REDINGTON

West Midlands Pension Fund

YOUR MARKET AND INVESTMENT UPDATE

Q2 2022

Private and Confidential

WHAT HAPPENED DURING THE QUARTER

Philip Rose
(CIO, Strategy & Risk)

Market Summary

Q2 saw a combination of continuing upside surprises for inflation and more aggressive tightening of monetary policy. This economic background was unsurprisingly poor for most asset prices, with both equities and bonds declining over the quarter. Toward the end of the quarter, even assets such as commodities started to sell off as markets expected inflation to move back towards central bank targets over the medium term.

The major uncertainty is now whether the expected rate rises will be sufficient to slow inflation while not causing a major recession. Failure to slow inflation could mean further tightening is required. The market is already discounting interest rate cuts in 2023, but is not pricing in the large economic slowdown that might be required to change central bank policy in a relatively short period of time.

Key Points for You

- Expected Returns remained broadly unchanged over the quarter at Gilts + 3.4%. A lower expected return for equity assets, along with a reduced allocation to equities, was offset by a higher allocation to illiquid markets and an increased expected return for credit assets (see appendix).
- Asset-side risk, as measured by VaR 95%, decreased slightly from 16.2% at 31 March 2022 to 16.0% at 30 June 2022.
- The Pension Risk Management Framework ("PRMF") in this report contains asset-only monitoring metrics. Our proposed PRMF, which includes liability-based metrics, has been included in the appendices.

Market Data

Equity Index	Level	Change since 31-Mar-22	Change since 30-Jun-21
FTSE 100 (Total Return)	7243	-3.7%	5.8%
S&P 500 (Total Return)	7993	-16.1%	-10.6%
EuroStoxx 50 (Total Return)	1544	-9.4%	-12.1%
Nikkei 225 (Total Return)	44844	-4.9%	-6.5%
MSCI World (Total Return)	6073	-14.3%	-11.1%
MSCI Emerging Markets (Total Return)	641	-8.1%	-20.2%
FX			
USD vs GBP	1.22	-7.3%	-11.9%
EUR vs GBP	1.16	-2.1%	-0.4%
JPY vs GBP	165.3	3.4%	7.6%
Credit Spreads			
Sterling Non-Gilt Index	127	22 bps	45 bps
Sterling Non-Gilt 15Y+ Index	195	20 bps	53 bps
Global Investment Grade	155	31 bps	68 bps
US Investment Grade	171	25 bps	74 bps
Global High Yield	528	161 bps	206 bps
European High Yield	475	157 bps	206 bps

Market Data

UK Gilts	Level	Change since 31-Mar-22	Change since 30-Jun-21
10Y	2.31	67 bps	150 bps
30Y	2.56	81 bps	132 bps
UK Nominal Swaps			
10Y	2.59	67 bps	162 bps
30Y	2.40	71 bps	130 bps
Gilt Breakeven Inflation			
10Y	3.68	-69 bps	16 bps
30Y	3.22	-45 bps	-13 bps
UK RPI Swap			
10Y	4.05	-54 bps	36 bps
30Y	3.36	-42 bps	-2 bps
UK Gilt Real Rates			
10Y	-1.36	136 bps	134 bps
30Y	-0.66	126 bps	144 bps
US TIPS			
20Y	1.36	123 bps	162 bps
30Y	0.89	92 bps	99 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

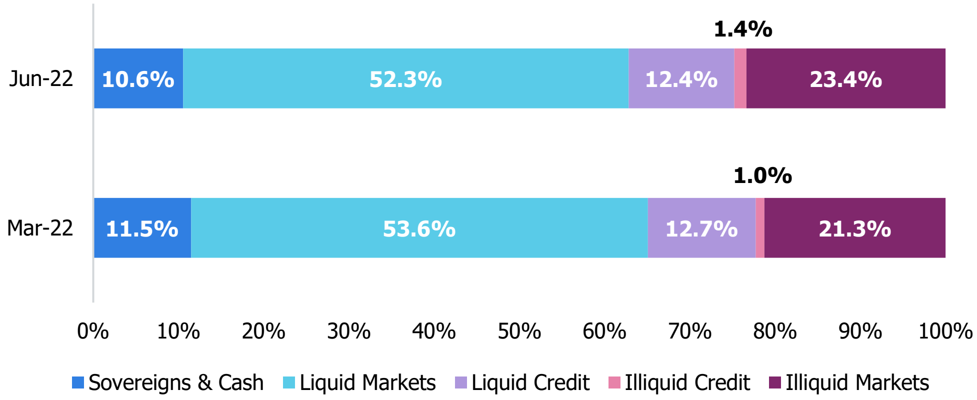
		**Kate Mijakowska** **Government Bonds**	Over the quarter, 20-year gilt yields rose 0.8%. The picture is similar in global markets, with 10-year US Treasury and German Bund yields up 1.0% and 0.9% respectively. 20-year gilt breakeven actually fell by 50 bps, with even more pronounced downward moves at the very short end of the curve. This combined effect drove real yields up by 1.3% at the long end of the curve and led many LDI managers to call for additional collateral. We reiterate that adequate preparation for collateral calls is absolutely crucial to continuing to maintain the hedge. Year-on-year CPI figures continued to rise, with the latest available figure for the UK at 7.9% (May) and the US at 9.1% (June). During the quarter, the Bank of England increased the base rate by 0.5% and the Fed by 1.25%, with both banks signalling that further hikes are on the horizon.
		**Oliver Wayne** **Liquid Markets (Equities)**	Over Q2 global developed markets (DM) and emerging markets (EM) both delivered negative absolute returns. The weakening of the pound versus the dollar meant these sell offs were less significant in GBP terms. This was on the back of concerns about inflation, rising interest rates and recessionary fears. There was a continuation of the major trends of Q1, with value and low volatility outperforming quality and momentum stocks across both DM and EM – though this was more pronounced in DM. In developed markets, energy stocks outperformed significantly as oil prices remained high, as did defensive sectors such as consumer staples. Longer-duration growth sectors such as consumer discretionary and information technology stocks were significant underperformers. On a country basis, China performed well following a disappointing Q1 as negative sentiment around COVID restrictions appeared to ease.
		**Tom Wake-Walker** **Liquid Markets (Multi-Asset)**	The second quarter saw dispersion in price movements within currencies, commodities, regional equities and fixed income, which created opportunities for nimble alternative strategies, while multi-asset strategies that carry more beta struggled. Trend following strategies were one of the main beneficiaries, with returns of the SG Trend index (+10%) shining brightly in comparison to recent history as well as other hedge fund strategies. This strategy has historically performed very strongly in inflationary environments and has benefited in the last 6 months from short bond and long commodity positioning. Other systematic strategies, such as long/short equity style premia, have enjoyed success, with value and momentum factors picking up alpha from intra-market equity rotation. In contrast, long-only multi-asset strategies suffered as the negative correlation between equities and bonds all but disappeared. This affected risk parity strategies most acutely with the HFRI Risk Parity Index down -11% for the quarter.

VIEWS FROM THE ASSET CLASS SPECIALISTS

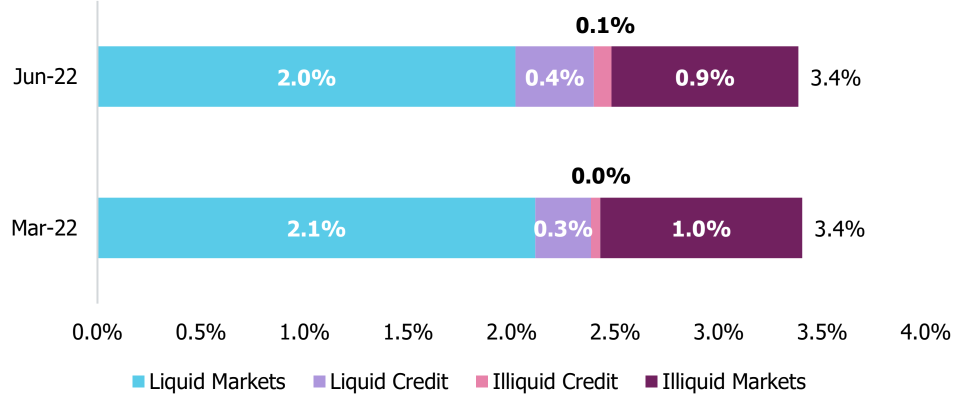
		**Chris Bikos** **Liquid & Semi-Liquid Credit**	The second quarter of 2022 was a continuation of what we experienced in Q1. Most of the major central banks continued tightening their economic policies, there was no progress in peace talks in Ukraine and inflation continued to move higher. Bonds rallied into quarter-end amid rising growth concerns, slightly curtailing the negative returns. The spread movement in European and US high yield was the most pronounced, at 233 and 246 bps respectively, as measured by Libor Option Adjusted Spread (L-OAS). Loan indices performed better than high yield, with US loans faring better than European. In investment grade, the picture was similar, with spreads moving wider to a lower degree but the impact of higher rates was a lot more significant, pushing long-duration corporate benchmarks to double-digit negative returns. Emerging market (EM) bonds suffered significant declines and EM currencies weakened as the US dollar performed well, benefiting from broad risk aversion. Default rates across markets remain muted. However, liquidity is getting more expensive, with transaction costs in credit going up especially in June, and new-issue activity in sub-investment grade well below the levels seen last year.
		**Tricia Ward** **Illiquid Credit**	H1 2022 private equity exits were at their lowest value since 2016 (source: Dealogic) and capital invested in new deals was deployed more thoughtfully than the frenetic H2 2021 activity. Private equity valuations are beginning to reflect the declines of their public market equivalents. Initial indications suggest mid-single-digit markdowns for Q2, potentially skewed towards growth companies. The valuation disconnect between buyers and sellers is contributing to a lull in transactions on both primary and secondary transactions. In June, private loan coupons expanded by ~75 bps, offsetting the contraction seen over the entire of 2021. Alongside this, core middle-market lenders are incorporating covenants and improved terms once again. Lenders emphasise borrowers with pricing power and a clear focus on the underlying quality of the company and its asset collateral to protect against inflationary pressures. As yet, private credit remains resilient, but it is realistic to expect some small markdowns to filter through in poorly constructed transactions.
		**Sarah Miller** **Illiquid Markets**	Performance over the first half of 2022 has been volatile across real assets, with interest rate moves appearing to have a more significant impact on infrastructure valuations than on real estate. Unlisted and listed infrastructure returned -5.2% (EDHEC Infra300) and -7.4% (S&P Global Infrastructure) respectively YTD, while real estate saw a positive move of +5.3% in Q1 (NCREIF Property Index). In infrastructure, inflation linkage and long-term fixed debt in a portion of infrastructure assets has mitigated some of the valuation impact from rising interest rates. Positive returns in UK real estate have been driven by the logistics sector's persistent uptake in e-commerce. As consumers seek convenience, choice and fast delivery against the continued backdrop of supply chain constraints, tenants seek to hold 5-15% more stock than they historically would have. They typically now use a 'just-in-case' rather than 'just-in-time' model, requiring larger premises in last mile locations, leading to higher rents. The high demand for logistics has resulted in the UK vacancy rate falling to just 1.6% compared to c.5% in 2020. London saw an unprecedented 39.3% rental growth over the first quarter of 2022, further compressing yields.

YOUR ASSET ALLOCATION AND EXPOSURE

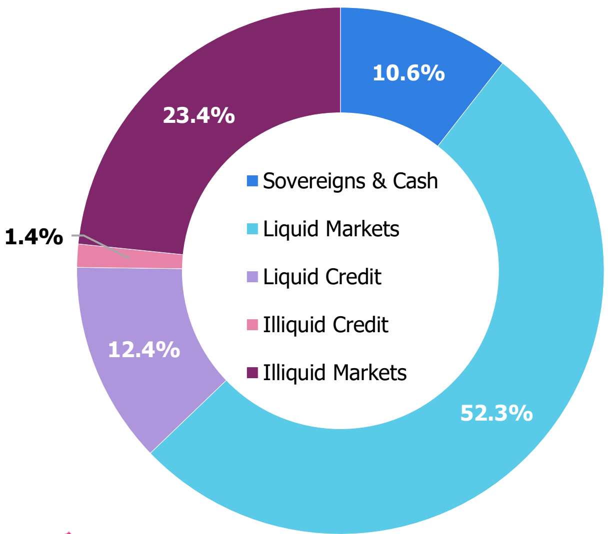
Asset Allocation Change



Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.



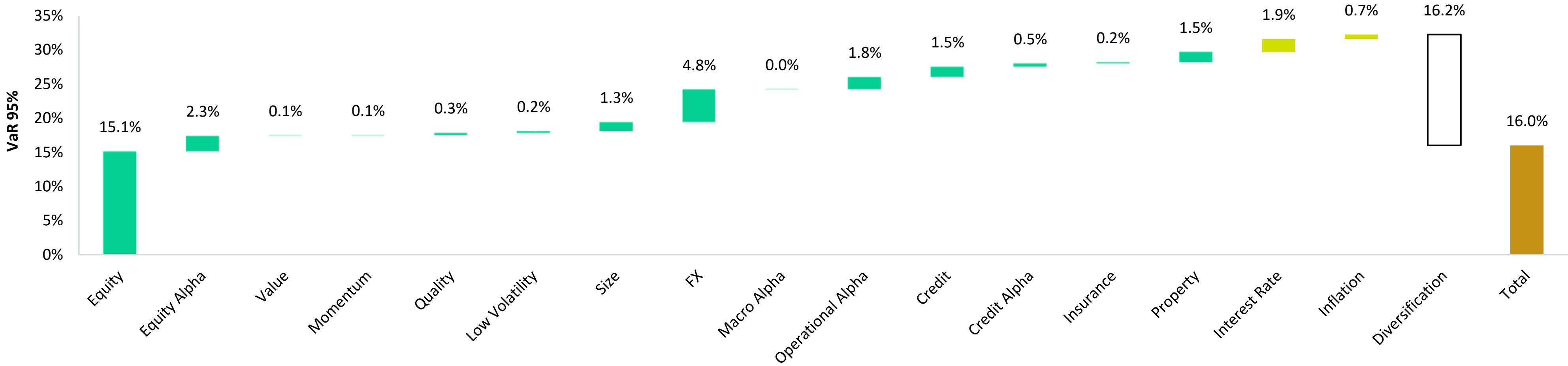
Detailed Asset Allocation

2.6% Cash
4.4% Index-Linked Gilts
1.5% Nominal Gilts
0.5% LGIM Overseas Bond Fund
1.5% US TIPS
6.1% ACS LGPS UK Equity Passive Fund
13.3% ACS LGPS Global Ex UK Passive Equity Fund
3.1% ACS LGPS Global Equity Dividend Growth Factor Fund
10.5% ACS LGPS All World Equity Climate Multi Factor Fund
5.8% LGPS Central Global Equity Multi Manager Fund
0.3% LGIM UK All Share
1.0% Global Active Futures
0.3% Equities held with Merrill Lynch
0.1% Smaller Equity Positions
2.3% Sustainable Equities - Impax
2.1% Sustainable Equities - RBC
0.5% Sustainable Equities - WHEB
2.4% Emerging Markets Equities - AGF
2.6% Emerging Markets Equities - BMO
1.8% Emerging Markets Equities - Mondrian

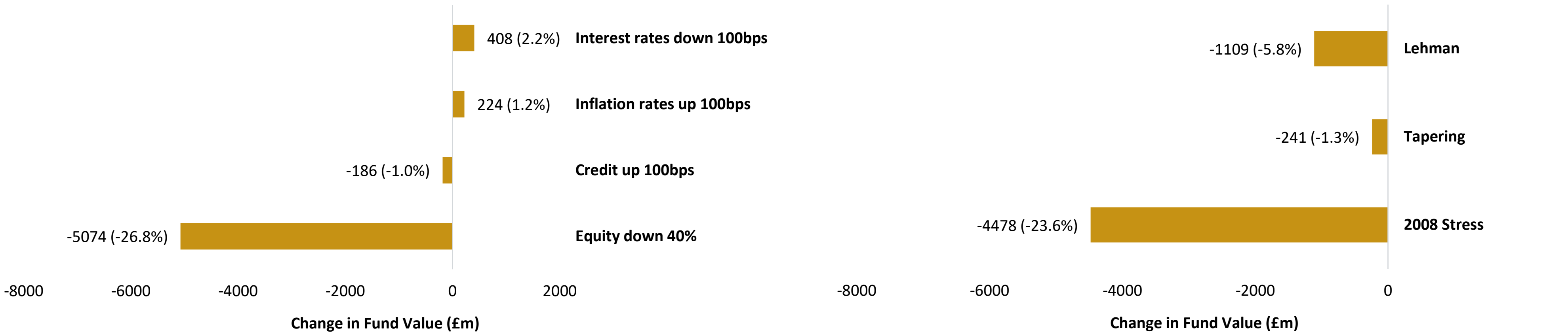
1.5% Aegon Short Dated Investment Grade Bond Fund
3.0% UK Corporate Bonds
1.0% LGPS Central Global Active IG Corporate Bond Fund
3.4% Multi-Class Credit
3.5% Emerging Market Debt Funds
1.4% Schroders FOCUS II / LGPS Credit Fund II
4.7% Infrastructure
8.7% Property
1.9% Opportunistic Funds
8.1% Private Equity

HELPING YOU UNDERSTAND YOUR RISK

Current Value-at-Risk 95% (Asset Only)



Scenario Analysis



APPENDICES

REDINGTON'S EXPECTED RETURNS – JUNE 2022

Asset Class	Expected Return (Gilts +)	Volatility	Expected Fees (p.a.)
Equity			
Developed Market Equities	3.5%	16.9%	0.0%-0.1%
Sustainable Equities	3.8%	15.8%	0.2%-0.4%
Emerging Markets Equities	4.1%	20.1%	0.1%-0.2%
China A Share Equities	5.4%	29.8%	0.3%-0.8%
Liquid Credit			
Corporate Debt GBP – Passive	1.4%	5.9%	0.1%-0.2%
Corporate Debt GBP – Active	1.8%	5.9%	0.2%-0.3%
Emerging Market Debt – Corporates	3.1%	7.6%	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	4.4%	14.5%	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	3.3%	9.0%	0.5%-0.8%
Multi-Class Credit Global	4.7%	8.8%	0.4%-0.7%
Illiquid Credit			
Diversified Matching Illiquids (Uninvested)	2.9%	7.1%	0.3%-0.5%
Opportunistic Illiquid Credit	6.0%	14.4%	1.0%-1.5% (+ performance fee)
Securitised Opportunities	3.8%	6.3%	0.5%-0.7%
Special Situations	7.5%	19.0%	1.0%-1.5% (+ performance fee)
Illiquid Markets			
Private Equity	4.6%	30.8%	1.0%-1.5% (+ performance fee)
Insurance-Linked Securities	5.9%	12.5%	1.0%-1.5%
Renewable Infrastructure (Whole Projects)	3.3%	14.5%	0.5%-0.7% (+ performance fee)

Fee data is estimated based on fees of preferred managers in each strategy. In practice, each fee would be negotiated for West Midlands and may be considerably lower.

GLOSSARY

Term	Description
Annual Management Charge (AMC)	The fee charged by the asset manager for managing the fund, typically expressed as an annual percentage on the invested assets. This excludes additional expenses, e.g. administrative costs, which when combined with the AMC make up a fund's total expense ratio (TER).
Credit Risk	The risk of financial loss as a result of the inability or unwillingness of an entity to make payments as they become due. Many types of relationships involve credit risk, such as those in which a company owes money to its suppliers (trade debt) or where a counterparty is required to make payments under a derivative contract (counterparty credit risk).
Credit Spread	The difference in the yield between two different bonds, due to different credit quality. The credit spread reflects the additional yield an investor can earn from taking incremental credit risk. Is it often quoted in relation to the yield on government bonds.
Inflation	The average rate at which prices (of products and services) increase over time. It gradually reduces the value of money over time – the higher the rate of inflation, the greater the erosion of value.
Risk Attribution	The process of attributing certain components of total risk to various sources such as inflation risk, credit risk, equity risk, etc.
Stress Testing	A tool used to assess a portfolio's exposure to large – but plausible – shocks. In the broadest sense, stress testing is a 'what if' exercise and can be modelled across various scenarios. For example, a stress test can be used to simulate the performance of a portfolio during 9/11, Black Monday and the Global Financial Crisis of 2007-08.
Value-at-Risk (VaR)	The minimum value that the Fund would expect to lose (at risk) for a given confidence level, over a given time horizon. We have used a 1-in-20 (i.e. 95%) confidence level. For example, if a portfolio's 95% 1-year VaR is £200 million, it would have a 5% chance (1-in-20) of suffering a loss over the year of £200 million or more.
Volatility	A measure of variability that is used as a common metric for risk. It represents the value of one standard deviation change in the value of an assets' return. Under certain assumptions, we are able to use this measure to calculate the probability of a given change in the value of the asset or portfolio.
Yield	The income return on an investment. It is based on the received cash flows of a security and is usually expressed as an annual percentage.
Yield Curve	A graphical representation showing the yields of a set of financial instruments by maturity. For example, the par interest rate swap curve or the UK Gilt curve.

CONTACTS

Pete Drewienkiewicz

Chief Investment Officer

Tel: +44(0) 20 3326 7138
pete.drewienkiewicz@redington.co.uk

Karen Heaven

Managing Director

Tel: +44(0) 20 3326 7134
karen.heaven@redington.co.uk

Tara Gillespie

Head of Global Assets

Tel: +44(0) 208 132 5753
tara.gillespie@redington.co.uk

Charlie Sheridan

Associate

Tel: +44(0) 203 326 7136
charlie.sheridan@redington.co.uk

Nicole Toselli

Analyst

Tel: +44(0) 20 3540 5868
nicole.toselli@redington.co.uk

Disclaimer