Appendix A

YOUR MARKET AND INVESTMENT UPDATE

Q2 2019

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 IS IN YOUR REPORT

WHAT HAPPENED DURING THE QUARTER

Philip Rose
(CIO, Strategy & Risk)

Market Summary

Central banks continued to move towards easing monetary policy, with the market pricing in rate cuts from both the Federal Reserve and ECB. This in turn supported risk assets with both equity and bond prices rising, leaving global real yields close to or at record lows. While global growth has slowed, central banks have expressed a willingness to ease from a starting point of stronger growth and much lower unemployment than they have in the past. The concern for risk assets is whether markets have overestimated how much central banks will ease, or that easier monetary policy will fail to offset the adverse impact of trade disputes. Zero is no longer a lower bound for interest rates, with a meaningful portion of the government bond index now trading at negative yields.

Key Points for You

- Risk, as measured by VaR 95%, has increased above the current stated target of 16% to 16.3%. This is due an increased allocation to equity, which is already the dominant driver of risk and return.
- Opportunities and portfolio enhancements to increase expected return above the stated target and reduce risk have been explored in the separate strategy review paper.

Market Data

Equity Index	Level	Change since 29-Mar-19	Change since 29-Jun-18
FTSE 100 (Total Return)	6732	3.3%	1.6%
S&P 500 (Total Return)	5908	4.3%	10.4%
EuroStoxx 50 (Total Return)	1426	6.1%	6.0%
Nikkei 225 (Total Return)	34153	0.6%	-2.6%
MSCI World (Total Return)	4831	3.6%	6.7%
MSCI Emerging Markets (Total Return)	583	0.2%	1.8%
X			
USD vs GBP	1.27	-2.6%	-3.9%
EUR vs GBP	1.12	-3.9%	-1.2%
Credit Spreads			
Sterling Non-Gilt Index	124	-3 bps	6 bps
Sterling Non-Gilt 15Y+ Index	177	0 bps	7 bps
Global Investment Grade	118	3 bps	13 bps
US Investment Grade	133	6 bps	16 bps
Global High Yield	376	7 bps	28 bps
European High Yield	309	-14 bps	-15 bps

Market Data

UK Gilts	Level	Change since 29-Mar-19	Change since 29-Jun-18
10Y	0.89	-14 bps	-53 bps
30Y	1.52	-5 bps	-18 bps
UK Nominal Swaps			
10Y	1.05	-16 bps	-46 bps
30Y	1.25	-13 bps	-25 bps
Gilt Breakeven Inflation			
10Y	3.31	-4 bps	19 bps
30Y	3.38	-5 bps	1 bps
UK RPI Swap			
10Y	3.59	8 bps	23 bps
30Y	3.42	-5 bps	1 bps
UK Gilt Real Rates			
10Y	-2.42	-10 bps	-73 bps
30Y	-1.86	0 bps	-20 bps
US TIPS			
20Y	0.76	-11 bps	-11 bps
30Y	0.91	-11 bps	-3 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

Kate Mijakowska

LDI and Government Bonds

Q2 2019 has been the third consecutive quarter with material interest rate falls. Over the last three quarters, the 20-year index-linked gilt yield fell by 0.5%. During the second quarter of 2019, both nominal and index-linked gilt yields fell by 0.1% at the 20-year tenor point. Breakeven inflation was broadly flat at the middle and long end of the curve, but rose by 0.2% at the 5-year tenor. Index-linked gilts and real swaps performed broadly in line with one another.

On 17th June 2019, EMIR Refit regulation came into force. It extended the Pension Scheme Exemption ("PSE") by 2 years, with the possibility of 2 more 1-year exemptions beyond that. It also introduced the Small Financial Counterparty category to capture entities with limited usage of Over-the-Counter derivatives, who will not be subject to the clearing obligation regardless of the PSE, provided their derivative exposure is below certain thresholds.

Oliver Wayne

Liquid Markets: Equities

Global developed and emerging markets posted positive returns during Q2 2019 despite a steep fall in May. The US S&P 500 index achieved a new record high. European indices advanced, with the European Central Bank President Mario Draghi hinting at the possibility of further monetary policy easing. UK companies also performed well despite Brexit-related uncertainty and the resignation of Prime Minister Theresa May. The Japanese stock market underperformed other major indices, posting a negative return in local currency terms.

From a factor perspective, value continued to face headwinds, particularly in developed markets. Momentum was the best-performing factor in both developed and emerging markets. Smaller companies generally underperformed larger companies in both developed and emerging markets.

Tom Wake-Walker

Liquid Markets: Multi-Asset

The period was a profitable one for multi-asset investing as both stocks and government bonds contributed positively. This was principally driven by continued dovish rhetoric from both US and European central banks. Worries around increased US-China trade tensions led to a temporary sell-off in risk assets, though these concerns had abated by the end of the quarter. Commodity returns were largely negative as metals and energies fell on global growth fears, while gold performed strongly due to signalled rate cuts and trade tensions.

Diversified risk premia strategies were profitable, with their risk parity component generating the majority of gains. Equity style premia continued to struggle, as strong performance in quality and low beta styles were unable to compensate for underperformance from the value factor. Trend strategies were helped by the sustained increase in government bond prices. Asset Allocation DGFs benefited from upbeat market conditions, while Relative Value DGFs were flat to positive, depending on the level of market exposure they held.

VIEWS FROM THE ASSET CLASS SPECIALISTS

Chris Bikos

Liquid & Semi-Liquid Credit

The rally continued in Q2 2019, with a sharp drop in May sandwiched between gains in April and June, and higher-quality bonds generally outperforming high yield. Continued declines in global interest rates were a tailwind for all major credit asset classes, and the global corporate default tally appears to have taken a pause in 2019. Year-to-date, most defaults have been in the retail & restaurants and oil & gas sectors.

In the US, long-dated and all-maturities credit were the strongest-performing asset classes, with rates being the main driver of return. In US high yield, support from rates was more than enough to offset widening spreads and for the asset class to deliver positive total returns.

In Europe, signs of slowing global growth and a deteriorating inflation outlook have helped spur a dovish shift in monetary policy. European high yield and corporate debt delivered positive returns. Sterling assets across all maturities had a positive quarter. Emerging market bonds had a positive quarter, with local currency bonds outperforming as the US dollar weakened, particularly in June.

Tom Duggan

Illiquid Credit

Fundamentals remained healthy in private credit market funds throughout the first half of 2019, and inflows have continued on the back of the low default rates and realised spreads above public credit markets experienced over the past few years. However, weaker underwriting standards and increased flexibility afforded to counterparties continue to make headlines and dominate allocation decisions. This dynamic is in part due to the $2trn+ of dry powder in private markets according to data provider Preqin.

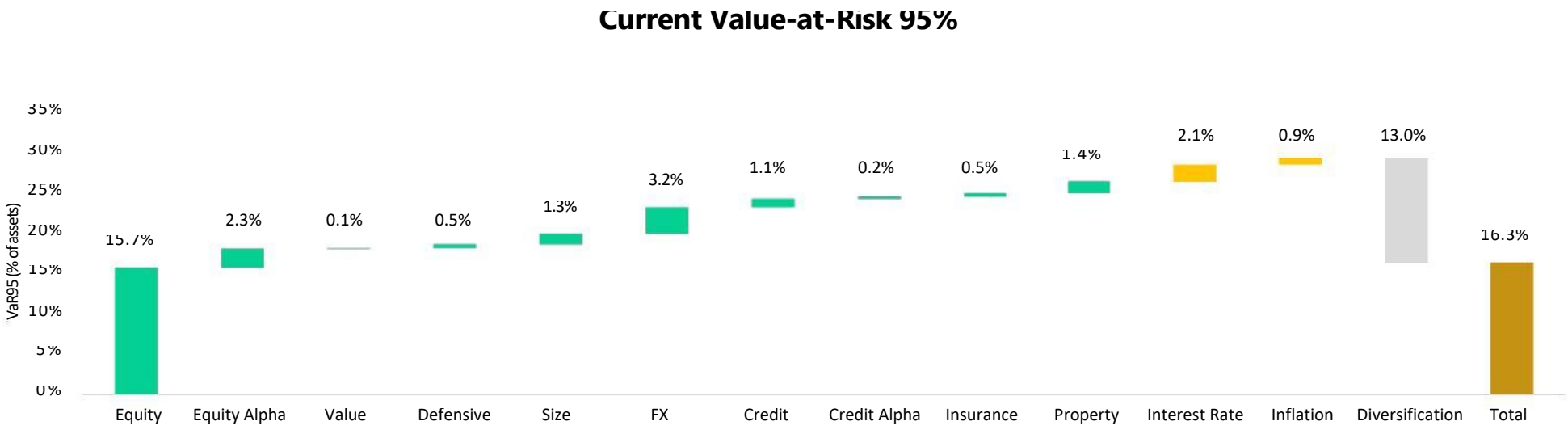
Keir Macdonald

Illiquid Markets

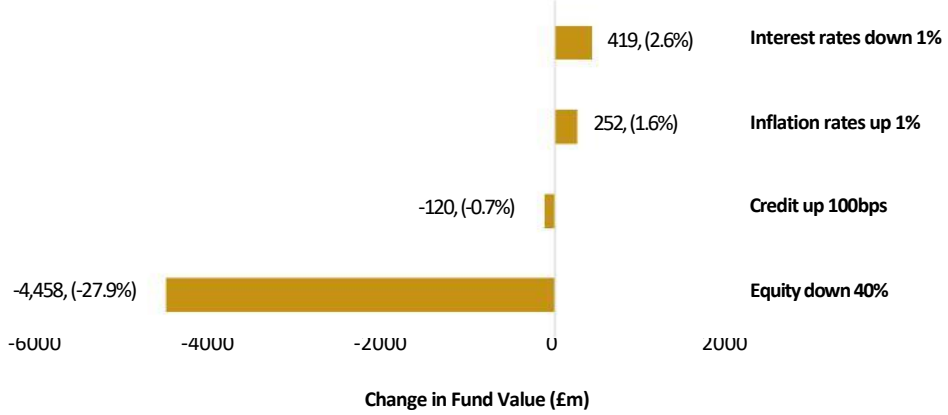
The UK real estate market has continued to see a subdued level of transactions over the first half of the year. The trends from 2018 have also continued, with the divergence between retail assets and industrial assets continuing at a broad sector level, with the former continuing to see capital values written down. Regional retailers and shopping centres were the hardest hit. The office market delivered positive performance, with city offices seeing a greater increase in June relative to the rest of the sector.

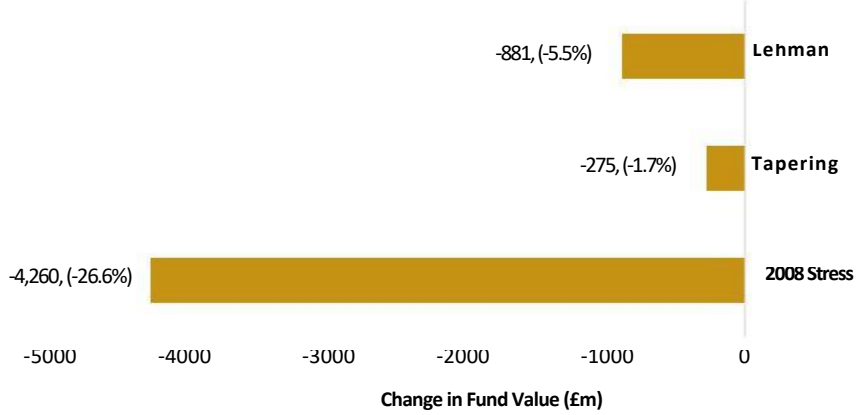
In the ILS market, premiums increased at the June 1st US renewals, with the most notable rises in aggregate programs.

HELPING YOU UNDERSTAND YOUR RISK



Scenario Analysis





APPENDICES

REDINGTON'S EXPECTED RETURNS

Asset Class	Expected Return (Gilts +) (June 2019)	Volatility	Expected Fees (p.a.)
Equity			
Passive Developed Market Equities	3.8%	16.8%	0.0%-0.1%
Active Developed Market Equities (Blend)	4.5%	16.6%	0.6%-0.8%
Passive Emerging Markets Equities	4.8%	20.8%	0.1%-0.2%
Active Emerging Markets Equities (Blend)	5.4%	20.6%	0.7%-1.0%
Active China A Equities	6.0%	28.9%	0.3%-0.8%
Liquid Alternatives			
Diversified Risk Premia	5.1%	9.8%	0.5%-0.8%
Liquid Credit			
Corporate Debt GBP	1.2%	5.4%	0.1%-0.2%
Corporate Debt GBP 10+ years	1.1%	8.0%	0.1%-0.2%
Emerging Market Debt – Corporate High Yield	2.4%	5.7%	0.4%-0.6%
Emerging Market Debt – Sovereign Total Return	2.5%	8.9%	0.5%-0.8%
Illiquid Credit			
Opportunistic Illiquid Credit	4.5%	10.0%	1.0%-1.5% + performance fee
SME Mezzanine Direct Lending	3.7%	14.2%	0.8%-1.2% + performance fee
Illiquid Markets			
Distressed Debt	5.4%	14.8%	1.0%-1.5% + performance fee
Private Equity	4.3%	24.9%	1.0%-1.5% + performance fee
Insurance-Linked Securities	3.0%	10.9%	1.0%-1.5%

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
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.
Derivatives	Derivatives are an instrument whose price is dependent upon, or derived from, one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is mainly determined by fluctuations in the underlying asset price. Examples include futures, options and swaps.
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.
Swap	A swap contract is an agreement between two parties to "swap" one set of pre-defined future payments for a difference pre-defined set, over an agreed period. Payments generally relate to a notional sum and the next value of the swap is set to zero at inception. For example, one party may "swap" a fixed rate for LIBOR.
Swap Rate	The rate of the fixed portion of a swap as determined by its particular market. This is the rate at which the swap will occur for one of the parties entering into the agreement.
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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