Appendix A

YOUR MARKET AND INVESTMENT UPDATE

Q4 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

WHAT HAPPENED DURING THE QUARTER

Philip Rose
(CIO, Strategy & Risk)

Market Summary

Vaccine approval and continued central bank and fiscal support outweighed a resurgence of COVID- 19 in many countries, leading to a strong quarter for risk assets.

While many economies have shrunk, government support means that incomes have not fallen as far and any bounce back in growth might be quicker than seen in previous downturns such as 2008/2009.

With markets looking ahead to a post-pandemic world, there is the possibility that integrated monetary and fiscal policy succeeds in reflating the economy and moving inflation levels and expectations to at or above central bank targets. The possibility of continued failure also remains, both in terms of mitigating the pandemic and meeting inflation targets.

Key Points for You

- Expected return was broadly unchanged over the quarter, marginally decreasing from Gilts +3.4% at 30 September to Gilts + 3.3% at 31 December. The increased expected return contribution from equities owing to the increased allocation was offset by a reduced expected return for credit assets, as a result of tightening credit spreads.
- Asset-side risk, as measured by VaR 95%, was broadly unchanged over the quarter: 15.4% at 31 December vs. 15.6% at 30 September.

Market Data

Equity Index	Level	Change since 30-Sep-20	Change since 31-Dec-19
FTSE 100 (Total Return)	6175	10.9%	-11.5%
S&P 500 (Total Return)	7759	12.1%	18.4%
EuroStoxx 50 (Total Return)	1507	11.4%	-2.6%
Nikkei 225 (Total Return)	45354	18.5%	18.3%
MSCI World (Total Return)	5983	12.4%	13.5%
MSCI Emerging Markets (Total Return)	744	16.0%	19.1%
FX			
USD vs GBP	1.37	5.8%	3.1%
EUR vs GBP	1.12	1.6%	-5.4%
GBP vs JPY	0.7	-3.5%	2.1%
Credit Spreads			
Sterling Non-Gilt Index	100	-35 bps	-11 bps
Sterling Non-Gilt 15Y+ Index	158	-30 bps	-8 bps
Global Investment Grade	103	-37 bps	3 bps
US Investment Grade	113	-43 bps	1 bps
Global High Yield	382	-136 bps	47 bps
European High Yield	326	-108 bps	58 bps

Market Data

UK Gilts	Level	Change since 30-Sep-20	Change since 31-Dec-19
10Y	0.23	-3 bps	-61 bps
30Y	0.79	-2 bps	-56 bps
UK Nominal Swaps			
10Y	0.40	0 bps	-63 bps
30Y	0.58	0 bps	-54 bps
Gilt Breakeven Inflation			
10Y	3.20	-7 bps	-2 bps
30Y	3.09	12 bps	-5 bps
UK RPI Swap			
10Y	3.41	-8 bps	-3 bps
30Y	3.11	10 bps	-6 bps
UK Gilt Real Rates			
10Y	-2.97	4 bps	-59 bps
30Y	-2.30	-15 bps	-52 bps
US TIPS			
20Y	-0.40	-8 bps	-105 bps
30Y	-0.26	-3 bps	-92 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

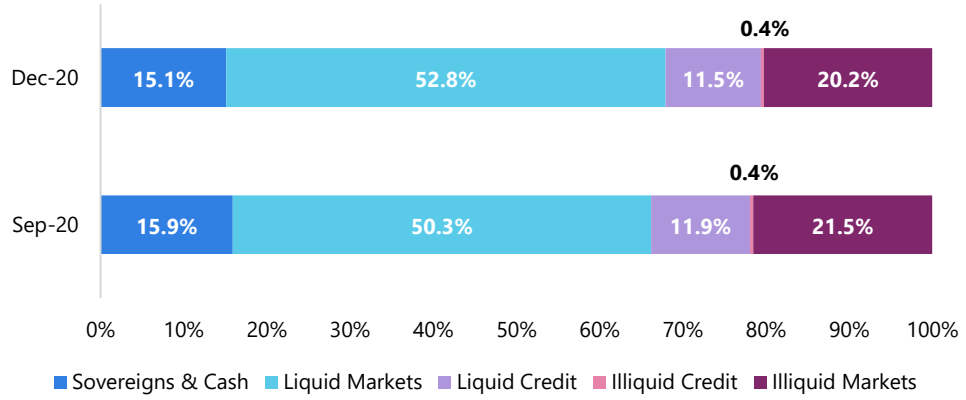
		**Kate Mijakowska** **LDI and Government Bonds**	Over Q4 2020, at the 20-year tenor point, nominal gilt yields fell by 5bps and gilt breakeven inflation increased by 4bps. During the quarter, the UK Quantitative Easing programme was extended by another £100bn (to £895bn). In November, the government announced that the UK Retail Price Index ("RPI") will be aligned with the Consumer Price Index including owner occupiers' housing costs ("CPIH") from 2030. There will be no compensation to index-linked gilt bondholders for the fact that, on average, CPIH has been 1% lower than RPI. The most significantly affected pensions schemes will be those with large CPI exposures in their liabilities that are hedged with RPI-linked instruments. We sent a more detailed note to our clients at the time. Also in November, the ICE Benchmark Administration announced a consultation on the cessation of publishing GBP, EUR, CHF, JPY, as well as some of the USD LIBOR tenors on 31 December 2021, with the other USD tenors due on 30th June 2023.
		**Oliver Wayne** **Liquid Markets: Equities**	Developed and emerging equity markets delivered strong gains in the fourth quarter of 2020. While the equity rally continued, there was a rotation in leadership across markets, sectors and factors. European and emerging market equities generated the largest returns. From a sector perspective, the more cyclical areas that underperformed most severely during the first three quarters, such as energy and financials, were the top gainers. Value factors rebounded sharply following a prolonged period of underperformance. However, valuation dispersions remain high and the gains were not enough to offset the losses experienced earlier in the year. Momentum and quality factors gave back some of the excess returns they generated during the first three quarters. We continue to believe that having a well-diversified portfolio by investment style is the key to successful long-term equity investing. From a size perspective, smaller companies strongly outperformed larger companies as investor risk appetite remained elevated in both developed and emerging markets.
		**Tom Wake-Walker** **Liquid Markets: Multi-Asset**	The continuation of combined monetary and fiscal stimulus led to positive performance for the majority of "risk-on" assets in Q4. Multi-asset portfolios with long equity exposure benefitted the most, with discretionary managers in general positioned well for strong performance resulting from the positive vaccine news and Biden victory. Commodities and inflation-seeking assets were also additive as hopes for an economic recovery in 2021 drove demand. Agricultural, energies and industrial metals all gained, while precious metals were mixed as silver rallied and gold fell. Managers' government bond performance was predominantly determined by geographical allocation as rates rose in the US while performance was mixed in Europe. Trend following strategies during the quarter were positive, benefiting from long equity and commodity positioning. Equity style premia strategies suffered in the quarter: quality, low-volatility and momentum factors struggled after the successful vaccine news and performance was not sufficiently offset by value's rebound.

VIEWS FROM THE ASSET CLASS SPECIALISTS

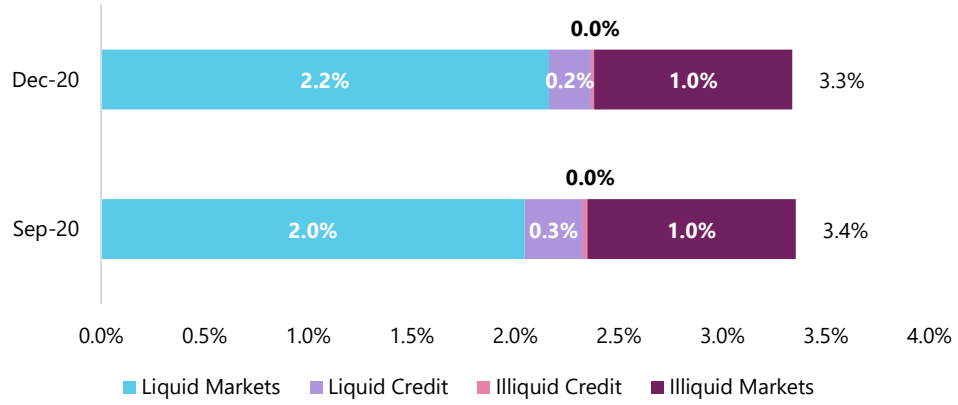
		**Chris Bikos** **Liquid & Semi-Liquid Credit**	Many adjectives will be used to describe 2020, but uneventful will not be one of them. The last quarter saw a strongly contested US presidential election result, significant rises in new infections globally, further monetary support from all major developed world central banks and a Brexit deal being struck between the EU and the UK. Government bond yields diverged, with the US 10-year yield moving 25 basis points (bps) higher, finishing at 0.88%, while broad European 10-year yields moved lower into negative territory at -0.58% and UK 10-year gilts remained broadly unchanged. Corporate bonds had a strong quarter, primarily driven by spread compression – especially in the lower-rated parts of the market. In the US, high yield was the top-performing asset class, followed by long-dated credit as spreads tightened by 155bps and 49bps, respectively. Markets behaved in a similar way in the UK and Europe. Emerging market currencies and local rates rallied very strongly, supported by US dollar weakness and higher US rates. Consequently, performance was very strong across the three main emerging market debt indices, with local markets the best performer.
		**Sarah Miller** **Illiquid Credit**	In the final three months of a difficult year, private market activity was strong, with the announcement of more than $1trillion worth of M&A deals. Although activity for the year was down 5% and 8% respectively on the two years prior, the bounce back seen in H2 2020 was at levels greater than the second half of any year ever reported. By the end of Q3 it was clear that on the whole, funds were in stronger positions than what had been priced into March valuations. As a result, over Q4 managers were able to somewhat reduce the monitoring intensity of existing positions and spend more time analysing new opportunities. Relative to Q2 pricing, we have seen spreads tighten across new opportunities. However, less tightening was observed in higher-risk, more opportunistic, private credit assets, with many investors remaining cautious. The value of distressed debt transactions for the year was more than double that of 2019, with a significant proportion of restructurings in the energy and power sector.
		**Jaspal Phull** **Illiquid Markets**	Q4 marked the end of a tough year, with the UK plunged into a second lockdown. Like every other asset class, the real estate market continues to be severely affected by the economic fallout from COVID-19. However, after months of ongoing uncertainty and untold economic damage, with Brexit finally off the table and the reality of an effective vaccine, this has sparked hopes for 2021 and optimism about a recovery. Whilst the shorter-term issues arising from the pandemic will continue to weigh on real estate, there will be a significant divergence in performance across sectors. For most types of real estate, reductions in rents and prices will mostly reflect the short-term income loss. Although investment volumes were subdued for much of 2020, encouragingly, £10.6bn was invested into UK commercial property in September, October, and November, which was a 69% rise on the preceding three-month period.

YOUR ASSET ALLOCATION AND EXPOSURE

Asset Allocation Change

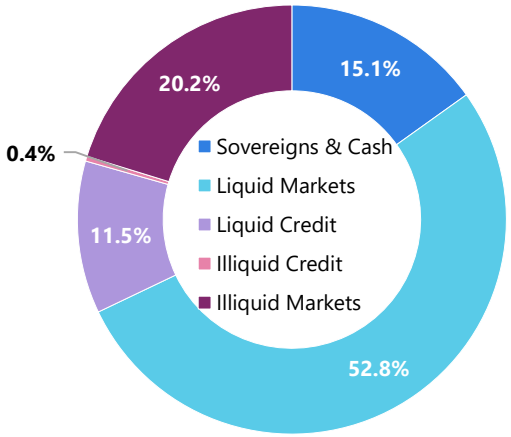


Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.

Detailed Asset Allocation

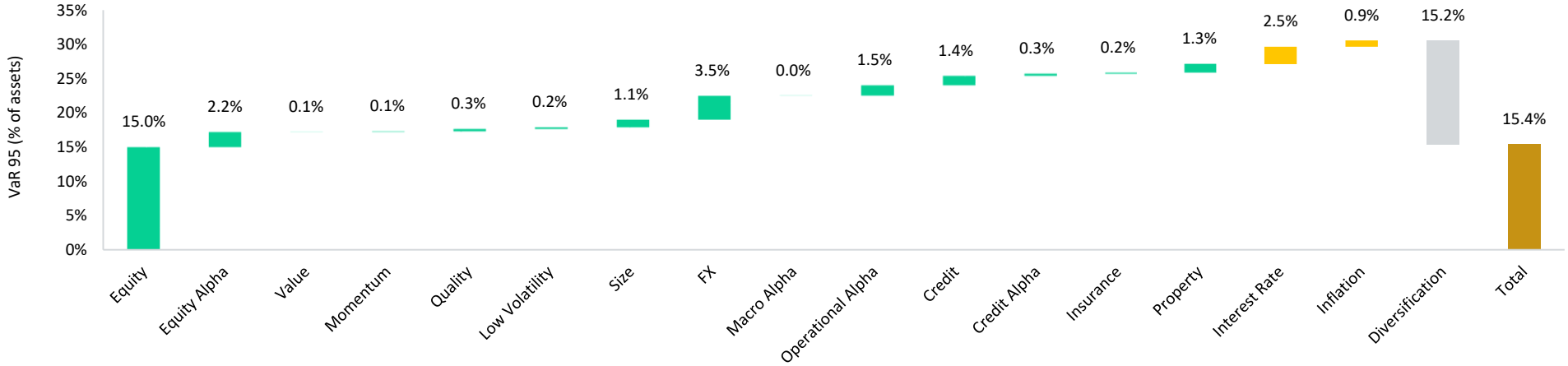


5.1% Cash
5.7% Index-Linked Gilts
1.9% Nominal Gilts
0.6% LGIM Overseas Bond Fund
1.8% US TIPS
5.7% ACS LGPS UK Equity Passive Fund
13.6% ACS LGPS Global Ex UK Passive Equity Fund
3.0% ACS LGPS Global Equity Dividend Growth Factor Fund
10.0% ACS LGPS All World Equity Climate Multi Factor Fund
5.5% LGPS Central Global Equity Multi Manager Fund
0.3% LGIM UK All Share
1.1% Global Active Futures
0.2% Futures - Global Active Cash
0.6% Equities held with Merrill Lynch
0.1% Smaller Equity Positions

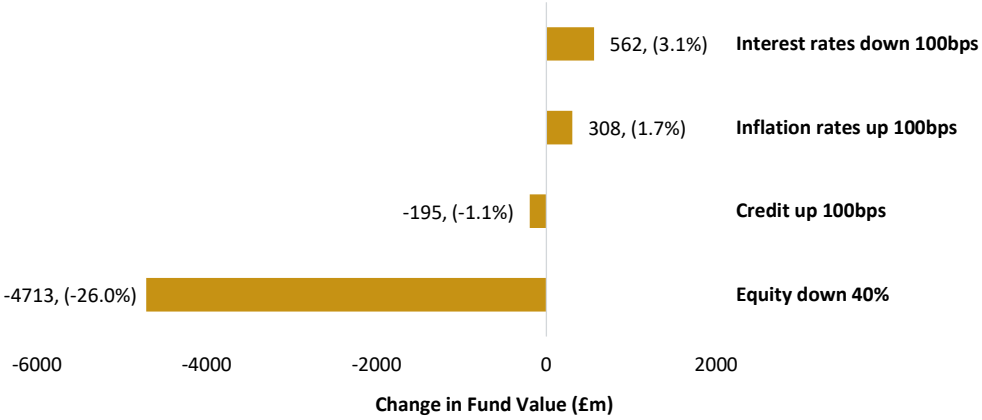
2.3% Sustainable Equities - Impax
2.2% Sustainable Equities - RBC
0.6% Sustainable Equities - WHEB
2.7% Emerging Markets Equities - AGF
3.0% Emerging Markets Equities - BMO
2.0% Emerging Markets Equities - Mondrian
3.8% UK Corporate Bonds
1.2% LGPS Central Global Active IG Corporate Bond Fund
2.1% Multi-Class Credit
4.4% Emerging Market Debt Funds
0.4% Schroders FOCUS II
4.3% Infrastructure
7.3% Property
2.0% Opportunistic Funds
6.7% Private Equity

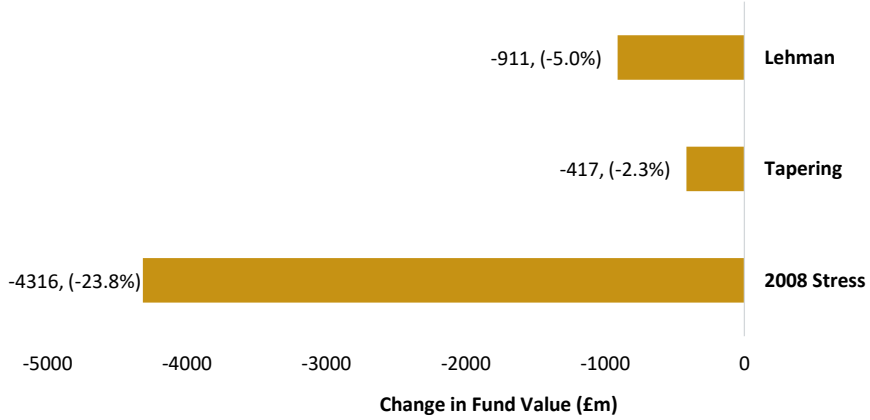
HELPING YOU UNDERSTAND YOUR RISK

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



Scenario Analysis





APPENDICES

REDINGTON'S EXPECTED RETURNS – DECEMBER 2020

Asset Class	Expected Return (Gilts +)	Volatility	Expected Fees (p.a.)
Equity			
Developed Market Equities	3.9% ▬	17.8% ▬	0.0%-0.1%
Sustainable Equities	4.2% ↑	16.2% ▬	0.2%-0.4%
Emerging Markets Equities	4.5% ↑	21.1% ↑	0.1%-0.2%
China A Share Equities	5.8% ↑	30.6% ↓	0.3%-0.8%
Liquid Credit			
Corporate Debt GBP – Passive	0.8% ↓	5.7% ↓	0.1%-0.2%
Corporate Debt GBP – Active	1.1% ↓	5.8% ↓	0.2%-0.3%
Emerging Market Debt – Corporates	2.0% ↓	5.9% ↓	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	2.6% ↓	13.9% ↓	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	1.7% ↓	8.5% ↓	0.5%-0.8%
Multi-Class Credit Global	2.8% ↓	6.6% ↓	0.4%-0.7%
Illiquid Credit			
Diversified Matching Illiquids (Uninvested)	2.2% ↓	6.6% ↓	0.3%-0.5%
Opportunistic Illiquid Credit	4.4% ↓	9.6% ↓	1.0%-1.5% (+ performance fee)
Securitised Opportunities	3.1% ↓	5.7% ↓	0.5%-0.7%
Special Situations	5.1% ↓	15.5% ↓	1.0%-1.5% (+ performance fee)
Illiquid Markets			
Private Equity	5.6% ↑	31.6% ↓	1.0%-1.5% (+ performance fee)
Insurance-Linked Securities	4.4% ▬	10.0% ▬	1.0%-1.5%
Renewable Infrastructure (Whole Projects)	3.8% ▬	13.6% ↓	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.

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