

Quarterly Funding & Investment Report

End September 2024

Prepared for: North Yorkshire Pension Fund

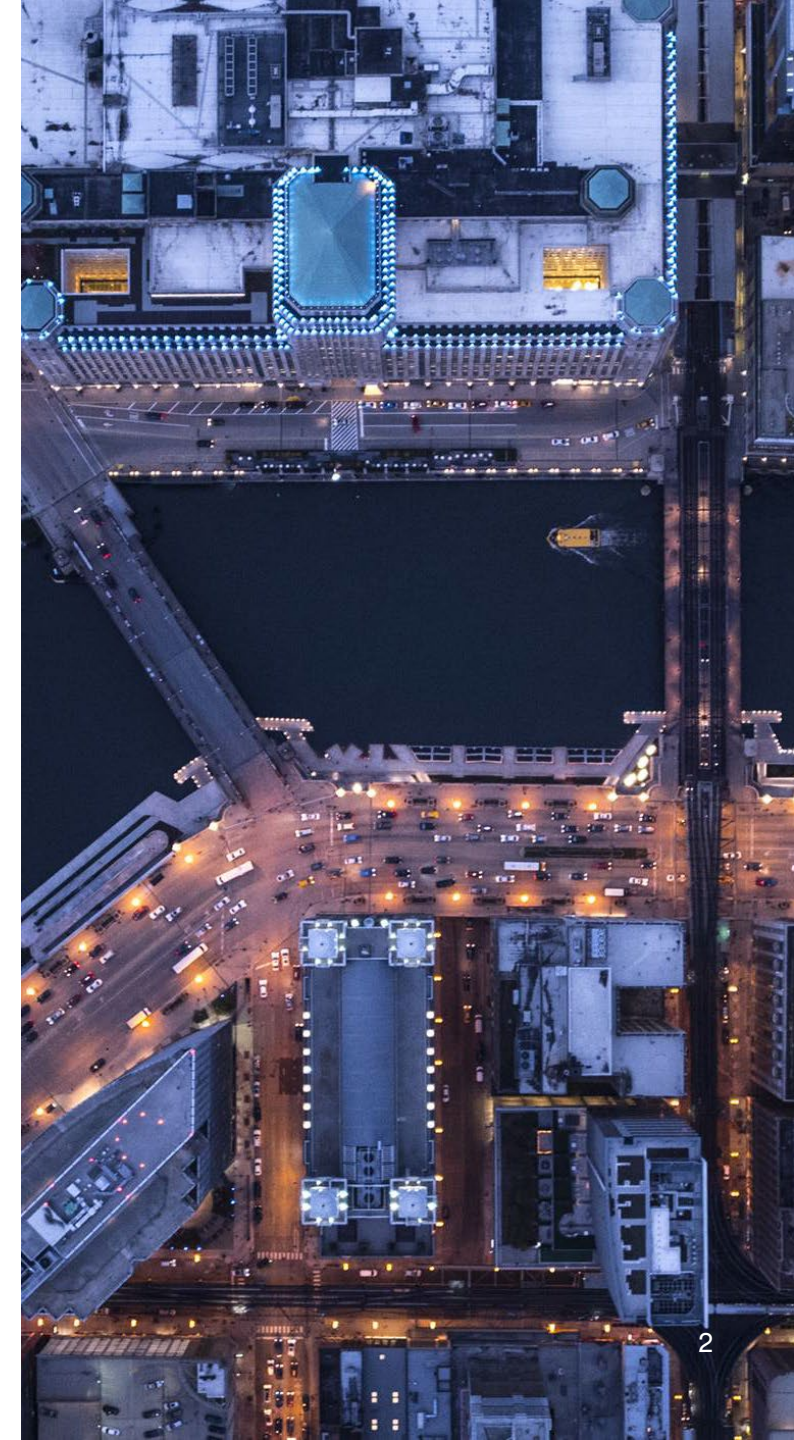
Prepared by: Aon

21 November 2024

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At a glance

High level summary of your investments and funding

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At a glance...

Funding*

Since the results of the valuation at 31 March 2022 the Fund's ongoing funding level is unchanged, and the surplus has increased by £17M.

This has been primarily driven by an increase in the net discount rate, although this has been offset by asset returns being lower than expected and pension increases being higher than expected.

Asset Allocation and Implementation

Officers and Advisors are due to hold further discussions around short-term tactical asset allocation changes and rebalancing opportunities took place prior to the November PFC meeting.

The remaining balance of £16.3m was received in July 2024 as part of the full redemption from the Federated Hermes Property Unit Trust

Performance

The Fund underperformed the composite benchmark over the quarter and 3 year period, was in line over 1 year period and outperformed over the 5 year period.

Market Background and Investment Outlook (October 2024)**

In Q3 2024, global equity markets rose over the quarter. The MSCI ACWI rose 5.0% in local currency and 0.6% in sterling terms

We suspect that a clear result from the US election will help equities and riskier bonds. However, a clean sweep by Republicans (taking control of the White House and both houses in Congress) could see bigger budget deficits and higher yields.

US macro continues to drive risk assets. July's labour market weakness has been reversed and we think market concerns that a recession might be imminent have receded. Robust September economic data have seen the market view around Fed cuts converge with our own. With no recession imminent this is supportive for both equity and credit markets.

KEY ACTIONS

- Committee members to consider the contents of this report.
- The results of the initial investment strategy review process will be discussed with Committee members at the November PFC meeting. The objective of this meeting is to agree an appropriate strategic asset allocation ahead of the 31 March 2025 actuarial valuation. Further advice on how the agreed strategy will be implemented will be discussed and considered at the February 2025 meeting.

Note: *This funding update rolls forward the results of the 2022 valuation of the Fund. We have made allowance for actual pension increases since the valuation (allowing for pension increases awarded in April 2023 and April 2024).

Note: **The opinions referenced are as of the date of publication (22 October 2024) and are subject to change due to changes in the market or economic conditions and may not necessarily come to pass. Information contained herein is for informational purposes only and should not be considered investment advice.

Key Stats – Q3 2024

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<p>Assets</p> <p>£4,677m</p> <p>Assets increased by £42m since 2022 valuation. £4,635m at 2022 valuation</p> 	<p>Funding level</p> <p>116%</p> <p>Funding level unchanged since 2022 valuation 116% at 2022 valuation</p>	<p>Return on Assets since 2022 Valuation</p> <p>0.6% pa</p> <p>This is below the assumed rate of return.</p> 
<p>Current Assets Expected Return (10 year p.a.)</p> <p>+7.1%</p> <p>1.2% increase since 2022 Valuation 5.9 % at 2022 valuation</p> 	<p>Long-term Strategy Expected Return (10 year p.a.)</p> <p>+7.1%</p> <p>1.0% increase since 2022 Valuation 6.1% at 2022 valuation</p> 	<p>Discount rate</p> <p>4.9%</p> <p>Discount rate has increased by 0.7% since 2022 valuation 4.2% at 2022 valuation</p> 
<p>Current Assets Value at Risk (1 Year 1 in 20)</p> <p>£993m</p>	<p>Long-term Strategy Assets Value at Risk (1 Year 1 in 20)</p> <p>£940m</p>	<p>Estimated Total Employer cost</p> <p>12.3%</p> <p>Estimated Total Employer cost decreased by 5.1% since 2022 valuation 17.4% at 2022 valuation</p> 

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Funding

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A review of your funding position
and contributions



Funding position

Funding level	Surplus	Comments
116% at 30 September 2024	£657M at 30 September 2024	Since the results of the valuation at 31 March 2022 the Fund's ongoing funding level is unchanged, and the surplus has increased by £17M.
Unchanged from 116% at 31 March 2022	Up from £640m at 31 March 2022.	This has been primarily driven by an increase in the net discount rate, although this has been offset by asset returns being lower than expected and pension increases being higher than expected.



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Change to funding level since 31 March 2022



Analysis – ongoing funding target

Reason for change since 31 March 2022 – Asset Attribution





Comments
 Since the 2022 valuation the surplus has increased by £17M.

Reason for change since 31 March 2022 – Liability Attribution



Aggregate Employer contributions – ongoing funding target

Total employer contribution rate	Employer cost of accrual	Comments
<p data-bbox="239 339 682 401">12.3%</p> <p data-bbox="239 419 682 448">at 30 September 2024</p> <p data-bbox="239 486 682 548">Down from 17.4% at 31 March 2022</p> 	<p data-bbox="682 339 1126 401">15.8%</p> <p data-bbox="682 419 1126 448">at 30 September 2024</p> <p data-bbox="682 486 1126 548">Down from 20.1% at 31 March 2022</p> 	<p data-bbox="1126 291 2354 358">The cost of accrual has decreased since 31 March 2022 due to the increase in net discount rate.</p>

Notes

The total employer contribution rate quoted above is based on the average total employer contribution rates across the Fund. Individual employer contributions can be very different to the average figure across the Fund shown above depending on their own characteristics, membership profile and funding target. The individual employer contributions will next be reviewed as part of the triennial valuation at 31 March 2025.

Funding position – Low Risk funding target

Funding level

91%

30 September 2024

64%

31 Mar 2022

Basis: Low Risk funding target
Effective date: 30 September 2024

Deficit

£453M

30 September 2024

£2,573M

31 Mar 2022

Comments

The funding level on the low-risk basis has increased since the last valuation due to a rise in gilt yields over the period, leading to a decrease in the liabilities.

Low risk funding target

Change to funding level since 31 March 2022



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Asset allocation

Review of your strategic asset allocation

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Asset allocation – Q3 2024





Asset Group	Manager	30 September 2024					
		Valuation (£m)	Current allocation	Long-term strategy*	Difference	Rebalancing Range	Possible action
Equities		2,239.0	47.9%	50.0%	-2.1%		✓
	BCPP UK Equity	192.8	4.1%	4.0%	+0.1%	TBC	
	BCPP Global Equity	1,369.3	29.3%	28.0%	+1.3%	+/- 5%	
	Baillie Gifford LTGG	676.8	14.5%	18.0%	-3.5%	+/- 3%	
Absolute Return		4.7	0.1%	0.0%	0.1%		🕒
	Leadenhall Remote Risk	1.6	0.0%				
	Leadenhall Diversified	2.1	0.1%				
	Leadenhall Nat Cat	1.0	0.0%				
Property		280.8	6.0%	7.5%	-1.5%	TBC	✓
	L&G	45.7	1.0%				
	Threadneedle	235.1	5.0%				

Source: Northern Trust, Aon. Note: Numbers may not sum due to rounding.



* The investment strategy agreed as part of the 31 March 2022 actuarial valuation discussions.

Asset allocation – Q3 2024 (cont.)

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Asset Group	Manager	Valuation (£m)	Current allocation	30 September 2024			Possible action
				Long-term strategy	Difference	Rebalancing Range	
Infrastructure		708.4	15.1%	10.0%	+5.1%		
	BCPP Infrastructure	358.9	7.7%				
	BCPP Listed Alts	289.7	6.2%				
	BCPP Climate Opportunities	59.7	1.3%				
Private Credit		191.6	4.1%	5.0%	-0.9%		
	BCPP Private Credit	164.3	3.5%				
	Arcmont	19.9	0.4%				
	Permira	7.5	0.2%				
Non-Investment Grade Credit		254.1	5.4%	5.0%	+0.4%	TBC	
	BCPP Multi Asset Credit	254.1	5.4%				
Investment Grade Credit		345.9	7.4%	7.5%	-0.1%	TBC	
	BCPP Investment Grade Credit	345.9	7.4%				

Asset allocation – Q3 2024 (cont.)

Asset Group	Manager	30 September 2024					
		Valuation (£m)	Current allocation	Long-term strategy	Difference	Rebalancing Range	Possible action
Gilts		562.0	12.0%	15.0%	-3.0%	TBC	
	BCPP Index Linked Bonds	562.0	12.0%				
Cash		90.3	1.9%	0.0%	+1.9%	TBC	
	Internal Cash	90.3	1.9%				
Total		4,676.7	100.0%	100.0%			

Source: Northern Trust, Aon. Note: Numbers may not sum due to rounding.

Investment strategy update

Recent and upcoming activity

- The results of the initial investment strategy review process will be discussed with Committee members at the November PFC meeting. The objective of this meeting is to agree an appropriate strategic asset allocation ahead of the 31 March 2025 actuarial valuation. Further advice on how the agreed strategy will be implemented will be discussed and considered at the February 2025 meeting.
- Officers and Advisors are due to hold further discussions around short-term tactical asset allocation changes and rebalancing opportunities took place prior to the November PFC meeting.
- Aon are in the process of undertaking a high-level due diligence review of the Border to Coast UK Property Fund.
- There is limited support from other Border to Coast partner funds for listed impact equities, however this will continue to be discussed with the Committee and Officers.
- We believe there remains attractive opportunities available in non-traditional asset classes such as diversifying hedge funds and insurance linked securities, however, Border to Coast do not currently have any fund offerings for these asset classes.

Transitions and cashflows

The following rebalancing activities took place over the quarter:

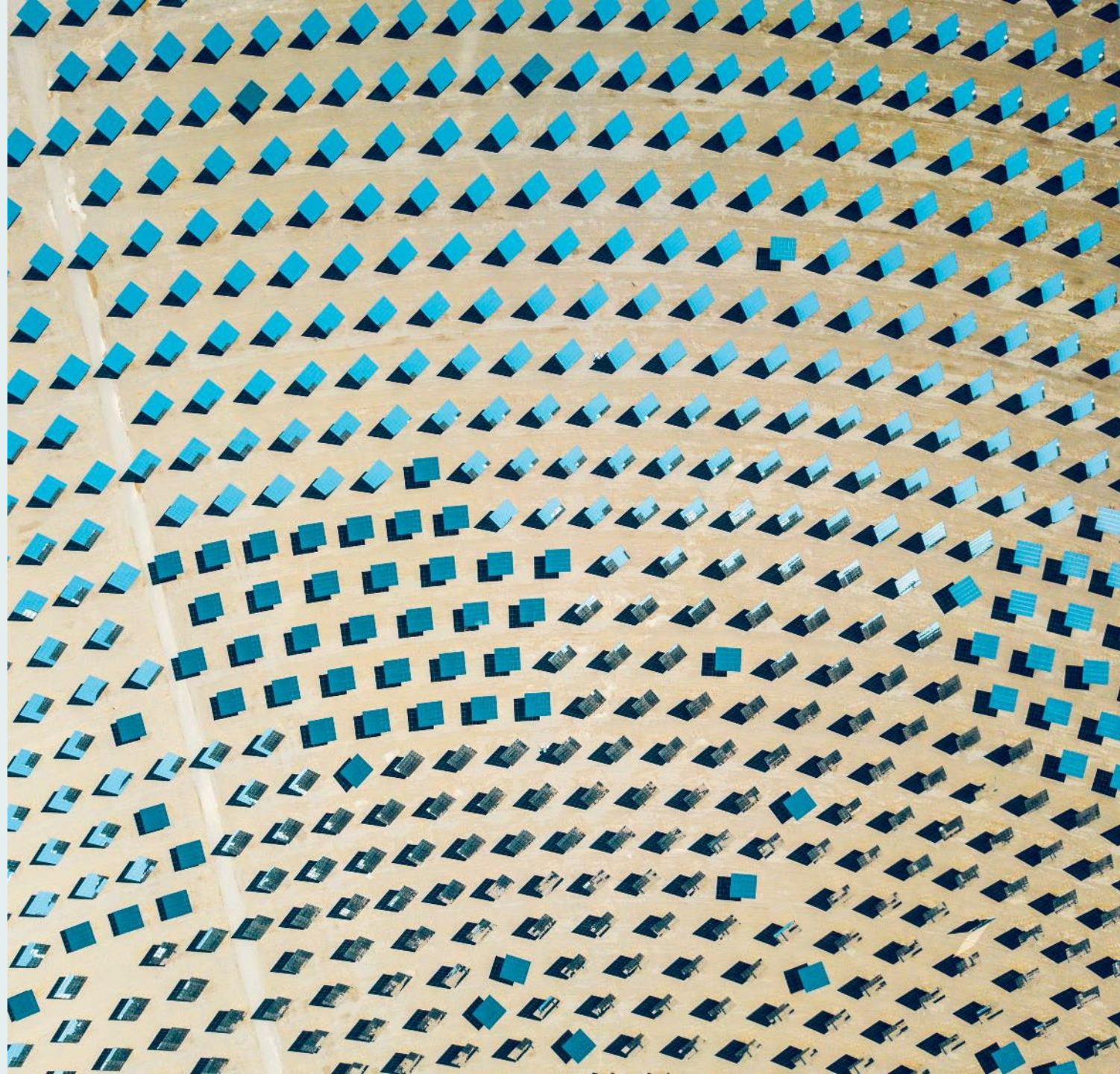
- Border to Coast made:
 - Infrastructure, 30 calls, 25 distributions, £30.1m paid net
 - Climate Opportunities, 16 calls, 7 distributions, £9.5m paid net
 - Private Credit, 9 calls, 17 distributions, £5.8m paid net
- The remaining balance of £16.3m was received in July 2024 as part of the full redemption from the Federated Hermes Property Unit Trust

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Fund performance

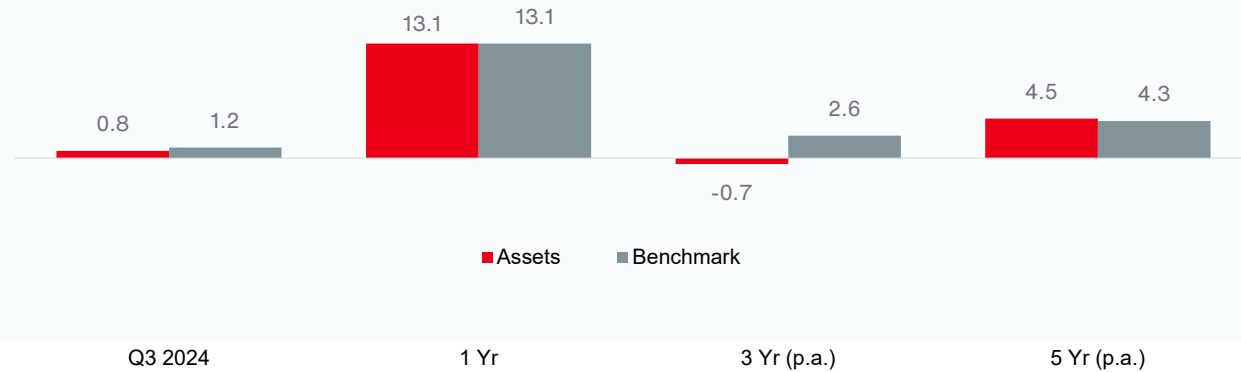
A review of your investment performance

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Total Fund performance – Snapshot

Fund performance & benchmark



Quarterly (relative)

-0.4%

The Fund underperformed the benchmark returning 0.8% vs 1.2% over the quarter.



3 year (relative)

-3.3%

Over 3 years the Fund has underperformed the benchmark returning -0.7% vs 2.6%.



Comments

Total Fund performance is ahead of the composite benchmark over the 5 year period and in line over the 1 year period, but behind over the quarter and 3 year periods to 30 September 2024.

Relative performance



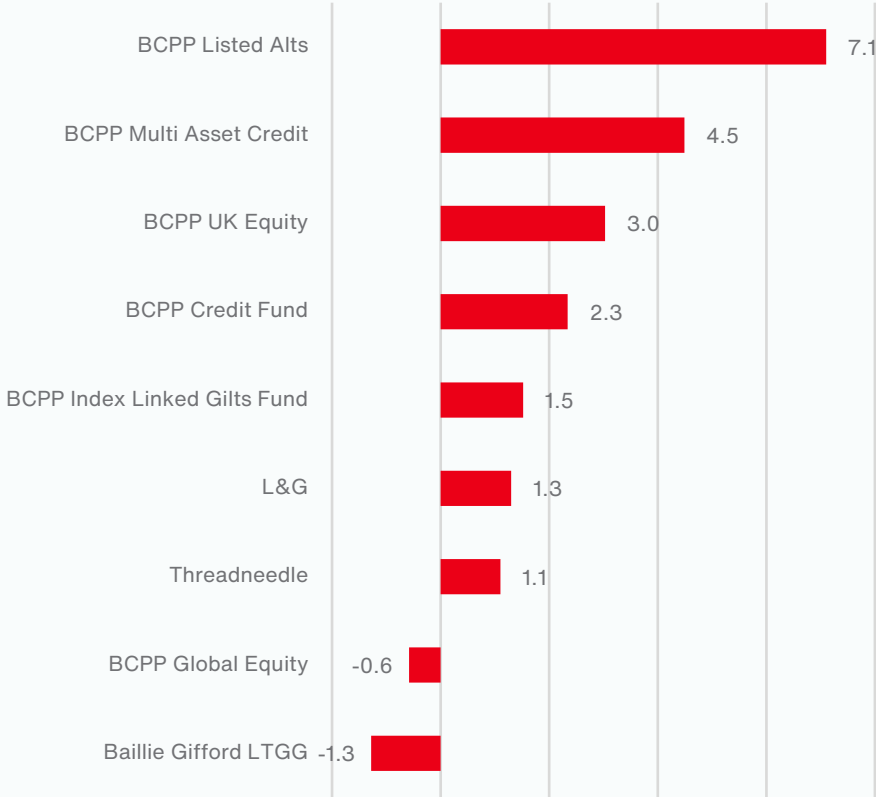
Manager performance – Quarter Snapshot

Q3 2024
Asset
Allocation

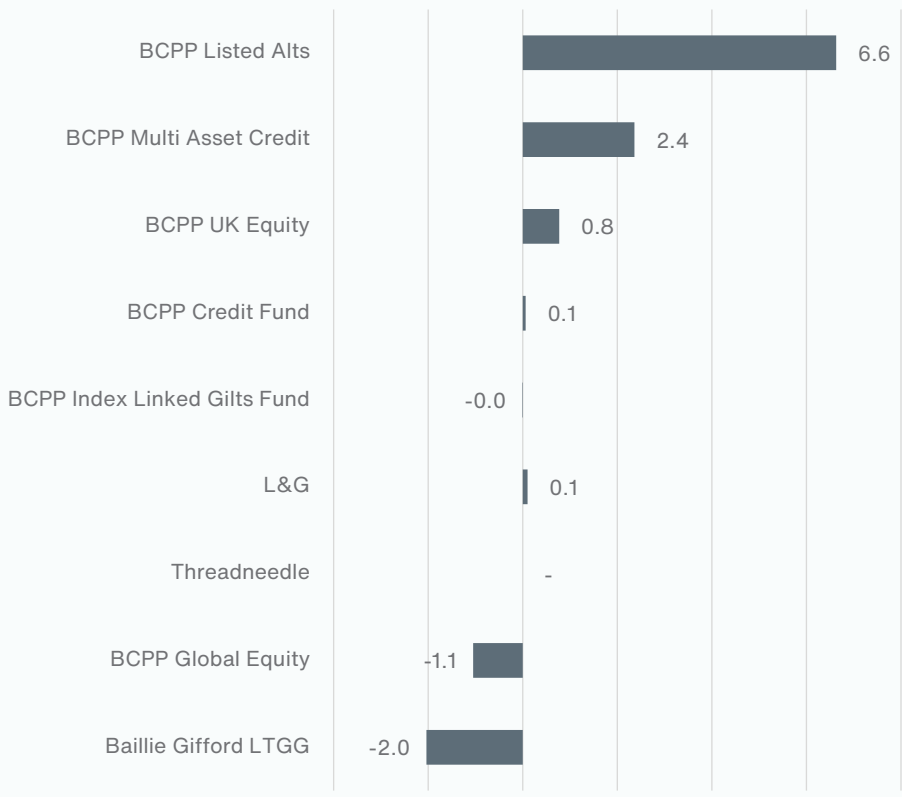
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6.2%
5.4%
4.1%
7.4%
12.0%
1.0%
5.0%
29.3%
14.5%

Absolute performance



Relative performance



Source: Northern Trust, Managers, Aon.
Note: L&G, Threadneedle; MSCI data was used for fund performance and benchmarking purposes, total fund performance calculated using Northern Trust data.

Manager performance – Longer term

	Q3 24 asset allocation	1 Year (%)			3 Years (% p.a.)			5 Years (% p.a.)			Since inception			Inception date
		Perf	B'mark	Rel	Perf	B'mark	Rel	Perf	B'mark	Rel	Perf	B'mark	Rel	
Equity														
UK Equity														
BCPP UK Equity	4.1%	13.5	13.4	0.1	2.8	7.4	-4.6	4.9	5.7	-0.9	4.4	5.6	-1.3	Jun-19
Global Equity														
BCPP Global Equity	29.3%	14.1	19.9	-5.8	6.9	8.3	-1.5	10.0	11.2	-1.2	10.0	11.2	-1.2	Oct-19
Baillie Gifford LTGG	14.5%	28.0	20.2	7.8	-4.6	8.8	-13.4	15.5	10.8	4.7	14.6	9.9	4.8	Sep-06
Property														
L&G	1.0%	3.2	1.7	1.5	0.4	-0.4	0.8	2.1	1.7	0.4	-	-	-	Dec-12
Threadneedle	5.0%	1.7	1.7	0.0	0.2	-0.4	0.6	2.0	1.7	0.3	-	-	-	Jun-12
Infrastructure														
BCPP Listed Alts	6.2%	21.7	19.9	1.8	-	-	-	-	-	-	4.2	8.6	-4.4	Feb-22
Investment grade credit														
BCPP Investment Grade Credit	7.4%	10.8	9.7	1.1	-2.0	-2.9	0.9	-	-	-	-1.1	-2.3	1.1	Aug-20
Non-investment grade credit														
BCPP Multi-Asset Credit	5.4%	13.7	8.8	4.8	-	-	-	-	-	-	1.9	-	-	Nov-21
Gilts														
BCPP Index Linked Bonds	12.0%	7.4	7.1	0.3	-20.0	-20.2	0.2	-	-	-	-14.8	-15.6	0.8	Oct-20
Total		13.1	13.1	0.0	-0.7	2.6	-3.2	4.5	4.3	0.3	7.0	7.3	-0.3	Jan-02

Border to Coast Pensions Partnership – Private Markets Performance Summary

BCPP Infrastructure

Fund	Q3 2024 Position				
	Capital Committed	Capital Drawn	Capital Distributed ¹	IRR ²	TVPI ²
Series 1A	98.7%	87.4%	16.2%	8.6%	1.21x
Series 1B	98.7%	71.7%	4.4%	7.1%	1.13x
Series 1C	100.0%	82.7%	13.3%	9.4%	1.19x
Series 2A	99.7%	52.1%	1.5%	-	-
Series 2B	99.9%	25.6%	0.1%	-	-
Series 2C	35.2%	44.4%	0.5%	-	-

BCPP Private Credit

Fund	Q3 2024 Position				
	Capital Committed	Capital Drawn	Capital Distributed ¹	IRR ²	TVPI ²
Series 1A/B	99.5%	88.3%	28.1%	10.8%	1.21x
Series 1C	99.5%	73.8%	21.4%	11.2%	1.14x
Series 2A	100.0%	40.5%	5.0%	-	-
Series 2B	99.1%	17.4%	1.4%	-	-
Series 2C	23.9%	0.0%	0.0%	-	-

Border to Coast Pensions Partnership – Private Markets Performance Summary (cont.)

BCPP Climate Opportunities

Fund	Q3 2024 Position				
	Capital Committed	Capital Drawn	Capital Distributed ¹	IRR ²	TVPI ²
Climate Opps Series 1 (Series 2A/B)	99.9%	44.4%	5.8%	-	-
Climate Opps Series 2 (Series 2C)	26.8%	22.4%	0.0%	-	-

BCPP UK Opportunities

Fund	Q3 2024 Position				
	Capital Committed	Capital Drawn	Capital Distributed ¹	IRR ²	TVPI ²
UK Opps (Series 2C)	0.0%	0.0%	0.0%	-	-

Border to Coast Pensions Partnership – Private Markets Commitments Summary

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Strategy	Total NYPF Commitments							
	Series 1	1A	1B	1C	Series 2	2A	2B	2C
Private Credit	£195m	£75m		£120m	£210m	£70m	£70m	£70m
Infrastructure	£320m	£70m	£50m	£200m	£360m	£120m	£120m	£120m
Climate Opportunities	N/A	N/A			£260m	£140m		£120m
UK Opportunities	N/A	N/A			£50m	N/A		£50m

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Market background and investment outlook

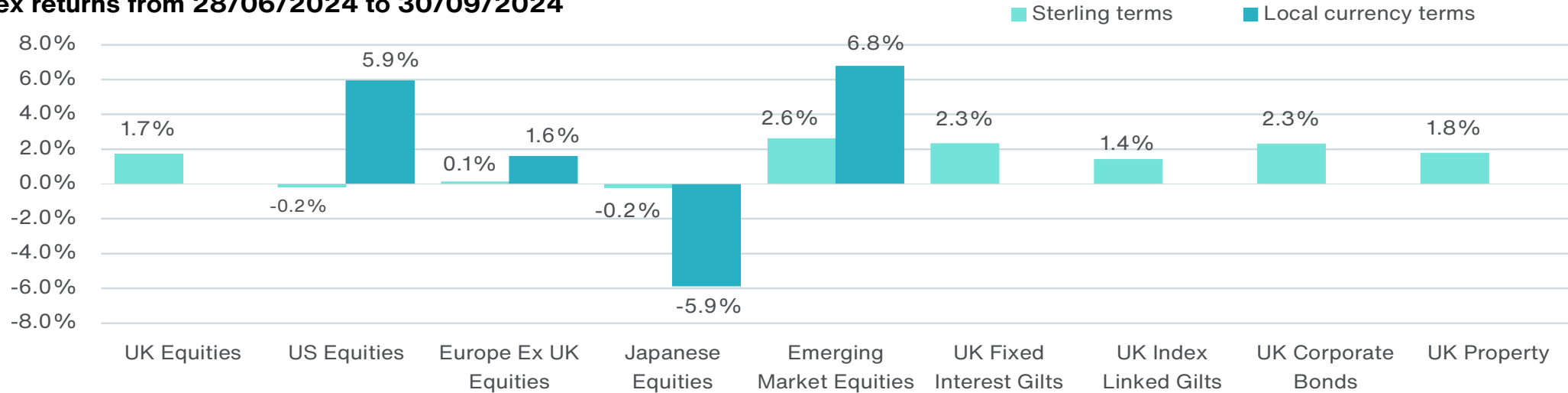
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Aon's views on the market outlook and snapshot of investment markets and key economic data



Market Background Q3 2024

Index returns from 28/06/2024 to 30/09/2024



Sources: FactSet, MSCI (Equities, Property), FTSE (Gilts), iBoxx (Credit).

Equities

In Q3 2024, global equity markets rose over the quarter. The MSCI ACWI rose 5.0% in local currency and 0.6% in sterling terms.

Bonds

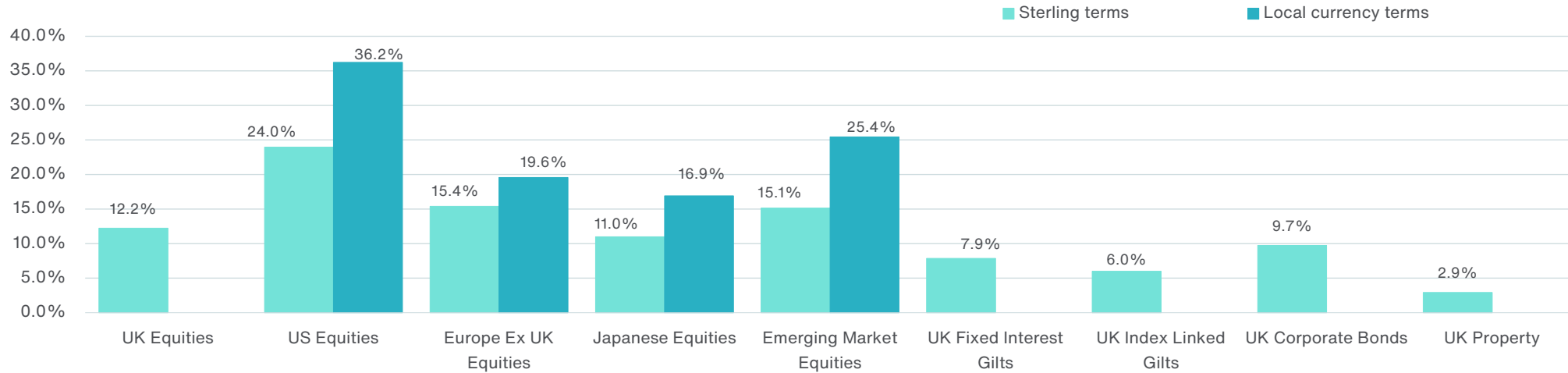
UK investment grade credit spreads remained unchanged at 1.09%, based on the IBoxx Sterling Non-Gilts index. Higher-quality bond credit spreads widened whilst, lower-quality counterparts narrowed, with AAA-rated non-gilt spreads rising by 0.02% to 0.29% and BBB-rated non-gilt spreads narrowed by 0.03% to 1.58%. The IBoxx Sterling Non-Gilts Index posted a return of 2.3%.

Gilts

The UK nominal gilt curve shifted downwards over the quarter as yields fell across maturities.

The index-linked gilt yield curve shifted downwards over the quarter as yields fell across maturities (except at the shortest end of the curve).

Market Background 12 month



Sources: FactSet, MSCI (Equities, Property), FTSE (Gilts), iBoxx (Credit).

Equities

Global equity markets rose over the last twelve months. The MSCI ACWI rose 30.4% in local currency and 20.4% in sterling terms. Inflation began to moderate in most major economies as the global economy proved more resilient than previously anticipated.

Bonds

The UK credit market performed positively over the past twelve months. UK investment-grade credit spreads (the difference between corporate and government bond yields), based on the iBoxx Sterling Non-Gilt Index, narrowed by 0.35% to 1.09%. The index rose 9.7% over the year.

Gilts

The UK nominal gilt curve shifted downwards over the year, with yields falling across maturities. Yields fell more sharply towards the shorter end of the yield curve compared to the medium and the long-term maturities. In Q4 2023, the UK nominal gilt curve shifted downwards while in the first half of 2024, the UK nominal gilt curve shifted upwards.

Quarterly Investment Outlook – October 2024*

- UK gilt yields have risen in the run-up to and budget. Whilst UK specific concerns have contributed, we think most of the recent move up has been down to US Treasury movements. We believe that there will be some attractive entry points to increase fixed rate hedging levels in the coming weeks and months for investors who are looking to manage interest rate risks.
- US macro continues to drive risk assets. July's labour market weakness has been reversed and we think market concerns that a recession might be imminent have receded. Robust September economic data have seen the market view around Fed cuts converge with our own. With no recession imminent this is supportive for both equity and credit markets. However, valuations for both are rich for equities and spreads compressed in corporate bonds. This depresses long-term returns as well as providing little in the way of compensation for unexpected shocks. We favour building portfolio resilience with additional return generating assets.
- We suspect that a clear result from the US election will help equities and riskier bonds. However, a clean sweep by Republicans (taking control of the White House and both houses in Congress) could see bigger budget deficits and higher yields.
- The Chinese “Bazooka” a combination of fiscal and monetary stimulus packages, caused Chinese equity markets to get excited at the end of September but that has since tailed off. The market is still cheap on traditional measures, but sustained progress will need structural reform as well demand stimulus. We think the potential upside means it is worth keeping at least a market weight to emerging market equities.

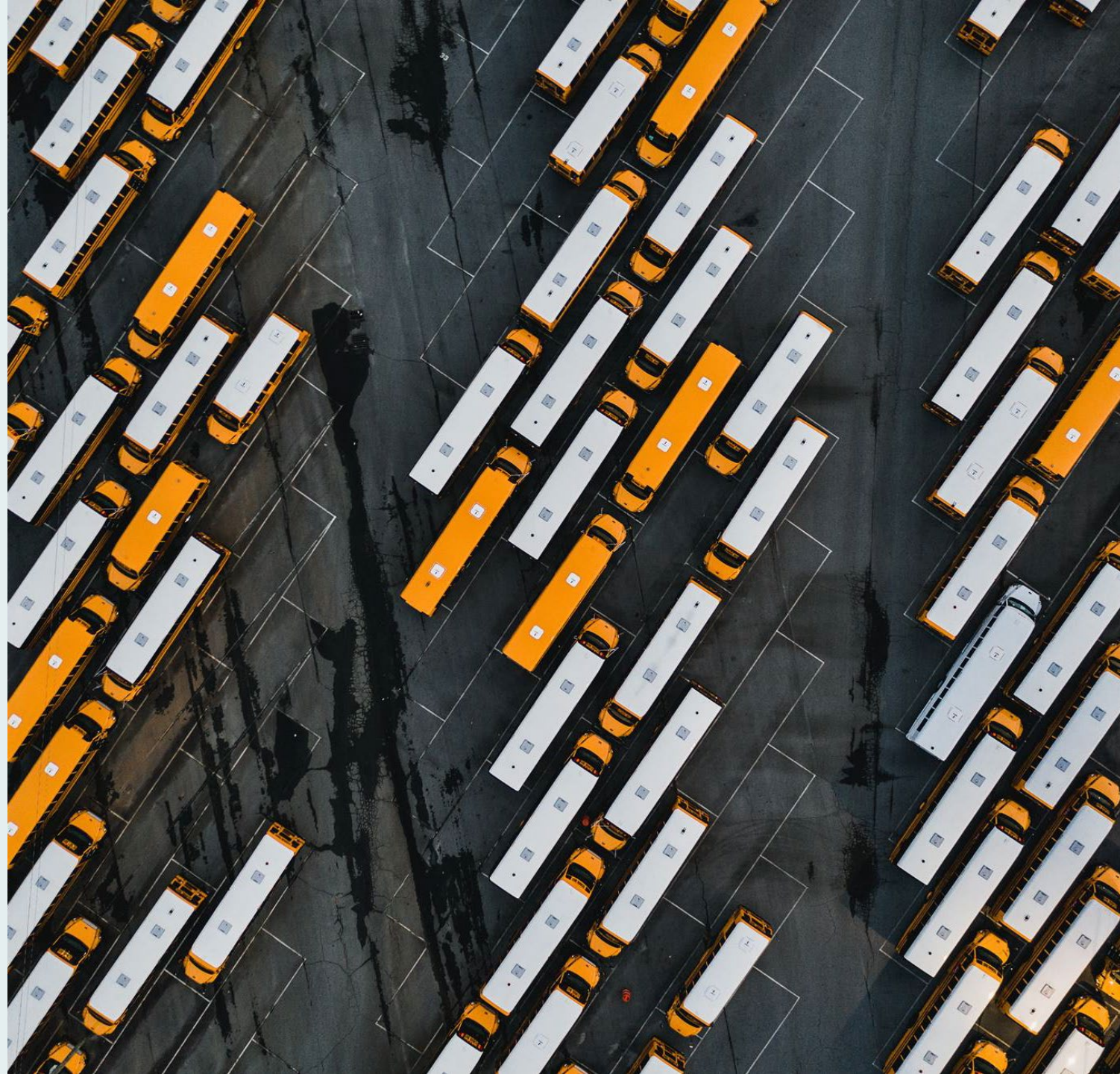
Note: *The opinions referenced are as of the date of publication (22 October 2024) and are subject to change due to changes in the market or economic conditions and may not necessarily come to pass. Information contained herein is for informational purposes only and should not be considered investment advice.

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Manager review

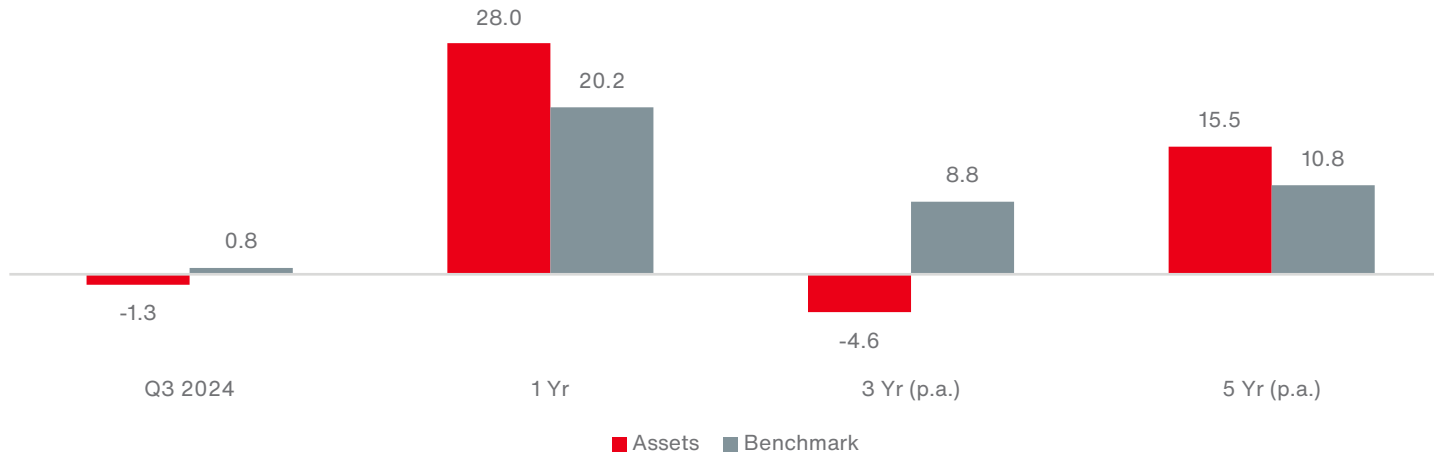
Peer ratings and understanding
manager performance

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Baillie Gifford - LTGG

Fund performance & benchmark



Major Developments

- Baillie Gifford have withdrawn from their membership of Climate Action 100+ and the Net Zero Asset Managers (NZAM) initiative. They reassured us this would lead to no change in process for the Long Term Global Growth strategy.

Performance

- The strategy marginally underperformed over the third quarter.
- The largest detractors over the quarter were Moderna, Dexcom and ASML.
- Moderna (pharmaceuticals and biotech) reported weaker results coupled with reduced R&D spend and COVID-19 vaccine demand, which led to the share price falling. The team continue to closely monitor the company's commercialisation strategy and the effectiveness of recent board changes as the company works toward achieving breakeven.

Buy

Reviewed: November 2024

Ratings detail

ODD: A1 pass **Risk:** ●●●●
Business: ●●●● **Perf:** ●●●●
Staff: ●●●● **Terms:** ●●●●
Process: ●●●● **ESG:** Integrated

Key Info

Appointed: 29 September 2006

Vehicle: Baillie Gifford Long Term Global Growth (+3% over 5-10yrs)

Mandate: Global Unconstrained Equities

Benchmark: FTSE All World Index from 31 March 2008

Target: To outperform the benchmark by 3% p.a. over rolling three-year periods.

Baillie Gifford – LTGG (cont.)

Performance (cont.)

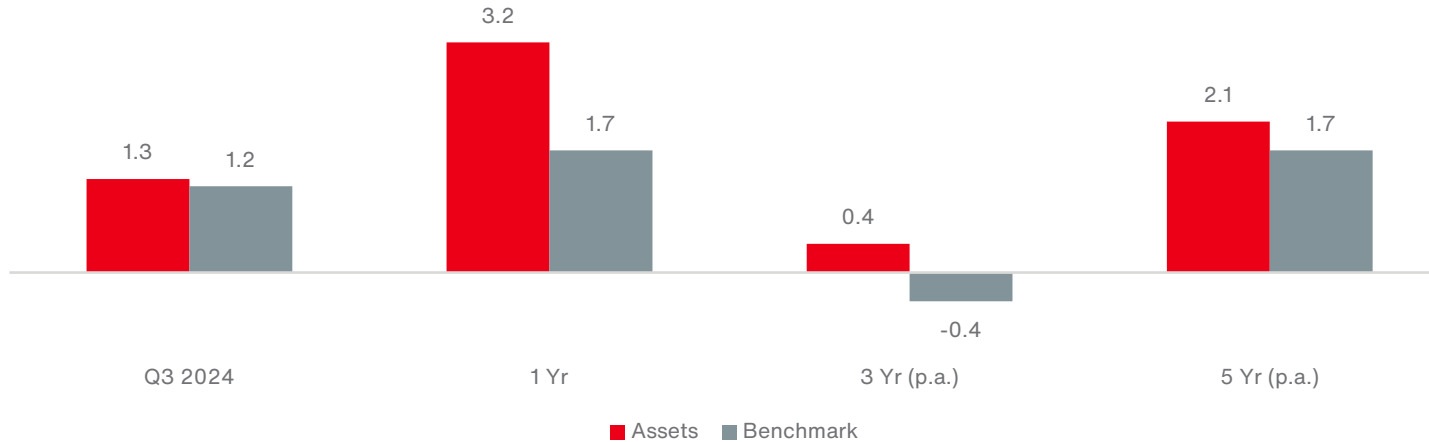
- Dexcom (continuous glucose monitoring) saw a sharp drawdown after the company revised its full-year guidance down and revenue growth slowed. Baillie Gifford continue to view Dexcom as a strong beneficiary of the growing diabetes crisis, and they have made strong progress to date.
- Despite positive results, ASML (semiconductors) faced headwinds over the quarter regarding geopolitical tensions and US election speculation concerning clamp downs on exporting chipmaking equipment to China.
- On the positive side, Meituan, Adyen and Samsara were the largest contributors to performance.
- Meituan (ecommerce platform) released strong results over the quarter, with revenues growing 21% year-over-year. The team believes this robust growth reflects Meituan's dominant position in China's food delivery and local services market, as well as its successful expansion into new verticals such as grocery delivery and ride-hailing.
- Adyen (digital payments) rebounded over the quarter with strong performance and strategic positioning. Revenues increased 24% year-over-year, as the company reported robust growth across its digital, commerce and platform segments in the first half of 2024, showcasing strength in multiple areas of the business.
- Samsara's (software) share price rise this quarter reflects the company's strong financial performance. Reported revenue growth was ahead of market expectations. According to the team, a key driver of Samsara's success has been its AI-powered safety features which significantly improve fleet safety, reducing costs for customers.

Positioning and Transactions

- During the period the team made two complete sales, Kering and Affirm Holdings. Kering was held for over 16 years and was a top 10 holding over this time, however, the team have lost conviction in the stock following a CEO retirement and how reliance the stock price is on the success of the Gucci brand. The team feel there are better opportunities elsewhere in the luxury space including the recent purchase of Moncler. Affirm was a smaller position and did not work out for the team.
- The team also made further trims to Tesla, now a 2.5% position, on valuation and conviction grounds.
- Using these funds, the team added to Elf Beauty, Mercado Libre and Rivian.
- The strategy remains concentrated (39 holdings), with significant exposure to tech-related businesses.

LGIM – Managed Property Fund

Fund performance & benchmark



Buy

Reviewed: August 2024

Key Info

Appointed: 1 November 2012

Vehicle: Property Fund

Mandate: UK Property Pooled Fund

Benchmark: IPD All Balanced Property Fund Index

Target: To outperform the benchmark by over three year rolling periods.

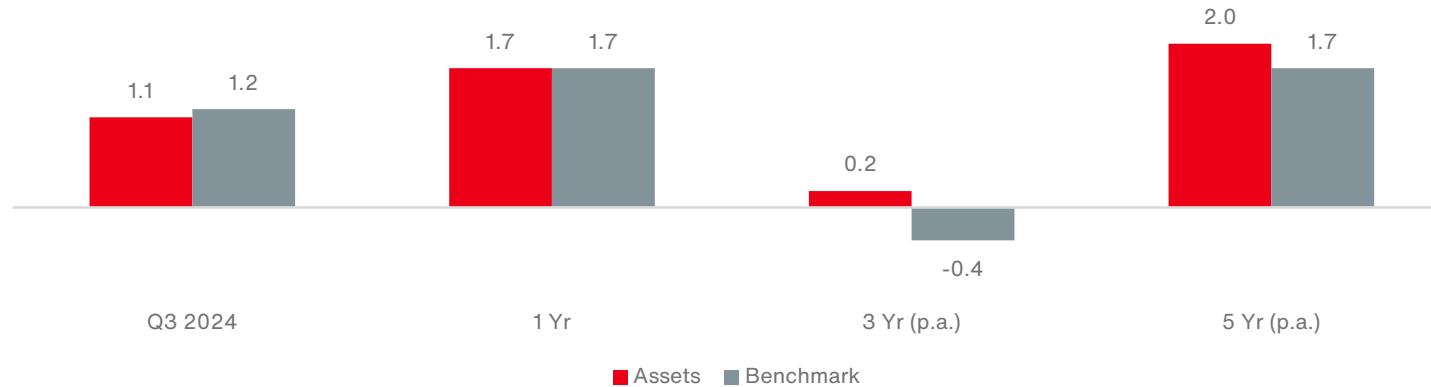
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Monitoring comments (Q2 2024)

- As of Q2 2024, the Fund was overweight to the alternatives sector compared to the benchmark (18.0% vs 13.48%) and had a strong cash position of (12.5% vs 7.72%). Cash has been accretive to returns. The Fund has benefitted from a large amount of DC pension inflows (average net inflows of £18 million per month over the trailing 12 months). Overall, c.50% of the Fund is NEST contributions. Compared to the benchmark, the Fund is underweighted to the industrial, office and retail sectors. The underweight position to the office sector, which remains out of favour, is worthy of note, despite valuations stabilizing.
- The manager has highlighted that the office exposure will be further reduced through strategic sales. Moreover, despite the manager’s cautious outlook on retail, especially high street and shopping centres, the manager remains relatively positive on retail warehousing, which is proving to be resilient.
- The manager also has a positive view on leisure assets, especially those located in core locations, with the Fund gaining exposure through the LGIM leisure Fund. LGIM forecasts that this segment will outperform All Property over the next 3 years and offer an attractive yield profile, also presenting opportunities for asset management initiatives. The Fund’s void rate has marginally dropped since last quarter (11.6% vs 12%). However, 1.2% is strategic void, 1.5% is under refurbishment and 2.7% is under offer.
- In terms of attribution over the quarter, the Industrial Property Investment Fund continued to outperform, returning 3.14% for the quarter and attributing 14bps of performance over the quarter to the Fund. Kinsland Business Park weighted contribution was 0.13% to overall performance. In terms of detractors over the quarter, Rackham’s, (Birmingham, Retail) returned -0.13% and 245 Hammersmith Road (Southeast, Office) returned -0.11%.

Threadneedle – TPEN

Fund performance & benchmark



Buy

Reviewed: September 2024

Key Info

Appointed: 21 June 2012

Vehicle: Property Fund

Mandate: UK Property Pooled Fund

Benchmark: IPD All Balanced Property Fund Index

Target: To outperform the benchmark by 1 to 1.5%.

Monitoring comments (Q2 2024)

- The Fund has an overweight position to industrials, with 48% of the portfolio invested in the sector versus the benchmark at 39.1%. For the retail sector, the Fund exposure is in line with the benchmark at 17.6% albeit with an overweight position to retail warehouses (14.4% vs 12%) and underweight position to both shopping centres and unit shops (combined exposure of 3.2% vs the benchmark at 5.6%). These are all good structural positions in terms of sector. Less good is the Fund's underweight position to 'other' property types (7.6% vs 14.5%) and an overweight position to offices at 22.5% vs 20% for the benchmark.
- Over one year to end-Q2 2024, the Fund's directly held assets generated a total return of 2.9% compared to a broader property market return of 2.3% (based on the MSCI UK Monthly Index – Unfrozen). TPEN's retail assets outperformed the wider market by 2.9% delivering a total return of 4.7% whilst the Fund's offices outperformed by 8.6%, producing a total return of -1.9%. The Fund's industrial assets delivered a total return of 4.6% compared to 5.1% for the industrial sector overall.
- TPEN's strategy is focused on holding assets with a higher income yield evidenced by the 6.3% net initial yield, 0.90% above the MSCI UK Monthly Property Index, as at end-June 2024. This approach should provide a solid foundation for out-performance vs the benchmark, at least in the near term.

Threadneedle – TPEN

Monitoring comments (Q2 2024) – cont.

- Rent collection for Q2 2024 (as at Day 14 post-quarter end) stands at 94%. For the previous quarter (Q1 2024) rent collection was c.93%, in line with pre pandemic levels. The Fund continues to work with occupiers on a case-by case basis to agree appropriate strategies for rent collection. As at end of Q2 2024, The Fund's liquidity position was c.£128.7 million, equivalent to c.8.7% of net asset value. The Fund is currently targeting several strategic sales which will increase its liquidity in line with target (10%).

Transactions

- There were no purchases to report over the quarter. The Fund completed on one sale, a small unit shop (261-309) on Loughton High Road, Greater London for c.£7 million, reflecting a net initial yield of 7.2%.

BCPP – Quarterly high-level monitoring (Q3 2024)

Changes to views of External and Internal Managers

BCPP Global Equity Alpha

- Loomis Sayles: The manager was first placed on the Watchlist in Q1 2023 due to a material level of turnover within the analyst pool. BCPP have held several engagements with the CEO, CIO and the investment team at Loomis around challenges in recruitment and retention. BCPP Plan to conduct an in-person assessment of new teams as part of the Global Equity Search interviews in October 2024.

BCPP UK Equity Alpha

- Redwheel: The manager was placed on the Watchlist during December 2023 following the UK Value team's launch of a new Global Value strategy. BCPP's Annual Review in June 2024 has maintained Redwheel on the Watchlist, and they will be closely monitoring developments over the next 12 months.
- BCPP have negotiated a fee saving arrangement, equating to a 10% saving in year 1.

Border to Coast Pensions Partnership – RI Quarterly Report Snapshot

UK Equity Alpha Fund

Fund	Q3 2024 Position	
	Weighted Average Carbon Intensity	Weighted ESG Score
UK Equity Alpha	44.1	7.8
Benchmark (FTSE All Share)	82.1	7.8

Global Equity Alpha Fund

Fund	Q3 2024 Position	
	Weighted Average Carbon Intensity	Weighted ESG Score
Global Equity Alpha	49.7	7.2
Benchmark (MSCI ACWI)	120.9	6.8

Sterling Investment Grade Credit Fund

Fund	Q3 2024 Position	
	Weighted Average Carbon Intensity	Weighted ESG Score
Sterling Investment Grade Credit	56.6	7.2
Benchmark (iBoxx Sterling Non Gilt Index)	62.0	7.5

Listed Alternatives Fund

Fund	Q3 2024 Position	
	Weighted Average Carbon Intensity	Weighted ESG Score
Listed Alternatives	151.9	7.6
Benchmark (MSCI ACWI)	120.9	6.8

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Further information

Key reference information about your Fund

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Explanation of Ratings

Overall Ratings

Overall Ratings

An overall rating is then derived taking into account both the above outcomes for the product. The table lists how the overall rating can be interpreted.

The comments and assertions reflect our views of the specific investment product and our opinion of its quality. Differences between the qualitative and Aon InForm outcome can occur and if meaningful these will be explained within the Key Monitoring Points section. Although the Aon InForm Assessment forms a valuable part of our manager research process, it does not automatically alter the overall rating where we already have a qualitative assessment. Overall rating changes must go through our qualitative manager vetting process. Similarly, we will not issue a Buy recommendation before fully vetting the manager on a qualitative basis.

Overall Rating	What does this mean?
Buy	We recommend clients invest with or maintain their existing allocation to our Buy rated high conviction products
Buy (Closed)	We recommend clients invest with or maintain their existing allocation to our Buy rated high conviction products, however it is closed to new investors
Qualified	A number of criteria have been met and we consider the investment manager to be qualified to manage client assets
Not Recommended	A quantitative assessment of this strategy indicates it does not meet our desired criteria for investment. This strategy is not recommended.
Sell	We recommend termination of client investments in this product
In Review	The rating is under review as we evaluate factors that may cause us to change the current rating

Explanation of Ratings

ODD

Operational Due Diligence (“ODD”)

The ODD factor is assigned a rating. The table below describes what these ratings mean.

Please note: Operational due diligence inputs provided to the research team by Aon’s Operational Risk Solutions and Analytics Group (ORSA). ORSA is an independent entity from Aon Solutions UK Limited, Aon Hewitt Investment Consulting, Inc., and Aon Hewitt Inc./Aon Hewitt Investment Management Inc. Investment advice is provided by these Aon entities.

Overall ODD Rating	What does this mean?
A1 Pass	No material operational concerns – the firm’s operations largely align with a well-controlled operating environment.
A2 Pass	The firm’s operations largely align with a well-controlled operating environment, with limited exceptions – managers may be rated within this category due to resource limitations or where isolated areas do not align with best practice.
Conditional Pass (“CP”)	Specific operational concerns noted that the firm has agreed to address in a reasonable timeframe; upon resolution, we will review the firm’s rating.

Explanation of Ratings

Overall Ratings

ESG Factor

The ESG factor is assigned a rating and can be interpreted as follows:

Overall ESG Rating	What does this mean?
Advanced	The fund management team demonstrates an advanced awareness of potential ESG risks in the investment strategy. The fund management team can demonstrate advanced processes to identify, evaluate and potentially mitigate these risks across the entire portfolio.
Integrated	The fund management team has taken appropriate steps to identify, evaluate and mitigate potential financially material ESG risks within the portfolio.
Limited	The fund management team has taken limited steps to address ESG considerations in the portfolio.
Not Applicable	ESG risks and considerations are not applicable to this strategy, for example, on the grounds of materiality or asset class relevance

Method

Liabilities

This funding update is consistent with the calculations for the formal actuarial valuation at 31 March 2022. The assumptions used have been modified only insofar as is necessary to maintain consistency with the approach set out in the latest Funding Strategy Statement, reflecting the change in the effective date and in relevant market conditions.

The funding update is projected from the results of the formal actuarial valuation at 31 March 2022 and is therefore approximate. Since the update is not based on up-to-date membership data, it becomes more approximate the longer the period of time that has elapsed since the last actuarial valuation.

The funding update takes account of the following over the period since the last formal actuarial valuation:

- Known fund returns provided; and
- Actual price inflation and its impact on benefit increases.

Demographic experience since the last formal actuarial valuation has been assumed to be in line with the assumptions set out in the 2022 valuation report.

This update is designed to give a broad picture of the direction of funding changes since the actuarial valuation but does not have the same level of reliability as, and therefore does not replace the need for, formal actuarial valuations.

It does not reflect any changes to assumptions which would be made if a full actuarial valuation were to be carried out to reflect, for example, changes to the investment strategy or economic outlook.

Assets

For the purpose of this funding update, we have used an unaudited value of the assets at 30 September 2024 as provided by the Administering Authority.

Contributions

The whole of fund total employer contribution rates shown in this funding update allow for a recovery period ending 31 March 2041 and allow for any surplus in excess of 110% to be recovered as set out in the Funding Strategy Statement.

Assumptions

	Discount rate (Ongoing/Low Risk)	Pay growth (Ongoing/Low Risk)	Pension increases (Ongoing/Low Risk)
31 March 2022	4.20% / 1.70%	3.55% / 4.65%	2.30% / 3.40%*
30 June 2024	4.70% / 4.40%	3.35% / 4.25%	2.10% / 3.00%
30 September 2024	4.90% / 4.30%	3.45% / 4.15%	2.20% / 2.90%

* Plus an allowance for short term inflationary increases

Risk/Return Assumptions



- The table to the right sets out the 10-year median returns and volatility assumptions in absolute terms used in the modelling.
- Assumptions are based on Aon's Capital Market Assumptions as at 30 September 2024
- Allocations modelled are those set out in the main body of this presentation. Allocations are assumed to be annually rebalanced.
- Allowance for active management is made in some of the assets classes, in particular where there is no real passive version of the asset, for example private equity funds.
- Unless stated otherwise, all returns are net of underlying manager fees.

High level asset class	Expected Return	Expected Volatility
Equities	7.0%	18.8%
Property	6.6%	12.6%
Infrastructure	8.9%	16.3%
Listed alternatives	7.1%	19.5%
Illiquid credit	8.0%	7.5%
Investment grade credit	5.0%	10.1%
Non-investment grade credit	6.4%	8.6%
Absolute Return	7.9%	5.4%
Gilts	3.5%	9.6%
Cash	3.9%	1.3%

Correlation Table

High level asset class	Equities	Property	Infrastructure	Listed Alternatives	Illiquid credit	IG Credit	Non-IG Credit	Absolute Return	Gilts	Cash
Equities	100%	35%	59%	100%	20%	5%	53%	21%	-6%	-2%
Property		100%	18%	34%	19%	4%	26%	8%	-1%	7%
Infrastructure			100%	61%	10%	3%	21%	21%	-2%	1%
Listed Alternatives				100%	20%	5%	52%	22%	-6%	-2%
Illiquid credit					100%	66%	62%	14%	4%	15%
IG Credit						100%	33%	16%	47%	35%
Non-IG Credit							100%	20%	1%	10%
Absolute Return								100%	9%	31%
Gilts									100%	30%
Cash										100%

Data and assumptions

Date of calculation	30 September 2024
Number of simulations	5000
Time horizon	10 years
Asset value	£ 4,676.7M

- Infrastructure is modelled as a blend of 37.5% EU and 62.5% US Infrastructure in line with BCPP's mandate.
- Listed Alternatives are modelled as passive global equities (including emerging markets).
- Private Credit modelled as combination of 2/3 Senior Direct Lending (for Arcmont and Permira) and 1/3 Whole Property Debt (for BCPP).
- Gilts are modelled as a 62.9% 15 year index-linked gilts and 37.1% 20 year index-linked gilts.
- Property is modelled as UK Property.
- Liquid IG Credit modelled as UK corporate bonds (A-rated with average duration of 10 years)
- Liquid Non-IG Credit modelled as high yield multi-asset credit.
- Absolute Return is modelled as Leadenhall Insurance Linked Securities modelled as an equal blend of Aggressive, Conservative and Moderate ILS.
- The Fund has an allocation to Equities which make up 50% of the long term allocation.
- For modelling purposes (and for consistency with the approach taken by the Actuary) we do not allow for any outperformance from active management (alpha).
- We have not allowed for the impact of equity protection on the risk and return of the portfolio
- Equities have been modelled using region splits in line with the long term allocation:

Passive UK Equity	10%
Passive Global Equity (including Emerging Markets)	90%

Purpose, key assumptions and judgements of the model

The purpose of this analysis is to consider and monitor the return and risk characteristics of the current and long term investment strategy of the Fund. The key assumptions and judgements of the model are set out below and we believe are reasonable for the intended purpose.

- The calculation considers (5000 stochastic) simulations of annual absolute returns over the period modelled. The simulations are constructed using Aon's Stochastic Asset Model, further details and assumptions are outlined in this appendix.
- A liability proxy is not considered.
- Allocations are assumed to be annually rebalanced, in practice this may not always be possible for illiquid assets.
- The calculations do not take into account any cashflows payable.

Limitations

Material risks to the Fund include covenant, longevity, market, inflation, contributions, expenses and liquidity.

- Our stochastic scenarios include market risk only, and this risk is present in the distribution of returns and is reflected in the risk metrics shown. Market risk has been calculated on an asset only basis.
- This modelling does not cover liability basis, inflation, covenant, longevity, contributions, expenses and liquidity risk. When using the modelling analysis, the user should consider how these risks apply and whether they are material to the decisions under consideration.

There are other factors that could materially affect the Fund's funding and strategy decisions, or the exposure or realisation of the risks above:

- These other factors include external factors such as climate change or political, regulatory and legislative change.
- The general risk factors of economic or technological change are reflected in our economic assumptions and the prevalence of extreme events in our economic model, but not all specific risks can be captured (e.g. disruptions to the financial system, or technological change leading to improvements in longevity).
- There are other risks to which the Fund is exposed that we assume are not material to long-term funding and investment strategy decisions, such as timing of member options or operational risks

Limitations (continued)

There are necessarily some limitations associated with the stochastic scenarios calibrated to Aon's Capital Market Assumptions used for asset-liability modelling.

- CMAs and asset-liability modelling. Asset-liability projections rely on views of the future and whilst median projections are our Aon-house views (intended to reflect no bias), we do not know what will materialise in practice (for example it cannot be predicted exactly how the equity market and bond market will develop over the next year). To help build up a more complete picture of possible outcomes, we project assets and liabilities stochastically with the aim of capturing the uncertainty associated with the projections. This approach is designed to be coherent with each asset being calibrated to target a CMA median return, volatility and set of interdependencies (correlations) assumptions. Nevertheless, there remain some limitations, including but not limited to those set out below.
- Whilst Aon's CMA assumptions are supported by historical data, current financial market prices and expert views there are necessary some limitations in the analysis, including, but not limited to, the following:
 - Long-term versus short-term. The stochastic scenario calibration primarily seeks to capture a realistic long-term distribution of outcomes but is also mindful of short-term risk behaviours. These, sometimes competing, objectives can lead to some trade-offs within stochastic scenario calibration and the requirement for significant expert judgement. Where significant focus is applied to an individual asset class, particularly for more extreme outcomes, the user should bear this limitation in mind, and/or may wish to consider the use of deterministic scenarios.
 - Only 5,000 scenarios are produced. There is necessarily a trade-off between running more scenarios and spurious accuracy. Notably as you approach extreme tails, i.e., 1-200 this is an area of the distributions where there is insufficient market information to apply rigorous statistical analysis to explicitly calibrate models to, as such seeking to define the model outcome with a high degree of confidence is to some extent spurious and will be heavily driven by model selection.
 - Data used for the CMAs may be limited and/or be subject to interpretation for relevance today. The issues that arise from a lack of or poor historical data may be compounded by changing context. For example, for part of the last 100 years the UK was either on the gold standard or a quasi-gold standard, which is a very different economic framework than floating currencies. This obviously creates significant issues for the relevance of any cash rate and bond yield data.
 - Defined randomness rather than chaotic behaviour. The model, by necessity, assumes an underlying distribution of returns and yields. This presumes the underlying asset returns are random in nature rather than deterministic and chaotic. In a deterministic and/or chaotic framework the concept of a 1-in-X event has no meaning and so is not used in this modelling.
 - Some extreme events are not modelled. Our model is built on the premise that the current monetary and political framework will continue and presumes that there will not be a breakdown of civil order, a major natural disaster, UK government default or a significant global armed conflict. We view these risks as being outside the typical use case, however where very extreme scenarios are considered these may be relevant and should be addressed through deterministic scenario analysis.
 - Unknown unknowns. The model deals with known risks and therefore does not allow for "black swan events" or "unknown unknowns", while our model does have fat tails, it is not possible to fully allow for these types of unknown risks.
 - Volatilities and correlations. Volatility and the correlation of assets are only observable after the fact and can change over time. Within the stochastic scenario calibration, volatility and correlations vary for each of 5,000 scenarios, with the distribution of outcomes largely a function of the chosen economic models and the median long-term volatility and correlation targets. Some correlation behaviour is introduced in the tails e.g., large equity falls with more downward credit transitions.

Capital Market Assumptions

Aon's Capital Market Assumptions (CMAs) are our asset class return, volatility, and correlation assumptions. The return assumptions are "best estimates" of annualised returns. Below we set out the key features and approach taken in setting these assumptions.

- Aon's CMAs. Market risk is the primary risk considered as part of the CMA setting process.
 - The return assumptions are Aon's "best estimate" returns, with the uncertainty around the expected return represented by the volatility (annualised standard deviation of returns over the projection period) assumptions. Correlation assumptions allow for the interconnectedness of the risks facing different asset classes.
 - By 'best estimate' we specifically refer to the median annualised return. That is, there is a 50/50 chance that outcomes will be above or below the assumptions.
 - Assumptions are set by Aon's Global Asset Allocation Team and represent the long-term (10 and 30 year) market outlook.
 - Our long-term assumptions are based on historical results, current market characteristics, our professional judgment, and forward-looking consensus views.
- Consideration of other approaches. Alternative approaches include using generalized global models, such as the Capital Asset Pricing Model (CAPM) or a fixed risk premia approach, but we believe these approaches over-simplify the analysis and do not capture as much of the intricacies around each asset class.
- Climate risks. We consider the impacts of climate change when setting our assumptions. Making direct adjustments is challenging and subject to a high degree of subjectivity, as climate change effects are extremely 'non-linear'. Aon's capital market assumptions (CMAs) are based on long-term consensus views of what is priced into the market, and therefore indirectly capture the climate risk that is currently captured in current market conditions. A separate range of deterministic scenarios focusing on climate change scenarios can be used to inform and help aid decisions.
- Other risks. The effects of other internal or external environmental factors, such as technological, economic, political and geopolitical, regulatory and legislative changes, are also indirectly captured, in consensus views on the economic outlook and market pricing, which feed into our return assumptions.

Aon's Stochastic Scenario Generator (SSG) Model

Aon's Stochastic Scenario Generator (SSG) Model is a set of 5,000 stochastic scenarios, calibrated quarterly to Aon's Capital Market Assumptions. These stochastic scenarios can be used to evaluate the risk and return characteristics of a Fund's assets versus its liabilities.

Asset-liability modelling

- Stochastic scenarios. Aon's Capital Market Assumptions CMAs are used as targets to calibrate a set (typically 5,000) of stochastic scenarios for each economic variable. This allows us to perform stochastic asset-liability studies i.e. project portfolios of assets and liabilities many times into the future, building up a coherent picture of possible outcomes. Allowing for the interactions of asset and liabilities stochastically impacts median outcomes and enables percentile outcomes and probabilistic metrics to be considered.
- Consistent framework. All the major markets and asset classes are modelled within a consistent framework allowing for the interactions between them to be properly taken into account.
- Model choice. When setting assumptions, we have opted to use different economic models for different asset classes (listed on this slide), as we believe this would be the best way to capture the specific characteristics associated with each asset class.

Key economic models used

- Nominal yields are modelled using an extended displaced Black-Karasinski model, which enables us to model full yield curves. Yields are positively skewed, and the model can fit the starting curve. In the current calibration, average nominal yields are assumed to broadly follow the market for the first c.20 years of the projections.
- Real yields are modelled using a Hull-White model, this enables us to model unbounded full yield curves. The model can fit the starting curve. In the current calibration, average real yields are assumed to broadly follow the market for the first c.20 years of the projections
- Inflation is taken as the difference between nominal and real short rates, and the positive skew of the nominal yield model ensures realised inflation is positively skewed. For realised inflation a 'surprise' element is allowed for making inflation more volatile than purely predicted by the short rates.
- Investment grade corporate bonds are modelled using an extended Jarrow-Lando-Turnbull framework which assumes bonds can be modelled based on their credit rating and anticipated cashflows. This ensures positive credit spreads with positive skew and ratings transitions which broadly reflect historically observed transitions.
- Return-seeking assets are modelled using exposures to factors, where each factor can contain stochastic volatility and/or jump diffusion process. This gives the flexibility to capture more complex tail behaviour than is typically observed in simpler log-normal models.
- Other assets generally use outputs from the models above and exposure to some degree of idiosyncratic element in order to capture desired properties for the asset being considered.

TAS compliance

This document has been prepared in accordance with the framework set out below.

This document has been requested by the Administering Authority. It has been prepared under the terms of the Agreement between the North Yorkshire Council and Aon Solutions UK Limited on the understanding that it is solely for the benefit of the addressee.

This document, and the work relating to it, complies with 'Technical Actuarial Standard 100: General Actuarial Standards' ('TAS 100') (updated July 2023).

The compliance is on the basis that North Yorkshire Council is the addressee and the only user and that the document is for information only and is not to be used to make any decisions on the contributions payable or the investment strategy, and is also to be used to assess the expected return and Value at risk of the Fund's assets on a quarterly basis. If you intend to make any decisions after reviewing this document, please let me know and I will consider what further information I need to provide to help you make those decisions.

This document should be read in conjunction with:

- The report on the most recent actuarial valuation of the Fund as at 31 March 2022.
- The latest Funding Strategy Statement.

If you require further copies of any of these documents, please let us know.

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