming years, much of the significant funding level improvement enjoyed over recent years would be undone. The Fund may wish to investigate approaches that would dampen such an eventuality.



Analysis of the impact of a market shock (high-level, illustrative)

- For the purposes of this high-level analysis, we have simplified the portfolio into '**equity-like**' and '**credit-like**' components.
- We consider 'e**quity-like**' includes all the Growth investments, plus property, infrastructure and higher-risk private debt (special situations and distressed). The remainder is treated as '**credit-like**'.
- This is a significant simplification of the Fund's actual investment approach but we think this straightforward simplification may be helpful in illustrating how much of the portfolio may be exposed in a sharp economic downturn.



- We have determined that around 80% of the portfolio could be considered 'equity-like'.
- Whilst these exposures are well diversified, it does help to highlight that a material amount of the portfolio could suffer in a downturn.

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Tail risks: Why consider market shocks?

What size of shock could we see?

- Every market shock is different. However, the most common type of market shock involves a significant fall in equity and corporate bond markets due to a slump in economic conditions. Further, there is often a 'flight to quality' towards government bond investments, which leads to a fall in the risk-free rate (government bond) rate and an increase in liabilities. It's worth noting that this doesn't always happen, e.g. equities fell while the risk-free rate rose in 2022, due to the impact of strongly rising inflation over this period (Russia's invasion of Ukraine being a significant contributor to this owing to disruption on supply chains and sharp increases in commodities such as oil, gas and wheat).

- Nonetheless, for the purpose of this high-level analysis, we have derived the three deterministic 'shock' scenarios by below considering how key markets may act in such circumstances:

Scenario	Chance	Equities	Credit	Liabilities
Mild	1 in 4	-15%	-5%	+5%
Moderate	1 in 20	-22%	-7%	+7%
Extreme	1 in 100	-32%	-10%	+9%

- **We consider equity market shocks of between 15% and 35% to be of particular relevance to the Fund given major market drawdowns experienced over the last quarter of a century.**

- Note that the above scenarios build on the portfolio composition outlined on the last page. Also note that these subjective stress scenarios are broadly consistent with output from our ALM software run last year to gauge size and probability of shocks.

Impact on contribution rates

- We have considered the impact of different sizes of asset shock (in isolation) on the likelihood of needing to increase contribution rates by the 2028 valuation*.
- We have ignored the possibility of reductions in contributions resulting from the 2025 valuation, for simplicity.

Immediate asset shock:	Chance of needing to increase contributions at 2028 valuation*:
0%	3%
-10%	7%
-20%	16%
-30%	30%

- **In short, a market shock would increase the likelihood that contributions would need to be increased; the larger the shock the greater the chance that contributions would need to go up. This is to be expected but the above probabilities help to add some likelihoods to given drawdowns.**

- There is some subjectivity as to the probability of increasing contributions which would be of concern. In our view, an equity market fall of 20% or more might reasonably be considered problematic.

** Defined as the chance that the current contribution rate and investment strategy could lead to the funding criteria not being met, which is currently a 75% chance of being fully funded in 2040.*

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Understanding Tail Risk

Downside protection: What options have we considered?

	Equity Portfolio Insurance	US Treasuries	Gold	Volatility derivatives
What is it?	Assets which pay out under pre-agreed conditions e.g. equity market falls of a given magnitude	Bonds issued by the US government	Exposure to movements in the price of a precious metal	Assets which move in line with an implied volatility index
How does it protect against tail risk?	Direct protection of the equity portfolio	'Safe haven' investment i.e. usually more demand in a market downturn Diversifier away from equities	'Safe haven' investment i.e. usually more demand in a market downturn Strong diversifier away from current assets	Index rises sharply during times of perceived market stress Often equity values fall when price volatility is high, but not always
Additional comments	More complex (makes use of derivatives) Used by numerous LGPS Funds currently, and historically **See coming slides for further detail**	Usually associated with a low long term expected return Doesn't always protect against equity falls **We do not provide further detail of this well understood class in this paper**	Uncommon amongst professional investors and the LGPS Doesn't always protect against equity falls. **See coming slides for further detail**	More complex (makes use of derivatives) We are not aware of historic use within the LGPS (although limited use in the private sector) **See coming slides for further detail**

- Note that we have provided introductions and preliminary analysis including allocations to each of the above classes in this report. This is to help determine which (if any) approaches merit additional consideration in 2025 rather than explicit new class recommendations.

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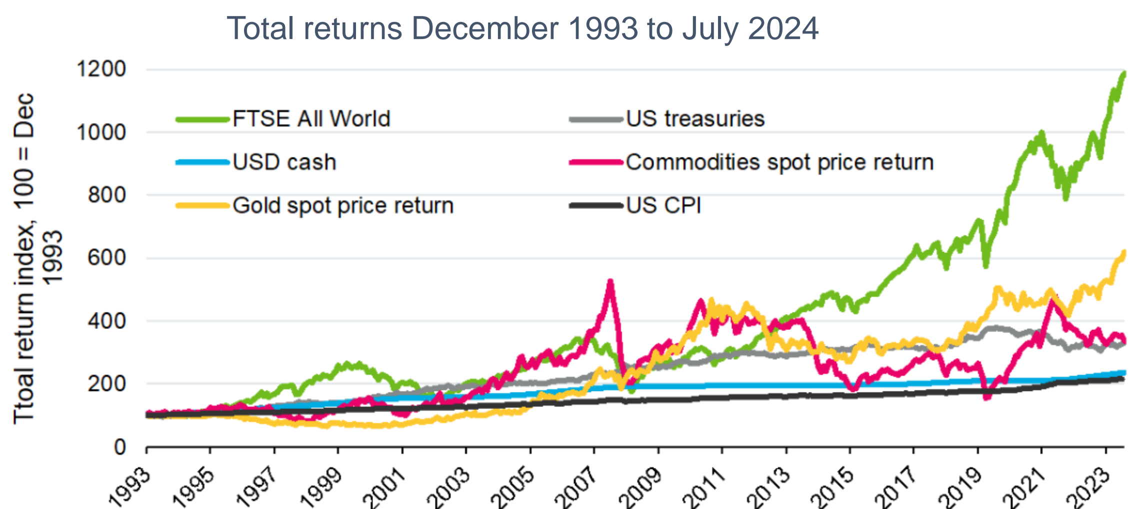
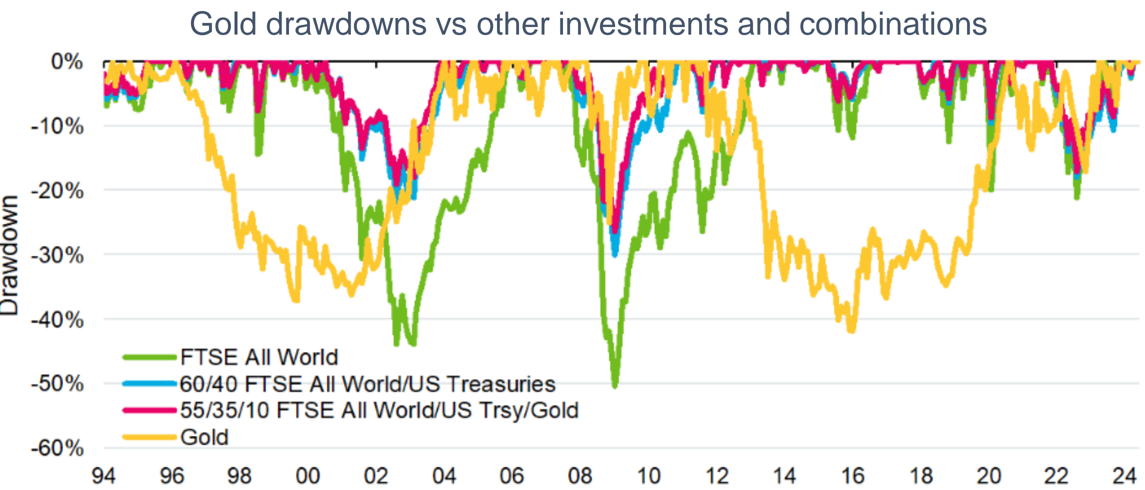
Introduction: Gold as a defensive asset class





How could Gold help?

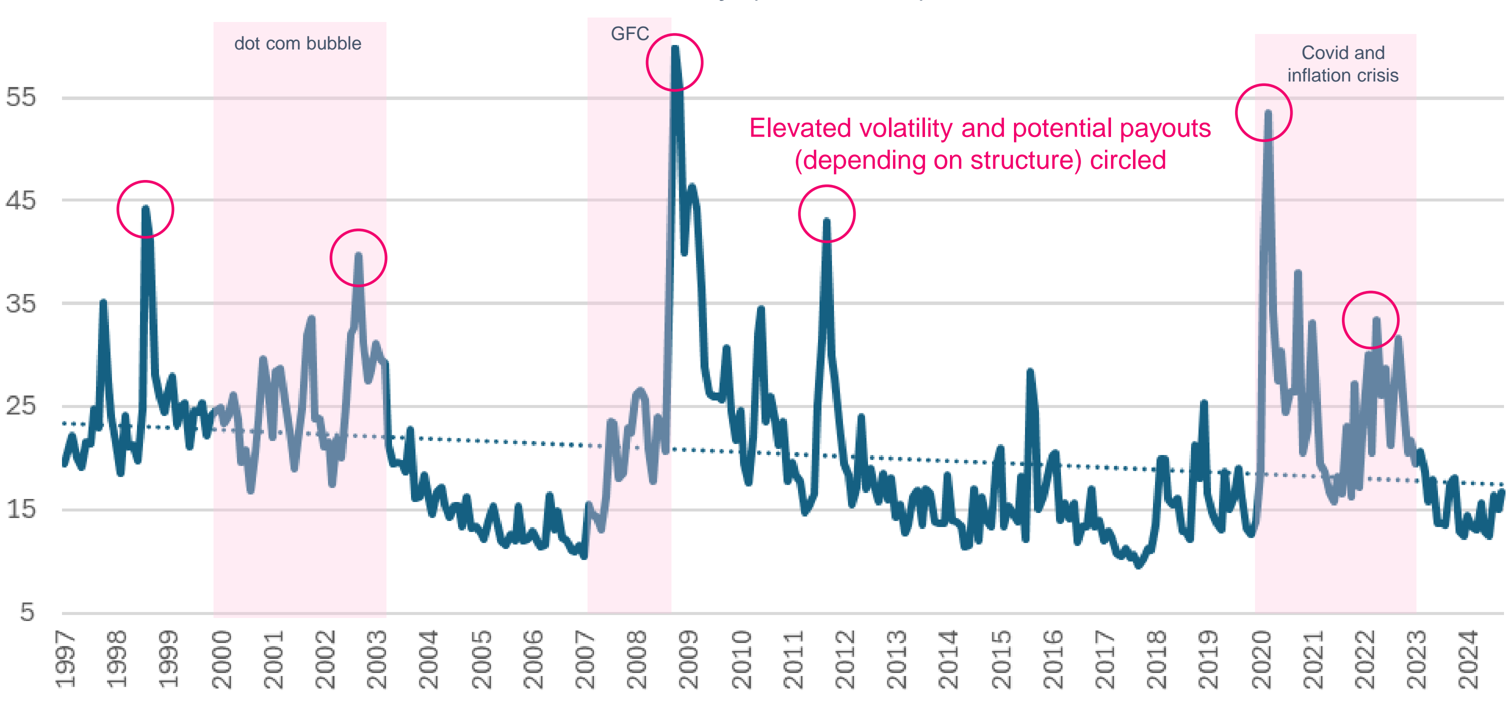
- Gold has scope to provide positive real returns, diversification, and liquidity as a complement to equities and bonds in a well-diversified long-term asset allocation.
- Given its scarcity value and diverse sources of demand, such as for jewellery, investment, central bank reserves, and technology components, gold can (but does not always) perform well in times of heightened economic and geopolitical uncertainty, while also providing long-term returns.
- However, gold provides no coupon or dividend, with returns determined solely by changes in the spot price and hence supply and demand for the asset. This means there is an opportunity cost, in the form of the return foregone on other assets, associated with investing in gold.

Is gold appropriate for the Fund?

- The class does have some defensive characteristics but has also experienced long periods of flat or negative performance, as shown in the charts on this page.
- **We have included this class to ensure that this potentially plausible option is investigated. However, our analysis suggests that the exposure to gold required to (attempt to) provide material protection against extreme market falls would be significant e.g. exposures of over £1.2bn to the class (i.e. >60% of equity portfolio)*.**
- **We recommend that exposure to gold as an asset class is discounted.**

** Based on historical backtesting over the period since 1997, in order to protect against >20% drawdowns over this period.*

Introduction: What are volatility derivatives?



What are volatility derivatives and how can they help?

- There are various different types of instruments that pay out when market implied volatility is elevated. This is related to the price at which downside protection via derivatives can be purchased.
- Spikes in implied volatility (and payoffs from such strategies) typically occur in times of market stress, and usually when markets are falling. As such, volatility derivative strategies can be used to attempt to protect against market falls, i.e. by receiving offsetting payments from contracts.
- One approach is a rolling program whereby so-called volatility futures are purchased on a rolling basis, e.g. monthly. Other types of approach are also available, e.g. volatility options.

Are volatility derivatives appropriate for the Fund?

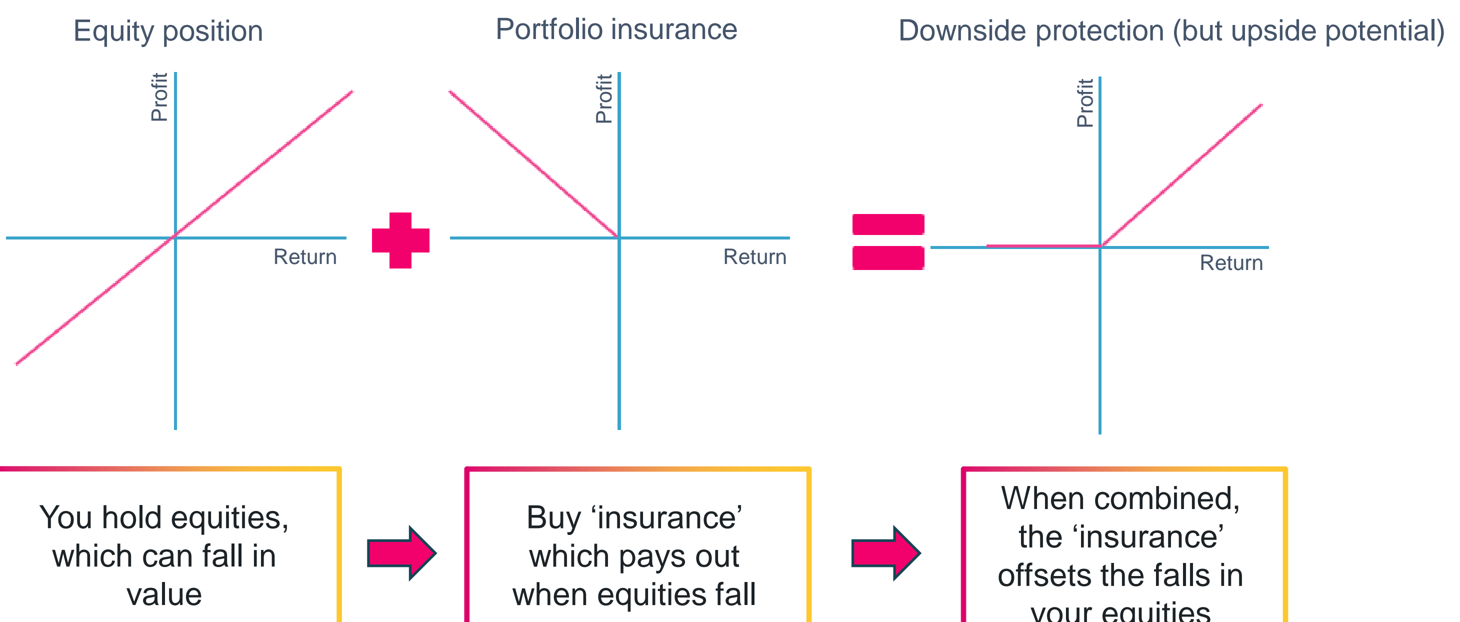
- We have investigated this class as it's one of the obvious ways to protect against downside risk.
- Such an approach is used in the fund management industry, sometimes by private pension schemes directly but we are not aware of its use within the LGPS.
- The strategy could be considered more difficult to understand and more complex to implement than some other approaches.
- **We have included this class to ensure that this potentially plausible option is investigated. However, we consider the potential benefits of the approach to not outweigh its downsides and complexities.**
- **We recommend that the volatility derivatives approach is discounted.**

Introduction: What is Equity Portfolio Insurance?

- Equity protection is a plausible strategy that has been adopted recently by several LGPS funds and has been used by numerous LGPS funds over recent times. We introduce the high-level features of the class here.

Portfolio Insurance:

- An investment that pays out when equities fall by more than a pre-determined amount, in exchange for a premium.
- When held with existing equity, portfolio insurance can serve to offset market losses.
- The cost of the premium needs to be considered (reduced return but protection against severe losses).



How do you obtain this insurance?

- Purchase derivative contracts and hold cash as collateral.
- Very large and liquid market.
- Derivatives very commonly used by pension schemes, investment funds.
- On-going premiums to cover the protection obtained.
- Much like house insurance, we suggest payment of a regular 'premium' e.g. annually (rather than e.g. capping returns).
- However, also like insurance, the premium can vary, so we suggest the cost is always considered before buying (e.g. annually).

Important note

- We provide initial information and high-level modelling calculations in this paper.
- This class of investment cannot be properly considered without suitable training and more detailed analysis and scenario testing.
- **We suggest this approach is considered as part of wider investigations into the overweight equity position in 2025 (and taking into account the developments of the Ongoing Consultation).**

How do the payoffs look from Equity Portfolio Insurance?

- Equity portfolio insurance operates with pre-defined payoffs, depending on how the relevant equity markets perform over the period.
- Here we show example payoffs for a simple structure by way of illustration, taken out over 1 year, and providing protection against equity falls of greater than 20% in exchange for a premium of 2.5% of amount of equity protected.

Equity performance	Portfolio Insurance payoff	Premium cost*	Overall performance	Relative performance (vs equities)
+40%	0%	-1.3%	+38.7%	**-1.3%**
+20%	0%	-1.3%	+18.7%	**-1.3%**
0%	0%	-1.3%	-1.3%	**-1.3%**
-20%	0%	-1.3%	-21.3%	**-1.3%**
-40%	+20%	-1.3%	-21.3%	**+18.7%**

- As can be seen, over a 1-year period this kind of structure would be expected to be a relatively modest drag on performance, unless we saw a large fall in equities over the year (which was sustained to maturity of the insurance). This is a desired characteristic, and again similar to the house insurance analogy used earlier.
- We also note that the payoffs are contractual and directly linked to equity performance, and are therefore certain in nature (unlike other types of tail risk protection we consider later).

Equity Portfolio Insurance is likely to be a relatively modest drag on portfolio performance, unless we see an extreme risk event, when it will pay out materially

** Using an indicative market price for such protection as at 30 November 2024, as supplied by an investment manager operating in this space. The actual premium would depend on market conditions at the date it is implemented.*

Longer-term performance: Equity + strategies

	Equities only	Equity + Portfolio insurance	Equity + 10Y US Treasuries	Equity + Gold	Equity + VIX futures
Proportion of equity portfolio moved to protection asset	-	1.5%*	10%	10%	10%
Whole period** outperformance vs equities p.a.	-	-0.2%	-0.2%	+0.1%	-1.6%
Whole period** volatility (monthly; annualised)	**15.7%**	13.4%	14.1%	14.5%	9.6%
Return / volatility	**0.51**	0.58	0.55	0.56	0.70
Largest 12m drawdown over whole period*	**-47.8% (Feb 2009)**	-36.6% (Feb 2009)	-42.2% (Oct 2022)	-43.5% (Feb 2009)	-32.0% (Feb 2009)

- Here we compare longer-term performance for such strategies, based on historic back-testing.
- **Note this approach is not ideal for Equity Portfolio Insurance as we recommend an informed ratification of the protection approach rather than systematically purchasing new insurance at any cost. The results are very sensitive to the assumptions used, and would be materially worse under certain alternative time periods.**
- We have capped the maximum proportion of the equity portfolio which is allocated to the US Treasuries, Gold and VIX futures strategy at 10%, as we expect allocations greater than that to be problematic.
- We also look to limit the Equity Portfolio Insurance premium we are willing to pay (to 2.5% of protection size, for protection against falls >20%) to reflect the fact that we would not wish to allocate material amounts of capital to protection strategies longer-term.
- Performance drag is satisfactory for all strategies except VIX futures. It is only marginally negative for Portfolio Insurance here, however we note this is highly sensitive to the assumptions made and the timeframes; in general we would expect a modest performance drag over longer periods.
- Overall volatility is reduced in all cases, materially so for VIX futures with the next best being Equity Portfolio Insurance.
- All reduce maximum drawdowns, albeit for US Treasuries and Gold this is relatively limited.
- Equity portfolio insurance doesn't reduce maximum drawdowns to 20%, as might be expected. This is because:
  - The full value of the protection is only received if a fall is sustained to maturity. The market value of the protection before maturity will reflect the possibility that markets could bounce back in the period left to maturity.
  - We have applied a cap to the price we are willing to pay for the protection.
  - There is a timing consideration, i.e. protection is rolled annually and when you buy it has an impact on when payoffs occur.

- *Capital is not allocated as such, so we state the average premium over the whole period. There is also the issue of collateral in certain situations which is not considered here but would be quantified in a 2025 review. For premium calculation we have used the VIX value as the implied volatility assumption; in practice the volatility implied in actual pricing is usually higher due to the 'volatility skew' effect which we have attempted to reflect by way of a loading to premiums of 0.5%.*
- ***Whole period is since Jan 1997 for all strategies except VIX futures, which are since March 2005, until Sept 2024. Note that equities is based on the FTSE All World Index ($), which returned 8.0% pa over this period.*

Key market drawdowns: Equity + strategies

Downside shock analysis: Discussion

- Earlier we identified that a material downturn in equity markets has the potential to harm the Fund's financial position. It is therefore useful to consider how such protection strategies would have performed during historic instances of such market shocks. Here we compare the performance of different strategies shown against specific sharp market downturns.
- For this particular analysis, we have assumed that protection against any falls (i.e. below 0% returns) is in place, to allow a fair comparison between strategy types over shorter time periods.
- This will lead to material premiums on the Equity Protection Insurance, but this is built into the returns shown. It is also built into the performance analysis on the previous page.
- US Treasuries and Gold have generally reacted positively to market downturns, however in both cases these strategies did not work in 2022. This demonstrates that these strategies are not certain to protect the Fund in a downturn.
- Equity Portfolio Insurance is harder to assess historically, due to needing to make assumptions about parameters such as timing of rolls, amount of protection put on, etc. Here we have assumed that the strategy is rolled annually at 31 March each year.
- However, in all cases (Covid withstanding, which was a very short-lived shock), the performance is better than the other strategies considered.
- Performance is not zero, however, as there is a need to pay the premium for protection.

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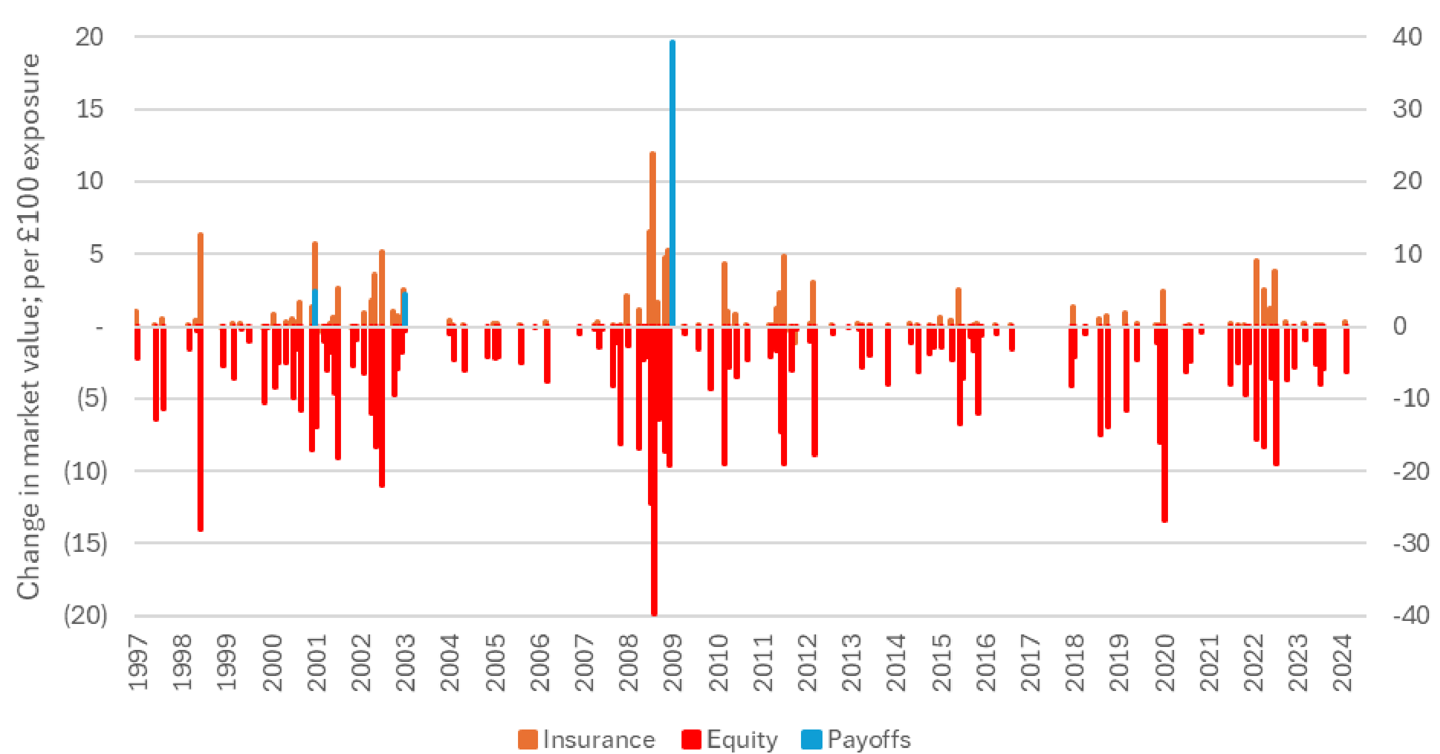
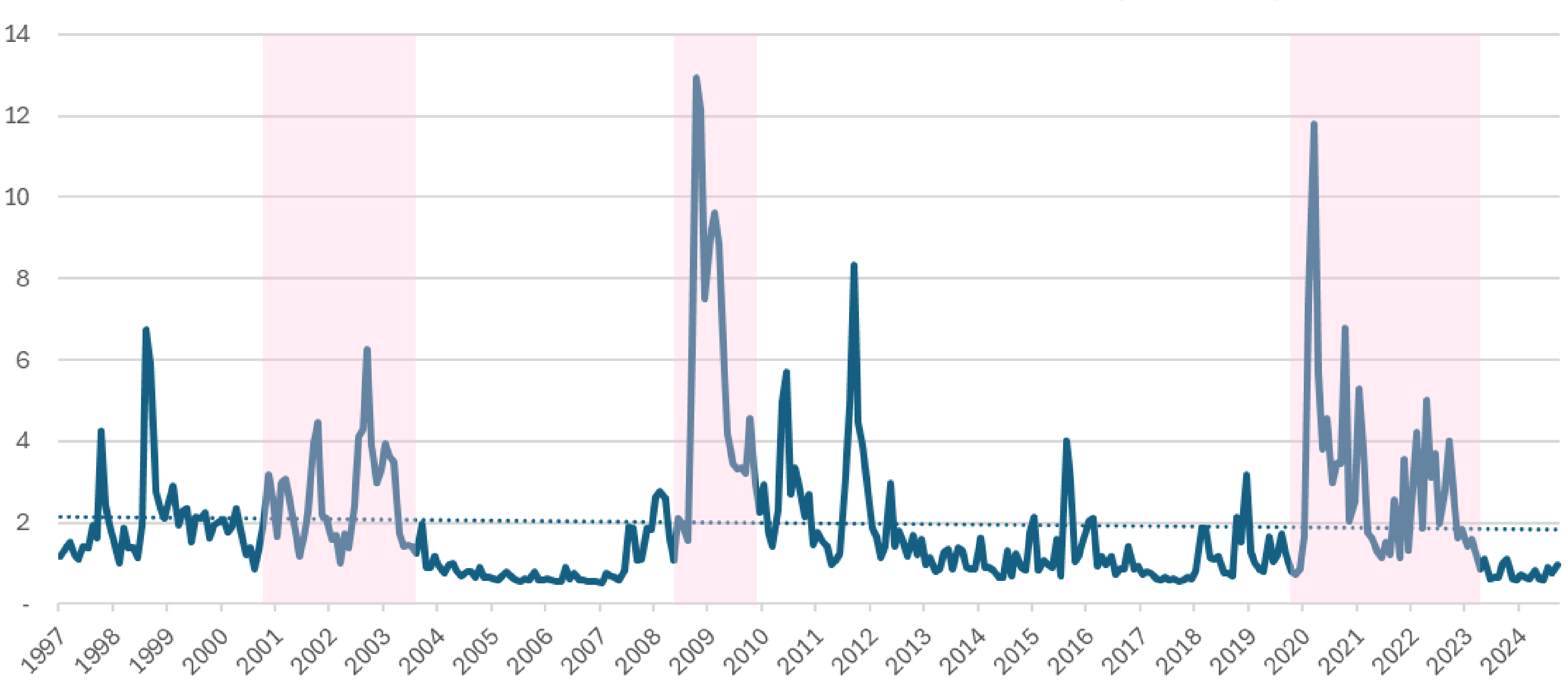
Equity Portfolio Insurance: How the market value of protection reacts to equity falls



- Whilst payoffs are crystallised at maturity (e.g. at the end of a 1-year contract), the protection will have a daily market value.
- **This means that the value of the protection will increase whenever we see market downturns.**
- However, the size of the movement will likely not precisely match the equity movement, due to other factors (e.g. time to maturity, changes in implied volatility, etc.).
- Here we choose to look at movements for a strategy protecting against falls greater than 20% (meaning it will only react in a meaningful way when markets were falling more materially). As can be seen, the protection reacts immediately when markets are falling (though as expected not by the same amount due to the limited protection in place).
- The full extent of the protection only comes through if the fall is sustained to maturity*. This was seen in our example here during the dotcom bubble (twice), and the GFC.
- Shorter-lived equity shocks, such as Covid and Inflation upsurge, saw mark-to-market reactions from the protection, but ultimately no payout as markets rebounded relatively quickly.

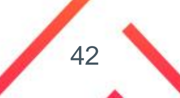
** Note we have used a different scale for payoffs (RHS) to more easily see the Insurance bars (LHS)*

Equity Portfolio Insurance: How the price of protection changes over time



- Pricing changes over time depending on market conditions…if the market is worried then protection becomes more expensive.
- The price you pay upon buying protection should therefore be an important consideration.
- Here we show the estimated* price of protection for falls beyond 20% in order to highlight points where the cost of protection was particularly high (and very likely prohibitively expensive).

** Prices have been derived using market implied volatility. We are aware that market pricing of downside protection can often imply higher volatility, however, this is suitable for the purpose of the high-level analysis in this paper.*



Tail Risk: Summary and Next Steps

- Material, sustained falls in equity markets would cause a problem for the Fund. It is therefore sensible to investigate whether these should be protected against, to at least some degree.
- However, protection should not simply be bought at any cost, particularly if the plan is to generate strong returns over the longer-term.
- **US Treasuries and Gold** have historically provided some level of protection against extreme market events. However, the value of capital required to provide meaningful protection would be unpalatable, given the associated performance drag. Also, the protection isn't certain, e.g. this didn't work in 2022. We discount these options.
- **VIX futures** provide meaningful protection for a lower capital allocation size. However, the performance drag (due to negative performance during calmer periods) is significant. Therefore, we also discount this option.
- We consider **Equity Portfolio Insurance** to be the most appealing solution in terms of efficiency. The relatively low capital allocation needed and ability to directly control performance drag (by not paying too high a price for protection) also helps the investment case.
- Its effectiveness of protection at maturity points cannot be questioned, and these can be aligned with valuation dates to solve the problem laid out at outset, i.e. untimely falls in markets leading to contribution increases. However, the market value in-between these points can give the illusion that the protection isn't working as well as intended.
- There are also governance considerations associated with adding equity portfolio insurance to the portfolio, e.g. frequency of rolling and an annual recalibration exercise.

Further notes and conclusions

- Our analysis of Equity Portfolio Insurance is very high level at this stage, with a large number of caveats and assumptions to the analysis presented.
- The approach looks like it merits some consideration. We are also aware of other LGPS Funds which run such strategies, as mentioned earlier.
- **We suggest that Equity Portfolio Insurance is investigated further in 2025.** This could include running an extension of our ALM software which shows the impact of implementing these on a forward-looking basis (although the scope of our work would be agreed at the next stage). Training could also be provided.
- We are cognisant of the Ongoing Consultation and therefore conversations with the Pool will be required to determine what is possible via the pool. However, if the Pool were unable to run the strategy a third-party manager would be needed.
- Such a review would also consider governance issues, including the governance benefits of a more automated solution relative to the potential benefits to outcomes of more regular monitoring and action. Ultimately any viable solution would need to be a simple, relatively low governance one.
- Given the risk reduction properties, exposure to Equity Portfolio Insurance could mean that the Fund is able to support a slightly higher strategic allocation to equities whilst decreasing (or not increasing) risk at the overall portfolio level. **We recommend that the current overweight to equities is formalised, but subject to the review recommended above.**

Progress to date

- **We are pleased to see the good progress the Fund has made towards its Net Zero ambitions.**
- There has been a considerable amount of work and portfolio restructure activity over recent years – both within the Pool and outside (e.g. forestry and sustainable infrastructure).

2020 – Investment in All World Equity Climate Multi Factor Fund (passive equity).

2021 – Investment in Aegon Global Short Dated Climate Transition Fund (fixed income).

2022 – ESG integrated into the investment strategy, recognising it as a risk factor.

2023 – First NZCS: Net Zero target date of 2050 (or sooner), climate metrics, and interim targets were agreed. Reporting progress is shown in the next slide.

Increased sustainable equity and infrastructure allocations, including commitment to Quinbrook NZPF (specialised in energy transition assets).

2024 – 2030 interim equity targets achieved.

Further commitments agreed to LGPSC Infrastructure fund (which has exposure to renewable energy) and Stafford's Timberland fund.

The Fund has made significant progress to date towards its Net Zero ambition

Net zero reporting: learnings to date

Subject	Insight
Primary Targets	**The Fund has met both interim 2030 targets for equity assets** ▪ Equity financed emissions: 112,811 tCO2e - ↓ 40.4% vs 2019 (target -40%). ▪ Equity weighted average carbon intensity: 76.7 tCO2e/$m sales - ↓ 52.8% vs 2019 (target -50%).
Allocation to Climate Solutions	**Over £1.2bn in climate related investments across equity, debt, infrastructure and forestry** ▪ Equity exposure to clean tech, apportioned by portfolio company revenue: 6.5% - ↑ 1.6 percentage points vs 2019. ▪ Off-Pool allocations have been made where the Pool did not have an offering.
Fossil Fuel	**Strong emphasis on active stewardship and direct engagement with companies** that are significant contributors to financed emissions, particularly within the fossil fuel sector. ▪ Equity exposure to fossil fuel reserves, apportioned by portfolio company revenue: 1.9% - ↓ 0.1 percentage points vs 2019.
Paris Alignment	• **64.2%** of the equity NAV in material sectors is considered aligned/aligning with the Paris Agreement. • **75.7%** of equity financed emissions are aligned/aligning or under engagement.
Fixed Income	• Significant improvement in data availability over recent years. • While there has been an increase in financed emissions (largely driven by significant expansion in the portfolio's NAV), this has been offset by a notable improvement in carbon efficiency, reflected in the decrease in weighted average carbon intensity (WACI).
Other Asset Classes	• 2024 reporting has expanded to cover the Fund's private market holdings managed by the Pool. • Initial assessment of climate risks for targeted return funds has been conducted, though data availability falls short of the 60% corporate data coverage threshold.

Source: 2024 climate risk report, prepared by LGPS Central.

The Fund is in a strong position. What are the possible next steps?

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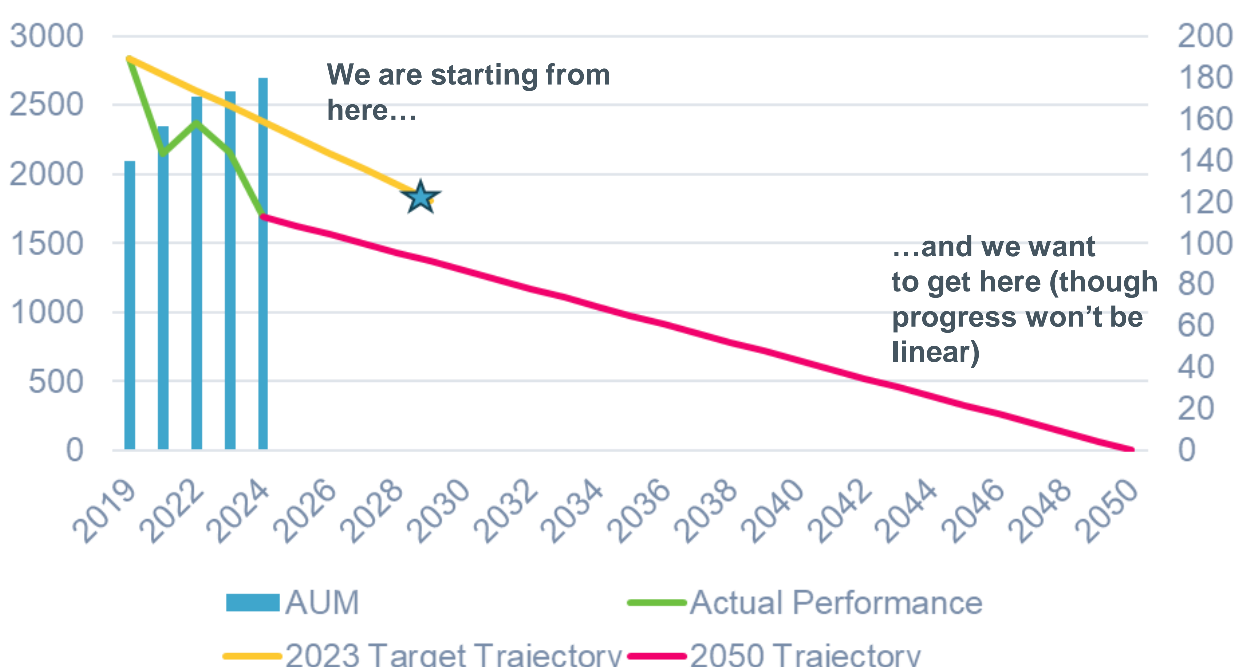
Achieving the 2050 NZ target: What can the Fund do?



Consider approaches that lead to a further reduction in more carbon intense assets?

Forward planning to ensure that carbon intense assets remain on a downward trajectory?

How can we be sure we are on the right path, and what do we do if we aren't?

The Fund and Net Zero

- **The Fund is progressing well towards its target of achieving Net Zero by 2050 and made demonstrable progress in numerous other areas of responsible investment and good governance.**
- The Fund has committed to consider fossil fuel exposure when considering any new investment, with a view to limiting its impact. This policy was a factor in the decision to invest in the Low Carbon Transition Fund and influenced the decision to invest in the Quinbrook Infrastructure Partners Power Fund and the Stafford Capital forestry allocation.
- The Fund has invested over £1bn in assets that integrate environmental considerations since 2019, which is an impressive achievement in itself.
- Meeting both the 2030 targets that are in place is testament to the work put in to restructure the portfolio over recent years, and the numbers are significant:
    - **Equity Financed Emissions:** 40.4% lower than 2019.
    - **Equity Weighted Average Carbon Intensity:** 52.8% lower than 2019.
- The Committee is taking steps to hold managers to account and develop their own thinking. For instance:
    - **Manager meetings:** Sessions with (forestry manager) Stafford Capital and (property manager) DTZ over recent years, to ask questions about the approaches adopted.
    - **Training sessions:** For example, we also note that the Committee has received training from the Pool.
- The Fund has also ensured that engagement activity takes place to promotes its Net Zero ambitions, e.g. via voting that takes place via LGIM and the Pool's external stewardship provider. We note the practical examples of proactivity by the Pool in this area, e.g. via engagement with Shell on their Scope 3 emissions as well as changes to their Energy Transition Strategy, for which the Fund's representatives voted against Shell on a key resolution.

The Fund should consider investigating next steps in relation to the Net Zero journey, but we would expect the Officers to wait for the outcome of the Ongoing Consultation.

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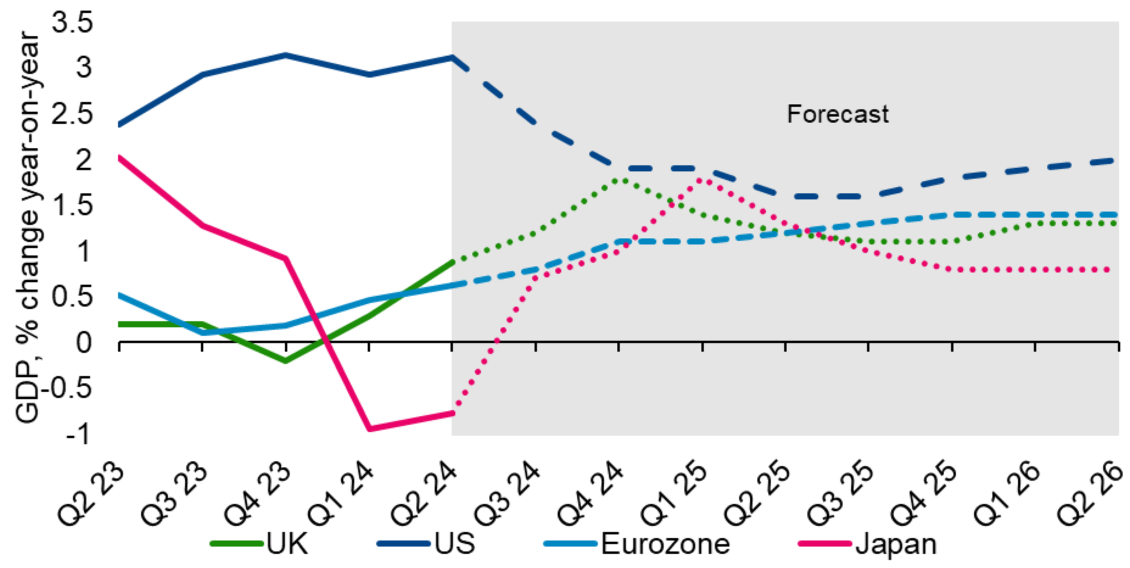
Appendices

Economic Background

Economic momentum is softening, but not cracking

- Bearish takes on recent economic news look overly gloomy.
- The US economy is slowing but still on track to expand at a solid pace.
- There is still scope for a modest recovery in Europe, while growth in emerging markets will likely remain broadly unchanged.
- Solid, but unspectacular, growth expected in near-term.

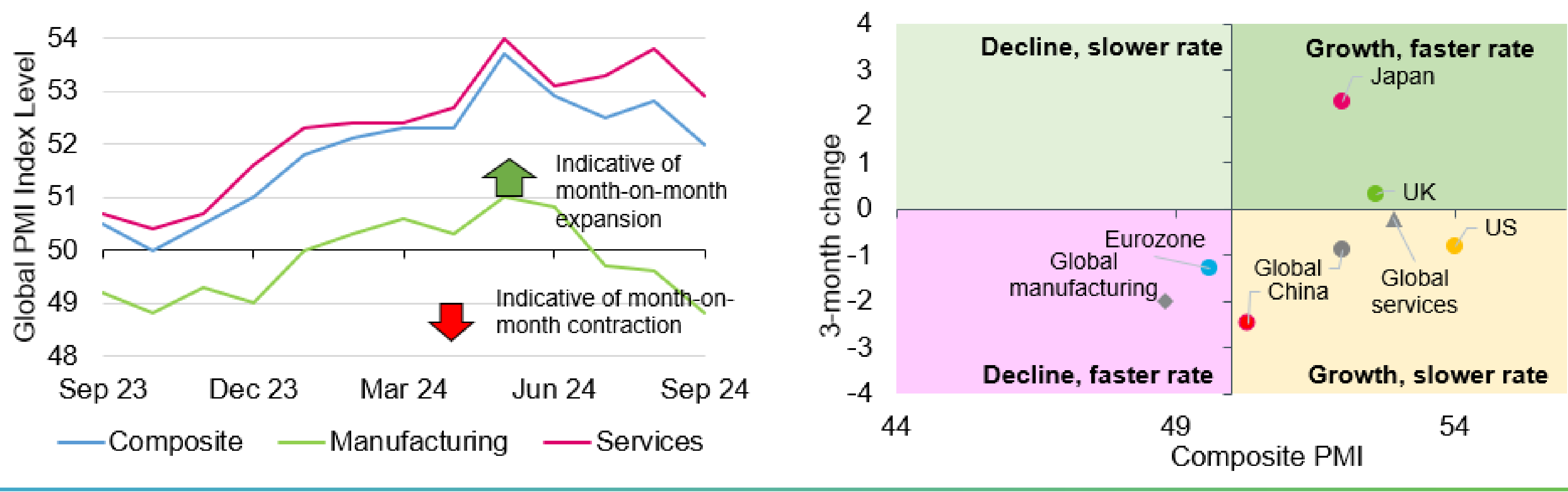


Forecasts point to trend-like growth

- Growing concerns the US might be entering recession look unfounded and recent data points to a more orderly and benign growth slowdown.
- Indeed, US Q2 GDP growth was stronger than anticipated and the rise in the unemployment rate has largely owed to job trend growth being insufficient to absorb the increase in labour supply, as opposed to being driven by widespread layoffs. The housing and manufacturing sectors remain weak spots but should benefit the most from lower interest rates.
- Survey data pointed to a modest reacceleration in eurozone growth mid-way through Q3, but this doesn't alter the underlying picture of sluggish growth trends. Stronger consumer spending will underpin solid UK GDP growth, but quarterly growth will likely slow from H1 2024's above-trend pace due to tight fiscal and monetary settings.
- Japanese economic momentum is expected to improve in H2 2024 and H1 2025, but Chinese growth is likely to remain subdued in the near-term as export strength fades while property sector weakness continues to weigh on private investment and consumer confidence. Following 2023's 2.7% expansion, Global GDP is forecast to rise 2.6% in 2024 and 2.5% in 2025.

Economic Background

Survey data tends to support forecasts of solid but unspectacular near-term global growth



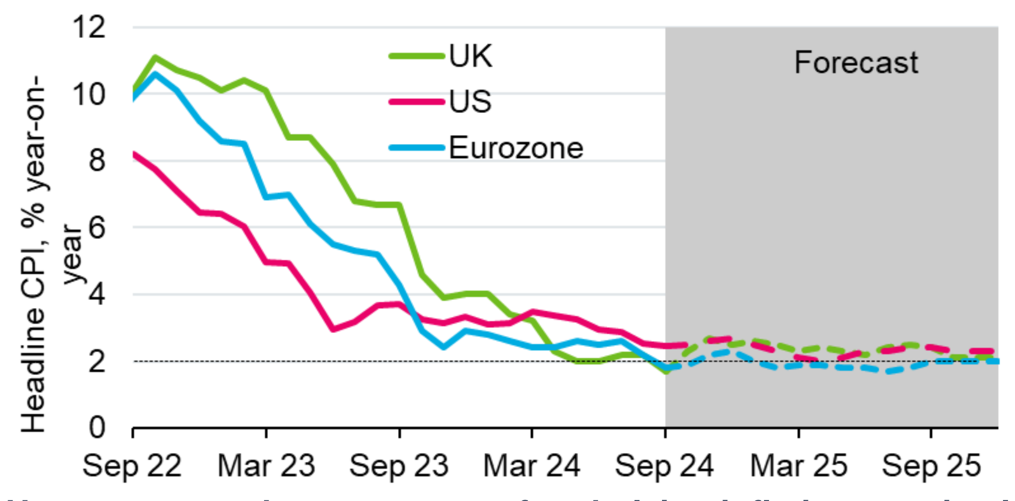
- JP Morgan's Global Composite Purchasing Manager's which aggregates activity across the global manufacturing and service sectors, slowed in September as services activity continued to grow at a solid, though slightly slower, pace and manufacturing output contracted month-on-month.
- The index is still indicative of solid global growth, but a broad-based loss of momentum across regions and sectors does raise some concerns.
- Service sector business activity rose for the 20th consecutive month in September, albeit at a slightly reduced pace, while manufacturing production decreased for the first time since December 2023 following a third successive month-on-month decrease in new orders.
- Marked divergence was also evident among the major economies in September. The US, Japan, UK and Brazil all expanded at solid rates, but the eurozone, Canada, Russia and mainland China showed signs of either contracting or stalling.
- September saw global employment stabilise, following a reduction in August, providing some relief against recent labour market worries.
- Input cost inflation, though still positive, eased to a three-month low in the weaker manufacturing sector in August, while they accelerated in the more labour-intensive service sector. In both sectors, business optimism eased to two-year lows amid signs of economic slowdown and rising geopolitical tensions.

Inflation

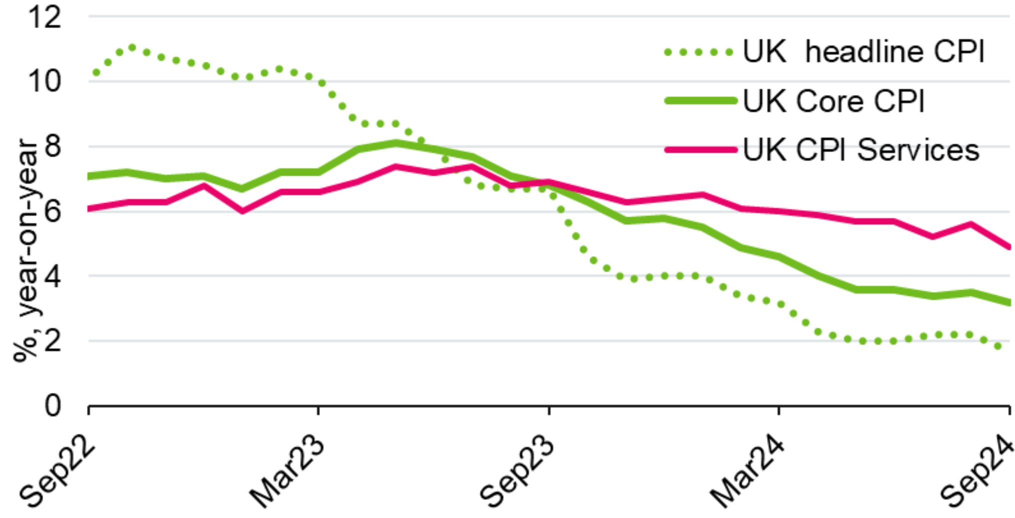
Inflation

- US headline CPI inflation eased to 2.4% year-on-year in September, while equivalent UK and eurozone inflation fell more than expected, to 1.7% and 1.8%, respectively.
- With services inflation slowing less sharply, core inflation has eased back more slowing, sitting at 3.3%, 3.2%, and 2.7%, in the US, UK, and eurozone.
- Some of the recent downwards contributors to UK headline inflation will rebound, but services inflation, at 4.9% year-on-year, has still massively undershot the MPC's forecast of 5.5% and consensus expectations of 5.2%.
- All told, while headline inflation is likely to rebound, recent UK data points to a slightly faster easing of underlying inflation pressures, albeit from elevated levels, than previously expected.
- While there are good reasons to think inflation may be more volatile than in the pre-pandemic era, we expect central banks to keep inflation close to target in the medium to long term.

Headline inflation has generally come in at, or below, expectations recently



However, some key measures of underlying inflation remain elevated



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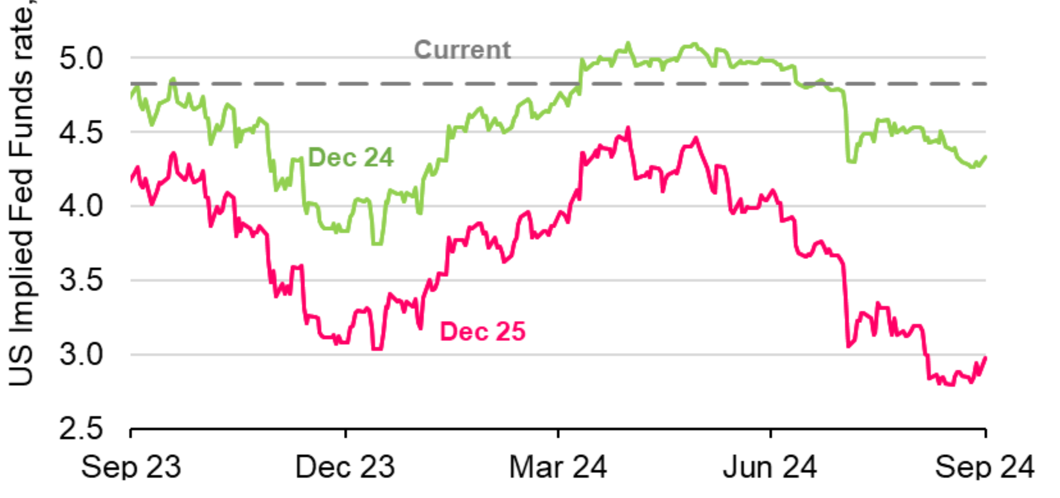
Interest Rates

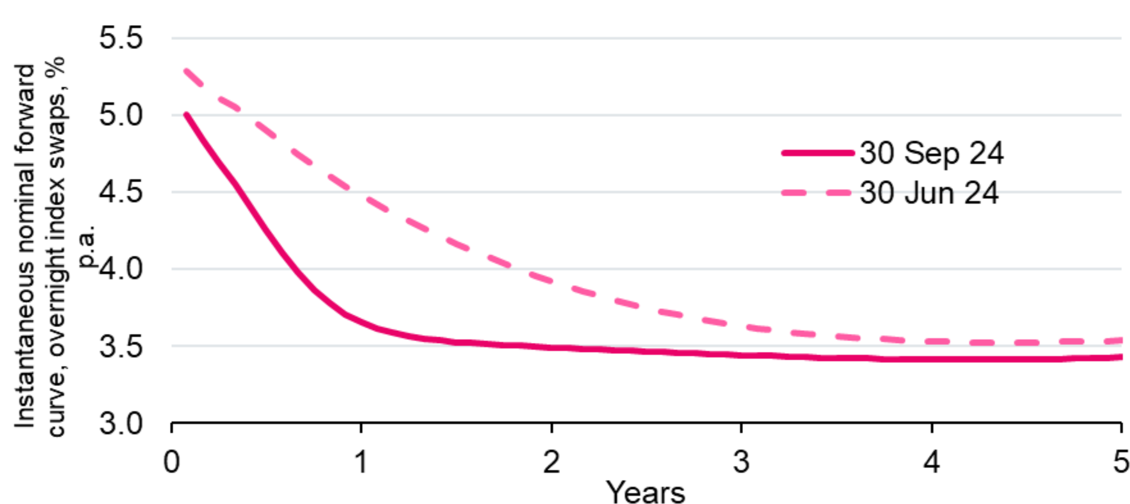
Interest rates

- The ECB cut rates for the second time in Q3, taking rates to 3.5% pa, while the BoE lowered interest rates 0.25% pa, to 5.0% pa. The Fed opted for a bumper 0.5% pa reduction, with their first cut of the cycle taking the Fed funds target range to 4.75 – 5.0% pa.
- As of September 30, markets were pricing an additional 50bps of cuts from the US Fed in 2024, followed by a further 135bps in 2025, reducing the US Fed Funds rate to 3.0% pa; implying a relatively aggressive pace of interest rate cuts.
- Given greater signs of stubbornness in underlying inflation, a slightly more gradual reduction in UK interest rates is expected: a further 30bps in 2024, followed by 120 bps of cuts in 2025.
- With GDP growth set to be solid but unspectacular and underlying inflation set to slow, we expect central banks to cut rates at a steady and sustained pace.
- Absent a more pronounced slowdown, the likely extent of near-term interest rate cuts looks at least fully priced.

Markets are already pricing significant interest rate cuts by the US Fed



The BoE is expected to ease at a slightly slower, but still steep, pace



Listed Equity

The current equity portfolio is comprised of a mix between **passive market-cap, passive fundamental-weighted, and active** mandates. The portfolio is structured to have a broad mix of strategies and a balanced exposure, in order to enhance returns and reduce volatility, while generating alpha.

Fund allocation

Manager & Fund	Active/ Passive	Above or Below Target allocation
L&G Total Passive Equity	Passive	3.5%
LGPSC Global Eq Active Multi Mgr Fund	Active	-2.0%
LGPSC EMM Eq Active Multi Mgr Fund	*Active*	*3.0%*
LGPSC AW Eq Climate Multi Factor Fund	Passive	1.0%
Total		**5.5%**

Fund performance

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)		
		PF	BM	ER	PF	BM	ER
L&G Total Passive Equity	Client Weighted Index	18.3			7.8		
LGPSC Global Eq Active Multi Mgr	FTSE All World Index	20.2			10		
LGPSC EMM Eq Active Multi Mgr	*FTSE All World Emerging Market Index*	*8.3*			*-4.8*		
LGPSC AW Eq Climate Multi Factor	FTSE All World Net	19.8			9.5		
Total	**Client Weighted Index**	**18.4**			**7.8**		

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Please note, the restructuring of the listed equity portfolio was completed in July 2024, and the table above reflects the position as of 30 June 2024. The allocation should now be closer to target, particularly following the full divestment from the EMM Equity Fund, which was overweight in June, to top up the underweight Global Equity Fund.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Private Equity

Private Equity allocation

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
Oseas Private Equity - Adams Street (L)	7.5%	5.7%	--
LGPSC Private Equity 2018 (L)		0.1%	
LGPSC Private Equity 2021 (L)		0.1%	
Patria Capital Partners SOF III		0.4%	
Total	**7.5%**	**6.3%**	**1.2%**

Private Equity performance

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)		
		PF	BM	ER	PF	BM	ER
Oseas Private Equity - Adams Street (L)	FTSE All World Index +3%	-0.7			9.3		
LGPSC Private Equity 2018 (L)		7.0			12.6		
LGPSC Private Equity 2021 (L)		-11.9					
Patria Capital Partners SOF III		0.2			16.6		
Total	**FTSE All World Index +3%**	**-0.3**			**10.0**		

UK Private Equity Fund – Catapult is currently winding up, with a small residual (c.£1m) remaining, as such has been omitted from this review

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Current Portfolio:

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
Ruffer	3.0%	2.7%	0.3%
Fulcrum Diversified Core Abs Ret	2.0%	2.0%	0.0%
Total	**5.0%**	**4.7%**	**0.3%**

Performance:

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)			Since Inception (%)		
		PF	BM	ER	PF	BM	ER	PF	BM	ER
Ruffer	SONIA 3 M + 4%	0.8			0.5			5.0		
Fulcrum Diversified Core Abs Ret								10.1		
Total	**SONIA 3 M + 4%**	**4.2**	**9.4**	**-5.1**	**7.0**	**7.1**	**-0.1**	**5.7**	**5.4**	**0.3**

Ruffer Investment Objective: To deliver positive returns ahead of cash in all market conditions over any 12-month period, with an emphasis on capital preservation in times of market uncertainty.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Infrastructure & Timberland

Current Portfolio:

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
JPM Infra	12.5%	2.6%	-
IFM Global Infrastructure		2.5%	
KKR Global Infrastructure Funds I, II, III		0.8%	
Stafford Timber Funds VI, VII, VIII		1.9%	
Infracapital Infrastructure		0.5%	
LGPSC Infrastructure Core/Core Plus sleeve		1.3%	
Quinbrook Net Zero Power		0.4%	
Quinbrook Net Zero Power - Co-inv		0.4%	
Total	**12.5%**	**10.4%**	**-2.1%**

Performance:

Manager & Fund	Current benchmark	1 Year			3 Year		
		PF	BM	ER	PF	BM	ER
JPMorgan Infrastructure	Absolute Return +8%	8.1			10.3		
IFM Global Infrastructure	Absolute Return +8%	3.9			11.9		
KKR Global Infrastructure	SONIA 3 M + 4%	20.8			19.6		
Stafford Timberland	Absolute Return +8%	1.6			12.8		
Infracapital Infrastructure	Absolute Return +7.5%	-8.1			4.9		
LGPSC Infra Core/Core+	CPI +3.5%	4.1					
Quinbrook Net Zero Power	13% IRR	12.0					
Quinbrook Net Zero Power Co-Inv	13% IRR	20.9					
JPMorgan Infrastructure	**SONIA 3 M + 4%**	**5.7**			**12.1**		

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The Fund conducted a review of its infrastructure portfolio over 2024, which resulted in the decision to make additional commitments over the coming years to reach the target allocation.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Property

Property offers a relatively stable income stream that is loosely inflation linked. Property also provides diversification with other growth and income assets. We believe that integrating RI effectively will improve investment performance. There is an increasing demand from tenants for more energy efficient space, with lower carbon emissions. Lower tenancy costs can often be translated into higher rents. Onsite renewables can lower costs and potentially bring in more income.

Current Portfolio:

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
Colliers Direct Property	10.0%	1.4%	-
La Salle		4.1%	
Kames Capital I		0.2%	
Kames Capital II		0.6%	
LGPSC UK Direct		0.8%	
Total	10.0%	7.1%	-2.9%

Performance

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)		
		PF	BM	ER	PF	BM	ER
Colliers Direct	Matching Total Property fund return	-2.0			-0.1		
LaSalle		-0.2			1.0		
Kames Capital I		-0.8			1.3		
Kames Capital II		-0.7			-2.8		
LGPSC UK Direct							
Total	**Matching fund return**	**-2.3**	**-2.3**	**0.0**	**-0.1**	**-0.1**	**0.0**

Exception noted: The Fund's allocation to property is currently underweight relative to its target.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Global Credit – Public Debt

Current Portfolio:

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
LGPSC Global Active MAC	9.0%	6.3%	-2.7%
Total	**9.0%**	**6.3%**	**-2.7%**

Performance:

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)		
		PF	BM	ER	PF	BM	ER
LGPSC Global Active MAC	SONIA 3 M + 4%	7.1			-0.4		
Total	**SONIA 3 M + 4%**	**7.1**			**-0.4**		

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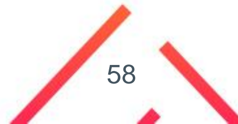
The Fund's allocation to Public Debt is currently underweight relative to its target. The MAC fund has significantly underperformed relative to its cash plus benchmark



Global Credit - Private Debt

Current Portfolio:

Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
Christofferson Robb & Company - CRF3 (1 month L)	10.5%	0.1%	-
Christofferson Robb & Company - CRF5 (1 month L)		0.9%	
M&G DOF		0.7%	
Partners Group Private Debt		2.6%	
LGPSC PD Low Return 2021 (L)		2.1%	
LGPSC PD High Return 2021 (L)		0.5%	
LGPSC PD Real Assets (L)		0.8%	
Total	**10.5%**	**7.9%**	**-2.6%**

Performance:

Manager & Fund	Current benchmark	1 Year (%)			3 Year (%)		
		PF	BM	ER	PF	BM	ER
Christofferson Robb & Company - CRF3 (1 month L)	Absolute Return +7.5%	18.9	7.5	11.4	20.9	7.5	13.4
Christofferson Robb & Company - CRF5 (1 month L)	Absolute Return +8.5%	16.0	8.5	7.5			
M&G DOF	SONIA 3 Month + 4%	-7.9			-3.7		
Partners Group Private Debt	SONIA 3 Month + 4%	8.6			5.7		
LGPSC PD Low Return 2021 (L)	7% IRR	8.0	7.0	1.0			
LGPSC PD High Return 2021 (L)	13% IRR	8.4	13.0	-4.6			
LGPSC PD Real Assets (L)	Absolute Return +5%	27.3	5.0	22.4			
Total	**Client Weighted Index**	**9.1**	**9.2**	**0.0**	**6.3**	**7.5**	**-1.3**

The Fund's allocation to private debt remains underweight relative to its target. A review of the fund's RST component was completed over 2024, which is part of the broader private debt allocation, where a further £40m commitment to RST was agreed. Additional commitments are still required to address the remaining underweight within the private debt allocation.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

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Current Portfolio:

Asset Class	Manager & Fund	Target Allocation	Actual Allocation	Above or Below Target
Inflation-linked bonds	Aegon Index-Linked	3.5%	3.6%	0.1%
Investment grade credit	Aegon Global Short Dated Climate Transition	0.5%	0.9%	0.4%
	LGPSC Investment Grade Credit	3.3%	2.5%	-0.8%
FX hedge	Aegon Currency Hedge	0.8%	0.9%	0.2%
Cash	Cash	0.0%	6.5%	6.5%
Total		**8.0%**	**14.4%**	**6.4%**

Performance:

Manager & Fund	Current benchmark	1 Year			3 Year		
		PF	BM	ER	PF	BM	ER
Aegon Index-Linked	FTSE All Stocks Index Linked Index	-0.3			-12		
Aegon Global Short Dated Climate Transition	SONIA 3 Month +1.25% (GBP)	7.7			1.5		
LGPSC Investment Grade Credit	LGPSC Corp Benchmark	10.4			-3.4		
Aegon Currency Hedge	SONIA 3 Month	17.6			-36		
Cash	SONIA 3 Month	4.5			2.5		

The Fund currently has some unused cash reserves. The 2024 protection review, we explored the potential of adding alternative protection assets to the portfolio. We've delved deeper by specifically focusing on tail risk protection strategies.

PF= Portfolio Return, BM = Benchmark Return, ER = Excess Return. Source: Hymans Performance Reporting. Returns tabulated above are time-weighted period returns (quoted in sterling).

Reliances and limitations

Addressee

This paper is addressed to the Local Pension Committee ("LPC") of Leicestershire County Council Pension Fund (the "Fund"). This presentation should not be used for any other purpose. It should not be released or otherwise disclosed to any third party except as required by law or with our prior written consent, in which case it should be released in its entirety. We accept no liability to any third party unless we have expressly accepted such liability in writing.

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We have a research team that advises on shortlisting fund managers in manager selection exercises, which is separate from our client and other relationships with fund managers and therefore we do not believe there will be a conflict that would influence the advice given. We would be happy to discuss this and provide further information if required.

Risk warning

Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, property whether held directly or in a pooled or collective investment vehicle and illiquid assets such as private equity, private debt and infrastructure. Further, investments in developing or emerging markets may be more volatile and less marketable than in mature markets.

Exchange rates may also affect the value of an overseas investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

Notes on Our Modelling

General

All modelling is as at 30 September 2024.

All modelling considers impact on past service liabilities only i.e. no modelling around impact on future service contribution rates has been undertaken.

Probabilities / expected likelihoods of achieving asset returns over specified periods

The model used makes use of the Economic Scenario Service (ESS) that supports our more comprehensive Asset Liability Modelling (ALM). More information on the underlying assumptions in this modelling can be provided upon request. However, the techniques used are more approximate in nature.

For example, the calculations are based on the Fund's broader asset classes rather than specific stock selection.

The modelling only considers the spread of future asset return outcomes on liabilities. In the scenarios modelled, all other assumptions that may affect liabilities (such as inflation) are fixed and are in line with the actuary's best estimate assumptions.

Funding level estimates

The output of the model above is used to determine the asset return with a 75% likelihood of being achieved over a 20-year period, which is consistent with the approach taken for deriving the discount rate at the last full valuation in 2022.

Any funding levels quoted do not represent funding advice.

Risk and return statistics relative to gilt-based liabilities

The modelling above only considers the spread of asset return outcomes. This model enables us to consider how the liabilities may move relative to those asset returns, by considering a spread of asset returns above or below gilts.

The discount rate underlying the liabilities is derived in a different way (as described above), however a number of the asset return assumptions underlying these projections are linked to so-called 'risk free rates' of return, which are highly correlated with gilt yield expectations. This therefore provides a reasonable (albeit approximate) indication of the interaction of assets and liabilities.

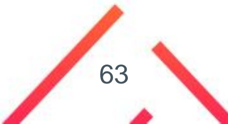
Reliance and Limitations

Reliances and limitations

The actuarial profession introduced Technical Actuarial Standard (TAS) 100 with effect from 1 July 2017. As part of our internal compliance regime, Hymans Robertson has chosen to apply the principles of TAS100 in the delivery of investment advice. TAS100 applies to work where actuarial principles and/or techniques are central to the work and which involves the exercise of judgement.

The Fund’s asset allocation and performance as at 30 June 2024 has been sourced from Hymans Q2 Performance Monitoring Report.

In this report we have provided our estimate of expected asset class returns. The expected returns are based upon 20-year median returns derived from our proprietary economic scenario generator (ESS) asset model. As with all modelling, the results are dependent on the model itself, the calibration of the model and the various approximations and estimations used. These processes involve an element of subjectivity. This model uses probability distributions to project a range of possible outcomes for the future behaviour of asset returns and economic variables. Some of the parameters of the model are dependent on the current state of the financial markets and are updated to reflect metrics that can be measured in markets, such as yields, while other more subjective parameters do not change with different calibrations of the model



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Thank you

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