London Borough of Havering Pension Fund

Q4 2022 Investment Monitoring Report

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HYMANS ROBERTSON

- This section outlines the key points included in this report.
- The tactical benchmark in the Fund Performance table represents the aggregate performance target of the Fund's assets and is a measure of relative outperformance / underperformance from the asset managers.
- The strategic benchmark represents the expected rate at which the Fund's liabilities are growing (or falling) in value. The asset performance relative to the strategic benchmark performance gives an indication of whether the funding level has improved or weakened over a given period.

Key Takeaways

Equities and credit generally performed well over the quarter	• Growth figures released during the quarter were ahead of expectation and the fears around European gas shortages eased • The LCIV Global Alpha equity fund underperformed whilst the LGIM Future World equity fund performed well as 'value' stocks continued to outperform 'growth' stocks • The LCIV Absolute Return Fund continued to produce very strong returns
Overall fund performance was positive as the total Fund value increased by around 0.5%, significantly outperforming the strategic benchmark	• Fund performance of 0.5% was broadly in line with the tactical benchmark • The Fund's assets significantly outperformed the strategic benchmark (-5.2%) indicating the funding level is expected to have increased over the quarter.
Negative index linked gilt returns meant a rebalancing trigger was breached in the RLAM mandate, although no action was taken	• Falling index linked gilt values meant that the balance in the RLAM mandate between MAC and IL gilts fell outside the current management parameters • Rebalancing was suspended in light of the current strategy review and volatile markets and it is proposed that this provision is removed from the IMA
USD denominated assets were negatively impacted as sterling strengthened. There were offsetting gains from the currency hedging programme.	• Many of the Fund's private market assets have USD exposure, meaning that they demonstrated a weak return when converted to sterling terms. Currency hedging largely offset this.
Large negative relative returns were observed across some of the Fund's real asset and bond investments, but there are no immediate concerns	• Most of these mandates are measured against inflation based benchmarks. Short term inflation remains high • As noted above, overseas currency exposure has negatively impacted returns • Property market valuations continue to be revised down, unwinding some of the strong returns observed over the past 18 months

Fund Performance

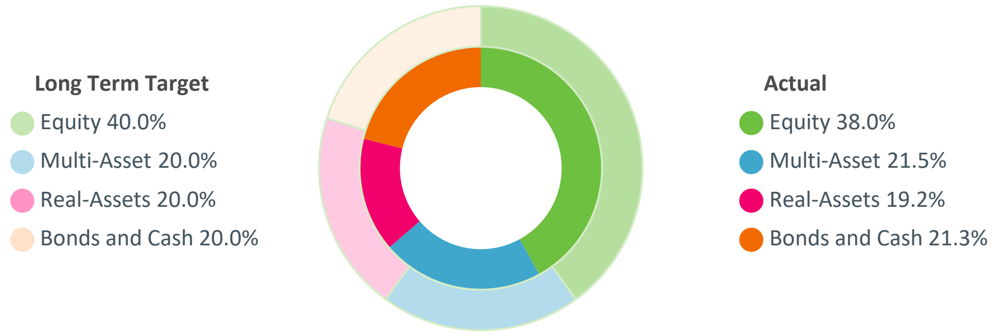
	Last 3 months (%)	Last 12 months (%)	Last 3 years (%)	Last 5 years (%)
Total Fund Performance	**0.5**	**-9.2**	**4.0**	**4.3**
Tactical Benchmark	0.9	-2.9	4.9	5.2
Strategic Benchmark	-5.2	-31.6	-6.5	-2.1

Fund Asset Valuation

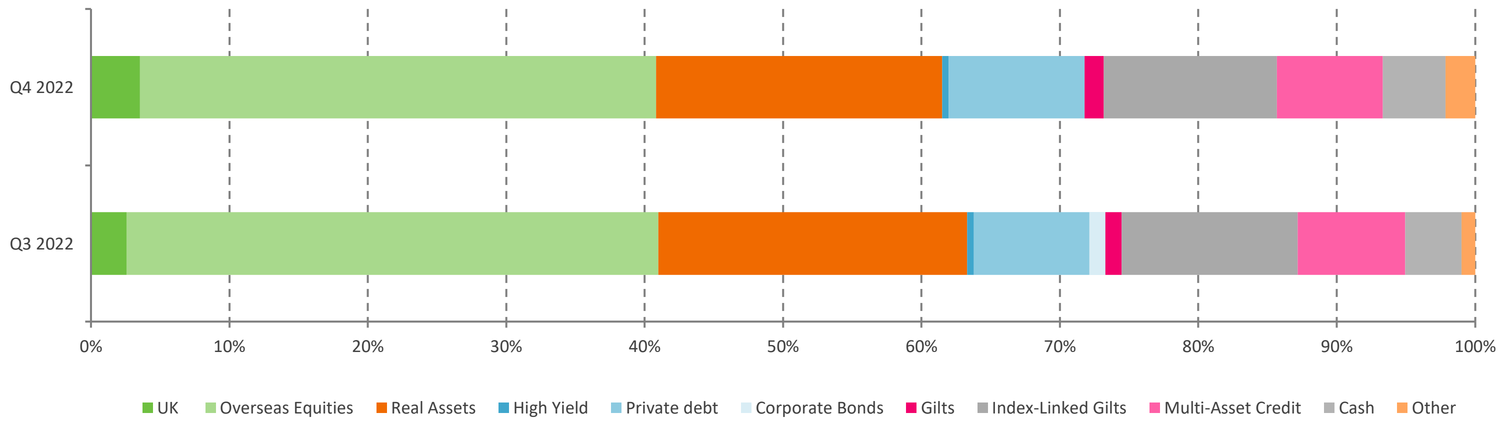
	Fund value (£m)
Q3 2022	**865.9**
Q4 2022	**870.5**

- The Fund's investment strategy is implemented through the London Collective Investment Vehicle ("LCIV"), and retained assets including life funds (with fee structures aligned with LCIV).
- The target allocation to LCIV and life funds totals 62.5% of Fund assets. Other retained assets will be delivered through external managers, with the position reviewed periodically.
- The chart below right illustrates the underlying asset allocation of the Fund, i.e. taking account of the underlying holdings in the multi-asset funds on a 'look through' basis.
- The Fund's overall allocation to equities continued to slightly decrease over the quarter to c.40.8% as at 31 December 2022 (c.41.0% at 30 September 2022) – this was due to both the LCIV Absolute Return Fund and LCIV Diversified Growth Fund decreasing their equity allocations from 14.8% and 25.3% to 12.7% and 16.5%, respectively.
- The allocation to private debt also continued to increase over the quarter to c.9.8% as at 31 December 2022 (c.8.4% as at 30 September 2022) – this was due to the majority of the Fund's private debt assets increasing in value over the quarter, despite mixed performance returns, the depreciation of sterling against the Euro and, primarily, the continued drawdown over the period, coupled with the fall in value of other assets.
- The allocation to real assets fell to c.20.7% as at 31 December 2022 (c.22.3% as at 30 September 2022) – this was due to the LCIV Diversified Growth Fund further decreasing their allocation to infrastructure and property from 20.2% to 18.2% over the quarter and real assets falling in value over the period.
- The allocation to corporate bonds fell to 0.0% as at 31 December 2022 (c.1.2% as at 30 September 2022) as the Fund fully redeemed its holdings in the RLAM Corporate Bonds Portfolio in October 2022.

Asset Allocation



Asset Class Exposures



The total value of the Fund's assets increased by £4.5m over the quarter to £870.5m as at 31 December 2022.

Despite falling in December 2022, global equities rose in the last quarter of 2022 due to optimism regarding the easing of European gas shortages and subsequent inflationary pressures in 2023, leading to improved investor sentiment.

The Fund's real assets continued to fall in value as rising interest rates and sustained inflationary pressures impacted real asset valuations. Capital values in property markets were c.20% below peak levels in June 2022, with the largest valuation decline being in the industrial sector.

Despite nominal gilt yields falling to below end-September 2022 levels, real yields rose over the quarter. As such, the Fund's RLAM Index linked Gilts mandate continued to fall in value over the period.

Over the quarter, as both global investment grade and sub-investment grade spreads fell by 0.3% p.a. to 1.5% p.a. and by 1.0% p.a. to 5.1% p.a., respectively, this positively impacted the RLAM MAC mandate.

Towards the end of October 2022, the Fund fully redeemed its remaining holdings in the RLAM Corporate Bonds Portfolio.

The Fund paid the following capital calls during the quarter:

- c.£1.4m to the Stafford IV Fund
- c.£0.2m to the LCIV Renewable Energy Infrastructure Fund
- c.£1.2m and c.£0.8m to the Churchill IV Fund
- c.£10.5m to the Permira V Fund

Asset Allocation

Manager		Valuation (£m) Q3 2022	Valuation (£m) Q4 2022	Actual Proportion	Benchmark	Relative
Equity		**324.5**	**330.4**	**38.0%**	**40.0%**	**-2.0%**
LGIM Global Equity	LCIV aligned	32.5	33.2	3.8%	5.0%	-1.2%
LGIM Emerging Markets	LCIV aligned	35.9	36.1	4.2%	5.0%	-0.8%
LGIM Future World Fund	LCIV aligned	87.0	90.2	10.4%	10.0%	0.4%
LCIV Global Alpha Growth Paris Aligned Fund	LCIV	128.1	129.6	14.9%	15.0%	-0.1%
LCIV PEPPA Passive Equity	LCIV	40.9	41.3	4.8%	5.0%	-0.2%
Multi-Asset		**188.5**	**187.2**	**21.5%**	**20.0%**	**1.5%**
LCIV Absolute Return Fund	LCIV	116.4	122.2	14.0%	12.5%	1.5%
LCIV Diversified Growth Fund	LCIV	72.2	65.0	7.5%	7.5%	0.0%
Real-Assets		**179.9**	**167.3**	**19.2%**	**20.0%**	**-0.8%**
UBS Property	Retained	60.2	51.0	5.9%	6.0%	-0.1%
CBRE	Retained	38.8	35.3	4.1%	4.0%	0.1%
JP Morgan	Retained	39.9	35.4	4.1%	4.0%	0.1%
Stafford Capital Global Infrastructure SISF II	Retained	20.5	20.2	4.1%	3.5%	0.6%
Stafford Capital Global Infrastructure SISF IV	Retained	13.7	15.8			
LCIV Renewable Energy Infrastructure Fund	LCIV	6.7	9.6	1.1%	2.5%	-1.4%
Bonds and Cash		**172.8**	**185.5**	**21.3%**	**20.0%**	**1.3%**
RLAM Index Linked Gilts	Retained	29.0	26.0	3.0%	5.0%	-2.0%
RLAM Multi-Asset Credit	Retained	56.8	58.6	6.7%	7.5%	-0.8%
RLAM Corporate Bonds	Retained	10.1	0.0	0.0%	0.0%	0.0%
Churchill Senior Loan Fund II	Retained	25.6	23.4	2.7%	3.0%	1.4%
Churchill Senior Loan Fund IV	Retained	14.1	14.8	1.7%		
Permira IV	Retained	27.9	29.6	4.7%	4.5%	0.2%
Permira V	Retained	0.2	10.9			
Cash at Bank	Retained	15.0	19.1	2.2%	0.0%	2.2%
Currency Hedging P/L	Retained	-5.7	3.2	0.4%	0.0%	0.4%
Total Fund		**865.9**	**870.5**	**100.0%**	**100.0%**	

Source: Northern Trust, Investment Managers

- Please note the early stage performance of the Fund's private market investments can be very volatile using this method of performance measurement. This is to be expected and should not provide cause for concern.
- The Fund's assets returned 0.5% over the quarter, underperforming its 0.9% benchmark return by -0.5%.
- The LGIM mandates continued to broadly track their respective benchmarks over the quarter.
- The LCIV Global Alpha Growth Paris Aligned Fund returned positively in absolute terms however underperformed its respective benchmark. The Fund's 18.5% allocation and overweight to the consumer discretionary sector (its third largest sectoral allocation) dragged on the Fund's performance – consumer discretionary stocks returned negatively over the period as the cost-of-living squeeze intensified over the quarter.
- Over the quarter, the low yield industrial sector has experienced the largest declines in capital values in the property market. UBS (c.26% as at 31 December 2022), CBRE (c.46% as at 30 September 2022) and JP Morgan (c.34% to the Utilities/Distribution sector as at 30 September 2022) all have significant allocations to the industrial sector and as such, have returned negatively in both absolute terms and relative terms against their respective property index and inflation linked benchmarks.
- The RLAM Index Linked Gilts mandate delivered negative returns in both absolute and relative terms due to further, but reducing rates of, increases in interest rates and real gilt yields over the quarter.
- Please note that all asset performance is in GBP terms and does not make an allowance for currency fluctuations. The total Fund performance includes the impact of the Russell currency overlay mandate. Please note the separate slide for further detail on the Russell mandate, along with asset performance excluding the impact of currency fluctuations.

Manager Performance

	Last 3 months (%)			Last 12 months (%)			Last 3 years (% p.a.)			Since Inception (% p.a.)		
	Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative	Fund	B'mark	Relative
Equity												
LGIM Global Equity	2.1	2.1	**0.0**	-7.4	-7.3	**-0.1**	7.8	7.9	**-0.1**	11.2	11.2	**0.0**
LGIM Emerging Markets	0.6	0.8	**-0.2**	-6.9	-6.4	**-0.5**	1.6	1.9	**-0.3**	4.1	4.3	**-0.2**
LGIM Future World Fund	3.6	3.7	**0.0**	-6.7	-6.6	**-0.1**	-	-	-	-2.0	-1.9	**-0.1**
LCIV Global Alpha Growth Paris Aligned Fund	1.2	1.9	**-0.7**	-21.8	-7.8	**-15.2**	3.9	8.1	**-3.9**	11.9	11.4	**0.4**
LCIV PEPPA Passive Equity	1.0	0.9	**0.1**	-12.6	-13.0	**0.5**	-	-	-	-10.2	-10.6	**0.4**
Multi-Asset												
LCIV Absolute Return Fund	5.0	1.7	**3.3**	6.9	5.4	**1.4**	9.0	4.7	**4.2**	5.6	4.8	**0.7**
LCIV Diversified Growth Fund	1.5	1.6	**-0.1**	-15.9	5.0	**-20.0**	-2.1	4.2	**-6.0**	2.4	4.1	**-1.6**
Real-Assets												
UBS Property	-14.6	-14.1	**-0.6**	-8.9	-9.5	**0.7**	2.8	2.2	**0.6**	5.4	6.1	**-0.6**
CBRE	-9.1	3.8	**-12.4**	17.3	15.5	**1.6**	10.6	10.4	**0.1**	9.1	9.3	**-0.2**
JP Morgan	-7.3	3.8	**-10.7**	10.0	15.5	**-4.8**	9.7	10.4	**-0.7**	8.0	9.3	**-1.1**
Stafford Capital Global Infrastructure SISF II	1.1	3.8	**-2.6**	23.3	15.5	**6.8**	10.1	10.4	**-0.3**	9.3	9.1	**0.2**
Stafford Capital Global Infrastructure SISF IV	4.8	3.8	**0.9**	35.3	15.5	**17.1**	-	-	-	22.5	12.2	**9.2**
LCIV Renewable Energy Infrastructure Fund	28.3	3.8	**23.6**	22.3	15.5	**5.9**	-	-	-	18.5	14.2	**3.8**
Bonds												
RLAM Index Linked Gilts	-10.3	-7.5	**-3.0**	-39.8	-38.0	**-3.0**	-	-	-	-12.5	-11.6	**-1.1**
RLAM Multi-Asset Credit	3.2	3.4	**-0.3**	-10.1	-7.1	**-3.2**	1.5	1.8	**-0.3**	6.4	6.0	**0.4**
Churchill Senior Loan Fund II	-6.0	1.7	**-7.6**	17.1	5.4	**11.1**	7.7	4.7	**2.9**	6.4	4.7	**1.6**
Churchill Senior Loan Fund IV	-6.3	1.7	**-7.8**	15.8	5.4	**9.9**	-	-	-	15.8	5.4	**9.9**
Permira IV	2.0	1.7	**0.3**	5.7	5.4	**0.2**	3.7	4.7	**-0.9**	3.8	4.7	**-0.9**
Permira V	0.6	1.7	**-1.0**	-	-	**-**	-	-	-	0.7	3.1	**-2.3**
Total	0.5	0.9	**-0.5**	-9.2	-2.9	**-6.4**	4.0	4.9	**-0.8**	7.8	-	**-**

Source: Northern Trust, investment managers. Please note that benchmark performance for Baillie Gifford DGF and Ruffer Absolute Return funds is inclusive of outperformance targets. In addition, longer term performance for Baillie Gifford Global Equity, Baillie Gifford DGF and Ruffer Absolute Return funds is inclusive of performance prior to their transfer in to the London CIV. LGIM Global and Fundamental Equity mandates were managed by SSGA prior to November 2017 and we have retained the performance history for these allocations. Performance figures for CBRE, Stafford and JP Morgan has been taken from the managers rather than Northern Trust. The Fund performance figure includes the effect of the currency hedging mandate managed by Russell. Permira V performance has been calculated by Hymans Robertson as End of Quarter Capital/Start of Quarter Capital (allowing for cashflows).

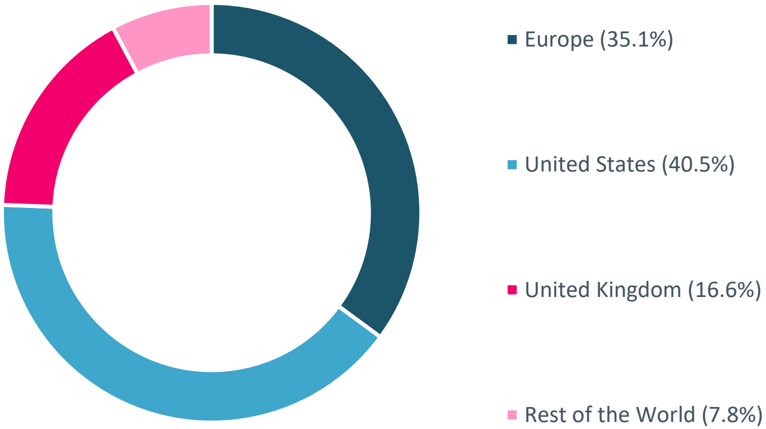
RLAM – Bond Mandates

- Royal London Asset Management (RLAM) was appointed in February 2005 to manage the Fund's bond mandate. RLAM now manage two separate portfolios: the Index Linked Gilts Portfolio and the MAC Portfolio.
- The separate Corporate Bonds Portfolio was fully sold down to fund strategic changes across the rest of the Fund's wider asset allocation towards the end of October 2022.
- The Fund's strategic allocation to index linked gilts and multi-asset credit of 5.0% and 7.5%, respectively. The current IMA with RLAM has an automatic rebalancing provision which has been triggered, but is currently suspended. We recommend this be removed.
- The charts right compare the regional and credit rating breakdown of the MAC mandate at the end of the quarter.
- The RLAM Index Linked Gilts Portfolio fell in value as real yields continued to rise, with performance negative in both absolute and relative terms.
- Both investment grade and sub-investment grade credit spreads began to fall over the last quarter of 2022 and as such, the MAC Portfolio, primarily invested in sub-investment grade credit assets which experienced a greater fall in spreads, contributed positive absolute returns.

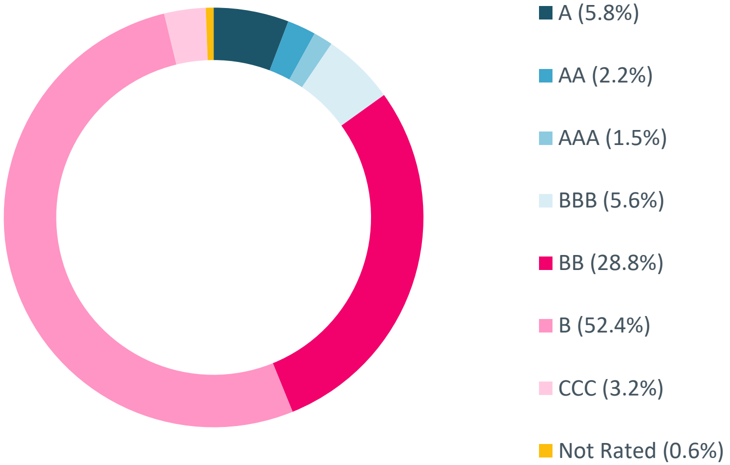
RLAM Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
RLAM ILGs	-10.3	-39.8	-12.5
Benchmark	-7.5	-38.0	-11.6
Relative	-3.0	-2.9	-1.1
RLAM MAC	3.2	-10.1	6.4
Benchmark	3.4	-7.1	6.0
Relative	-0.3	-3.2	0.4

Regional Allocation (MAC)



Credit Allocation (MAC)



MAC and ILGs Benchmark: FTSE Index Linked over 5 Year 50%, ICE BAML BB-BBB Index 25%, Credit Suisse US Leveraged Loan GBP Hedged 25%.
Corporate Bonds Benchmark: iBoxx Sterling Non-Gilt Over 10 year Index.

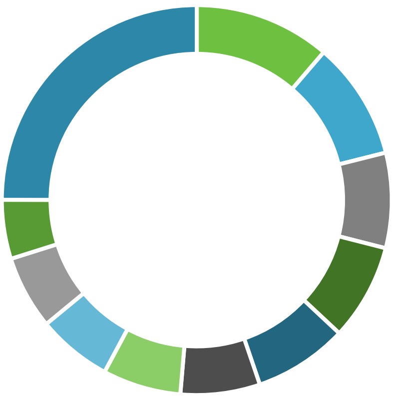
Churchill Private Debt

- The strategic allocation to the Churchill mandate is 3.0%. With the actual allocation being overweight to this by 1.4% as at 31 December 2022.
- Over the quarter, both the Churchill II and Churchill IV funds underperformed their respective benchmarks and contributed negatively to the overall Fund return – with Churchill II contributing a relative return of -7.6% and Churchill IV contributing a relative return of -7.8%.
- However, over the longer periods of 12 months and since inception, both Churchill II and Churchill IV continued to outperform their respective benchmarks.
- As at 30 September 2022, Churchill II had 104 loan commitments and Churchill IV had 108 loan commitments.
- Over the third quarter of 2022, Churchill II completed 3 new investments totalling $20.1m (c.£18.0m) and Churchill IV completed 13 new investments totalling $328.8m (c.£294.5m).

Churchill II Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Churchill Senior Loan Fund II	**-6.0**	**17.1**	**6.4**
Benchmark	**1.7**	**5.4**	**4.7**
Relative	**-7.6**	**11.1**	**1.6**

Churchill II Sector Allocation*



- Healthcare & Pharmaceuticals (11.3%)
- High Tech Industries (9.8%)
- Beverage, Food & Tobacco (7.9%)
- Services: Business (8%)
- Containers Packaging & Glass (7.8%)
- Telecommunications (6.6%)
- Aerospace & Defense (6.5%)
- Capital Equipment (6.2%)
- Consumer goods: Non-durable (6.1%)
- Construction & Building (4.9%)
- Other (25%)

Churchill IV Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Churchill Senior Loan Fund IV	**-6.3**	**15.8**	**15.8**
Benchmark	**1.7**	**5.4**	**5.4**
Relative	**-7.8**	**9.9**	**9.9**

Churchill IV Fund Sector Allocation*

- Healthcare & Pharmaceuticals (14.5%)
- High Tech Industries (11.2%)
- Capital Equipment (9%)
- Services: Business (10.3%)
- Beverage, Food & Tobacco (6.2%)
- Banking, Finance, Insurance, Real Estate (6.6%)
- Construction & Building (4.9%)
- Environmental Industries (3.7%)
- Consumer Goods (4.9%)
- Automotive (4.7%)
- Other (23.9%)

Source: Northern Trust, Churchill
** As at 30 September 2022 (latest available).*

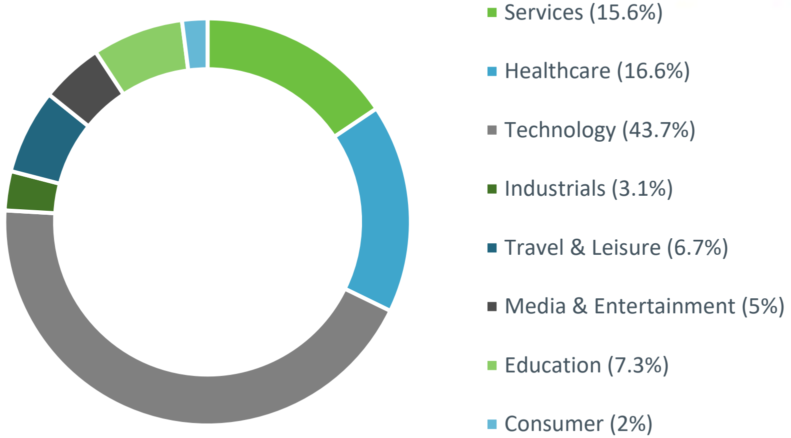
Permira Private Debt

- The strategic allocation to the Permira mandate is 4.5%. With the actual allocation being overweight to this by 0.2% as at 31 December 2022.
- Over the quarter, the Permira IV fund slightly outperformed its benchmark whereas the Permira V fund underperformed its benchmark, contributing mixed returns to the overall Fund return – with Permira IV contributing a relative return of 0.3% and Permira V contributing a relative return of -1.0%.
- Over the longer period of 12 months, Permira IV continued to marginally outperform its respective benchmark. However, since inception, both Permira IV and Permira V continued to slightly underperform their respective benchmarks, noting that Permira V is early in its lifecycle.

Permira IV Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Permira IV	2.0	5.7	3.8
Benchmark	1.7	5.4	4.7
Relative	0.3	0.2	-0.9

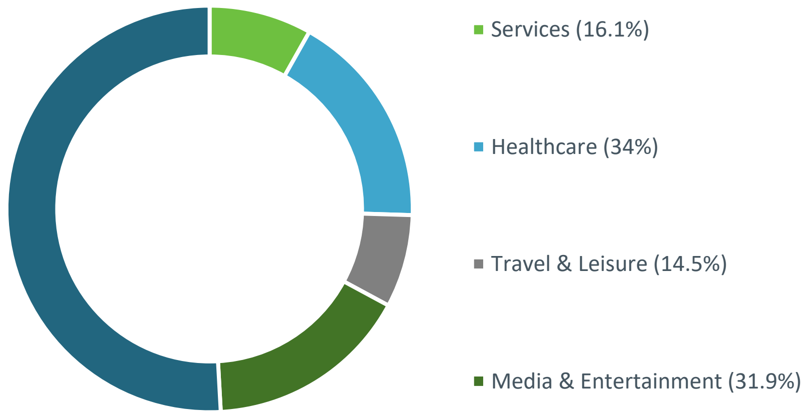
Permira IV Sector Allocation*



Permira V Fund Performance

	Last 3 months (%)	Last 12 months (%)	Since Inception (% p.a.)
Permira V	0.6	-	0.7
Benchmark	1.7	-	3.1
Relative	-1.0	-	-2.3

Permira V Sector Allocation*



Source: Northern Trust, Permira
** As at 30 September 2022 (latest available).*

Russell Currency Hedging

- Russell Investments have been appointed to manage the Fund's currency overlay mandate.
- The current policy is to hedge non-sterling exposures in the Fund's private markets mandates. Currency exposure in equity mandates is retained.
- At present, 100% of the exposure to USD, EUR and AUD from the private market investments is hedged within any residual currency exposure retained on a de-minimis basis.
- The volatility of returns (measured as the standard deviation of quarterly returns since inception) is 5.2% to date when the impact of currency fluctuations is included and only 4.8% when currency movements are stripped out by the Russell currency overlay mandate. This continues to indicate that the Russell mandate is reducing overall volatility and increasing the predictability of returns, as intended.

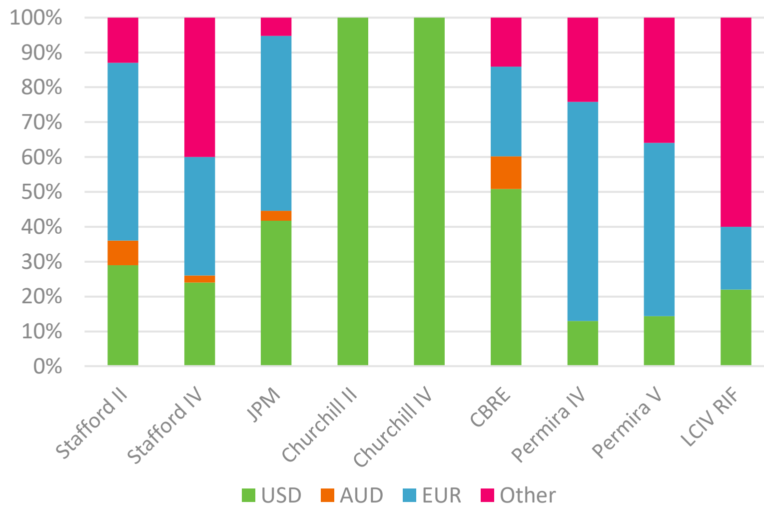
Q4 2022 Performance

	Asset Return (inc. FX impact)	Currency Return (via Russell mandate)	Asset Return (ex. FX impact)	BM Return	Relative Return (ex. FX impact)
Stafford II	1.1	2.9	4.0	3.8	0.2
Stafford IV	4.8	2.8	7.6	3.8	3.6
JPM	-7.3	3.7	-3.5	3.8	-7.1
Churchill II	-6.0	8.5	2.5	1.7	0.8
Churchill IV	-6.3	8.7	2.4	1.7	0.8
CBRE	-9.1	4.8	-4.2	3.8	-7.7
Permira IV	2.0	1.2	3.2	1.7	1.5
Permira V	0.6	4.9	5.5	1.7	3.8
LCIV RIF	28.3	1.5	29.7	3.8	25.0

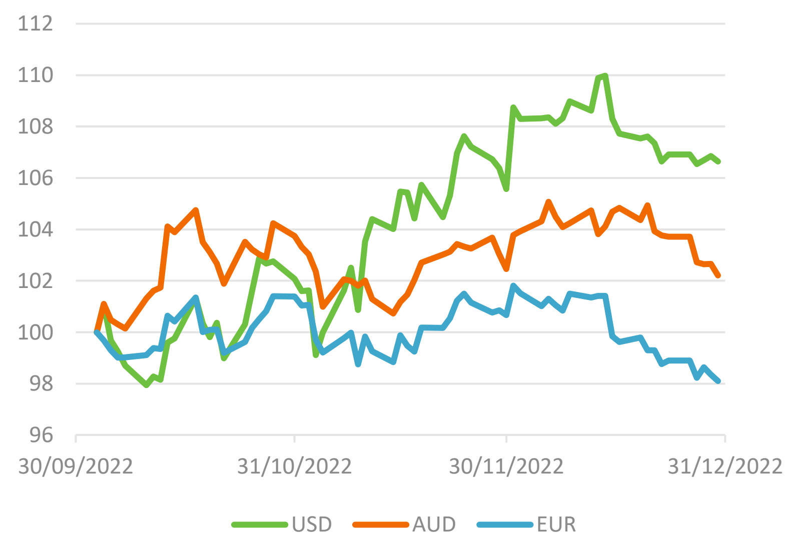
Performance Since Mandate Inception*

	Asset Return (inc. FX impact)	Currency Return (via Russell mandate)	Asset Return (ex. FX impact)	BM Return	Relative Return (ex. FX impact)
Stafford II	10.6	-1.8	8.8	9.1	-0.3
Stafford IV	22.5	-3.6	18.9	12.2	6.0
JPM	9.4	-2.4	7.0	9.3	-2.1
Churchill II	8.1	-3.8	4.3	4.7	-0.4
Churchill IV	15.8	-10.2	5.6	5.4	0.2
CBRE	10.0	-2.1	7.9	9.3	-1.2
Permira IV	3.8	-2.3	1.5	4.7	-3.0
Permira V	0.7	-5.2	-4.4	3.1	-7.2
LCIV RIF	18.5	-4.2	14.3	14.2	0.1

Hedged Currency Exposure **



Sterling Performance vs. Foreign Currencies (Rebased to 100 at 30 September 2022)



Source: Northern Trust, Investment managers

*Since inception performance is since individual fund inception of inception of the currency hedging mandate, whichever is more recent. ** As at Q3 2022 (latest available).

Private Markets Investments

- Since March 2018, the Fund has made commitments to seven private markets funds as outlined right. The table provides a summary of the commitments and drawdowns to 31 December 2022.
- There are outstanding commitments of approximately £55m to the remaining funds which will be funded from the LCIV Diversified Growth Fund, other overweight positions alongside capital being returned from other mandates.

Mandate	Infrastructure			Private Debt		
Vehicle	**Stafford Infrastructure Secondaries Fund II**	**Stafford Infrastructure Secondaries Fund IV**	**LCIV Renewable Energy Infrastructure Fund**	**Churchill Middle Market Senior Loan Fund IV**	**Permira Credit Solutions IV Senior Fund**	**Permira Credit Solutions V Senior Fund**
Commitment Date	25/04/2018	18/12/2020	30/06/2021	29/09/2021	12/2018	07/11/2022
Fund Currency	EUR	EUR	GBP	USD	EUR	EUR
Gross Commitment	€28.5m	€30m	£25m	$26.5m	£36.0m	£43.0m
Gross Commitment (GBP estimate)	£25.3m	£26.6m	-	£22.0m	-	-
Net Capital Called During Quarter (Payments Less Returned Capital)	-	£1.4m	£0.2m	£2.1m	-	£10.5m
Net Capital Drawn To Date	£26.3m	£13.7m	£7.1m	£14.7m	£28.3m	£10.5m
Distributions/Returned Capital To Date (Includes Income and Other Gains)	£13.0m	£0.4m	-	£0.9m	£3.4m	-
NAV at Quarter End	£20.2m	£15.8m	£9.6m	£14.8m	£29.6m	£10.9m
Net IRR Since Inception *	10.5% p.a. (v. 8-9% target)	29.1%	-	10.59%**	7.6%	-
Net Cash Yield Since Inception*	7.6% p.a. (v. 5% target)	5.2%	-	-	-	-
Number of Holdings*	22 funds	11 funds	-	108 investments	83 investments	23

**as at 30/09/2022 (latest available) **Refers to IRR of realised assets in the portfolio*

Source: Investment Managers

Q4 Growth outturns surprised to the upside as US labour and consumer demand remains resilient while the economic impact of potential European gas shortages abated more recently.

Despite more recent upwards revisions for some economies, global growth forecasts for 2023 fell over the quarter, as high inflation and tighter monetary policy weigh on the outlook.

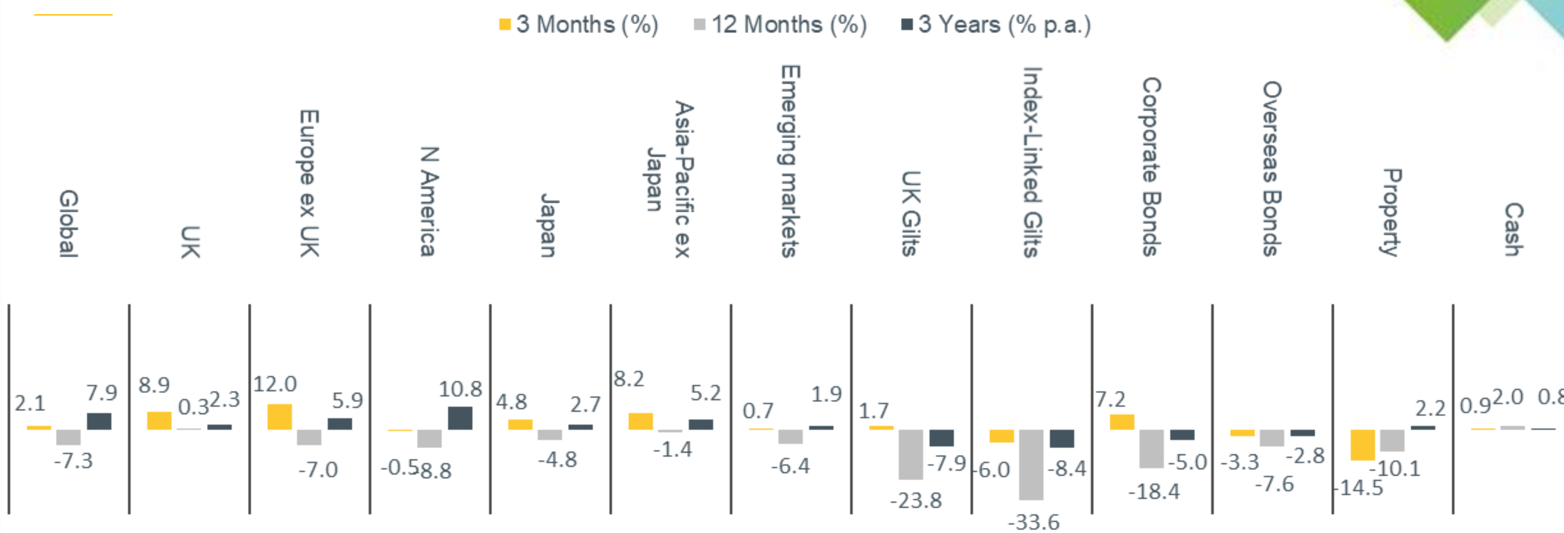
Downside CPI surprises, support the idea that inflation peaked in Europe and the US. Year-on-year headline CPI inflation fell to 7.1%, 10.7%, and 10.1% in the US, UK, and Eurozone, respectively, in November.

After a round of 0.75% p.a. interest rate rises, major central banks shifted down to smaller 0.5% p.a. increases in December. The 1.25% p.a. of rate rises delivered by each of the major central banks in Q4 takes policy rates in the US, UK, and Eurozone to 4.5% p.a., 3.5% p.a., and 2.0% p.a., respectively.

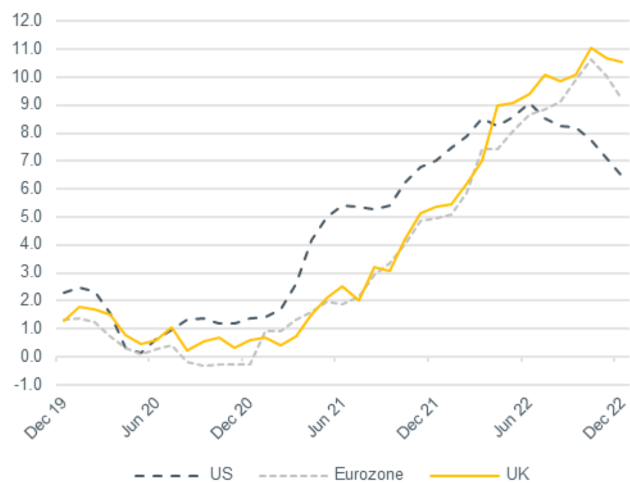
UK 10-year yields ended the period at 3.7% p.a., 0.5% p.a. below end-September levels. Equivalent US yields rose 0.1% p.a., to 3.9% p.a., and German yields rose 0.5% p.a., to 2.6% p.a., respectively. Japanese yields rose 0.2% p.a., to 0.4% p.a., as the Bank of Japan loosened the target range for 10-year yields under its yield curve control policy.

UK 10-year implied inflation, as measured by the difference between conventional and inflation-linked bonds of the same maturity, fell 0.6% p.a. to 3.4% p.a. Equivalent US implied inflation rose 0.1% p.a., to 2.3% p.a.

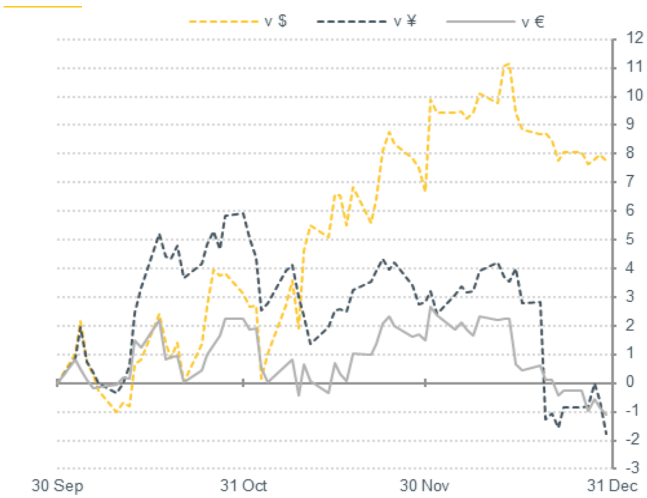
Historic returns for world markets [1]



Annual CPI Inflation (% p.a.)



Sterling trend chart (% change)



Source: DataStream. [1] Returns shown in Sterling terms. Indices shown (from left to right) are: FTSE All World, FTSE All Share, FTSE AW Developed Europe ex-UK, FTSE North America, FTSE Japan, FTSE AW Developed Asia Pacific ex-Japan, FTSE Emerging, FTSE Fixed Gilts All Stocks, FTSE Index-Linked Gilts All Maturities, iBoxx Corporates All Investment Grade All Maturities, ICE BofA Global Government Index, MSCI UK Monthly Property; UK Interbank 7 Day

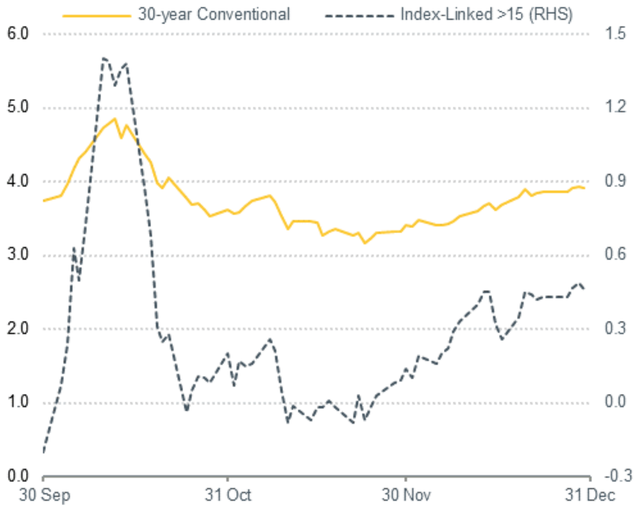
Global investment grade credit spreads fell 0.3% p.a., to 1.5% p.a., while speculative-grade spreads fell 1.0% p.a., to 5.1% p.a. Speculative-grade default rates have risen a little since the start of 2022 but remain below long-term average levels.

The FTSE All World Total Return Index rose 7.6% (local currency) .The energy sector outperformed amid record earnings reports, as did Industrials and basic materials. Consumer discretionary and technology stocks underperformed as the cost-of-living squeeze intensified. Europe ex-UK outperformed the most while Japan notably underperformed on the back of yen strength and doubts over ongoing monetary support from the Bank of Japan.

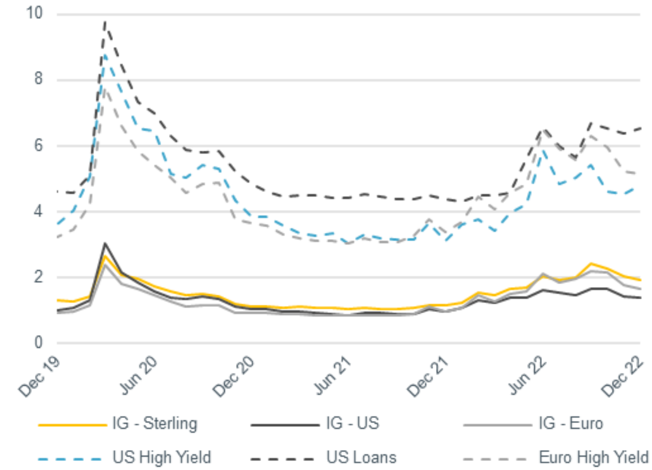
Easing inflation in the US saw the US dollar fall 4.8% in trade-weighted terms, reducing its year-to-date gains to 6.3%. Equivalent sterling, euro, and yen measures rose 1.9%, 4.4%, and 5.2%, respectively.

MSCI UK Monthly Property Index declines slowed from falling 0.5%. in November to falling 0.03% in December. The extent of recent declines in capital values, which are now 20% below their June peak, has been the primary driver. Capital values have fallen across the 3 main commercial sectors but have been most notable in the industrial sector, where they have fallen 27% since the end of June.

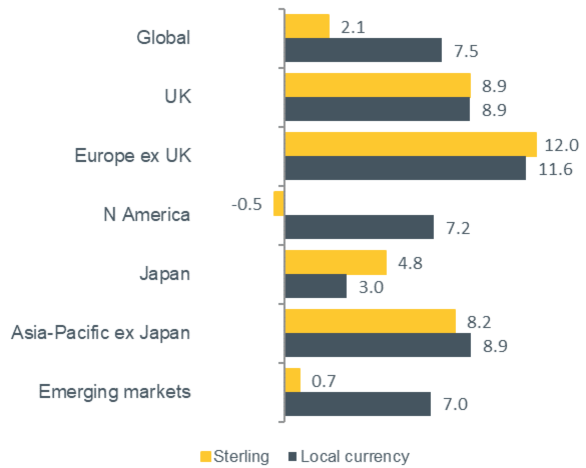
Gilt yields chart (% p.a.)



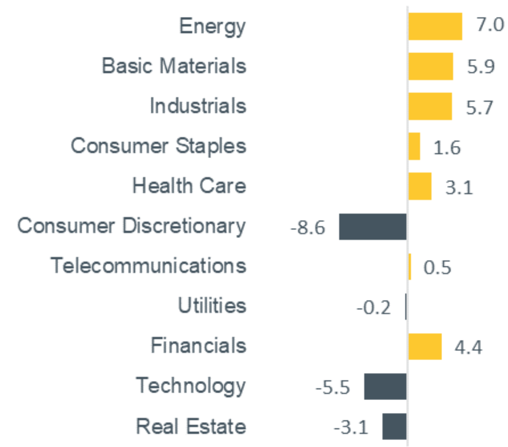
Investment and speculative grade credit spreads (% p.a.)



Regional equity returns [1]



Global equity sector returns (%) [2]



Source: DataStream, Barings, ICE [1] FTSE All World Indices. Commentary compares regional equity returns in local currency. [2] Returns shown in Sterling terms and relative to FTSE All World.

Capital Markets Outlook

Asset Class	Market Summary
Equities	• Consensus global corporate earnings growth expectations for 2023 continue to see downward revisions and now sit at a very modest 2.5%. There are tentative signs that these earnings revisions are bottoming out, but the backdrop for earnings growth looks challenging and downside risks remain. Although equity prices fell significantly in 2022, valuation multiples, which are broadly in-line with long-term averages, look vulnerable to contraction as slowing growth puts further pressure on earnings.
Investment Grade Credit	• Interest coverage is high, but higher absolute yields and slowing earnings growth will weigh on debt affordability. Lower debt levels and longer terms, means the impact on affordability will be less severe in investment- than speculative-grade markets. Although credit spreads have fallen sharply since their October peak as technical conditions improved, we still see the possibility of attractive risk-adjusted returns at current yield levels.
Emerging Market Debt	• Local currency emerging market debt yields are at attractive levels and the asset class should be supported be easing inflationary pressures and a stabilisation in the US dollar. Hard currency debt will also derive some benefit from the recent easing in US dollar strength, alongside an apparent peak in US treasury yields and spreads which are at very attractive levels relative to history.
Liquid Sub-Investment Grade Debt	• Speculative-grade default rates remain low but are expected to increase in 2023. Though healthy debt affordability and a lack of immediate refinancing requirements may limit the extent of the rise in defaults, US high yield spreads, at long-term median levels, may be vulnerable to slowing growth and tightening lending conditions. We currently hold a slight preference for traded loans, over high yield bonds, with the premium on loans over US high yield at elevated levels relative to the post-GFC history.
Private Lending	• Although leverage levels have come down in managers' pipelines, LTVs remain low given high private equity multiples. While defaults remain low, we expect these to rise with concerns on labour, input, and energy costs squeezing EBITDA margins. Overall, we are more cautious on private loan markets versus traded loan markets as valuations remain unattractive.
Core UK Property	• While nominal rental growth remains positive, the latest RICS UK Commercial Property Market Survey points to a deteriorating fundamental backdrop. A continued sharp decline in capital values has resulted in a sharp rise in net initial yields, but they remain low relative to history. Technical conditions also remain challenging: transaction levels remain low, but a large number of sales will be required to meet the flood of redemption requests from UK property investors.
Conventional Gilts	• High inflation remains a fundamental challenge for nominal gilts while BoE asset sales and increased issuance pose a technical headwind. However, yields are attractive relative to longer term fair value and base effects and weak economic activity should ease the pressure on the BoE to continue raising rates in 2023. Quantitative tightening and low forward yields make us more cautious on both real and nominal longer-dated yields.
Index-Linked Gilts	• Even adjusting for the additional inflation protection (typically around 1.0% p.a. over the longer-term) afforded to index-linked gilts until RPI is aligned with CPIH in 2030, and high near-term inflation, long-dated implied inflation still looks a little expensive. The front end of the curve looks to offer better value.

The table summarises our broad views on the outlook for markets. The ratings used are Positive, Attractive, Neutral, Cautious and Negative. The ratings are intended to give a guide to our views on the prospects for markets over a period of around three years; although they are updated quarterly, they are not intended as tactical calls. The ratings reflect our expectations of absolute returns and assume no constraints on investment discretion. In practice, they need to be interpreted in the context of the strategic framework within which individual schemes are managed.

Source: Hymans Robertson

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, and property, whether held directly or in a pooled or collective investment vehicle. Further, investment 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 investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

In some cases, we have commercial business arrangements/agreements with clients within the financial sector where we provide services. These services are entirely separate from any advice that we may provide in recommending products to our advisory clients. Our recommendations are provided as a result of clients' needs and based upon our independent research. Where there is a perceived or potential conflict, alternative recommendations can be made available.

Geometric vs. Arithmetic Performance

Hymans Robertson are among the investment professionals who calculate relative performance geometrically as follows:

$$\frac{(1 + Fund\ Performance)}{(1 + Benchmark\ Performance)} - 1$$

Some industry practitioners use the simpler arithmetic method as follows:

$$Fund\ Performance\ - Benchmark\ Performance$$

The geometric return is a better measure of investment performance when compared to the arithmetic return, to account for potential volatility of returns.

The difference between the arithmetic mean return and the geometric mean return increases as the volatility increases.