

YOUR MARKET AND INVESTMENT UPDATE

Q3 2019

West Midlands Pension Fund



Private and Confidential



WHAT HAPPENED DURING THE QUARTER



Philip Rose
(CIO, Strategy
& Risk)

Market Summary

The third quarter saw record lows for many government bond yields, with market expectations pricing in further central bank easing and the maintenance of those interest rate levels for a sustained period. However, this current and implied future easing failed to move growth assets, with returns across both equity and credit being relatively subdued over the period. Concerns over trade wars continue to persist but has not yet been strong enough to cause a meaningful downturn in growth assets. The risk of a downturn has not subsided though, particularly when coupled with the reduced effectiveness of monetary easing when rates are already low or negative and political risk on both sides of the Atlantic.

Key Points for You

- › Risk, as measured by VaR 95%, decreased over the quarter from 16.3% to 14.8%. This was primarily driven by a reduced allocation to equities, down from 54% last quarter to 51%, this also contributed to increased risk diversification.
- › Expected return decreased slightly from Gilts + 3.4% to Gilts + 3.3%, primarily driven by the reduced allocation to equities. Expected return remains below the stated target of Gilts +3.5%.

Market Data

Equity Index	Level	Change since 28-Jun-19	Change since 28-Sep-18
FTSE 100 (Total Return)	6798	1.0%	3.2%
S&P 500 (Total Return)	6009	1.7%	4.3%
EuroStoxx 50 (Total Return)	1470	3.1%	8.9%
Nikkei 225 (Total Return)	35208	3.1%	-7.8%
MSCI World (Total Return)	4905	1.5%	2.9%
MSCI Emerging Markets (Total Return)	571	-2.1%	-0.2%
FX			
USD vs GBP	1.23	-3.2%	-5.7%
EUR vs GBP	1.13	1.0%	0.5%
Credit Spreads			
Sterling Non-Gilt Index	128	4 bps	12 bps
Sterling Non-Gilt 15Y+ Index	192	15 bps	25 bps
Global Investment Grade	125	7 bps	29 bps
US Investment Grade	142	9 bps	39 bps
Global High Yield	384	8 bps	65 bps
European High Yield	313	4 bps	20 bps

Market Data

UK Gilts	Level	Change since 28-Jun-19	Change since 28-Sep-18
10Y	0.47	-42 bps	-111 bps
30Y	1.00	-52 bps	-94 bps
UK Nominal Swaps			
10Y	0.65	-41 bps	-103 bps
30Y	0.71	-54 bps	-105 bps
Gilt Breakeven Inflation			
10Y	3.44	13 bps	13 bps
30Y	3.20	-18 bps	-21 bps
UK RPI Swap			
10Y	3.73	14 bps	23 bps
30Y	3.23	-19 bps	-29 bps
UK Gilt Real Rates			
10Y	-2.97	-55 bps	-124 bps
30Y	-2.20	-34 bps	-73 bps
US TIPS			
20Y	0.59	-17 bps	-53 bps
30Y	0.61	-30 bps	-50 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS



Kate Mijkowska

LDI and Government Bonds

Q3 2019 saw a significant fall in interest rates. Nominal yields fell by 0.4-0.5% across the curve, while breakeven inflation rose at the short end but fell at the long end of the curve. The 20-year gilt real yield fell by 0.4% to end the quarter at -2.4%, having reached an all-time low in early September of -2.5%. On 4th September, the Chancellor of the Exchequer responded formally to the UK Statistics Authority, rejecting to approve the request to align RPI to CPIH before 2025. However, he introduced the possibility of such a change occurring between 2025-2030. On the back of the Chancellor's letter, breakeven inflation fell sharply by 0.1%-0.2%. However, it rebounded promptly and ended the quarter at 3.3% at the 20-year point. Our recommendation is to continue to hedge inflation exposures but to analyse and understand any CPI/RPI basis risks. This will be covered by your consultant separately if relevant.



Oliver Wayne

Liquid Markets: Equities

Q3 2019 was a mixed quarter for equity markets, with developed markets making gains while emerging markets fell in GBP terms. Returns in GBP were supported by the depreciation of GBP relative to USD. US equities made gains despite ongoing growth concerns and continued uncertainty surrounding US-China trade. Eurozone and UK equities also made gains, with defensive sectors such as utilities, real estate and consumer staples outperforming discretionary and cyclical sectors. Emerging markets declined as Asian markets suffered from the ongoing US-China trade dispute. In South America, the surprise primary election results in Argentina triggered a major sell-off in equities and the Argentine peso. From a factor perspective, low-volatility and quality factors outperformed in both developed and emerging markets. Smaller companies underperformed larger companies in both developed and emerging markets.



Tom Wake-Walker

Liquid Markets: Multi-Asset

Multi-asset returns were variable over the quarter with asset allocation decisions and strategy design proving to be crucial. Managers with overweight exposure to government bonds benefitted as yields fell to record lows while returns from global equities and credit were generally muted. Commodity prices as a whole were generally lower over the period. However significant swings in energy prices occurred in mid-September following the strikes on Saudi Arabian oil facilities. Diversified Risk Premia strategies were generally profitable over the quarter as risk parity components contributed strongly from their long government bond exposure. Equity style premia strategies varied in their performance, however there was positive performance from the value factor with a noticeable style rotation occurring in September as growth and momentum fell out of favour. Trend strategies were positive with continued performance from long rates positioning. Asset Allocation and Relative Value DGFs were largely profitable with returns dependent on government bond exposure.

VIEWS FROM THE ASSET CLASS SPECIALISTS



Chris Bikos

Liquid & Semi-Liquid Credit

The ECB embarked on a new round of stimulus for the eurozone, cutting interest rates by 10bps to -0.5% and reviving its bond purchase programme at €20bn a month. Government yields continued to trend lower, with the US 10-year Treasury yield ending the period at 1.7%. Risk aversion and volatility increased amid continued uncertainty over trade tensions, Brexit, and politics in Eurozone and the US. In credit, duration was the main driver of returns. Spread moves were mixed, with European high yield and short-dated (1-10 years) investment grade sterling credit being two asset classes that saw spreads tighten. US high yield posted total returns of 1.2% whilst floating rate loans were up 0.9% over the period. Within sub-investment grade, higher quality (BB) paper continued to outperform credit rated B and below. US investment grade bonds had another positive quarter, driven primarily by falling rates. All maturities and 10+ year corporates posted returns of 3.1% and 5.8%. European high yield and loans did not deviate from their US counterparts, delivering 1.3% and 1.1%. European investment grade delivered 1.3%, supported by falling rates and positive technicals. Long-dated (6.3%) and all-maturities (4.0%) sterling assets delivered positive total returns. In emerging markets (EM), weakening EM local currencies relative to the US Dollar led to a negative return of -0.8% from EM local sovereigns. However, EM hard currency sovereigns and corporates posted positive returns of 1.5% and 1.7% respectively.



Tom Duggan

Illiquid Credit

Whilst perhaps not exhibiting the same level of volatility as public markets, private credit markets are not immune from the broader market trends caused by political uncertainty and macro-economic tensions. Brexit uncertainty is creating an interesting pricing dynamic in the UK commercial real estate debt market, particularly for UK onshore investors, as EUR allocators have approached UK assets with caution ahead of the planned Brexit date of 31st October. Within private corporate credit, investor flows remain steady and managers continue to increase the size of their funds. Managers raising larger funds are doing so with the stated intention of funding larger deals to insulate themselves from wider market pressure. Pricing in the corporate debt market remains steady, but spreads remain historically tight. Comparison continues to be made to pre-Global-Financial-Crisis levels, as leverage levels for buyouts approach 6x. However, equity cushions are slightly higher at around 40%, some 10% healthier than 2007.



Jaspal Phull

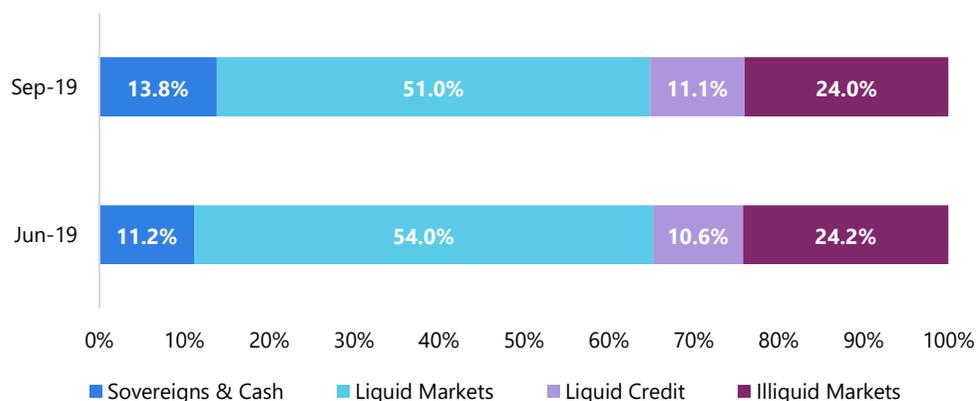
Illiquid Markets

Weakening economic sentiment and political uncertainty related to Brexit continued to contribute to a slowdown in investment activity. Whilst we would normally expect the summer months to be quiet, it is more than evident that investors remain cautious and are delaying purchasing decisions as we get closer to October 31st. The demand for alternatives sectors remained high with investors still keen to access markets where rental growth remains a possibility to drive total returns. Capital growth for the industrial and office sectors remained robust, whilst retail woes continue to impact at an all property level.

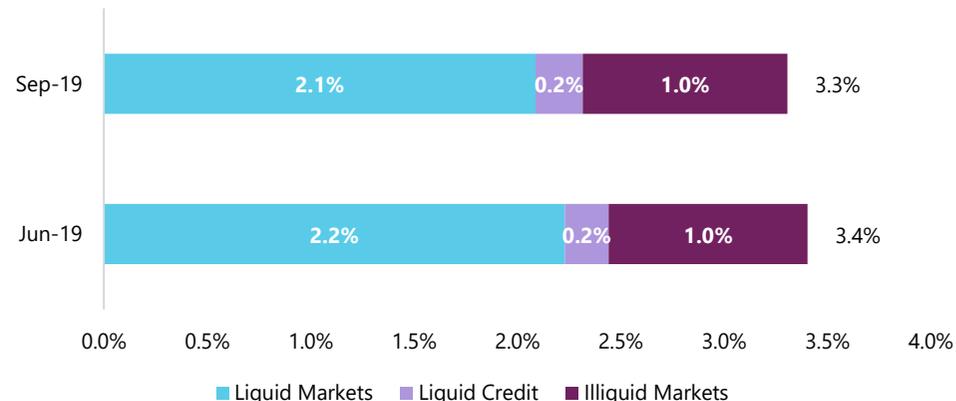
YOUR ASSET ALLOCATION AND EXPOSURE



Asset Allocation Change

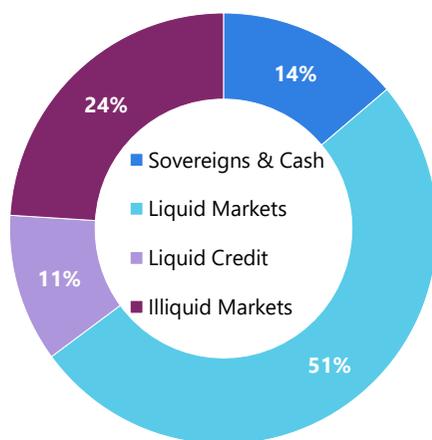


Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.

Detailed Asset Allocation



- 3.9% Cash GBP
- 6.2% Index-Linked Gilts
- 2.1% Nominal Gilts
- 1.7% US TIPS
- 3.2% ACS LGPS Global Equity Dividend Growth Factor
- 22.4% ACS LGPS Global Ex UK Passive Equity
- 6.6% ACS LGPS UK Equity Passive Fund
- 7.8% Emerging Markets
- 5.2% Global Equities - External (Active)
- 0.6% Global Equities - External (Passive)
- 5.2% Global Equities - Internal (Sustainable)
- 0.1% Overseas Legacy Passive Equities
- 0.0% UK Equities
- 4.2% Emerging Market Debt Funds
- 3.0% Other Fixed Interest (Secured Loans)
- 3.9% Corporate Debt GBP
- 2.5% Direct Infrastructure
- 6.0% Direct Property
- 2.6% Indirect Infrastructure
- 2.1% Indirect Property
- 2.0% Insurance-Linked Securities
- 1.5% Opportunistic Funds
- 7.3% Private Equity/Secondaries

REDINGTON'S EXPECTED RETURNS – SEPT 2019



Asset Class	Expected Return (Gilts +)	Volatility	Expected Fees (p.a.)
Equity			
Passive Developed Market Equities	4.2%	16.6%	0.0%-0.1%
Active Developed Market Equities	5.5%	17.6%	0.6%-0.8%
Passive Emerging Markets Equities	4.8%	20.5%	0.1%-0.2%
Active Emerging Markets Equities	6.1%	21.6%	0.7%-1.0%
China A Share Equities	6.1%	31.1%	0.3%-0.8%
Liquid Credit			
Corporate Debt GBP	1.2%	5.6%	0.1%-0.2%
Emerging Market Debt – Corporates	2.1%	5.3%	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	2.8%	13.1%	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	1.8%	7.7%	0.5%-0.8%
Emerging Market Debt – Total Return	2.6%	9.0%	0.5%-0.8%
Multi-Class Credit Global	2.9%	6.9%	0.4%-0.7%
Illiquid Credit			
Diversified Matching Illiquids (Uninvested)	2.7%	9.2%	0.3%-0.5%
Opportunistic Illiquid Credit	4.5%	9.8%	1.0%-1.5% (+ performance fee)
Securitized Opportunities	3.0%	7.0%	0.5%-0.7%
Illiquid Markets			
Private Equity	4.4%	25.0%	1.0%-1.5% (+ performance fee)
Insurance-Linked Securities	4.8%	12.4%	1.0%-1.5%
Renewable Infrastructure	4.2%	13.3%	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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