YOUR MARKET AND INVESTMENT UPDATE

Q3 2021

West Midlands Pension Fund

REDINGTON

West Midlands Pension Fund

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

The third quarter saw continued good performance from risk assets, with fiscal and monetary stimulus providing the conditions for positive asset returns. The reaction of both interest rate and inflation markets to recent US inflation statistics suggests than investors view these as transitory, related to re-opening supply constraints rather than the start of a reversal of the disinflation trend over the last few decades. While both central banks and governments have significant scope to tighten policy if inflation remains a problem, the problem of correcting a persistent period of low growth in the developed world should not be ignored.

Key Points for You

- Expected return decreased marginally over the quarter, moving from Gilts + 3.5% at 30 June 2021 to Gilts + 3.4% at 30 September 2021.
- Asset-side risk, as measured by VaR 95%, decreased from 16.7% at 30 June 2021 to 16.2% at 30 September 2021. This was partly driven by a slightly lower allocation to equities and a higher allocation to cash, with equities being the dominant driver of risk and return, as well as by changes in our risk modelling.

Market Data

Equity Index	Level	Change since 30-Jun-21	Change since 30-Sep-20
FTSE 100 (Total Return)	6982	2.0%	25.4%
S&P 500 (Total Return)	9103	1.8%	31.6%
EuroStoxx 50 (Total Return)	1755	-0.1%	29.8%
Nikkei 225 (Total Return)	49402	3.0%	29.1%
MSCI World (Total Return)	6871	0.6%	29.0%
MSCI Emerging Markets (Total Return)	750	-6.7%	16.9%
FX			
USD vs GBP	1.35	-2.6%	4.3%
EUR vs GBP	1.16	-0.3%	5.5%
JPY vs GBP	0.7	2.5%	-9.2%
Credit Spreads			
Sterling Non-Gilt Index	72	-10 bps	-63 bps
Sterling Non-Gilt 15Y+ Index	136	-6 bps	-52 bps
Global Investment Grade	83	-4 bps	-57 bps
US Investment Grade	94	-3 bps	-62 bps
Global High Yield	334	12 bps	-184 bps
European High Yield	271	2 bps	-163 bps

Market Data

UK Gilts	Level	Change since 30-Jun-21	Change since 30-Sep-20
10Y	1.03	22 bps	77 bps
30Y	1.39	14 bps	57 bps
UK Nominal Swaps			
10Y	1.21	24 bps	81 bps
30Y	1.27	17 bps	70 bps
Gilt Breakeven Inflation			
10Y	3.87	35 bps	60 bps
30Y	3.52	17 bps	55 bps
UK RPI Swap			
10Y	5.90	222 bps	336 bps
30Y	4.49	85 bps	132 bps
UK Gilt Real Rates			
10Y	-2.83	-13 bps	18 bps
30Y	-2.14	-4 bps	2 bps
US TIPS			
20Y	-0.27	-26 bps	-20 bps
30Y	-0.11	-31 bps	-3 bps

VIEWS FROM THE ASSET CLASS SPECIALISTS

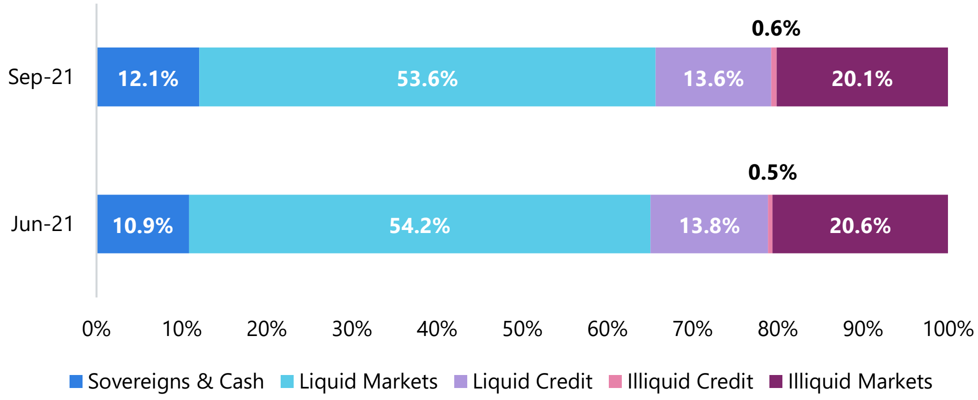
		**Kate Mijakowska** **Government Bonds**	Nominal yields rose over the quarter, with the 20-year point up 15bps. Over the same period breakeven inflation rose sharply too, although this was more pronounced at the short end, with 5-year breakeven rates rising 61bps, while the 20-year was up by 30bps. Throughout the quarter, fears emerged about the path of inflation as energy prices soared. The August (year-on-year) UK Consumer Price Index print is at 3.0%, 1.0% above the Bank of England's target. The Debt Management Office issued its first green gilt on 21st September. The size was £10bn and the tenor was 12 years. The syndication saw significant demand of c.£100bn and the premium over a non-green gilt was estimated to be between 1bp and 2.5bps at the point of issuance. More detail on this and expected future issuance can be found in our recent email communication.
		**Oliver Wayne** **Liquid Markets (Equities)**	Global developed markets (DM) delivered flat returns (in USD). The strongest-performing market was Japan, as investors initially reacted positively to the resignation of Prime Minister Shinzo Abe. Emerging market (EM) equities underperformed meaningfully as the offshore Chinese companies listed in Hong Kong and the US sold off during the quarter. Investors were concerned about broader regulatory action from the Chinese government following the actions taken to restrict private education companies from making profits and to limit the time children can spend on online video games. Factor returns varied substantially between DM and EM. In DM the only outperforming factor was momentum, whereas it was the only underperforming factor in EM. There were strong returns for value and quality factors in EM. From a size perspective, larger companies broadly outperformed smaller companies in DM, whereas smaller companies significantly outperformed in EM. This combination of positive factor and small-cap returns in EM was a tailwind for many active managers.
		**Tom Wake-Walker** **Liquid Markets (Multi-Asset)**	The third quarter was modestly profitable for the majority of multi-asset and liquid alternative strategies. With developed equity markets generally flat, returns came from commodity and alternative risk premia allocations. Commodity markets – particularly energies and metals – rose as pent-up demand fed through the system following the COVID-19 driven slump. Inflation-linked bonds also performed strongly, supporting strategies with explicit allocations in both systematic and discretionary strategies. Risk parity was flat to mildly positive, while the performance of discretionary multi-asset strategies was more mixed. Strong positive returns from long commodity holdings in trend following were offset by unprofitable short dollar and short bond positioning. Equity style premia strategies were mixed, with managers overweight to value signals underperforming. Fixed income and commodity carry strategies also contributed meaningfully to returns for strategies with these sub-components.

VIEWS FROM THE ASSET CLASS SPECIALISTS

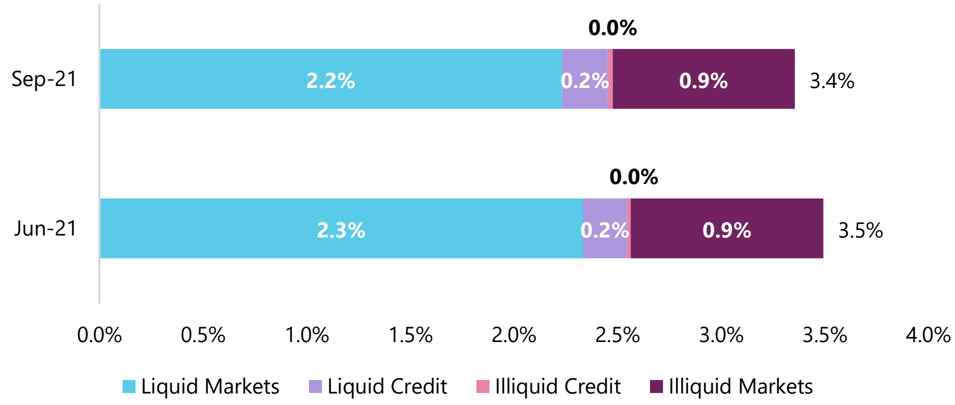
		**Chris Bikos** **Liquid & Semi-Liquid Credit**	US and UK sovereign bond yields increased over the quarter, but the main difference was the magnitude of the change. The UK 10-year yield increased from 0.72% to 1.02%, with the move occurring in September while the US 10-year Treasury yield finished at 1.49%, just 1bp higher. In corporate bonds, long-duration credit posted negative returns in both the US and the UK, driven by the negative impact of rising yields. Short-duration credit across investment grade and high yield delivered positive returns. In Europe, investment grade outperformed government bonds. Volatility in September was compounded by the news that the second-largest property developer in China, Evergrande, was likely to default on debt payments. The impact was felt across both sovereign and corporate emerging market debt. In addition, the US dollar strengthened against most emerging market currencies, pushing the local currency benchmark into negative territory.
		**Tricia Ward** **Illiquid Credit**	Private debt AUM has exceeded $1 trillion for the first time (as reported by Preqin); continued momentum in private equity markets and pending refinancing underpin growing demand. Driven by the direct lending market, the COVID flight to safety has led to larger fund sizes, fewer fund raises and larger deals, with the top 10 funds having raised 41% of capital in 2021, according to Deloitte. This may further support the opportunity for non-sponsor-led and specialty lenders to finance the underserved lower-middle markets. Competition amongst sponsor-led direct lenders has increased, leading to limited ability to improve terms. Whilst yields and illiquidity premia remain attractive, leverage has on average increased from c.5.0 to c.5.5x EBITDA since Q3 2020, albeit typically supported by a larger equity cushion. Retained focus on discipline in diligence and covenant structures remains vital. As anticipated, default rates (as released by the Proskauer Private Credit Default Index during Q3 2021) declined further in Q2 2021 to 1.3%, vs 8.1% in Q2 2020.
		**Jaspal Phull** **Illiquid Markets**	UK commercial property growth was reported at 3.8% for the quarter, the highest since Q1 2010. The trend is similar across all sectors, with retail assets experiencing exceptional capital growth, and industrials reporting the strongest quarter on record at 7.5%. The return of office workers across the UK has supported the sector, with total take-up for 2021 already 7% above the total take-up recorded for the whole of 2020. Demand is largely focused on high-quality assets, with the majority of space taken up so far being grade A. Wholesale gas prices hit new all-time highs over the quarter, up 250% since the beginning of the year, leading to a surge in energy prices. This is the result of a shortage of gas, driven by a combination of factors: low storage levels due to a cold winter, post-pandemic economic recovery, low winds in the North Sea and the closure of a major gas storage facility in the UK. Industries that are major users of natural gas and electricity are experiencing a major increase in wholesale energy prices that could force many UK factories to close.

YOUR ASSET ALLOCATION AND EXPOSURE

Asset Allocation Change

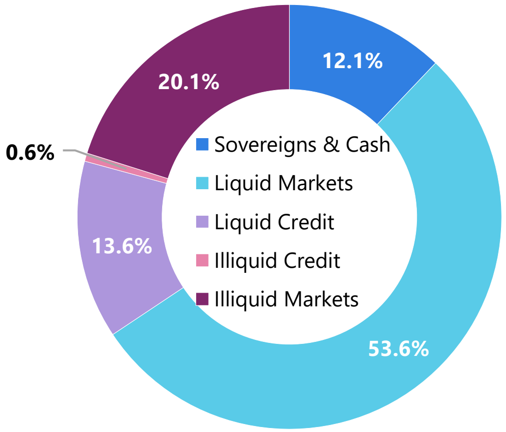


Expected Return Contribution Change (over gilts)



Note, asset class expected returns are in the appendix.

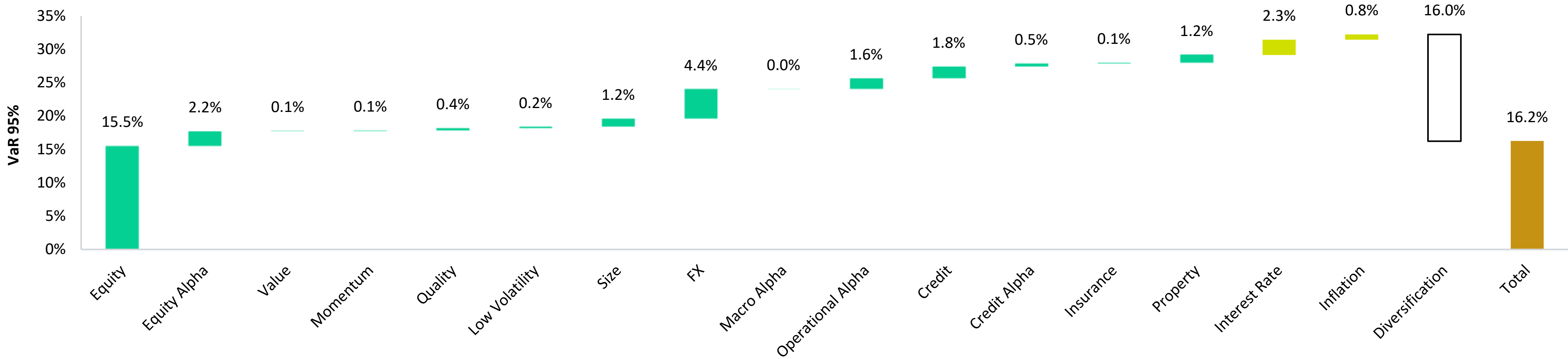
Detailed Asset Allocation



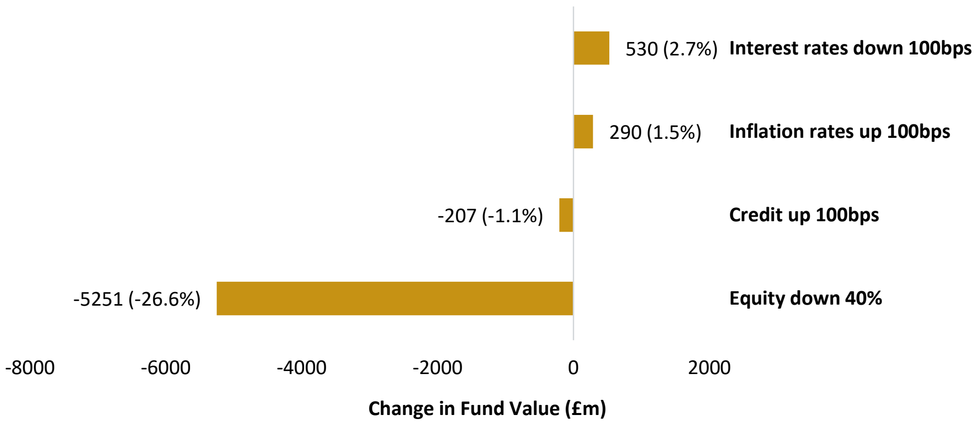
3.1% Cash
5.2% Index-Linked Gilts
1.6% Nominal Gilts
0.5% LGIM Overseas Bond Fund
1.7% US TIPS
5.9% ACS LGPS UK Equity Passive Fund
13.9% ACS LGPS Global Ex UK Passive Equity Fund
3.0% ACS LGPS Global Equity Dividend Growth Factor Fund
10.4% ACS LGPS All World Equity Climate Multi Factor Fund
5.9% LGPS Central Global Equity Multi Manager Fund
0.3% LGIM UK All Share
1.0% Global Active Futures
0.6% Equities held with Merrill Lynch
0.1% Smaller Equity Positions
2.4% Sustainable Equities - Impax
2.3% Sustainable Equities - RBC
0.6% Sustainable Equities - WHEB
2.5% Emerging Markets Equities - AGF
2.8% Emerging Markets Equities - BMO
1.8% Emerging Markets Equities - Mondrian
1.5% Aegon Short Dated Investment Grade Bond Fund
3.4% UK Corporate Bonds
1.1% LGPS Central Global Active IG Corporate Bond Fund
3.6% Multi-Class Credit
4.0% Emerging Market Debt Funds
0.6% Schroders FOCUS II / LGPS Credit Fund II
4.2% Infrastructure
7.0% Property
1.6% Opportunistic Funds
7.3% Private Equity

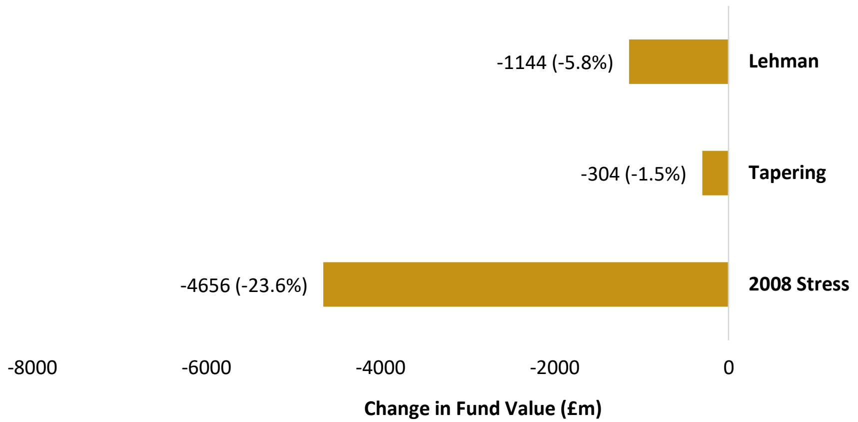
HELPING YOU UNDERSTAND YOUR RISK

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



Scenario Analysis





APPENDICES

REDINGTON'S EXPECTED RETURNS – SEPTEMBER 2021

Asset Class	Expected Return (Gilts +)		Volatility		Expected Fees (p.a.)
Equity					
Developed Market Equities	3.8%	↓	16.8%	↓	0.0%-0.1%
Sustainable Equities	4.1%	↓	15.6%	↓	0.2%-0.4%
Emerging Markets Equities	4.4%	↓	20.3%	↓	0.1%-0.2%
China A Share Equities	5.7%	↓	30.8%	↑	0.3%-0.8%
Liquid Credit					
Corporate Debt GBP – Passive	0.7%	↓	6.3%	↑	0.1%-0.2%
Corporate Debt GBP – Active	1.0%	–	6.4%	↑	0.2%-0.3%
Emerging Market Debt – Corporates	2.0%	↑	7.9%	↑	0.4%-0.6%
Emerging Market Debt – Local Currency Sovereign	2.7%	↑	14.6%	↑	0.5%-0.8%
Emerging Market Debt – Hard Currency Sovereign	1.8%	↑	9.5%	↑	0.5%-0.8%
Multi-Class Credit Global	2.2%	↑	7.7%	↑	0.4%-0.7%
Illiquid Credit					
Diversified Matching Illiquids (Uninvested)	2.5%	↑	7.1%	↑	0.3%-0.5%
Opportunistic Illiquid Credit	3.7%	–	12.2%	↑	1.0%-1.5% (+ performance fee)
Securitised Opportunities	2.7%	↑	6.0%	↑	0.5%-0.7%
Special Situations	4.4%	↑	17.2%	↑	1.0%-1.5% (+ performance fee)
Illiquid Markets					
Private Equity	5.7%	↓	30.7%	↓	1.0%-1.5% (+ performance fee)
Insurance-Linked Securities	4.8%	↑	8.4%	↓	1.0%-1.5%
Renewable Infrastructure (Whole Projects)	3.7%	↓	13.9%	↑	0.5%-0.7% (+ performance fee)

The increase in volatility of credit assets is driven by changes in our credit risk modelling.
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

Floor 6, One Angel Court, London. EC2R 7HJ
+44 (0)20 7250 3331 | www.redington.co.uk

Pete Drewienkiewicz

Chief Investment Officer

Tel: +44 20 3326 7138
pete.drewienkiewicz@redington.co.uk

Karen Heaven

Managing Director

Tel: +44(0) 20 3326 7134
karen.heaven@redington.co.uk

Charlie Sheridan

Associate

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

Nicole Toselli

Analyst

Tel: +44(0) 203 540 5868
nicole.toselli@redington.co.uk

Disclaimer

The information contained herein was obtained from various sources. Accordingly, no representation, warranty, guarantee or other assurance, express, implied or statutory, (including, without limitation, as to the accuracy or completeness, the inclusion or omission of any facts or information, or as to the suitability, sufficiency or appropriateness of the information), is made by Redington Limited regarding this document. Neither Redington Limited, nor any other person, accepts any liability whatsoever for any direct, indirect or consequential loss arising from any use of or reliance on this document or the information contained herein.
The information contained herein is for your private information and is for discussion purposes only. A variety of market factors and assumptions may affect this analysis, and this analysis does not reflect all possible loss scenarios. There is no certainty that the parameters and assumptions used in this analysis can be duplicated with actual trades. This document is based on data/information available to Redington Limited at the date of publication and takes no account of subsequent developments after that date. Any historical exchange rates, interest rates or other reference rates or prices which appear above are not necessarily indicative of future exchange rates, interest rates, or other reference rates or prices. Neither the information, recommendations or opinions expressed herein constitutes an offer to buy or sell any securities, futures, options, or investment products on your behalf. Unless otherwise stated, any pricing information in this message is indicative only, is subject to change and is not an offer to transact. Where relevant, the price quoted is exclusive of tax and delivery costs. Any reference to the terms of executed transactions should be treated as preliminary and subject to further due diligence.

Redington Limited does not advise on all implications of the transactions described herein. Prior to undertaking any trade, you should also discuss with your professional tax, accounting and / or other relevant advisers how such particular trade(s) affect you.

All analysis (whether in respect of tax, accounting, law or of any other nature), should be treated as illustrative only and not relied upon as accurate. This document is not intended by Redington Limited to form a basis of any decision by you or a third party to do or omit to do anything.

Redington Limited (6660006) is regulated by the Financial Conduct Authority and is registered in England and Wales. Registered office: Floor 6, One Angel Court, London, EC2R 7HJ.