Appendix A

REDINGTON

West Midlands Pension Fund

YOUR MARKET AND INVESTMENT UPDATE

Q1 2023

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WHAT HAPPENED DURING THE QUARTER

Pete Drewienkiewicz (Chief Investment Officer)

Market Summary

The prevailing themes of inflation and higher interest rates were rudely interrupted by volatility in the banking sector in March. In the US, we saw the failure of Signature Bank and Silicon Valley Bank in quick succession, while Credit Suisse was acquired by Swiss rival UBS a week later. This spurred a risk-off interlude, sending Treasury yields and stock prices lower in tandem. However, markets seemed to shrug off the events quite quickly and the end of Q1 saw a rally in risk assets. This helped equity markets record a strong quarter overall, with some mean reversion seen from 2022, as growth stocks led the way.

Central Banks continued to raise rates consistently through the quarter, with an aggregate 225bps of rate hikes split between the Bank of England, Federal Reserve and European Central Bank. All three now appear closer to a level of terminal rates as inflation appears to have moderated somewhat, although the UK's March CPI print of 10.1% slowed less than economists had hoped for.

Key Points for You

- Expected returns increased slightly over the quarter from Gilts + 3.4% at 30 December 2022 to Gilts + 3.6% at 31 March 2023. This was largely driven by a higher allocation to Equities at 31 March 2023, as well as slightly higher expected return assumptions for the asset class.
- Asset-side risk, as measured by VaR 95%, decreased from 16.6% at 30 December 2022 to 16.2% at 31 March 2023.

Market Data

Equity Index	Level	Change since 31-Dec-22	Change since 31-Mar-22
FTSE 100 (Total Return)	7930	3.6%	5.4%
S&P 500 (Total Return)	8791	7.2%	-7.7%
EuroStoxx 50 (Total Return)	1949	14.3%	14.4%
Nikkei 225 (Total Return)	48652	8.5%	3.1%
MSCI World (Total Return)	6701	7.4%	-5.5%
MSCI Emerging Markets (Total Return)	651	3.8%	-6.6%
FX			
USD vs GBP	1.23	1.9%	-6.1%
EUR vs GBP	1.14	0.7%	-4.1%
Credit Spreads			
Sterling Non-Gilt Index	136	11 bps	31 bps
Sterling Non-Gilt 15Y+ Index	181	6 bps	6 bps
Global Investment Grade	145	8 bps	21 bps
US Investment Grade	166	11 bps	20 bps
Global High Yield	442	0 bps	75 bps
European High Yield	364	-17 bps	46 bps

Market Data

UK Gilts	Level	Change since 31-Dec-22	Change since 31-Mar-22
10Y	3.56	-24 bps	192 bps
30Y	3.88	-4 bps	213 bps
UK Nominal Swaps			
10Y	3.68	-31 bps	175 bps
30Y	3.40	-22 bps	171 bps
Gilt Breakeven Inflation			
10Y	3.79	22 bps	-58 bps
30Y	3.48	7 bps	-19 bps
UK RPI Swap			
10Y	3.94	3 bps	-65 bps
30Y	3.43	5 bps	-35 bps
UK Gilt Real Rates			
10Y	-0.22	-47 bps	250 bps
30Y	0.41	-11 bps	232 bps
US TIPS			
20Y	1.66	-22 bps	153 bps
30Y	1.35	-22 bps	138 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

Kate Mijakowska

Government Bonds

The first quarter of the 2023 saw growing uncertainty in the banking sector, which drove global government bond yields down. During the quarter, UK 20-year nominal gilt yields fell 22bps, while 20-year index-linked gilt yields fell 24bps. In March, the UK policy rate increased by another 25bps to 4.25%. The UK Consumer Price Index (year-on-year) print was 10.4% in February, which was higher than the market expected, primarily due to soaring food prices. The March CPI figure is at 10.1%. Towards the end of the quarter, the Bank of England Financial Policy Committee published a paper recommending that LDI funds should be resilient to a "severe but plausible stress", quantified by the Committee to amount to c.250bps interest rate shock. An additional buffer is advised over and above that level but has not been quantified. Further guidance from The Pensions Regulator is expected following this paper.

Oliver Wayne

Liquid Markets (Equities)

Global developed markets ('DM') and emerging markets ('EM') both delivered positive absolute returns in Q1. Central banks continued to raise rates in an attempt to control rising inflation. However, speculation that further rate hikes will be limited supported equity market returns. The collapse of Silicon Valley Bank caused significant volatility in the banking sector for equity investors. This was largely contained as the Fed effectively provided liquidity back stops to the troubled regional banks. There was high dispersion in sector performance, with Information Technology and Consumer Discretionary delivering very strong double digit returns. Financials, Energy and Health Care were amongst the worst performers, delivering negative absolute returns. Quality and Growth factors performed strongly in DM and Value was the best performing factor in EM. Larger companies outperformed smaller companies on a relative basis in both DM and EM, which created a moderate headwind for the majority of active managers.

Tom Wake-Walker

Liquid Markets (Multi-Asset)

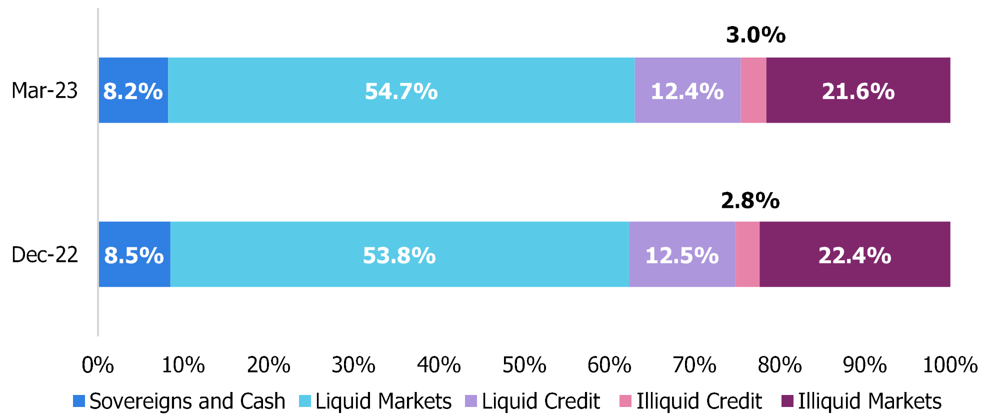
Turbulent market moves in March negatively affected those liquid alternative managers who had significant short fixed income positioning. This was most acutely felt by trend following strategies who suffered negative returns for the quarter as a result. Long biased multi-asset funds finished the quarter largely positive as both equities and bonds rose. Most diversified risk premia strategies benefitted from strong risk parity performance, but results overall were mixed – driven by the managers' relative exposure to trend following and style premia. Defensive as a factor was the worst performer, with other factors struggling to generate meaningful positive performance.

VIEWS FROM THE ASSET CLASS SPECIALISTS

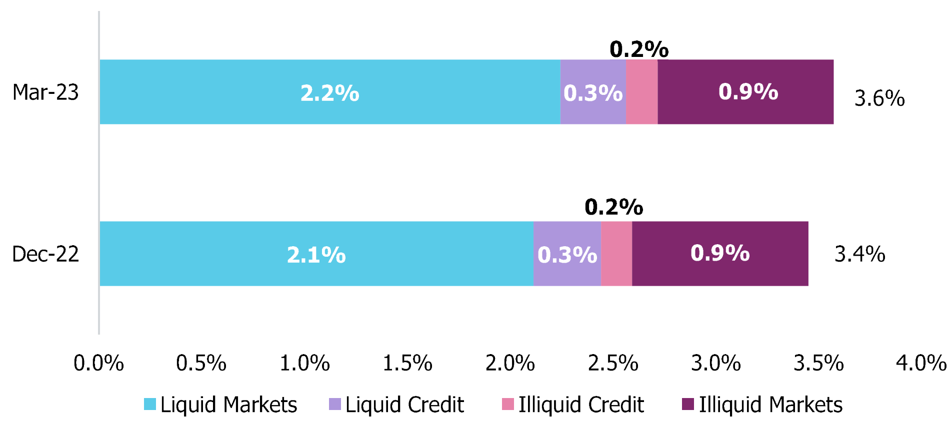
	**Chris Bikos** **Liquid & Semi-Liquid Credit**	2022 saw credit markets experience substantial losses globally, however 2023 got off to a more positive start with a volatile end in March. The Financials sector had a turbulent March, following the failure of Silicon Valley Bank and the write-off of Credit Suisse's Additional Tier 1 Capital bonds (AT1s) before the troubled lender was bought by UBS. Fears of a banking crisis pushed government bond yields lower, providing a tailwind across all major credit asset classes and especially those with a longer duration profile. Credit spreads moved tighter in European and US high yield, while investment corporate spreads moved slightly wider across the maturity spectrum except for long-dated US credit. Commodities were led lower by the energy complex as natural gas and oil prices continued to ease. Within emerging markets ("EM"), local currency sovereigns had another strong quarter followed by EM investment-grade corporates and sovereigns.
	**Tricia Ward** **Illiquid Credit**	As the UK economic outlook remains volatile and unpredictable, many property investors continue to take a "wait and see" approach. Transaction volume in commercial property totalled £5.6bn in the UK in the first quarter of 2023, the lowest quarterly volume since 2009 with the exception of Q2 2020. However, confidence has started to return to the market as pricing levels steady after a swift recalibration downwards in Q4. In some cases, prices moved inward, as experienced in industrial and regional offices where yields have moved inwards by 25bps over the quarter meaning the average Savills prime yield now stands at 5.57%. Over the year, it is expected that transaction volumes will increase due to prices stabilising and a build-up of dry powder. In the infrastructure sector, the energy and power sectors in Europe, North America, and APAC saw several regulatory and windfall taxes implemented to combat the sharp rises in prices in 2022.
	**Sarah Miller** **Illiquid Markets**	Against an uncertain macro backdrop Private Debt fundraising fell over Q1, decreasing by 20% vs Q4 2022 according to Preqin data. Although Q1 represents the third consecutive quarterly decrease in fundraising, the first quarter of both 2020 and 2021 were also the lowest in the year. Private Debt deals saw a small drop off over Q1, driven by reduction in M&A activity. M&A, which accounted for 69% of European Direct Lending deals over 2022, fell 23% over Q1 making it the least active quarter since the start of COVID-19 lockdowns in Q2 2020. Anecdotally, the lack of equity capital has been an emerging issue for lenders over the quarter. The upper end of the market was impacted by a slight increase in the unusually low bank lending activity we saw in the syndicated market over 2022.

YOUR ASSET ALLOCATION AND EXPOSURE

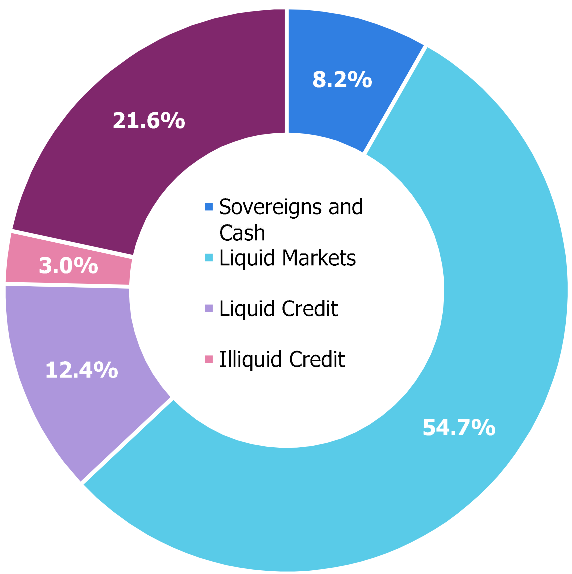
Asset Allocation Change



Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.

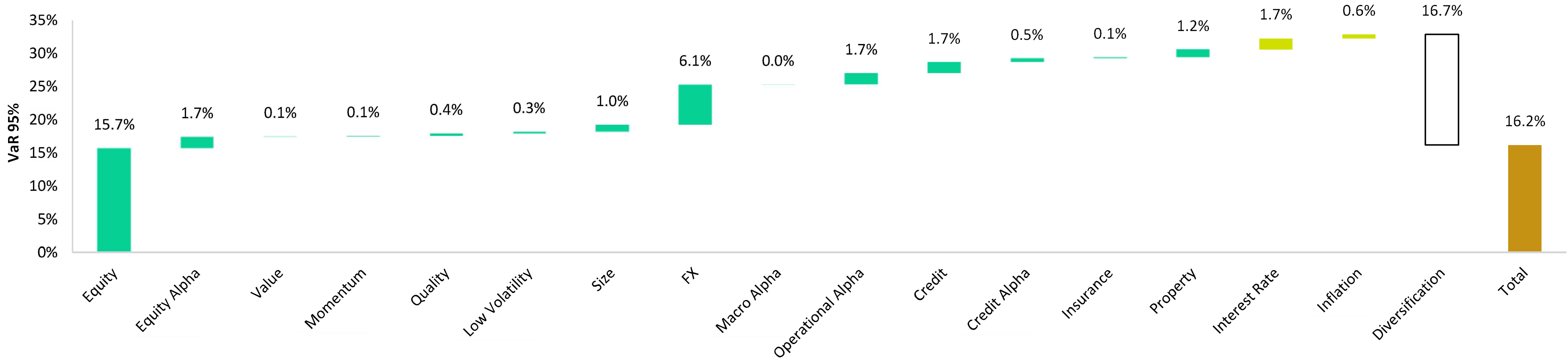


Detailed Asset Allocation

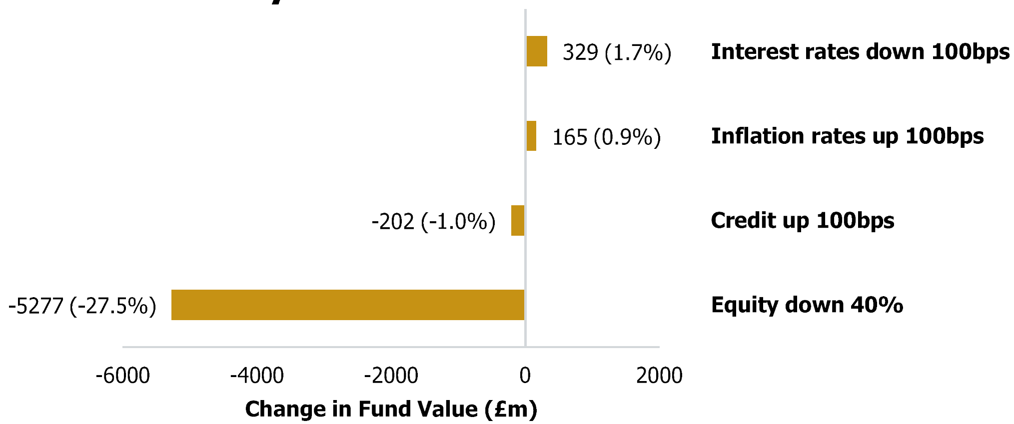
Cash	3.1%	Sustainable Equities - RBC	2.2%
LGIM Overseas Bonds	0.5%	Sustainable Equities - WHEB	0.6%
Index-Linked Gilts	3.9%	Emerging Markets Equities	6.8%
Nominal Gilts	0.7%	Aegon Short Dated Investment Grade Bond Fund	1.5%
ACS LGPS UK Equity Passive Fund	6.5%	UK Corporate Bonds	2.8%
ACS LGPS Global Ex UK Passive Equity	14.6%	LGPS Central Global Active IG Corporate Bond Fund	0.9%
ACS LGPS Global Equity Dividend Growth Factor	3.3%	Multi-Class Credit	3.4%
ACS LGPS All World Equity Climate Multi Factor	11.2%	Emerging Market Debt Funds	3.7%
LGPS Central Global Equity Multi Manager Fund	6.3%	LGPS Central Private Credit / Schroders FOCUS II/III	3.0%
LGIM UK All Share	0.3%	Infrastructure	5.4%
Equities held with Merrill Lynch	0.4%	Property	7.0%
Smaller Equity Positions	0.1%	Opportunistic Funds	1.5%
Sustainable Equities - Impax	2.6%	Private Equity	7.7%

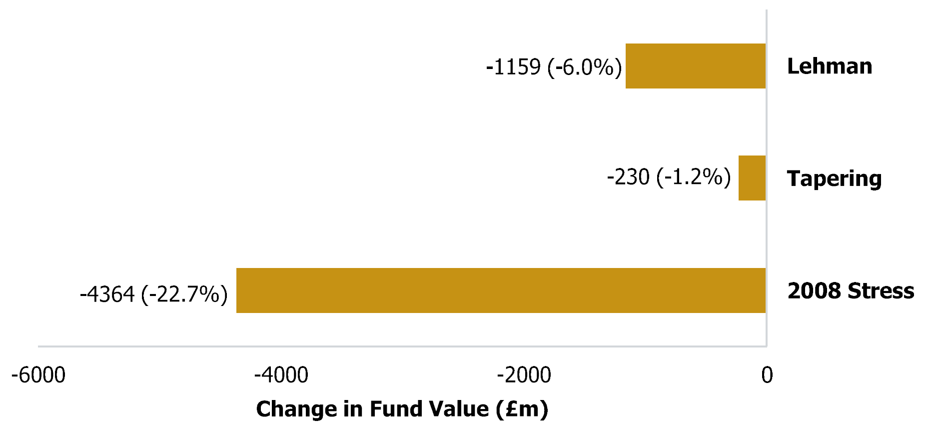
HELPING YOU UNDERSTAND YOUR RISK

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



Scenario Analysis





APPENDICES

REDINGTON'S EXPECTED RETURNS – MARCH 2023

Asset Class	Expected Return (Gilts +)	Volatility	Expected Fees (p.a.)
Equity			
Developed Market Equities	3.9% ↑	16.8% ↓	0.0%-0.1%
Sustainable Equities	4.0% ↑	15.9% –	0.2%-0.4%
Emerging Markets Equities	4.5% ↑	20.1% ↓	0.1%-0.2%
Liquid Credit			
Corporate Debt GBP – Passive	1.4% ↓	6.0% ↑	0.1%-0.2%
Corporate Debt GBP – Active	1.7% ↓	6.1% ↑	0.2%-0.3%
Emerging Market Debt – Corporates	2.4% ↓	7.0% ↑	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	3.4% –	13.8% ↑	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	2.5% –	8.7% ↑	0.5%-0.8%
Multi-Class Credit Global	4.1% ↓	7.5% ↓	0.4%-0.7%
Illiquid Credit			
Diversified Matching Illiquids	2.0% ↓	6.9% ↑	0.3%-0.5%
Opportunistic Illiquid Credit	5.1% ↓	11.6% ↓	1.0%-1.5% (+ performance fee)
Securitised Opportunities	3.9% ↓	5.7% ↓	0.5%-0.7%
Special Situations	7.0% ↓	14.3% ↓	1.0%-1.5% (+ performance fee)
Illiquid Markets			
Private Equity	5.5% ↑	30.6% ↓	1.0%-1.5% (+ performance fee)
Commercial Property	2.0% –	11.9% ↑	0.4%-0.6%
Renewable Infrastructure (Whole Projects)	3.6% ↑	14.2% ↑	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

Tara Gillespie

Head of Global Assets

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

Benjamin Blackburn

Senior Vice President

Tel: +44 (0) 20 3463 8064
benjamin.blackburn@redington.co.uk

Charlie Sheridan

Vice President

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

Ellen Welford

Analyst

Tel: +44(0) 20 3463 8049
ellen.welford@redington.co.uk

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