

Avon Pension Fund

Panel Investment Report Quarter to 30 June 2023

August 2023

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Contents

1)	Executive Summary	3
2)	Market Background	6
3)	Mercer Market Views	9
4)	Funding Level and Risk	15
5)	Performance Summary	18
6)	Asset Allocation	25
7)	Current Topics	29
Ap	pendices	32



Executive Summary



Executive Summary

Market background

- Continued economic resilience and declining inflation (in most regions apart from the UK) led to investor optimism and thus positive performance for risk assets.
- In the UK, market-implied inflation expectations rose over the quarter, and nominal yields generally rose.

Mercer market views

- Our medium term outlook (as at July 2023) is mixed.
- We remain slightly negative on equities due to expectations for flat or negative corporate profit growth in 2023.
- We continue to a have a modestly positive view on growth fixed income markets (e.g. Multi Asset Credit) due to attractive credit spreads and yields.

• The funding level is estimated to have increased over the quarter to c. 97%, as the decrease in the estimated value of the liabilities and impact of contributions outweighed the slight negative performance from the assets.

• It is estimated to be c. 6% higher over the year to 30 June 2023 (as illustrated to the right).



Funding level and risk

- The Value-at-Risk increased over the quarter to £1,321m, and rose as a percentage of liabilities to 23.5%.
- A key driver of this was a rise in underlying forward-looking volatility assumptions for most major asset classes over the period.
- The reduction in risk that can be seen in 2020 was due to the move from a static to dynamic equity protection strategy. Levels have gradually increased since 2020 due to market movements and changes in forward-looking assumptions.



Executive Summary

 The marginal negative return of Fund assets over the quarter was driven by the Protection assets, although this was largely of 	ffset
by positive performance from all Growth assets, with the exception of Property. The Secured Income portfolio has also	
underperform its benchmark mainly due to the challenges seen in Property markets.	

The Currency Hedge added to returns over the period due to a strengthening of Sterling.

Underperformance relative to the strategic benchmark over the one year period to 30 June 2023 is mainly due to the underperformance of Property and Secured Income mandates, and the Equity Protection (though performance is in line with expectations).

3 Months 1 Year 3 Years (%) (%) (% p.a.) Total Fund (1) -0.1 -0.3 3.2 Strategic Benchmark (2) 1.4 6.4 7.7 (ex currency hedge) -4.5 Relative (1 - 2) -1.5 -6.7

Performance

- The main detractors over the three year period were the Equity Protection, Overseas Property and Secured Income.
- The Currency Hedge overlay had positive returns over the one year period, but the impact has been neutral over three years. It should be noted that the benchmark does not make allowance for the currency hedge.
- Absolute returns compared to the strategic returns modelled at the strategy review in 2023 have been mostly positive among Equity and the Liquid Growth assets, given that these markets have seen a strong year-to-date, whilst they have been generally negative within the Illiquid Growth assets.
- A key point underpinning these is that it is comparing only a six-month period compared to expectations derived per annum, as the expectations derived from the strategy review were with effect from 31 December 2022.

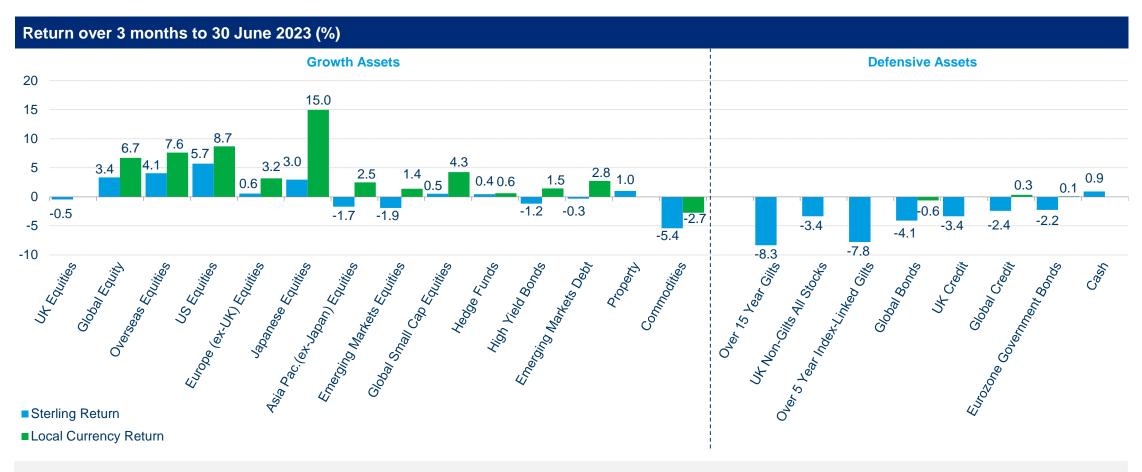
Asset allocation and strategy

- A net amount of c. £125m was drawn down to the Brunel private market portfolios during the quarter, including the first drawdown to Secured Income Cycle 3 to the magnitude of c. £107m.
- There were large transitions within the Equity portfolio to implement the agreed tilt towards passively-managed mandates, and the creation of synthetic exposure to the MSCI Paris-Aligned Index was completed during the period.

Market Background

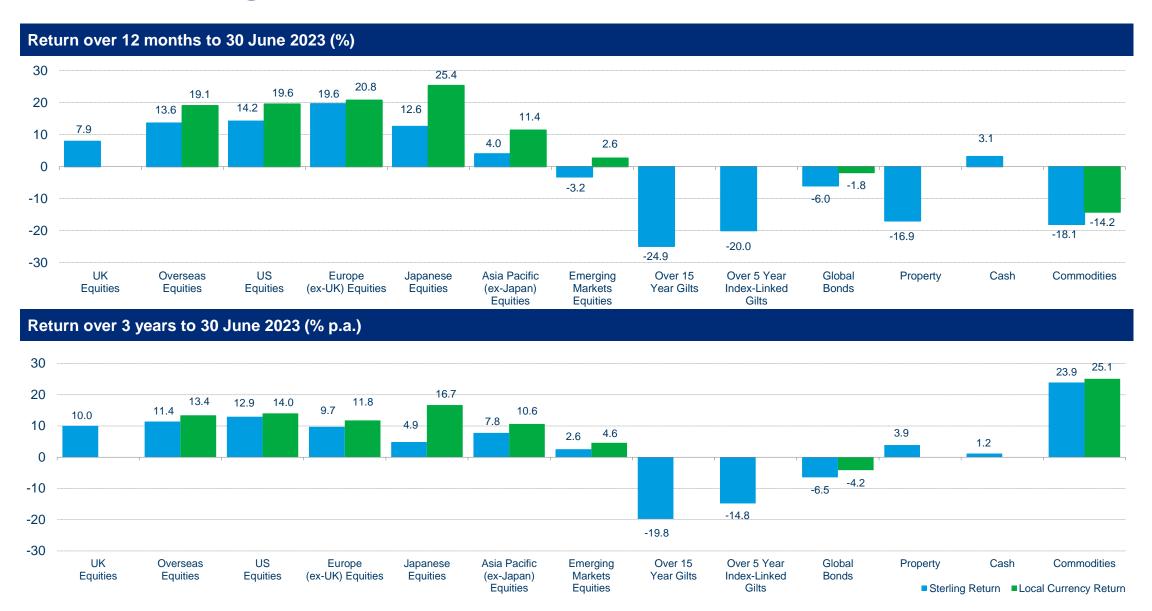


Market Background



The second quarter of 2023 saw the orderly resolution of the second largest bank failure in US history and further distress among US regional banks, ongoing economic resilience, declining inflation, an equity rally led by eight stocks, and increased geopolitical tensions, including an attempted coup in Russia. Developed market central bank actions were mixed over the quarter, with some deciding to pause hiking interest rates, and others continuing to increase the policy rate, but rhetoric remained hawkish. Headline inflation continued to slow and core inflation fell in most regions apart from the UK. Inflation expectations also continued to decline over the quarter. Overall, this led to investor optimism and thus positive performance for risk assets whereas government bond performance was negative because of increasing rates.

Market Background – 1 & 3 Years





Mercer Market Views



Market Outlook (July 2023)

Overweight

Neutral weight

Underweight

Global equities had another strong quarter, despite more aggressive central bank action in the developed world and an economic slowdown in China. Tech stocks were responsible for some of the strength, with many gaining on hopes that advances in artificial intelligence (AI) would materially boost overall economic growth. Government bond yields rose sharply as the banking crisis stabilised and as ongoing economic strength led the Federal Reserve to signal that they would probably keep raising rates in 2023H2. Central banks in Canada and Australia both restarted their hiking campaigns and the Bank of England increased rates by 0.5%. Emerging market equities underperformed developed markets with Chinese equities especially weak as growth softened following the strong start to 2023. Credit spreads tightened a little, while a weaker yen was the key development in currency markets.

The global economy remained resilient with the US stronger than many expected. In Europe, economic growth softened, with manufacturing especially weak. Manufacturing remained weak in most of the world as the post COVID shift from manufacturing to services continued. Having grown rapidly at the start of the year, the Chinese economy weakened, especially in the manufacturing and property sectors, although the post COVID rebound in the service sector continued. In most of the developed world, labour markets remained tight, with wages still above the levels consistent with central banks' inflation targets. Emerging economies outside China were generally resilient.

Inflation at a headline level fell sharply in many countries, although core inflation remained elevated in most of the developed world. In Spain, for example, headline inflation fell to 1.9% in June having been over 10% last July. The sharp declines seen in Spain and elsewhere were largely the result of powerful base effects and much lower energy prices. Core inflation rates, however, remained elevated, with strong wage growth continuing to put upward pressure on those companies where labour costs make up a large proportion of total costs. In the US, headline inflation fell to 4%, down from 9% last June, while core inflation fell to 5.3% from a peak of 6.5%. In Japan, inflation, wage growth and inflation expectations remained firm, suggesting a change to the disinflationary mind-set that has been in place for years. Inflation remained very low in China. Inflation in the UK remains stubbornly high and the highest amongst in developed markets peers.

The outlook for the global economy has not changed a lot. We expect high interest rates and tighter credit conditions in the US to weigh on economic activity in most of the developed world. While we continue to think a hard landing will be avoided, US growth is likely to slow to about 0% by the turn of the year, making an occasional quarter of negative growth likely. Europe is likely to follow a similar profile although it would be supported if natural gas prices don't spike in the winter. In China, we expect policy makers to announce stimulus measures to boost the economy, while broader emerging markets should perform reasonably well given they acted on increasing inflation more precipitously than developed market economies.

Headline inflation should fall further as past increases in commodity and other prices work their way out of the year-on-year calculations, while improved supply chains should reduce the prices of things like used cars. Core inflation should stay above target well into 2024 because of elevated wage growth. Central banks may soon pause their interest rate hiking cycles to assess the impact of past increase. They are unlikely to cut rates until they are certain wage growth is contained.

We made no material changes to our asset class preferences, continuing to prefer growth fixed income (GFI) assets (high yield, loans and EMD) to defensive fixed income assets and cash. We remain neutral equities. While further declines in inflation should support equities, we think corporate profit growth will be flat or negative in the developed world in 2023. We remain overweight emerging equities (EME), because we expect the reopening in China will generate strong economic and corporate profit growth. A generally weak US dollar should also support EME. Within GFI we increased our exposure to emerging market local currency debt, as some of their central banks are about to start a rate cutting cycle.



Listed Equities

ASSET CLASS	APRIL 2023	JULY 2023	COMMENTARY
Developed Equity	Underweight	Underweight	The MSCI World Index returned 4.1% in GBP terms over 2023Q2 and 9.2% year to date.¹ We have maintained our developed market equity sector position at underweight within the global equities portfolio. Valuations have deteriorated again over the quarter from already rich levels. We also note the narrow leadership in equity returns over the quarter, which makes them vulnerable to a shift in the tech sector momentum. Our macro base case remains unchanged: strong consumer and business balance sheets will likely avert a deep recession. Inflation will continue to slow as base effects become even more deflationary, but core inflation will likely remain persistent into 2024. Monetary policy should remain restrictive, with most expectations of cuts for 2023 now largely priced out of bond markets. A recession that ends up being worse than our soft-landing base case therefore remains a significant risk. Equity markets are sanguine about this, even amid expectations of earnings growth beginning to turn more negative. We believe that another strong quarter means valuations offer even less compensation for a less benign scenario than our base case. We prefer to allocate our risk budget to other equity sub-sectors with more compelling valuations, such as emerging markets.
Global Small Cap Equity	Neutral	Neutral	The MSCI Small Cap index returned 0.5% in GBP terms over 2023Q2 and 2.1% year to date.¹ We have maintained our small cap equity position at neutral. Despite strong performance, some valuation metrics still remain historically attractive. Small-cap balance sheets remain robust. Our base case of a soft landing would be a positive environment for small-cap equities, given their cyclical exposure. However, we remain wary of the potential downside for the asset class if this scenario does not occur and a significant economic downturn takes hold, as highlighted in the developed equity section. Sentiment for equities as a whole remains bearish, as indicated by the BofA Fund Manager Survey, with investors still expecting large-cap equities to outperform small-cap equities in the coming year.² Overall, we balance more bearish sentiment and mixed macroeconomic scenarios with attractive valuations, both in comparison to small-cap's own history and relative to other equity sectors.
Emerging Markets Equity	Overweight	Overweight	The MSCI Emerging Markets index returned -1.7% in GBP terms over 2023Q2 and -0.6% year to date.¹ We have maintained our positioning for emerging markets at overweight. Valuations deteriorated over the quarter and are now looking less attractive compared to the beginning of 2023. China's reopening has been underwhelming compared to initial expectations, but there is still potential for growth as policy support gains momentum and regulations remain favourable. Even if China doesn't reach expected growth levels, the fact it is at the opposite stage in the business cycle compared to developed economies will act as a tailwind. In other Emerging Markets, economies are in a less fragile state compared to most Western economies, thanks to proactive actions by EM central banks in terms of monetary tightening. This provides more room for policy easing if an extended period of economic weakness occurs. According to the BofA fund manager survey for June 2023, investors have remained overweight in emerging market equities for seven consecutive months, after being underweight for most of 2022.² Despite less attractive valuations, bullish sentiment and a more positive macro outlook in comparison to developed countries support our decision to allocate our risk budget to emerging markets rather than developed markets.



Growth Fixed Income

ASSET CLASS	APRIL 2023	JULY 2023	COMMENTARY
Global Loans	Underweight	Underweight	Over 2023Q2, Global Loans returned 0.3%. We have maintained our position at underweight within growth fixed income. Bank loans have significantly outperformed the other growth fixed income sectors in 2023 thus far, as the sector's floating rate profile has largely insulated it from sharply higher interest rates. Whilst we expect the asset class may continue to outperform, in the near-term, due to its floating rate profile, we are increasingly cautious about its lower quality nature and rising default rates. Yields offer a significant spread pickup compared to high-yield bonds, which offer some offset to the lower credit quality. The loan market is currently of lower quality than in prior cycles, with single-B loans comprising a large portion of the overall market, and the expectation that the rising cost of capital will reduce free cash flow, we would expect loan default rates to rise by year end. While all-in yields are attractive and whilst there is potential for loan outperformance over high yield in the short term, the lower quality nature of the asset class leaves spreads vulnerable over the DAA horizon.
High Yield	Overweight	Neutral	Global high yield returned 1.3% on a GBP hedged basis in 2023Q2. We have reduced our overweight position to the positive side of neutral within growth fixed income. Valuations within the asset class remain attractive, in our view, with an index yield over 8.7% and an average bond price below par. Spread levels have narrowed since last quarter, however they still remain far off what are typical recessionary levels. The higher quality make-up of the index is noticeable with 55% of the market rated BB. Fundamentals are still holding up to this point, business balance sheets remain strong and companies remain increasingly conservative in their approach with limited capex as well as the use of leverage decreasing. Overall, we believe investors are getting adequately compensated for risk in high yield rather than in bank loans but we reduce our conviction in global high yield, in order to, increase our conviction in emerging market debt local currency
EM Debt (Local Currency)	Neutral	Overweight	Overweight EMD LC. The possibility of a weakening US dollar offers return potential. Shorter-term headwinds can be found in the persistence of inflation, central bank policy, and continuing geo-political risks. The index yields 6.3%, as of 30 June 2023. LC performed reasonably well over the last quarter, with some yield compression and steady FX levels in the wake of some FX gains in Q1. The dip down in yields may reflect some degree of a peaking in inflation and rates cycles across EM countries. The recent EM currency strength, in a longer-term context, is quite modest, and EMFX continues to be attractive relative to historical valuations. Global growth continues to face a broader slowdown although some headwinds continue to show signs of alleviating over the DAA's time horizon. The Fed recently increased rates to tackle more persistent than expected inflation, and a strong labour market, but did so during the development of idiosyncratic fractures within the banking system that failed to materialise into a more systemic issue. The directionality of rates, and the depth of a potential recession in the US, will be a significant driver for EM returns. A weakening US dollar relative to a basket of emerging market currencies could well be a positive for the FX component of the asset class, but the direction of the US dollar may be whipsawed by the direction of Fed rates. Sentiment remains sensitive to global growth, the persistence of inflation, US rate levels and ongoing geo-political stories. US recessionary risk pares back sentiment. Overall, we have increased our positioning from neutral to overweight to reflect our conviction in a declining US dollar amongst tailwinds for domestic emerging market economies.
EM Debt (Hard Currency)	Neutral	Neutral	Maintain the modest neutral/underweight on EMD HC. The index offers a yield of 8.4% as at 30 June, and the spread is still well above long run average levels. However, within the index it is worth noting the bifurcated nature of the market with the below-IG segment of the market yielding over 12% whilst the IG portion yields just over c. 5%. Global growth continues to face a broader slowdown although some headwinds continue to show signs of alleviating over the DAA's time horizon. The Fed recently increased rates to tackle more persistent than expected inflation, and a strong labour market, but did so during the development of idiosyncratic fractures within the banking system that failed to materialise into a more systemic issue. The directionality of rates, and the depth of a potential recession in the US, will be a significant driver for EM returns. Whilst US dollar strength had begun to falter on the expectations of slowing rate hikes, expectations of a recession may push the US dollar upwards weighing on the ability of some EM countries to service their debt. Sentiment remains sensitive to global growth, the persistence of inflation, US rate levels and ongoing geopolitical stories. US recessionary risk pares back sentiment. The direction of the US dollar, Fed rate levels and continuing geopolitical risks are headwinds over the short-term, as is the relatively long duration nature of the market.



Defensive Fixed Income

ASSET CLASS	APRIL 2023	JULY 2023	COMMENTARY
UK Sovereign Fixed Income	Neutral	Neutral	UK Gilt returns were negative in the second quarter of 2023 at -5.4% in GBP terms¹. We have maintained our stance on the negative side of neutral. UK government bond yields rose over 100 basis points (bps) in the quarter, albeit without the market upheaval witnessed towards the end of Q3 2022. The rise in yield was largely driven by the unwind of the global flight to safety given the reduction of the nervousness over the banking sector that permeated Q1, the UK's precarious fiscal position and the extremely sticky UK inflation numbers that continue to surprise to the upside. The BOE hiked twice in Q2, by 25bps and again by 50bps in June, the latter being somewhat of a surprise to the market given its aggressiveness. The yield curve in the UK inverted substantially during Q2 2023, with 2 year yields rising more that 10yr yields, usually the harbinger of a recession. The large move in the front end of the curve followed the BOE's larger than expected 50bps hike in rates in June. The BOE said there had been "significant" news suggesting Britain's persistently high inflation would take even longer to fall. The unemployment rate for February to April 2023 increased by 0.1% on the quarter to 3.8%. The increase in unemployment was driven by people unemployed for up to 12 months. The economic inactivity rate decreased by 0.4% on the quarter, to 21.0% in February to April 2023.
UK Inflation- Linked Bonds	Neutral	Neutral	UK index linked gilts returned -6.6% in the second quarter of 2023 in GBP terms¹, driven by rising real yields. We have retained our position of being on the negative side of neutral in the defensive fixed income portfolio. Inflation prints in general surprised on the upside after appearing to moderate in the early part of the year. The April UK CPI release sparked a selloff in Gilts, coming in above expectations by 50bps. While headline CPI fell from 10.1% YoY to 7.9% YoY, this was largely a function of base effects in energy inflation. This effect had been well signposted, and the bigger story was in core CPI. At 6.8% YoY, core CPI reached its highest level in 30 years, driven by core goods prices. This was ahead of consensus estimates of no change from March's 6.2%. The BOE responded with a larger than expected 50bps hike in June, taking official rates to 5.0%. Wholesale energy prices are starting to come off and will likely ripple through the real economy in the months ahead. Nevertheless, given the uncertainty we maintain a slightly underweight position in UK Index Linked gilts as the BoE will be reluctant to cut rates until core inflation truly starts to tail-off, which is unlikely in the short run. We do however subscribe to the view that the UK should track US inflation lower, albeit with a small lag given the UK's sensitivity to energy prices. In particular, we see room for food inflation to fall rapidly given recent weakness in PPI data and forward pricing. As such, we continue to remain moderately underweight and seek a better entry point to the asset class. From a technical perspective, UK linkers continue to be supported by a captive local market seeking to hedge inflation risks in long-dated pension liabilities.
UK Buy and Maintain Credit	Neutral	Neutral	UK investment grade credit returned -3.4% in GBP terms during the second quarter of 2023¹. Although in the neutral range, we maintain a tilt towards IG credit within defensive fixed income. Whilst returns were negative over the quarter, credit outperformed equivalent duration government bonds as spreads tightened. Valuations appear attractive with spreads above their ten-year average, higher than global spreads and all-in yields are still high. Although economic data have been generally stronger than expected year to date, the consensus view remains for weaker growth/recession over a six to twelve month horizon as the Bank of England continues to focus on reducing inflation, which has surprised on the upside, even at the risk of recession. Global corporate fundamentals have generally proved to be relatively resilient, although there remains a risk of a deterioration in earnings and a pick up in downgrades if economic growth remains weak or worsens. Sentiment is mixed. Whilst many active fixed income managers are cautiously positioned, noting the risk of wider spreads, some would see this as a buying opportunity. Defined benefit pension schemes in the UK are likely to increase allocations to high quality credit as they reduce leverage in their LDI portfolios and the yields available may prove attractive to asset allocators.

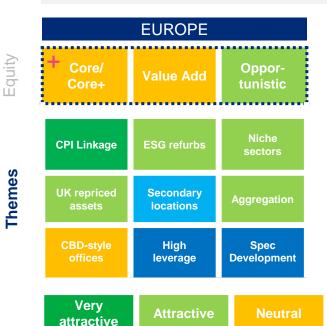


Global Property Market Outlook

Less

Attractive

- The correction in real estate pricing is likely to continue until some stability in interest rates has occurred. This moment is moving closer for some markets, notably the US. In the UK and Continental Europe, the majority of interest rate hiking is also likely to have occurred, even if inflationary pressures are proving stickier here.
- The yield spread of property over local government bonds is currently very low in a historic context. Reversion of the yield spread through rising property yields seems therefore inevitable. However, we expect the yield spread to move closer to the historic norms of 200-250bps rather than the 400-500bps yield spread that prevailed for much of the past decade.
- Importantly, strong fundamentals coupled with high inflation also means that the negative impact of rising property yields is partially mitigated by NOI growth. Strong labour markets and healthy savings rates are effectively softening the blow of the capital market correction.
- If the narrative of a "soft landing" for the global economy prevails, investor sentiment in real estate could improve as soon as the fourth quarter of 2023. When it does, the turnaround in activity is likely to be quick, as investors move to capitalize on reduced net asset values.
- Longer term, real estate can provide diversified returns from liquids or other private market asset classes due to the asset class' inflation-linked qualities and ability to tap into different economic sectors.



Attractive value: With substantially higher interest rates and less bank financing available, real estate debt strategies show highly attractive riskadjusted returns. Equity investors can also tap into this theme by backing certain opportunistic managers. Strong capital value growth prospects remain for several undersupplied niche sectors across markets.

Worst value: We think that US Core/Core+ will see more repricing in the second half of 2023, so have maintained this segment as "less attractive". While capital value corrections are also still likely in the other regions, the worst looks to be behind us in the UK and parts of Europe, while markets in Asia Pacific are more boosted by growth and should see more shallow declines.

Not

applicabl

Unattractive

Disclaimer: For illustration purposes only. The above table presents a simplified perspective at the time of writing this report and is subject to change without notice. All categories offer attractive opportunities and optimal allocations are subject to manager selection. The outlook represented is for new investors with a non-constrained risk budget over a 3 to 5 year investment horizon. 'Unattractive' positions therefore do not imply advice to liquidate existing investments.

Further guidance is available in Mercer's *Global Market* Summary: Quarterly Real Estate Report, July 2023

Change from previous quarter in pink



Funding Level and Risk

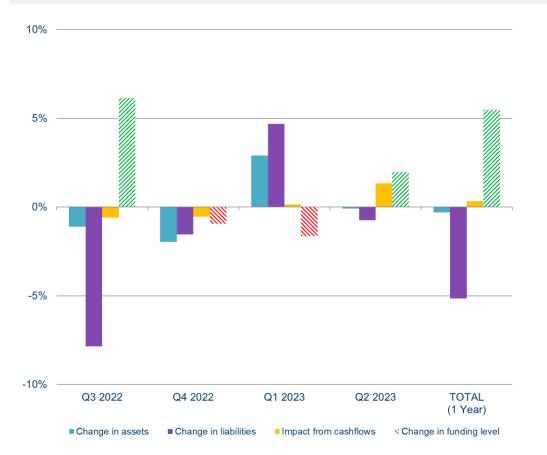


Funding Level and Deficit

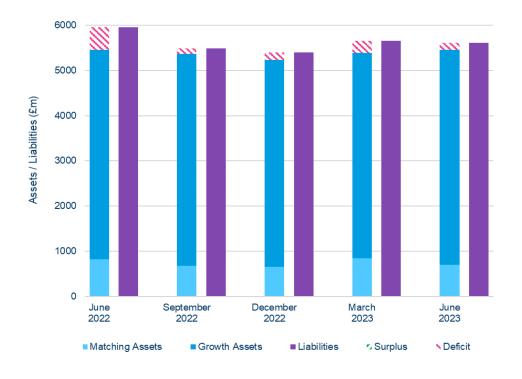
The Fund's assets returned -0.1% over the quarter, whilst the liabilities are estimated to have decreased by c. 0.7% due to the rise in nominal yields.

The combined effect of this, also allowing for expected cashflow over the period, saw the estimated funding level increase to c. 97%.

The funding level is estimated to be c. 6% higher over the year to 30 June 2023.



The deficit was estimated to have decreased over Q2 to c. £155m:

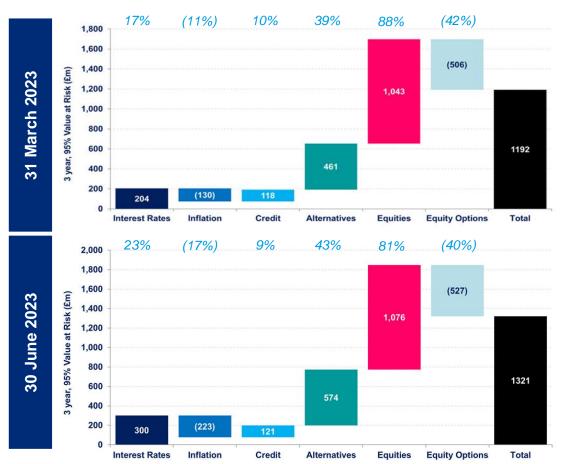


Liability values are estimated by Mercer. They are based on the actuarial valuation assumptions as at 31 March 2022 and the 'CPI plus' discount basis. Impact figures are estimated by Mercer.



Risk Decomposition – 3 Year Value at Risk

- The two charts below illustrate the main risks that the Fund is exposed to, and the size of these risks in the context of the change in the deficit position.
- The purpose of showing these is to ensure there is an awareness of the risks faced and how they change over time, and to initiate debate on an ongoing basis around how to best manage these risks, so as not to lose sight of the 'big picture'.
- The final columns show the estimated 95th percentile Value-at-Risk (VaR) over a one-year period. In other words, if we consider a downside scenario which has a 1-in-20 chance of occurring, what would be the impact on the deficit relative to our 'best estimate' of what the deficit would be in three years' time.



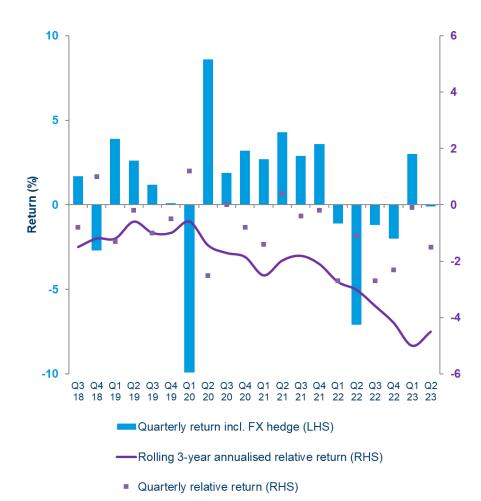
- As at 30 June 2023, if a 1-in-20 'downside event' occurred over the next three years, the funding position could deteriorate by at least an additional £1.3bn.
- Each bar to the left of the total represents the contribution to this total risk from the primary underlying risk exposures (interest rates and inflation, changes in credit spreads, volatility of alternative assets and equity markets, and the benefit from equity options).
- Overall the VaR increased by £129m over the quarter. A key driver of this was a rise in underlying forward-looking assumptions for volatility (and return) for most major asset classes over the period. Moreover, updating for the 2022 actuarial valuation cashflows and SAA together reinforced the upward movement.
- VaR rose as as a percentage of liabilities from 21.1% to 23.5%.



Performance Summary



Total Fund Performance



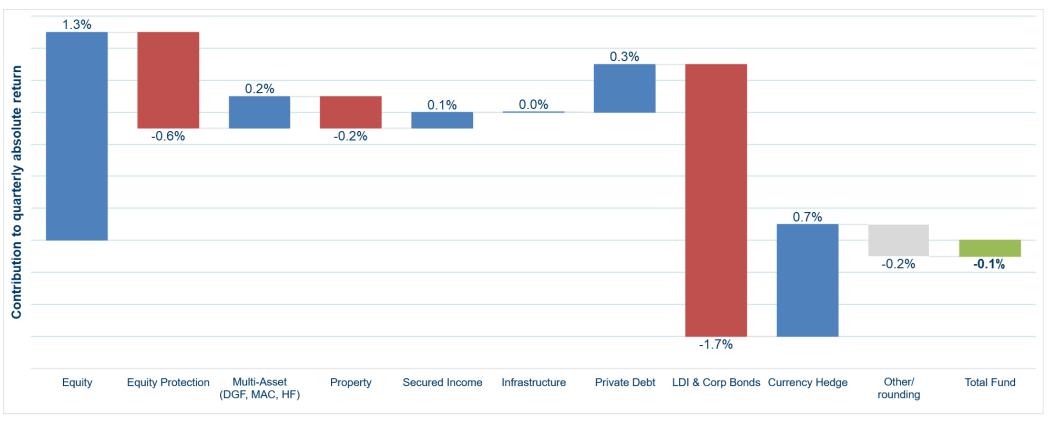
	3 Months (%)	1 Year (%)	3 Years (% p.a.)
Total Fund (1)	-0.1	-0.3	3.2
Total Fund (ex currency hedge)	-0.8	-1.1	2.9
Strategic Benchmark (2) (ex currency hedge)	1.4	6.4	7.7
Relative (1 - 2)	-1.5	-6.7	-4.5

Source: Custodian, Mercer estimates, Returns are net of fees.

Commentary

- As illustrated on the next slide, the marginal negative return of Fund assets over the quarter was driven by the Protection assets, although this was largely offset by positive returns from all Growth assets with the exception of Property.
- Relative performance in Q2 was mostly negative. Sustainable Equity suffered from an underweight to the few large cap companies in which a lot of the equity market rally was concentrated. The Liquid and Illiquid Growth assets underperformed their cash/inflation-plus benchmarks with the Secured Income portfolio underperforming its benchmark mainly due to the challenges seen in Property markets. The only exception was the Private Debt, .
- The main drivers of underperformance over three years include the Equity Protection strategy (as we would expect given the positive performance from the physical equity holdings), Overseas Property and the Secured Income portfolio.
- The Currency Hedge has added to returns over the period shown due to a strengthening of Sterling.

Total Fund Performance Attribution – Quarter



Source: Custodian and Mercer estimates

'Other' contributions to the total can include the relatively small holdings in the ETF, cash, the impact of cashflows and terminated mandates, as well as rounding.

The marginal negative return on the Fund assets over the quarter was driven mainly by the decline in value of the LDI portfolio as nominal yields rose. The Equity Protection detracted, in line with expectations as the underlying physical equity holdings posted positive returns.

All of the broad Growth asset categories contributed to return, except for Property. The Currency Hedge contribution was positive due to the strengthening of Sterling.

Total Fund Performance Attribution – 1 Year





^{&#}x27;Other' contributions to the total can include the relatively small holdings in the ETF, cash, the impact of cashflows and terminated mandates, as well as rounding.

The negative returns from LDI and the Equity Protection were the main detractors over the 1 year period.

Property and Secured Income have also had a difficult year, though all other Growth asset categories contributed positively, especially Equity.

The Currency Hedge contribution was positive due to the strengthening of Sterling.



Performance vs. Expected Strategic Returns

Growth Asset	Brunel Global High Alpha	Brunel Global Sustainable	Brunel Passive Global PAB	Brunel Diversified Returns	Brunel Multi-Asset Credit
Benchmark Allocation	10.5%	10.5%	20.5%	6.0%	6.0%
Commentary	Returns above expectations* since December 2022 due to equity market strength year- to-date. Active management contribution has been marginally positive over this period.	Returns marginally below expectations* since December 2022 due to a negative active management contribution. During Q2, this was largely due to an underweight to the few large cap companies in which a lot of the equity market rally was concentrated. However period is still less than one year.	Returns above expectations* since December 2022 due to equity market strength.	Returns below expectations* since December 2022 due to flat Q1 performance, however period is still less than one year.	Returns below expectations* since December 2022 thanks to strength in high-yield debt markets year-to-date.

^{*}Expected strategic returns have been updated to reflect the assumptions for the 2023 Investment Strategy Review, which are as at 31 December 2022. As such the return track record has also been recalibrated to commence from this date. Given this, the return period covers six months whereas the expected returns are per annum, so there are limitations at this stage to making direct comparisons.



Notos:

We have illustrated the performance of the key mandates within the Fund's investment strategy.

Actual returns are from 31 March 2019 to 30 June 2023, except if otherwise stated below. Returns for periods over a year have been annualised. The strategic expected returns are from the 2023 strategy review, which reflect the 10 year mean Mercer Q4 2022 asset model assumptions.

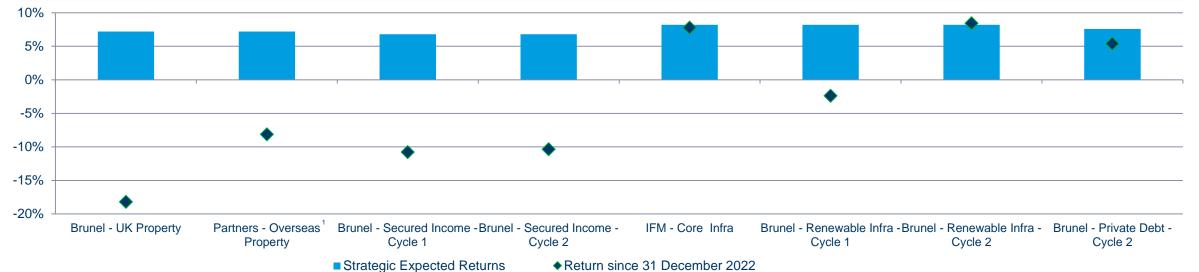


Performance vs. Expected Strategic Returns

Growth Asset	Brunel UK Property	Partners Overseas Property	Brunel Secured Income	IFM Core Infra	Brunel Renewable Infra	Brunel Private Debt
Benchmark allocation	3.75%	3.75%	9.0%	4.0%	5.0%	4.5%
Commentary	Returns below e	•	ember 2022 due to the challenges seen in Property cets year-to-date.	Returns broadly in line with expectations* since December 2022.	Returns for cycle 2 assets (first drawdown in October 2021) broadly in line with expectations* since December 2022, though the assets within cycle 1 (first drawdown in January 2021) have reported lower returns. Mandates are still in the drawdown phase.	Returns below expectations* since December 2022, however period is still less than one year. Mandates are still in the drawdown phase.

^{*}Expected strategic returns have been updated to reflect the assumptions for the 2023 Investment Strategy Review, which are as at 31 December 2022. As such the return track record has also been recalibrated to commence from this date.

Given this, the return period covers six months whereas the expected returns are per annum, so there are limitations at this stage to making direct comparisons.



Notes:

We have illustrated the performance of the key mandates within the Fund's investment strategy.

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The strategic expected returns are from the 2023 strategy review, which reflect the 10 year mean Mercer Q4 2022 asset model assumptions.



 $^{^{\}rm 1}$ Returns are shown up to 31 March 2023, as this is the latest data available.

Mandate Performance to 30 June 2023

		3 Months	;		1 Year			3 Year		3 Year	3 Year
Manager / Asset Class	Fund (%)	B'mark (%)	Relative (%)	Fund (%)	B'mark (%)	Relative (%)	Fund (% p.a.)	B'mark (% p.a.)	Relative (% p.a.)	Performance Target (% p.a.)**	Performance vs Target
Brunel Global High Alpha Equity	3.9	4.1	-0.2	16.3	13.8	+2.2	11.1	11.6	-0.4	+2-3	Target not met
Brunel Global Sustainable Equity	0.1	3.4	-3.2	10.2	11.9	-1.5	N/A	N/A	N/A	+2	N/A
Brunel Passive Global Equity Paris-Aligned	5.3	5.3	0.0	16.7	16.7	0.0	N/A	N/A	N/A	-	N/A (p)
Brunel Diversified Returns Fund	1.0	1.8	-0.8	1.1	6.2	-4.8	N/A	N/A	N/A	-	N/A
Brunel Multi-Asset Credit	1.8	2.0	-0.2	7.6	7.3	+0.3	N/A	N/A	N/A	-	N/A
Brunel UK Property	0.4	0.3	+0.1	-19.0	-17.1	-2.3	N/A	N/A	N/A	-	N/A
Partners Overseas Property*	-3.5	2.5	-5.9	-8.9	10.0	-17.2	0.5	10.0	-8.6	-	Target not met
Brunel Secured Income - Cycle 1	0.0	2.0	-2.0	-14.4	8.0	-20.7	0.4	6.6	-5.8	+2	Target not met
Brunel Secured Income - Cycle 2	0.1	2.0	-1.9	-12.7	8.0	-19.2	N/A	N/A	N/A	+2	N/A
IFM Core Infrastructure	0.5	2.3	-1.7	6.1	8.3	-2.0	11.4	6.3	+4.8	-	Target met
Brunel Renewable Infrastructure - Cycle 1	-1.8	2.0	-3.7	5.4	8.0	-2.4	5.1	6.6	-1.4	+4	Target not met
Brunel Renewable Infrastructure - Cycle 2	-2.5	2.0	-4.4	15.7	8.0	+7.1	N/A	N/A	N/A	+4	N/A
Brunel Private Debt - Cycle 2	11.7	2.0	+9.5	16.5	7.2	+8.7	N/A	N/A	N/A	-	N/A
BlackRock Corporate Bonds	-4.1	-4.1	0.0	-16.0	-16.0	0.0	-11.4	-11.4	0.0	-	N/A (p)
BlackRock LDI	-8.0	-8.0	0.0	-17.4	-17.4	0.0	1.9	1.9	0.0	-	N/A (p)
Equity Protection Strategy	-1.2	N/A	N/A	-6.8	N/A	N/A	-5.6	N/A	N/A	-	N/A

Source: Investment Managers, Custodian, Mercer estimates. Returns are net of fees. Returns are in GBP terms

Relative returns have been calculated geometrically (i.e. the portfolio return is divided by the benchmark return) rather than arithmetically.

A summary of the benchmarks for each of the mandates is given in the Appendix.

Green = mandate exceeded target. Red = mandate underperformed target. Black = mandate performed in line with target (mainly reflecting passive mandates).

Performance for Partners in IRR terms. Performance for IFM is in TWR terms.

Performance of the Equity Protection Strategy is estimated by Mercer based on the change in market value of the options over time, accounting for realised profit/loss upon rolling of the strategy. *Partners performance is to 31 March 2023, as this is the latest data available.

Performance is not yet illustrated for Private Market Cycle 3 investments, which will become more meaningful with the passage of time.



^{**}Where the outperformance target has not already been incorporated into the benchmark returns shown. See Appendix for further details.

Asset Allocation



Valuations by Asset Class

Asset Class	Start of Quarter (£'000)	End of Quarter (£'000)	Start of Quarter (%)	End of Quarter (%)	Benchmark (%)	Ranges (%)	Relative (%)
Global Equity*	1,416,993	635,125	26.3	11.6	10.5	5.5 - 15.5	+1.1
Global Sustainable Equity	792,531	589,576	14.7	10.8	10.5	5.5 - 15.5	+0.3
Paris-Aligned Equity*	278,856	1,346,330	5.2	24.7	20.5	12.5 - 28.5	+4.2
Diversified Returns Fund	336,583	339,865	6.3	6.2	6.0	3 - 9	+0.2
Fund of Hedge Funds**	32,638	22,335	0.6	0.4	-	No set range	+0.4
Multi-Asset Credit	304,609	310,208	5.7	5.7	6.0	3 - 9	-0.3
Property	342,961	332,948	6.4	6.1	7.0	No set range	-0.9
Secured Income	435,092	543,334	8.1	10.0	9.0	No set range	+1.0
Core Infrastructure	313,207	314,803	5.8	5.8	4.0	No set range	+1.8
Renewable Infrastructure	163,699	168,655	3.0	3.1	5.0	No set range	-1.9
Private Debt	128,903	158,685	2.4	2.9	4.5	No set range	-1.6
Local / Social Impact	-	-	-	-	3.0	No set range	-
Corporate Bonds	170,711	163,667	3.2	3.0	2.0	No set range	+1.0
LDI & Equity Protection	983,979	1,023,496	18.3	18.8	12.0	No set range	+6.8
Synthetic Equity Offset*	-562,614	-733,621	-10.4	-13.4	-	-	-
Other***	245,723	239,340	4.6	4.4	-	0 - 5	+4.4
Total	5,383,885	5,454,760	100.0	100.0	100.0		

Source: Custodian, Investment Managers, Mercer. Red numbers indicate the allocation is outside of tolerance ranges.

^{***}Valuation includes internal cash, the ETF and currency instruments.



Totals may not sum due to rounding.

^{*}Global Equity (at the start of the quarter) and Paris-Aligned (at the end of the quarter) includes synthetic exposure via the BlackRock QIF; Synthetic Equity Offset reflects an offsetting value to account for the difference between the exposure to equity markets and the actual mark to market value of the holding.

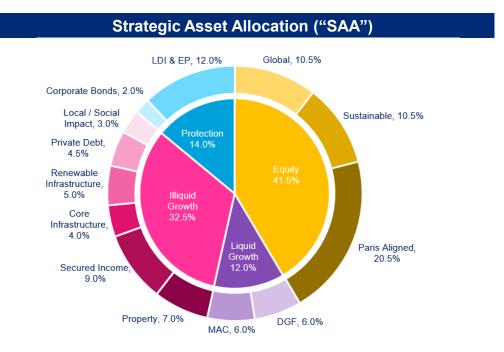
^{**}Mandate due to be terminated.

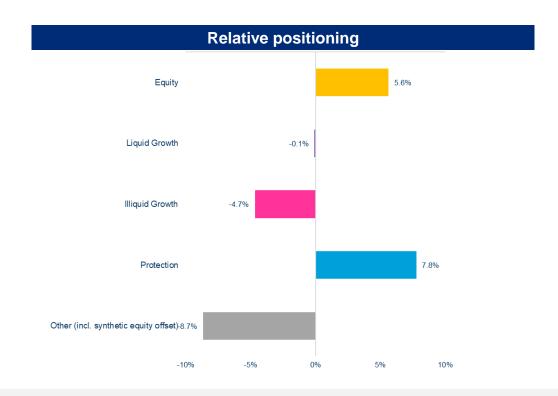
Valuations by Manager

Manager	Asset Class	Start of Quarter (£'000)	Cashflows (£'000)	End of Quarter (£'000)	Start of Quarter (%)	End of Quarter (%)
BlackRock	Global Equity*	708,487	-148,208	-	13.2	0.0
Brunel	Global High Alpha Equity	698,860	-99,930	621,442	13.0	11.4
Brunel	Global Sustainable Equity	792,531	-199,880	589,576	14.7	10.8
Brunel	Passive Global Equity Paris Aligned	278,856	299,993	612,709	5.2	11.2
BlackRock	MSCI Paris-Aligned (Synthetic)*	-		733,621	-	13.4
Brunel	Diversified Returns Fund	336,583		339,865	6.3	6.2
JP Morgan	Fund of Hedge Funds	32,638	-12,038	22,335	0.6	0.4
Brunel	Multi-Asset Credit	304,609		310,208	5.7	5.7
Brunel	UK Property	180,699	-72	181,693	3.4	3.3
Schroders	UK Property	13,018		12,750	0.2	0.2
Partners	Overseas Property	149,245	-798	138,506	2.8	2.5
Brunel	Secured Income – Cycle 1	323,868	-4,123	319,833	6.0	5.9
Brunel	Secured Income – Cycle 2	111,224	-1,422	109,972	2.1	2.0
Brunel	Secured Income – Cycle 3	-	107,034	113,528	-	2.1
IFM	Core Infrastructure	313,207		314,803	5.8	5.8
Brunel	Renewable Infrastructure – Cycle 1	98,180	6,281	102,773	1.8	1.9
Brunel	Renewable Infrastructure – Cycle 2	57,901	1,843	58,427	1.1	1.1
Brunel	Renewable Infrastructure – Cycle 3	7,618	-41	7,456	0.1	0.1
Brunel	Private Debt – Cycle 2	114,081	10,727	138,568	2.1	2.5
Brunel	Private Debt – Cycle 3	14,821	4,979	20,117	0.3	0.4
BlackRock	Corporate Bonds	170,711		163,667	3.2	3.0
BlackRock	LDI & Equity Protection	983,979	148,208	1,023,496	18.3	18.8
BlackRock	Synthetic Equity Offset	-562,614		-733,621	-10.4	-13.4
Record	Currency Hedging (incl. collateral)	25,681	10,000	70,650	0.5	1.3
BlackRock	ETF	127,088		125,687	2.4	2.3
Internal Cash	Cash	101,839	-46,349	55,925	1.9	1.0
Total		5,383,885	76,200	5,454,760	100.0	100.0

Source: Investment Managers, Mercer. Totals may not sum due to rounding.

Positioning relative to target





Commentary

- The Plan updated its Strategic Asset Allocation as part of the 2023 Investment Strategy Review. Among other things, specific to the SAA this included agreements to:
 - Tilt the active/passive split for equities from 67/33 to 50/50
 - Introduce an initial target allocation of 3% for a Local/Social Impact portfolio; being funded strategically from the other existing components of the Illiquid Growth portfolio
- The right hand side chart displays the actual relative weights of the key portfolio building blocks compared to the SAA:
 - The overweight to Equity reflects strong recent absolute performance
 - The underweight to Illiquid Growth reflects the fact that most of the portfolios are still drawing down capital, and in particular the plans to fund the new allocation to a Local / Social Impact portfolio are still being developed.
 - The overweight to Protection reflects the collateral boost provided by the synthesising of some of the Equity allocation; meaning that in practice an overweight to this building block is likely persist and is unlikely to trigger any consideration for action, which would continue to be driven more specifically by collateral adequacy requirements.



Current Topics

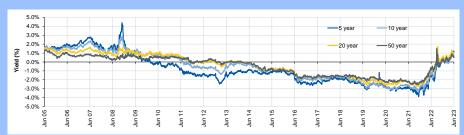


Current Topics

Index-Linked Gilts

Positive real yields for the first time in over a decade

- Given rising yields the index-linked gilts have become considerably cheaper
- Currently, long term index-linked gilts are yielding +1% above long-term CPI expectations



Source: Refinitiv

Attractions for LGPS Funds

Index-Linked Gilts had previously been considered unviable investments except for the most well funded LGPS funds, but with improved funding levels and higher yields, they are once again a viable de-risking asset.

Attractive yield above inflation

What are the risks?

Direct UK CPI inflation linkage

Yields continue to rise in short to medium term

Reduces expected return too far

Cashflow generative

Highly liquid and cheap

Collateral

Relevance to the Fund



The liability hedging component of the risk management framework (including the inflation hedge ratio) has recently been reviewed.

Local and Social Impact

Levelling Up Missions

The government's 2022 white paper on 'Levelling Up' stated "the UK Government is asking LGPS funds, working with the LGPS asset pools, to publish plans for increasing local investment, including setting an ambition of up to 5% of assets invested in projects which support local areas."



Social and Affordable Housing

- Social and Affordable Housing refer to housing provided with public subsidy, or in a general way to describe housing of any housing tenure that is affordable to a particular group.
- We define Social and Affordable housing as residential real estate that is leased to occupants whose housing costs relative to their incomes exceed norms and who may face problems with housing-related payments.







Relevance to the Fund



Officers and the Committee have had extensive discussion on Impact Investing.

The Fund has carved out a new 3% strategic allocation to a Local / Social Impact portfolio, for which the contents are to be discussed further.

Current Topics

Climate Risk Reporting



Review of UK pension scheme TCFD reports

- Almost all reports were published on time
- Length from 10 to 85 pages, with an average of 34 pages
- Showed an encouraging level of trustee engagement with the new requirements
- Some reports included helpful non-technical summaries
- Data quality and coverage remain a challenge

Reporting in the LGPS is now expected to commence from 1 April 2024, with first reports due in late 2025. However, there are good reasons not to delay





Do not have a sufficient

project plan in place to

deliver a report by the

anticipated initial

deadline

(Dec 2024)

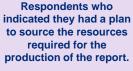
25% do not believe that they have access to sufficient data to populate a risk report. 27% unsure if they have access to the necessary data.

Scheme Advisory Board Survey: Preparedness of pension funds for the changes being considered by the Government



Respondents who indicated they had conducted a full assessment on what expertise was required for risk analysis.

35%





6(5)

What should we be doing?

Summary of recommendations

30%

Understand

- Familiarise yourself with the provisional requirements
- Read TPR's review of TCFD reports
- Undertake training on the requirements and metrics

Agree responsibility

- Who will be producing the Metrics analysis required?
- Who will be producing the Climate Scenario analysis
- Who has responsibility for drafting the report?

Engage with boards

- Ensure Committee members / boards are familiar with the requirements and work required
- Discuss where responsibility for target setting lies (Officers / Committee)

Be Ready

- Production of metrics & scenario analysis is no small undertaking
- Ensure you obtain capacity with whoever is producing the analysis well in advance

Relevance to the Fund



The Fund is in the process of producing its second annual TCFD report.

"LGPS (England and Wales): Next Steps on Investment" Consultation

1

Asset Pooling

2

Levelling Up

3

Investment Opportunities in Private Equity

4

Improving the provision of investment consultancy services to the LGPS

5

Updating the LGPS definition of investments

Relevance to the Fund



The Committee should understand the recommendations. Mercer is working on a fuller response but would welcome thoughts from impacted LGPS committees.



Appendix

Q2 2023 Equity Market Review

Global equity markets exhibited extremely narrow leadership over the second quarter. Nvidia was the catalyst for a rally in technology stocks. Fewer than 10 stocks made up most of the S&P 500 return through Q2.

Equity markets in the US have looked through the regional banking distress during the quarter. Earnings remained resilient, but analyst expectations point to a decline in the coming quarter.

Global equities returned 3.4% in sterling terms and 6.7% in local currency terms as the dollar depreciated versus sterling.

US equities returned 8.7% in local currency terms, whilst European (ex-UK) equities returns 3.2%, and Japanese equities returned 15.0%.

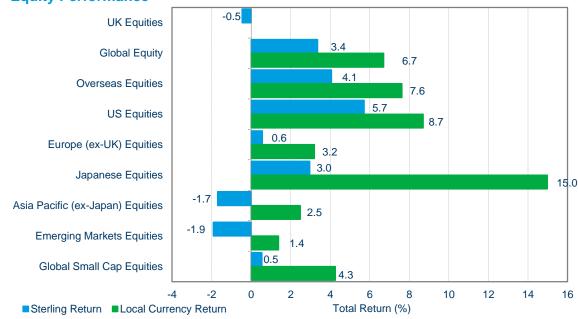
Emerging markets ('EM') equities returned 1.4% in local terms.

Global small cap stocks returned 4.3% in local terms. Small caps underperformed global equities due to their lack of exposure to the large cap tech stocks which were the main driver of global equity returns this quarter.

The FTSE All Share index returned -0.5% over the quarter with the large cap FTSE 100 index returning -0.3%. Large cap equities (All-Share and FTSE 100) produced negative returns whilst smaller, more domestically focused, equities (FTSE 250) produced worse negative returns. However, the small cap index produced a positive 0.7% return.

Poor performance in the basic materials and telecoms sectors were a drag on UK performance relative to global equities.

Equity Performance



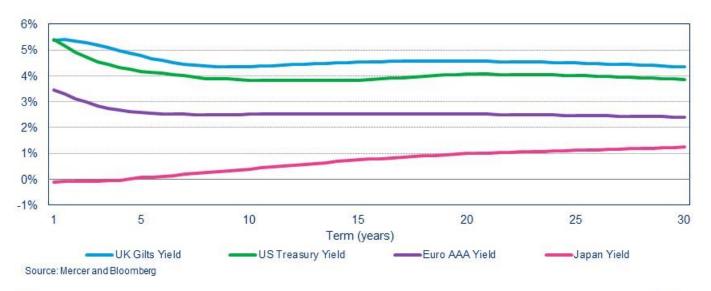
FTSE Performance by Market Cap

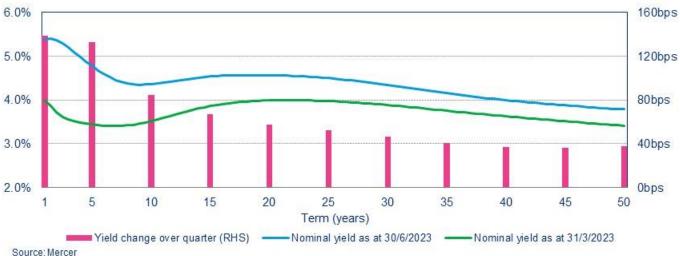




33

Q2 2023 Bond Market Review





Government Bond Yields

10-year global government bond yields rose over the quarter. In the UK, short- dated gilts rose sharply, further inverting the curve from short-dated to 10-year tenors. The UK is now back at yield levels witnessed during the gilt crisis in September 2022 but the market is considerably less disorderly than in September.

The US, like the UK, saw a further inverting of the curve, as the front end rose more than the long end. 5-year yields rose 130bps in the UK and 58bps in the US. 20-year yields rose by around 69bps in the UK and 27bps in the US.

Both the Federal Reserve and the Bank of England raised interest rates over the quarter, while the Fed paused rate hikes at their June meeting but are expected to hike again at their next meeting.

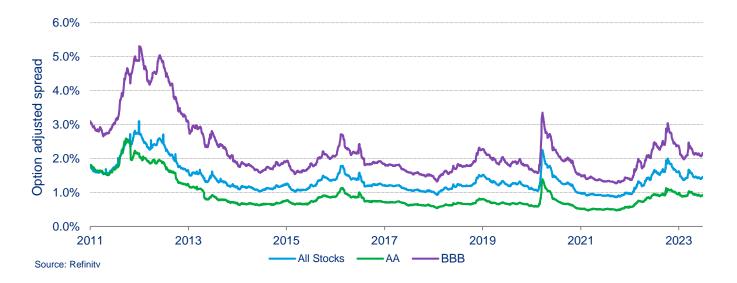
The German 10-year yield rose around 10bps; the European Central Bank raised rates twice over the quarter and continue to reiterate hawkish guidance that they remain committed to increase rates further.

Q2 2023 Bond Market Review



UK Index-Linked Gilt Yields

UK real yields rose across the curve, led by the short end as the Bank of England remained in its hiking cycle. UK inflation remains considerably above target. Real yields, for all maturities remain in positive territory. Market based measures of inflation expectations, in the form of breakeven inflation, rose over the quarter. The UK 10-year breakeven rate rose to 3.9%, ~9bps higher than at the end of last quarter. However, this masks some of the volatility witnessed in the quarter, as 10yr breakeven rates fell to 3.5% intra quarter. Market based measures of inflation expectations for the US fell over the quarter.



Corporate bonds

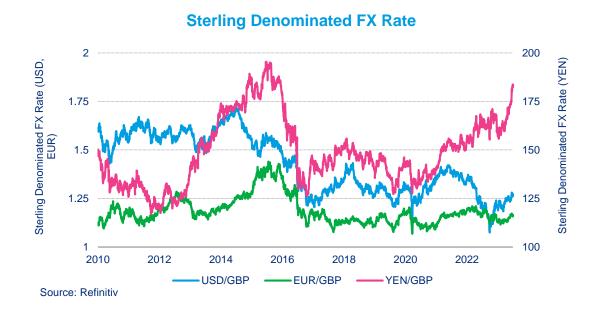
Spreads on UK investment grade credit tightened marginally over the quarter, with spreads on lower rated credit tightening more than for higher rated credit. UK credit outperformed equivalent duration government bonds. This was at odds with the negative performance we saw for UK equities.



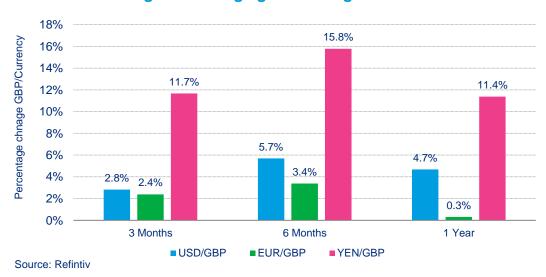
Q2 2023 Currency Market Review

Sterling's performance over the quarter was positive, appreciating versus the US dollar, euro and yen. Sterling strength was driven by a combination of a weak US dollar, economic weakness in the Eurozone, in addition to rising UK rates supporting Sterling versus other currencies, most notably yen.

On a 12-months basis, sterling has appreciated considerably versus US dollar and yen but is flat versus euro.



Change in sterling against foreign currencies



Q2 2023 Property

UK property as measured by the MSCI Index increased by 1.0% over the quarter.

Summary of Mandates

Manager	Mandate	Benchmark/Target	Outperformance Target (p.a.)	Inception Date
BlackRock	Passive Paris-Aligned Equity (Synthetic Exposure)	MSCI Paris-Aligned Benchmark	-	May 2023
Brunel	Global High Alpha Equity	MSCI World	+2-3%	November 2019
Brunel	Global Sustainable Equity	MSCI AC World	+2%	September 2020
Brunel	Passive Global Equity Paris Aligned	FTSE Developed World PAB Index	-	October 2021
Brunel	Diversified Returns Fund	SONIA +3-5% p.a.	-	July 2020
Brunel	Multi-Asset Credit	SONIA +4-5% p.a.	-	June 2021
Brunel	UK Property	MSCI/AREF UK Quarterly Property Fund Index	-	January 2021
Partners	Overseas Property	Net IRR of 10% p.a. (local currency)	-	September 2009
Brunel	Secured Income (Cycles 1-3)	CPI	+2%	January 2019
IFM	Core Infrastructure	SONIA +5% p.a.	-	April 2016
Brunel	Renewable Infrastructure (Cycles 1-3)	CPI	+4%	January 2019
Brunel	Private Debt (Cycles 2-3)	SONIA + 4% p.a.	-	September 2021
BlackRock	Buy-and-Maintain Corporate Bonds	Return on bonds held	-	February 2016
BlackRock	Matching (Liability Driven Investing)	Return on liabilities being hedged	-	February 2016
Record	Passive Currency Hedging	N/A	-	March 2016
BlackRock	Exchange-Traded Fund (ETF)	Bespoke benchmark to reflect total Fund allocation	-	March 2019
Cash	Internally Managed	-		-



Market Background Indices

Acces Oloca	Testers
Asset Class	Index
UK Equity	FTSE All-Share
Global Equity	FTSE All-World
Overseas Equity	FTSE World ex-UK
US Equity	FTSE USA
Europe (ex-UK) Equity	FTSE World Europe ex-UK
Japanese Equity	FTSE Japan
Asia Pacific (ex-Japan) Equity	FTSE World Asia Pacific ex-Japan
Emerging Markets Equity	FTSE Emerging
Global Small Cap Equity	MSCI World Small Cap
Hedge Funds	HFRX Global Hedge Fund
High Yield Bonds	ICE BofAML Global High Yield
Emerging Market Debt	JP Morgan GBI EM Diversified Composite
Property	MSCI UK Monthly Total Return: All Property
Commodities	S&P GSCI
Over 15 Year Gilts	FTA UK Gilts 15+ year
Sterling Non Gilts	ICE BofAML Sterling Non Gilts
Over 5 Year Index-Linked Gilts	FTA UK Index Linked Gilts 5+ year
Global Bonds	ICE BofAML Global Broad Market
Global Credit	Bloomberg Capital Global Credit
Eurozone Government Bonds	ICE BofAML EMU Direct Government
Cash	SONIA



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