Appendix A

YOUR MARKET AND INVESTMENT UPDATE

Q2 2020

West Midlands Pension Fund

REDINGTON

West Midlands Pension Fund

bsi. ISO/IEC 27001 Information Security Management

QAS Institute and Faculty of Actuaries Quality Assurance Scheme

Private and Confidential

WHAT HAPPENED DURING THE QUARTER

Philip Rose
(CIO, Strategy & Risk)

Market Summary

Q2 showed that trying to predict markets from economic data (or indeed even trying to predict economic data) remains challenging, with markets rebounding strongly even as the pandemic worsened. In part, this has been driven by prompt coordinated monetary and fiscal action across the world, which has helped to support both incomes and markets. While we do not yet have a cure for the virus, central banks and governments do have a cure for market dislocations, which have been remedied far faster than was seen in 2008. Differences in monetary/fiscal stimulus and pandemic management may lead to significantly different outcomes across both countries and industries.

Key Points for You

- Risk, as measured by VaR 95%, decreased marginally from 15.5% to 15.4% over the quarter. This was largely driven by the increased allocation to cash.
- Expected return decreased marginally from Gilts + 3.5% to Gilts + 3.4% over the quarter. This was largely driven by a reduction in the expected return for credit assets owing to the tightening of spreads as markets recovered from the COVID-19 related sell-off in Q1 2020.

Market Data

Equity Index	Level	Change since 31-Mar-20	Change since 28-Jun-19
FTSE 100 (Total Return)	5803	9.1%	-13.8%
S&P 500 (Total Return)	6352	20.5%	7.5%
EuroStoxx 50 (Total Return)	1362	17.8%	-4.5%
Nikkei 225 (Total Return)	36547	18.0%	7.0%
MSCI World (Total Return)	4990	18.5%	3.3%
MSCI Emerging Markets (Total Return)	591	16.7%	1.4%
FX			
USD vs GBP	1.24	-0.1%	-2.3%
EUR vs GBP	1.10	-1.9%	-1.1%
GBP vs JPY	0.7	-0.2%	2.3%
Credit Spreads			
Sterling Non-Gilt Index	149	-53 bps	25 bps
Sterling Non-Gilt 15Y+ Index	202	-45 bps	25 bps
Global Investment Grade	165	-100 bps	47 bps
US Investment Grade	182	-116 bps	49 bps
Global High Yield	584	-176 bps	208 bps
European High Yield	467	-161 bps	158 bps

Market Data

UK Gilts	Level	Change since 31-Mar-20	Change since 28-Jun-19
10Y	0.18	-17 bps	-71 bps
30Y	0.67	-17 bps	-85 bps
UK Nominal Swaps			
10Y	0.36	-24 bps	-69 bps
30Y	0.43	-18 bps	-83 bps
Gilt Breakeven Inflation			
10Y	3.10	11 bps	-22 bps
30Y	2.98	30 bps	-40 bps
UK RPI Swap			
10Y	3.39	7 bps	-20 bps
30Y	3.01	23 bps	-40 bps
UK Gilt Real Rates			
10Y	-2.91	-28 bps	-49 bps
30Y	-2.31	-47 bps	-45 bps
US TIPS			
20Y	-0.07	-22 bps	-83 bps
30Y	-0.08	-25 bps	-98 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

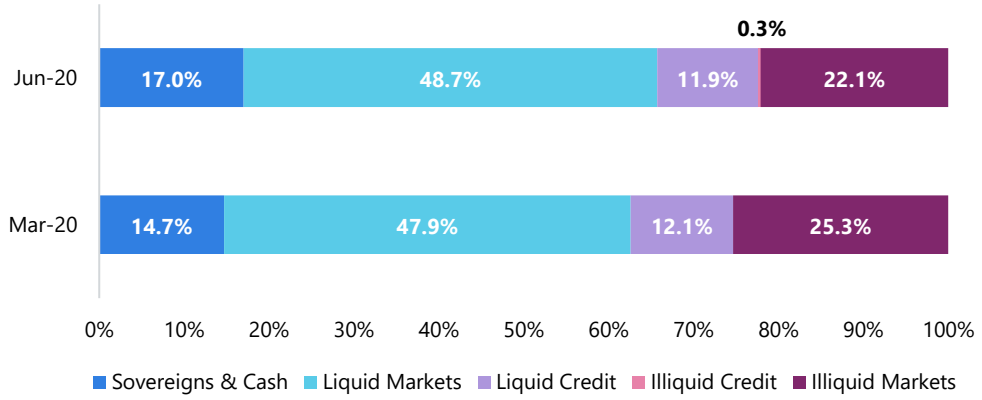
		**Kate Mijakowska** **LDI and Government Bonds**	Over Q2 2020, UK index-linked gilt yields fell by 41bps at the 20-year point, reaching new record lows. This decrease was driven by nominal gilt yields, which fell c.19bps, as well as an increase in gilt-based inflation expectations of c.22bps. The rise in inflation expectations was exacerbated by poor supply of index-linked gilts, as well as the uncertainty over the RPI rate itself given its potential reform to be more aligned with CPIH. Following extreme market conditions at the end of the first quarter, liquidity in nominal gilts returned to normal and repo costs fell back to c. Sonia + 20bps, which are levels that we are much more accustomed to. In April, the deadline for submitting responses to the RPI consultation was extended until August 2020. Redington's response to it is available on request. Finally, the cessation of Libor may occur earlier than initially expected (end of 2020), but this is yet to be confirmed.
		**Oliver Wayne** **Liquid Markets: Equities**	Equity markets rallied strongly in the second quarter of 2020 as governments provided enormous amounts of stimulus and economies started to reopen. US equities outperformed other major equity markets. Emerging market equities generated strong returns amplified by US dollar weakness, but moderately underperformed developed markets. Volatility remained high throughout the quarter, even as market sentiment improved. From a factor perspective, the market leadership remained largely unchanged, with momentum factors outperforming across developed and emerging markets. Value factors – which materially underperformed in the Q1 drawdown – lagged in the recovery and underperformed the broader market. From a size perspective, Q2 saw a reversal from the first quarter as market participants' risk appetite increased, with smaller companies outperforming larger companies across both developed and emerging markets.
		**Tom Wake-Walker** **Liquid Markets: Multi-Asset**	Performance within multi-asset portfolios for the quarter depended on the degree of market risk held by managers. Systematic managers generally increased risk through the quarter due to both volatility-scaling mechanisms as well as trend signals, while many discretionary managers remained relatively cautious with their equity allocations, instead tilting more towards credit to capture liquidity-driven returns. Trend following managers benefited from long exposure to precious metals and fixed income but struggled with short equity and long dollar positioning which originated from the extreme Q1 price moves. Equity market neutral and style premia strategies were mixed, with those more exposed to the value factor faring worst as the style continued to underperform.

VIEWS FROM THE ASSET CLASS SPECIALISTS

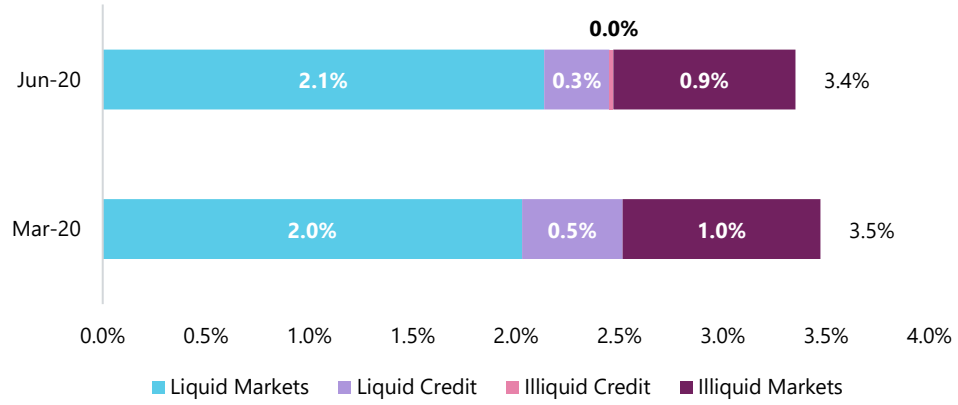
		**Chris Bikos** **Liquid & Semi-Liquid Credit**	Q2 2020 was a stark contrast to Q1, with the extremely sharp economic global downturn followed by timely and unforeseen levels of monetary stimulus and central bank intervention across the globe. Consequently, credit spreads declined across the risk/return spectrum and boosted returns on corporate bonds, with longer-duration and higher-quality bonds posting the best year-to-date results. Overall, corporate bonds outperformed government bonds. US and European High Yield spreads tightened during the quarter but remained higher relative to their long-term averages. Emerging Market (EM) bonds also rebounded to produce strong gains. Hard currency government, quasi-sovereign and corporate bonds posted double digit returns. Local currency bonds had a good quarter, but EM currency performance was mixed, as concerns over COVID-19 remained heightened, notably in Brazil. The shape of recovery will largely depend on COVID-19's trajectory and on central banks' continued support.
		**Tom Duggan** **Illiquid Credit**	The market rally that provided a wealth of opportunity in publicly traded assets had little impact (besides inputs for certain valuation methodologies) on private market activity. The tenets of active management in private markets such as deal sourcing, structuring and engagement are driven (predominantly) by people. Hence, shelter-in-place and continued social distancing measures as well as broader economic uncertainty have stemmed M&A and private market activity. S&P reported just 50 deals totalling $6.5bn over H1 2020 vs. 119 deals worth $40.4bn in H1 2019 in the US. As such, Q2 and H1 2020 have proven to be a long-awaited litmus test of illiquid manager processes and workout/restructuring experience as they triage portfolios and allocate resources accordingly. An area of positive differentiation has been the ability for lenders of scale and special situations to provide capital at attractive terms where public syndication or issuance is no longer tenable. Still, the broader observation and rhetoric seems to be patience in deployment and a focus on managing liquidity through 2020.
		**Jaspal Phull** **Illiquid Markets**	The UK property market has been hit hard by the COVID-19 crisis. It is now very evident that the pandemic has caused existing trends to accelerate; online shopping is growing faster at the expense of traditional brick-and-mortar retailers, whilst struggling businesses are being pushed into default and bankruptcy at a much quicker pace. Despite the monetary and fiscal measures being enacted to combat the economic fallout of the virus, the economic recovery is expected to be slow, uneven and highly different among regions, cities, property types and sectors. Rental collection over the quarter varied across sectors, with retail the poorest performing. Most UK property funds remain gated; however, central London offices, all industrial and logistics assets, build-to-rent properties and long-dated annuity income assets with a secure covenant now no longer need a material uncertainty clause in their valuations.

YOUR ASSET ALLOCATION AND EXPOSURE

Asset Allocation Change

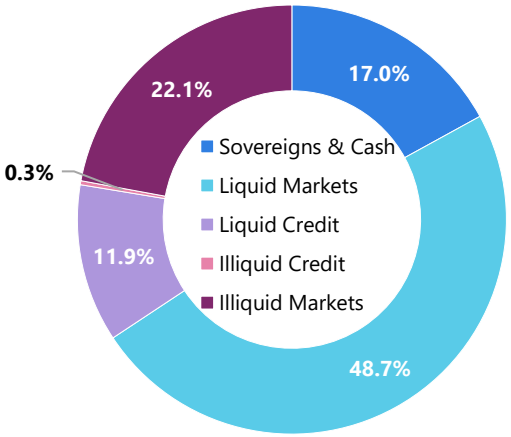


Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.

Detailed Asset Allocation

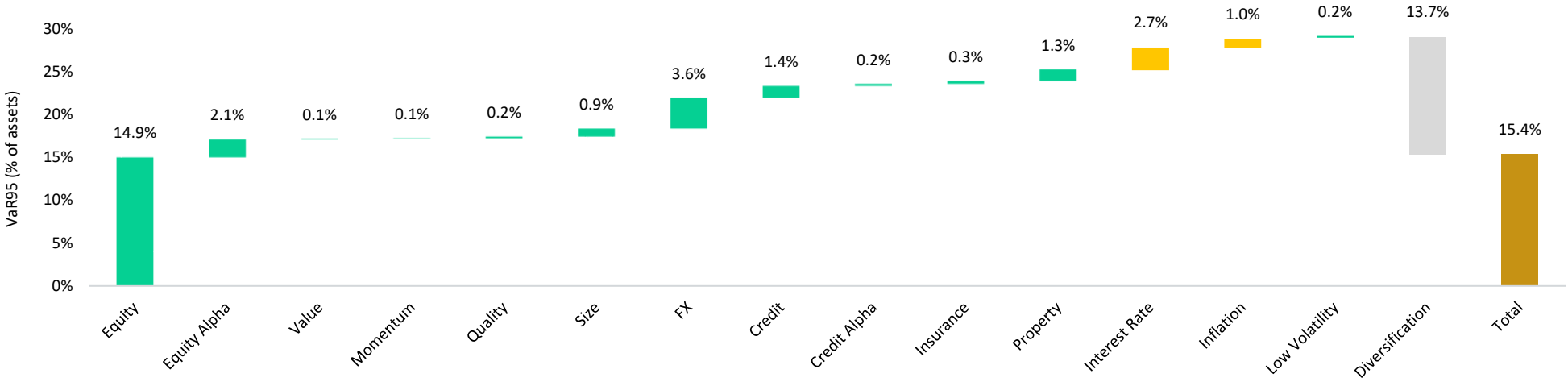


6.8% Cash GBP
6.1% Index-Linked Gilts
2.1% Nominal Gilts
2.0% US TIPS
3.0% ACS LGPS Global Equity Dividend Growth Factor
13.0% ACS LGPS Global Ex UK Passive Equity
9.7% ACS LGPS All World Eq Climate Multi Factor Fund
5.6% ACS LGPS UK Equity Passive Fund
5.1% Global Equities - External
3.2% Global Equities - Internal
2.2% Sustainable Equity Fund
0.1% Overseas Legacy Passive Equities
0.0% UK Equities
6.9% Emerging Markets Equities

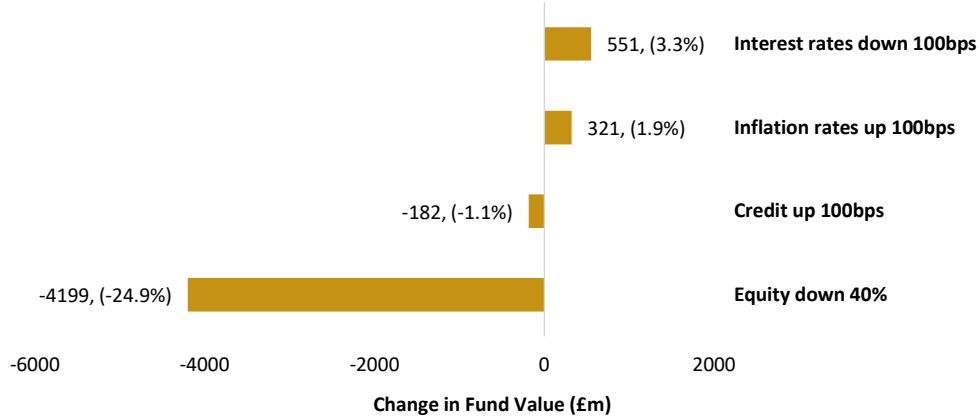
3.9% UK Corporate Bonds
1.2% LGPS Central Global Active IG Coporate Bond Fund
2.8% Other Fixed Interest (Secured Loans)
4.0% Emerging Market Debt Funds
0.3% Securitised Opportunties
2.4% Direct Infrastructure
5.7% Direct Property
2.3% Indirect Infrastructure
2.0% Indirect Property
1.3% Insurance-Linked Securities
1.3% Opportunistic Funds
7.1% Private Equity/Secondaries

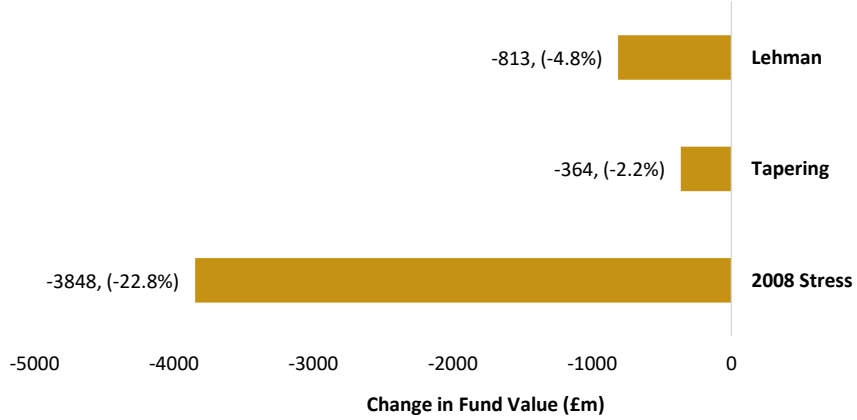
HELPING YOU UNDERSTAND YOUR RISK

Current Value-at-Risk 95%



Scenario Analysis





APPENDICES

REDINGTON'S EXPECTED RETURNS – JUNE 2020

Asset Class	Expected Return (Gilts +)	Volatility	Expected Fees (p.a.)
Equity			
Developed Market Equities	4.2% ↑	17.8% ↑	0.0%-0.1%
Sustainable Equities	4.4% ↓	16.3% ↓	0.2%-0.4%
Emerging Markets Equities	4.8% –	21.0% ↓	0.1%-0.2%
China A Share Equities	6.1% –	30.9% ↓	0.3%-0.8%
Liquid Credit			
Corporate Debt GBP	1.4% ↓	5.9% ↓	0.1%-0.2%
Emerging Market Debt – Corporates	3.1% ↓	6.3% ↓	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	3.7% ↓	14.5% ↓	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	2.7% ↓	8.9% ↓	0.5%-0.8%
Emerging Market Debt – Total Return	3.3% ↓	9.9% –	0.5%-0.8%
Multi-Class Credit Global	4.3% ↓	8.5% ↓	0.4%-0.7%
Illiquid Credit			
Diversified Matching Illiquids (Uninvested)	2.4% ↓	7.0% ↓	0.3%-0.5%
Opportunistic Illiquid Credit	6.1% ↑	12.9% ↓	1.0%-1.5% (+ performance fee)
Securitised Opportunities	4.0% ↓	7.8% ↓	0.5%-0.7%
Special Situations	7.0% ↓	17.2% ↓	1.0%-1.5% (+ performance fee)
Illiquid Markets			
Private Equity	4.1% ↑	26.5% ↑	1.0%-1.5% (+ performance fee)
Insurance-Linked Securities	4.8% –	12.4% –	1.0%-1.5%
Renewable Infrastructure (Whole Projects)	5.3% ↑	14.3% ↑	0.5%-0.7%

Fee data is estimated based on fees of preferred managers in each strategy. In practise 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.

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