



Avon Pension Fund

Review for period to 30 September 2013



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1 Executive Summary

This report is produced by JLT Employee Benefits ("JLT") to assess the performance and risks of the investment managers of the Avon Pension Fund (the "Fund"), and of the Fund as a whole.

Funding level

- Based on financial market values, investment returns and cashflows into the Fund, the estimated funding level increased by approximately 1% over the third quarter of 2013, all else being equal.
- This was driven by:
 - » A small positive asset return, following positive returns from most managers and asset classes.
 - » This was slightly offset by an increase on the value placed on the liabilities, due to a 0.1% decrease in the discount rate. This increases the value placed on future pension payments and hence increases the value placed on the liabilities, all else being equal.

Fund performance

- The value of the Fund's assets increased by £74m over the third quarter of 2013 to £3,173m. The total Fund (including the impact of currency hedging) outperformed the Fund's strategic benchmark over the quarter by 0.7%, producing an absolute return of 2.6%.

Strategy

- Equity markets were mixed over the last quarter, with the best returns from Europe (+6.9%) and the UK (+5.6%), whereas the USA and Emerging market equities produced small negative returns of -1.0% and -2.2% respectively.
- In equity markets over the last twelve months, Japan and Europe were the best performers with returns of 31.2% and 27.1% respectively. The three year equity returns remained ahead of the assumed strategic return but were lower than in last quarter's report as the strong markets of 2010 fall out of the analysis.
- Gilt and corporate bond markets produced modest quarterly returns as gilt yields stabilised. Over the three year period returns remain ahead of the assumed strategic return.
- The Overseas Fixed Interest return has fallen to 0.1% p.a. over three years. This has been affected by rising yields within European bonds, and more recently by the view that the US Federal Reserve would start 'tapering' its Quantitative Easing.
- Both Hedge funds and Property remain below their assumed strategic returns but there has been some improvement over the last year.

Managers

- Returns from all managers were positive in absolute terms over the last quarter, with the exception of Genesis, who returned -0.8%. The best performing funds were SSgA European equities (7.0%) and TT UK equities (4.3%). All of the other funds returned between 0% and 3%.
- Genesis' longer term returns fell significantly over the last quarter, with their one-year return falling from 10.2% to 3.6%, and their three-year return falling from 6.1% p.a. to 1.8% p.a. This is in line with emerging market equities as a whole and not due to the manager, who continue to meet their objective.

- TT outperformed the benchmark over three years but did not meet their three-year target. Negative relative returns over three years were produced by the hedge fund managers.
- All of the other managers met their three-year target returns.
- TT made changes in Q4 2011 that have had a positive effect on performance. They have underperformed this quarter but the one and three year returns remain above the benchmark. However their three-year return of 1.3% p.a. above the benchmark is below their target of +3-4% p.a.
- Both the SSgA Europe ex UK and Pacific incl Japan enhanced equity pooled funds remain at a size such that Avon's investment now represents almost all of the pooled fund holdings. However, the Panel has previously concluded that the funds could be sustained even if the Avon Pension Fund was the only investor.

Key points for consideration

- Emerging market equities have underperformed developed market equities significantly over the past three years due to slowing growth in emerging markets and improving sentiment in developed market equities.
 - » This short term sentiment provides potential opportunities for long term investors such as the Fund.
- The Fund's returns over the past three years have benefited from a high allocation to equities and from its bond holdings, with both returning significantly above the assumed strategic return over this period.
 - » Returns from both asset classes are unlikely to be as high over the following three years given current low bond yields and deleveraging consumers and governments.
 - » The Fund's exposure to alternative asset classes and changes being made as a result of the recent strategic review should provide diversification to equities and bonds.
- Whilst the Panel has investigated the issue of the SSgA regional funds being dominated by the Avon investment and is comfortable with this position, monitoring of the size of these funds by Officers should continue.

2 Market Background

The figures below cover the three months, 1 year and 3 years to the end of September 2013.

Market Statistics

Yields as at 30 September 2013	% p.a.
UK Equities	3.41
UK Gilts (>15 yrs)	3.41
Real Yield (>5 yrs ILG)	-0.04
Corporate Bonds (>15 yrs AA)	4.32
Non-Gilts (>15 yrs)	4.51

Absolute Change in Yields	3 Mths %	1 Year %	3 Years %
UK Equities	-0.12	-0.23	0.24
UK Gilts (>15 yrs)	-0.02	0.51	-0.44
Index-Linked Gilts (>5 yrs)	-0.01	-0.13	-0.52
Corporate Bonds (>15 yrs AA)	-0.20	0.30	-0.63
Non-Gilts (>15 yrs)	-0.16	0.26	-0.46

Market Returns Bond Assets	3 Mths %	1 Year %	3 Years % p.a.
UK Gilts (>15 yrs)	1.3	-4.4	6.3
Index-Linked Gilts (>5 yrs)	0.5	6.6	8.3
Corporate Bonds (>15 yrs AA)	3.8	0.7	6.6
Non-Gilts (>15 yrs)	3.2	1.3	6.7

Source: Thomson Reuters and Bloomberg

Market Returns Growth Assets	3 Mths %	1 Year %	3 Years % p.a.
UK Equities	5.6	18.9	10.1
Overseas Equities	0.8	18.2	9.7
USA	-1.0	19.7	15.4
Europe	6.9	27.1	7.3
Japan	0.1	31.2	8.2
Asia Pacific (ex Japan)	0.6	6.9	3.2
Emerging Markets	-2.2	0.2	-1.7
Property	2.9	6.5	6.2
Hedge Funds	1.7	7.7	5.4
Commodities	-1.9	-4.4	2.7
High Yield	-3.1	8.5	8.2
Emerging Market Debt	1.2	-4.1	4.9
Senior Secured Loans	2.7	9.2	6.7
Cash	0.1	0.4	0.5

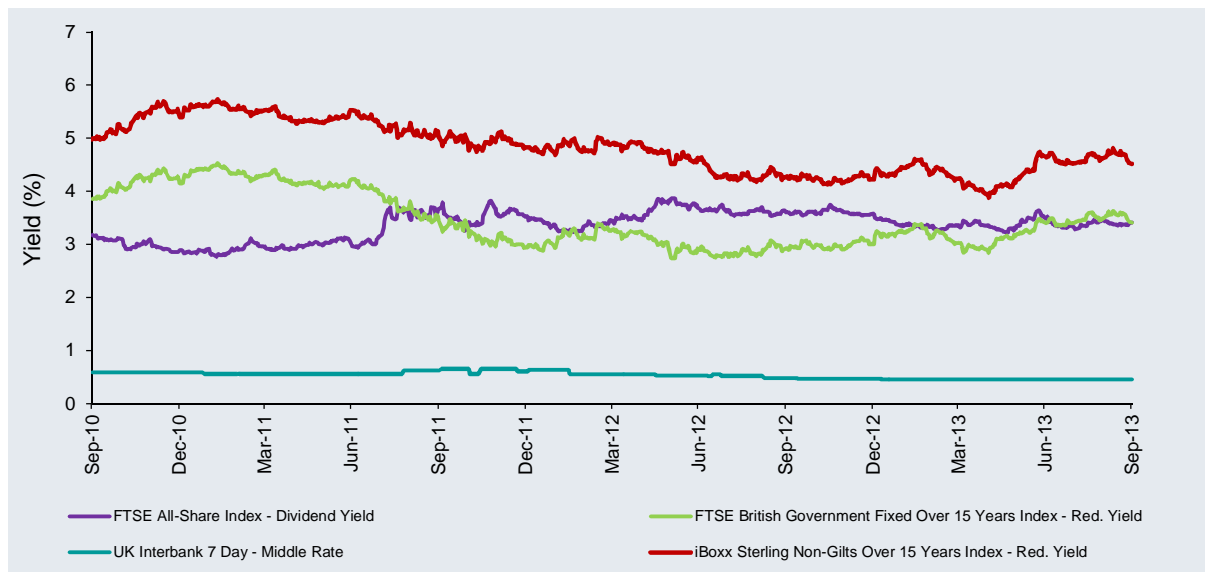
Change in Sterling	3 Mths %	1 Year %	3 Years % p.a.
Against US Dollar	6.8	0.3	0.9
Against Euro	2.5	-4.7	1.2
Against Yen	5.5	26.5	6.5

Inflation Indices	3 Mths %	1 Year %	3 Years % p.a.
Price Inflation – RPI	0.9	3.2	3.8
Price Inflation – CPI	0.7	2.7	3.3
Earnings Inflation	-0.1	0.8	1.4

Market Summary charts



The graph above shows market returns for the last three years; both the medium-term trend and the short-term volatility.



The graph above shows the historic yields for gilts, corporate bonds, UK equities and UK cash over the last three years. The trend over 2011 and 2012 shows falling gilt and corporate bond yields. Apart from cash, yields fell slightly over the last quarter, following rises over the second quarter of 2013.

The table below compares general market returns (i.e. not achieved Fund returns) to 30 September 2013, with assumptions about returns made in the Investment Strategy agreed in 2009.

Asset Class	Strategy Assumed Return % p.a.	3 year Index Return % p.a.	Comment
UK Equities	8.4	10.1	Ahead of the assumed strategic return following strong returns throughout the period apart from mid-2011. This quarter, markets have continued to rise although not as strongly as in Q2 2010 (which has fallen out of the 3-year return), hence returns are lower than in the last report.
Global Equities	8.4	9.7	
UK Gilts	4.7	6.3	Ahead of the assumed strategic return as gilt yields fell significantly during 2011. However the returns are lower than in recent reports as gilt yields have begun to rise or stabilise over the last two quarters.
Index Linked Gilts	5.1	8.3	
UK Corporate Bonds	5.6	6.0	
Overseas Fixed Interest	5.6	0.1	Behind the assumed strategic return, affected by rising yields within European bonds, and more recently by the view that the US Federal Reserve would start 'tapering' its Quantitative Easing.
Fund of Hedge Funds	6.6	2.6	Behind the assumed strategic return following a negative return in 2011. More recent returns have been steady and an improvement on 2011, with return over the last twelve months being 6.5%. Low LIBOR levels could lead to continued low performance.
Property	7.4	6.2	This remains behind the assumed strategic return, but continues to improve as property prices begin to rise.

Source: Statement of Investment Principles, Thomson Reuters.

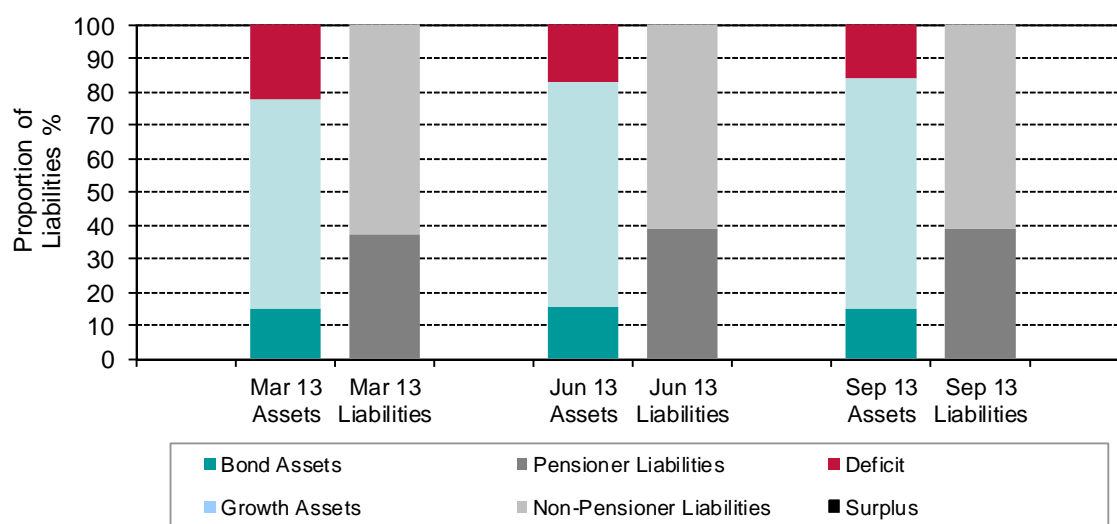
See appendix A for economic data and commentary.

3 Consideration of Funding Level

This section of the report considers the estimated funding level of the Fund. Firstly, it looks at the Fund asset allocation relative to its liabilities. Then it looks at market movements, as they have an impact on both the assets and the estimated value placed on the liabilities.

Asset allocation and liability split

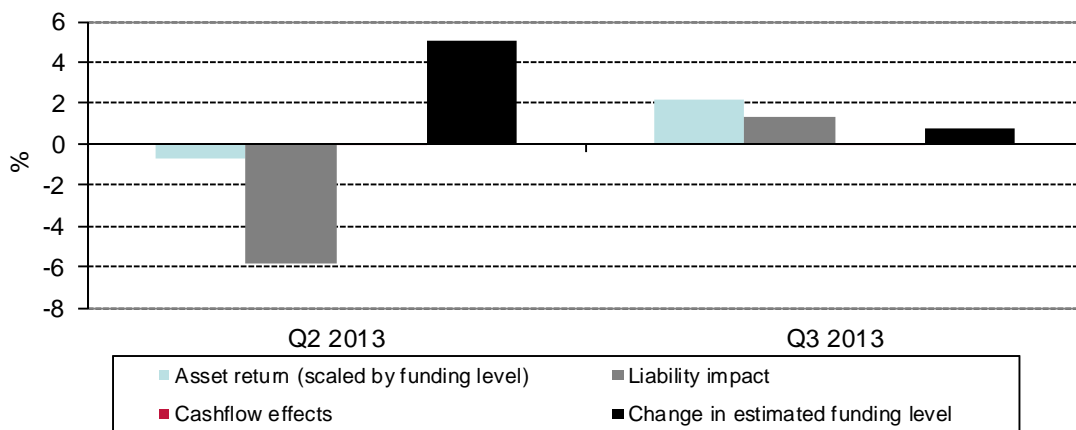
- The chart below shows the allocation of the Fund to Bond and Growth assets against the estimated liability split, which is based on changes in gilt yields underlying the Scheme Actuary's calculation of liabilities. The reference yield used for the liabilities is the Mercer Gilt yield (see appendix for definition). The liability benchmark is based on the valuation results from 31 March 2013.
- These calculations do not take account of any unexpected changes to the Fund membership or changes to the demographic assumptions and should not be construed as an actuarial valuation.



- Based on financial market values, investment returns and cashflows into the Fund, the estimated funding level increased by approximately 1% over the third quarter of 2013, all else being equal. This was driven by:
 - » A small positive asset return, following positive returns from most managers and asset classes.
 - » This was slightly offset by an increase on the value placed on the liabilities, due to a 0.1% decrease in the discount rate. This increases the value placed on future pension payments and hence increases the value placed on the liabilities, all else being equal.
- At the valuation date, 31 March 2013, the Scheme was 78% funded. Since then financial market movements, actual cashflows, and investment returns are expected to have increased the overall funding level to 84%. Most of this improvement came in the second quarter of 2013 when the discount rate assumption increased by 0.4%, reducing the value placed on the liabilities.

Scheme performance relative to estimated liabilities

- The chart below shows, quarter by quarter, the return on the assets and the impact on the liabilities due to changes in financial market values and expected member movements.
- As detailed previously, such movements in liabilities are based upon the bond yield underlying the Scheme Actuary’s calculation of liabilities.

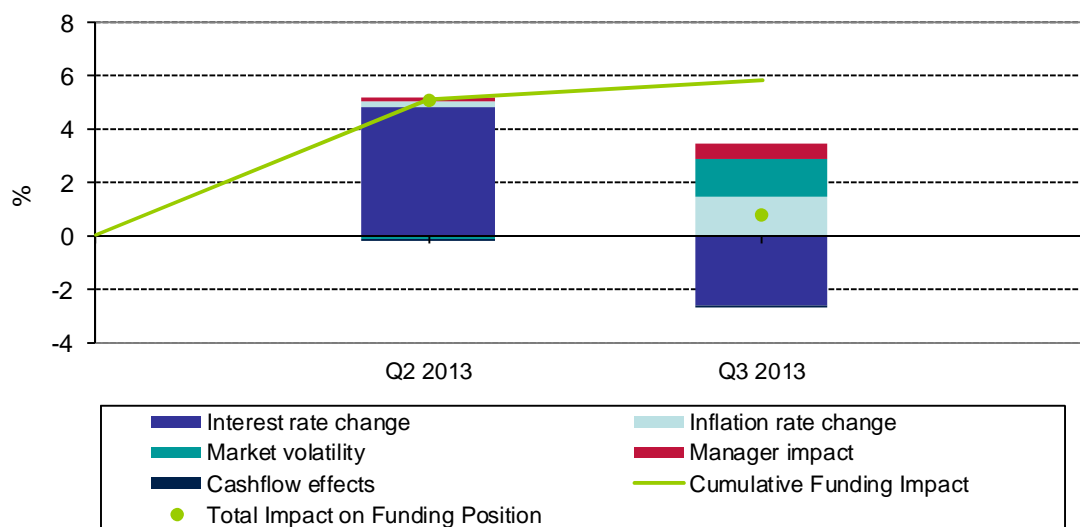


Note : A decrease in liabilities and an increase in assets improves the funding level and vice-versa.

- The graph above shows that the Fund’s assets, scaled to take into account the estimated funding level, have produced an absolute return of 2.2%, over the last quarter.
- The value placed on the liabilities increased by 1.3% due to a small fall in the discount rate.
- Overall, the combined effect has led to an increase in the estimated funding level to 84% (from 83% at 30/06/2013).

Key drivers of performance against the estimated liabilities

- The chart below shows the main contributors to the change in the estimated funding level. For reference, please note that the underlying calculations are based on the Mercer gilt yield.



- 'Interest rate change' reflects the impact caused by the difference in the duration of the liabilities compared to the assets. As the liabilities have a longer duration than the assets, when yields rise, this has a positive impact, for example as in Q2 2013. Over the last quarter, the discount rate assumption fell slightly, which results in the negative contribution, although this was not as large as the positive impact in Q2.
- The Market Implied (RPI) inflation assumption fell by 0.1% p.a. over the quarter. This gives a positive contribution as the assumed future inflation-linked payments are lower.
- For Growth assets, 'Market volatility' is simply the (benchmark) return on the assets; for Bond assets it is the return less the return that would be expected given the changes in bond yields. This has had a positive impact over the quarter as overall markets produced a positive return.
- 'Manager impact' is the investment performance compared to the strategic benchmark. This was positive over the last quarter but gave a relatively small contribution, as expected, compared to the other factors.
- The small 'cashflow effects' reflect factors such as pension payments, contributions and disinvestments. This was negligible over the last two quarters.
- Overall the investment factors have had a small positive impact on the estimated funding level of the Fund over the last quarter.
- Over the six month period since 31 March 2013, investment factors have had a positive effect. This was primarily due to the 'interest rate change' effect in quarter two. Generally rising markets (the 'market volatility' bars) over the six month period mean the assets have broadly kept pace with the unwinding of the liabilities.

4 Fund Valuations

The table below shows the asset allocation of the Fund as at 30 September 2013, with the BlackRock Multi-Asset portfolio and the BlackRock property portfolio (assets “ring fenced” for investment in property) split between the relevant asset classes.

Asset Class	30 September 2013 Value £'000	Proportion of Total %	Strategic Benchmark Weight %
UK Equities	672,642	21.2	18.0
Overseas Equities	1,394,664	44.0	42.0
Bonds	583,735	18.4	20.0
Fund of Hedge Funds	221,232	7.0	10.0
Cash (including currency instruments)	67,391	2.1	-
Property	233,247	7.3	10.0
TOTAL FUND VALUE	3,172,910	100.0	100.0

Source: Data provided by WM Performance Services

- The value of the Fund's assets increased by £74m over the third quarter of 2013 to £3,173m. Each asset class (except for Property) contributed to the increase with the majority (£43m) coming from UK Equities.
- In terms of the asset allocation, market movements resulted in a shift towards UK equities, and away from each of the other asset classes. This moved the allocation further away from the strategic benchmark weight apart for overseas equities.
- The Fund remains overweight in equities and underweight in bonds, hedge funds and property.
- The valuation of the investment with each manager is provided on the following page.

Manager	Asset Class	30 June 2013		Net new money £'000	30 September 2013	
		Value	Proportion of Total		Value	Proportion of Total
		£'000	%		£'000	%
Jupiter	UK Equities	140,717	4.5	-	151,976	4.8
TT International	UK Equities	163,649	5.3	-	171,207	5.4
Invesco	Global ex-UK Equities	221,159	7.1	-	223,388	7.0
Schroder	Global Equities	201,966	6.5	-	203,330	6.4
SSgA	Europe ex-UK Equities and Pacific incl. Japan Equities	101,947	3.3	-	105,517	3.3
Genesis	Emerging Market Equities	147,236	4.8	-	146,181	4.6
MAN	Fund of Hedge Funds	64,160	2.1	-	63,607	2.0
Signet	Fund of Hedge Funds	65,478	2.1	-	65,903	2.1
Stenham	Fund of Hedge Funds	35,591	1.1	-	35,966	1.1
Gottex	Fund of Hedge Funds	55,178	1.8	-	55,755	1.8
BlackRock	Passive Multi- asset	1,418,832	45.8	-	1,430,170	45.2
BlackRock (property fund)	Equities, Futures, Bonds, Cash (held for property inv)	55,380	1.8	-5,500	51,032	1.6
RLAM	Bonds	171,978	5.5	-	196,005	6.2
Schroder	UK Property	135,421	4.4	-	139,246	4.4
Partners	Property	104,279	3.4	500	100,354	3.1
Record Currency Mgmt	Dynamic Currency Hedging	-3,609	-0.1	-	7,877	0.2
Record Currency Mgmt 2	Overseas Equities (to fund currency hedge)	6,832	0.2	-	7,426	0.2
Internal Cash	Cash	12,949	0.4	5,000	17,970	0.6
Rounding		-	-	-	-	-
TOTAL		3,099,143	100.0	0	3,172,910	100.0

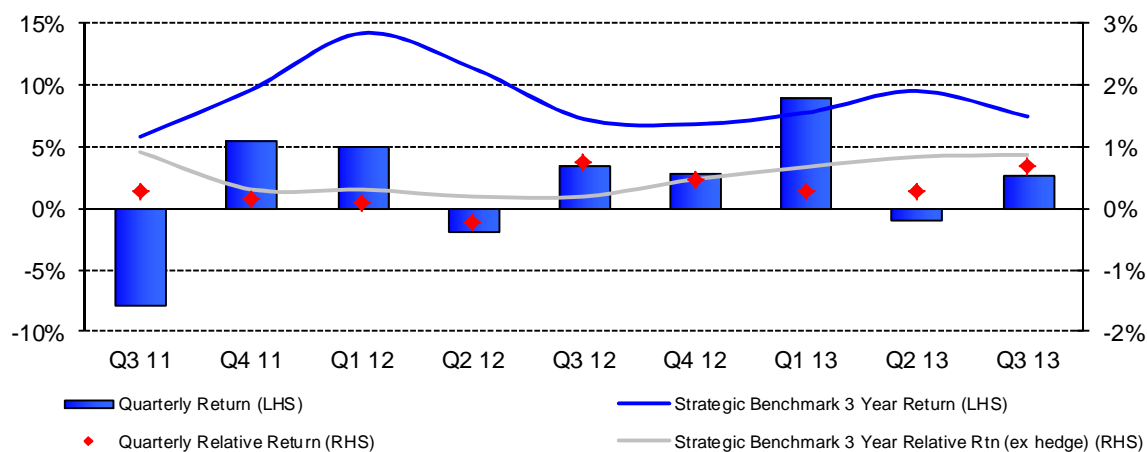
Source: Avon Pension Fund Data provided by WM Performance Services

5 Performance Summary

Total Fund performance

The chart below shows the absolute performance of the total Fund's assets over the last 3 years.

Total Fund absolute and relative performance



fund	3 months (%)	1 year (%)	3 years (% p.a.)
Total Fund (inc currency hedge)	2.6	13.9	N/a
Total Fund (ex currency hedge)	2.2	13.7	8.4
Strategic Benchmark (no currency hedge)	1.9	11.9	7.4
Relative (inc currency hedge)	+0.7	+2.0	N/a

Source: Data provided by WM Performance Services

Strategy performance

The table below shows the strategic allocation to each of the major asset classes and the benchmark returns over the quarter and year to 30 September 2013.

Asset Class	Weight in Strategic Benchmark	Index returns	Contribution to total benchmark	Index returns	Contribution to total benchmark
		Q3 2013	(quarter)	1 year	(1 year)
UK Equities	18%	5.6%	1.0%	18.9%	3.4%
Overseas Equities	42%	1.6%	0.8%	18.1%	7.6%
Index Linked Gilts	6%	0.5%	0.0%	6.6%	0.4%
Fixed Coupon Gilts	6%	1.3%	0.1%	-4.5%	-0.3%
UK Corporate Bonds	5%	2.2%	0.1%	2.9%	0.1%
Overseas Fixed Interest	3%	-4.2%	-0.1%	-5.5%	-0.2%
Fund of Hedge Funds	10%	-1.1%	-0.1%	4.8%	0.5%
Property	10%	2.4%	0.2%	4.2%	0.4%
Total Fund	100%				

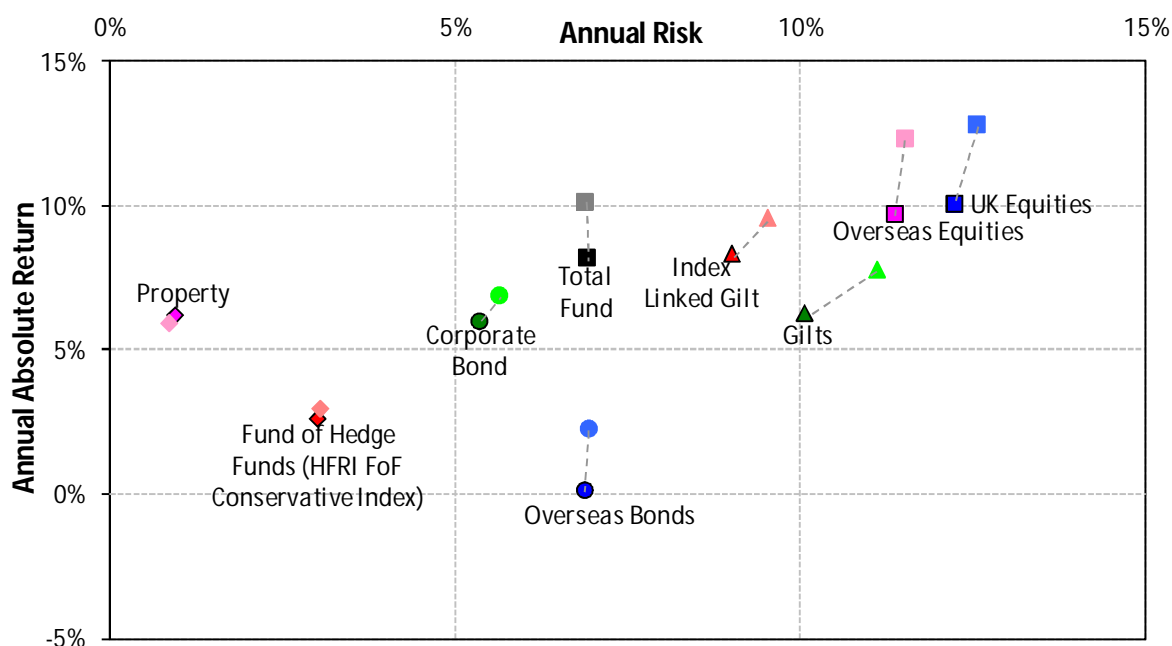
- **Market impact:** Following a turbulent second quarter, equities continued to provide strong returns over quarter three as policy makers eased concerns regarding rising interest rates with “forward guidance”.
- Overseas equity returns were subdued by in sterling terms due to strengthening of sterling. The Fund’s currency hedge therefore provided a positive return.
- Government bonds posted a positive return over the quarter but were still down over the one year period. Corporate bonds continued to outperform as investors sought higher yields..
- **Strategic Benchmark:** Over both the three month and one year periods the strategic benchmark was driven by equities, with the Fund benefiting from a high allocation to the asset class.
- The diversifying asset classes, hedge funds and property, proved much less volatile than equities but did not match equity returns.

Risk Return Analysis

The chart below shows the 3 year absolute return ("Annual Absolute Return") against the 3 year volatility of absolute returns ("Annual Risk"), based on monthly/quarterly (as available) data points in sterling terms, to the end of September 2013 of each of the underlying asset benchmarks, along with the total Fund strategic benchmark. We also show the position as at last quarter, as shadow points.

- This chart can be compared to the 3 year risk vs return managers' chart on page 18.

3 Year Risk v 3 Year Return to 30 September 2013

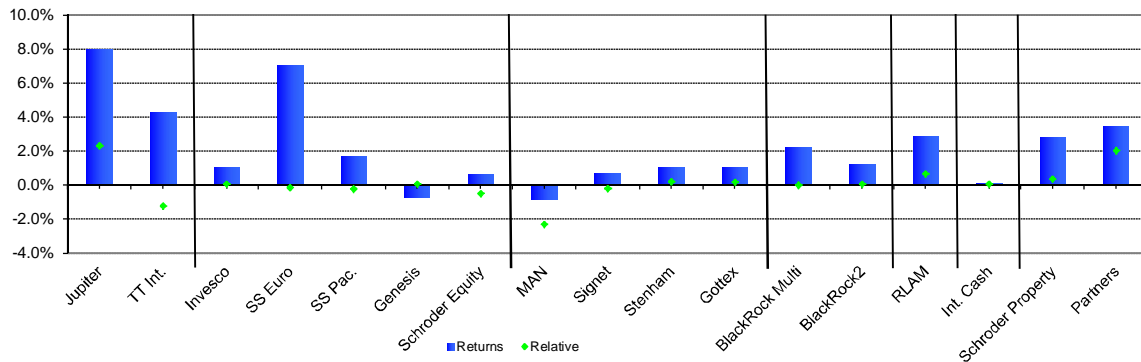


- All of the underlying benchmarks have produced a positive return over the period (3 years p.a.).
- Other than a small increase in the property return, the three year returns have fallen across all asset classes. This was partly due to Q3 2010 falling out of the analysis, in which there were strong bond returns and a rebound in equity markets following their falls of Q2 2010.
- Equities remain the best performing asset class over three years and continued to post positive returns over the last quarter, particularly UK equities. Despite this, the three-year equity returns reduced by 2.7% p.a. for both UK and overseas.
- The Property return has increased slightly.
- Hedge funds continue to produce steady returns, improving to 6.5% over the last year compared to 2.6% in the year to September 2012 and a negative return in 2011.
- Gilts, index-linked and corporate bonds 3-year returns fell as yields stabilised over the last quarter, leading to a low return.
- In terms of risk, the three-year volatility has decreased for each of the asset classes except property as the volatile returns of 2010 are replaced by steadier returns.
- The three-year return on equities, gilts, index-linked gilts and corporate bonds are above their assumed strategic return. Property, overseas fixed interest and hedge funds remain below their assumed strategic return.

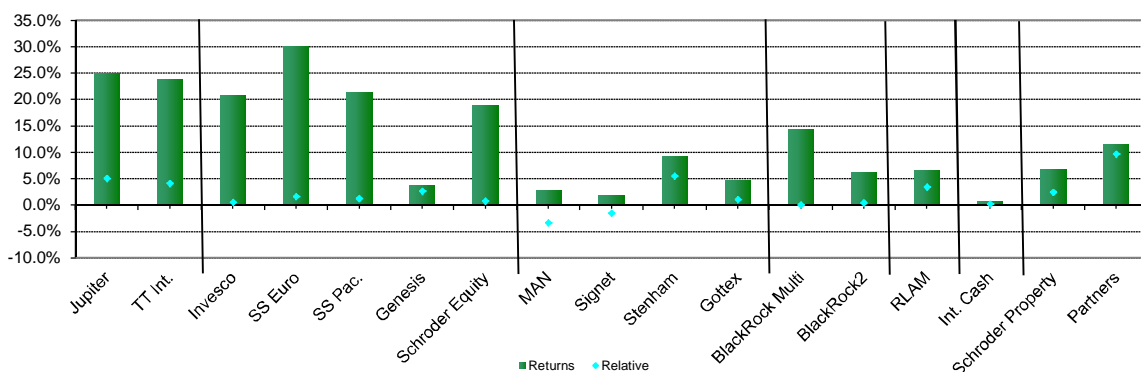
Aggregate manager performance

The charts below show the absolute return for each manager over the quarter, one year and three years to the end of September 2013. The relative quarter, one year and three year returns are marked with green and blue dots respectively.

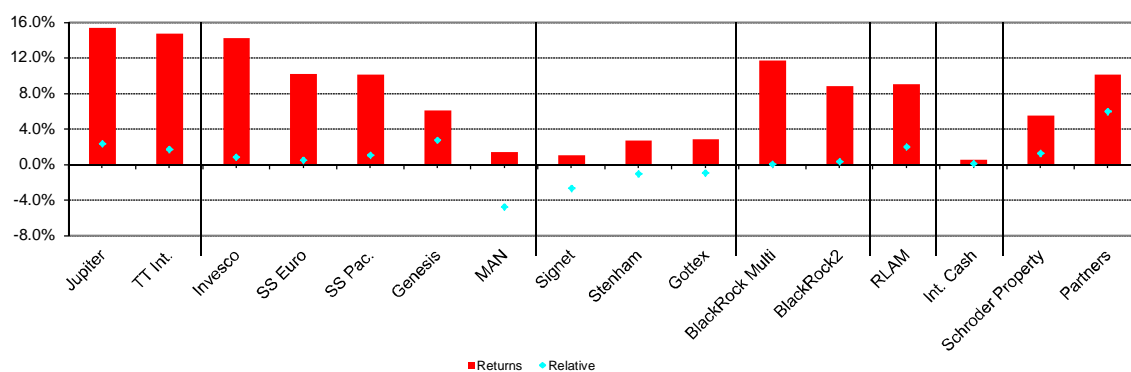
Absolute and relative performance - Quarter to 30 September 2013



Absolute and relative performance - Year to 30 September 2013



Absolute and relative performance - 3 years to 30 September 2013



Source: Data provided by WM Performance Services

The table below shows the relative returns of each of the funds over the quarter, one year and three years to the end of September 2013. Returns in blue text are returns which outperformed the respective benchmarks, red text shows an underperformance, and black text represents performance in line with the benchmark.

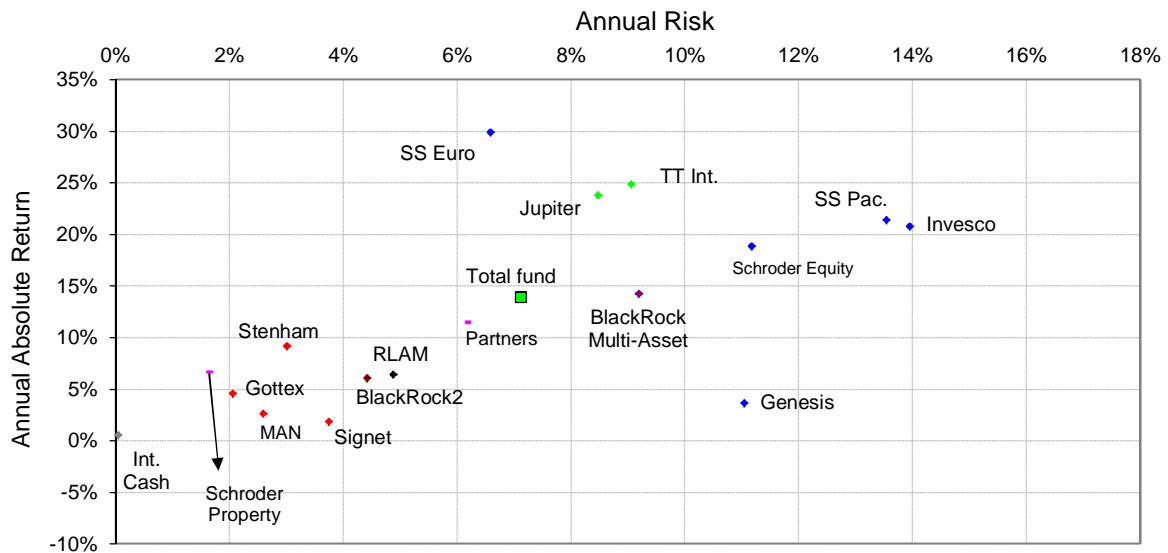
Manager / fund	3 months (%)	1 year (%)	3 years (% p.a.)	3 year performance versus target
Jupiter	+2.3	+5.0	+3.9	Target met
TT International	-1.3	+4.1	+1.3	Target not met
Invesco	0.0	+0.5	+1.4	Target met
SSgA Europe	-0.2	+1.5	+1.2	Target met
SSgA Pacific	-0.3	+1.2	+1.0	Target met
Genesis	0.0	+2.6	+2.7	Target met
Schroder Equity	-0.5	+0.7	N/A	N/A
Man	-2.4	-3.4	-6.2	Target not met
Signet	-0.2	-1.6	-3.3	Target not met
Stenham	+0.2	+5.4	-1.2	Target not met
Gottex	+0.2	+1.0	-1.0	Target not met
BlackRock Multi - Asset	0.0	0.0	0.0	Target met
BlackRock 2	+0.1	+0.4	+0.1	Target met
RLAM	+0.6	+3.4	+1.8	Target met
Internal Cash	0.0	+0.1	+0.1	N/A
Schroder Property	+0.3	+2.3	+1.6	Target met
Partners Property	+2.0	+9.6	+5.5	Target met

Source: Data provided by WM Performance Services

Manager and Total Fund risk v return

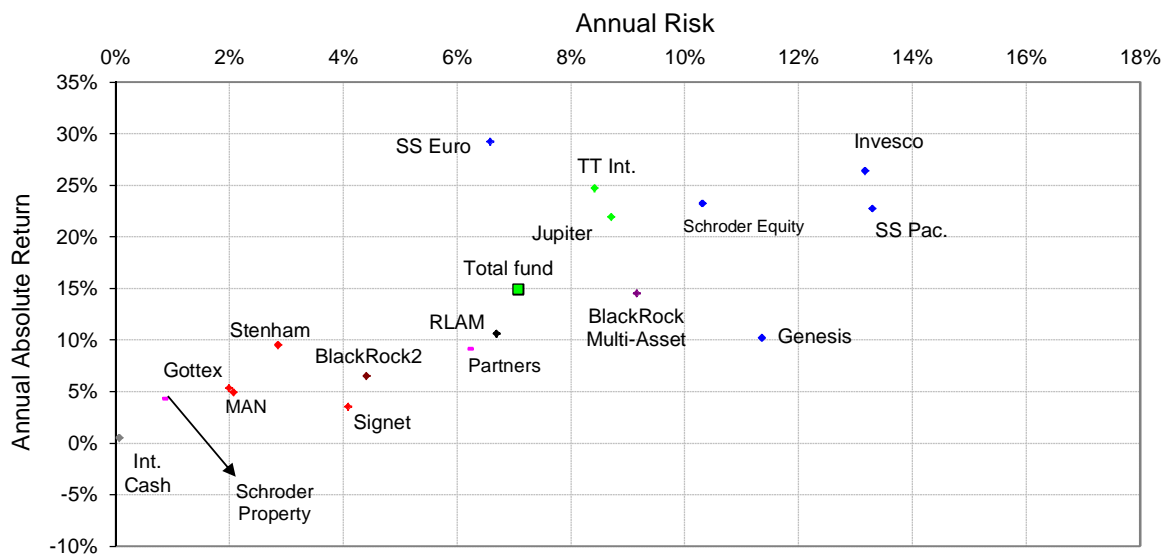
The chart below shows the 1 year absolute return ("Annual Absolute Return") against the 1 year volatility of absolute returns ("Annual Risk"), based on monthly/quarterly (as available) data points in sterling terms, to the end of September 2013 of each of the funds. We also show the same chart, but with data to 30 June 2013 for comparison.

1 Year Risk v 1 Year Return to 30 September 2013



Source: Data provided by WM Performance Services

1 Year Risk v 1 Year Return to 30 June 2013

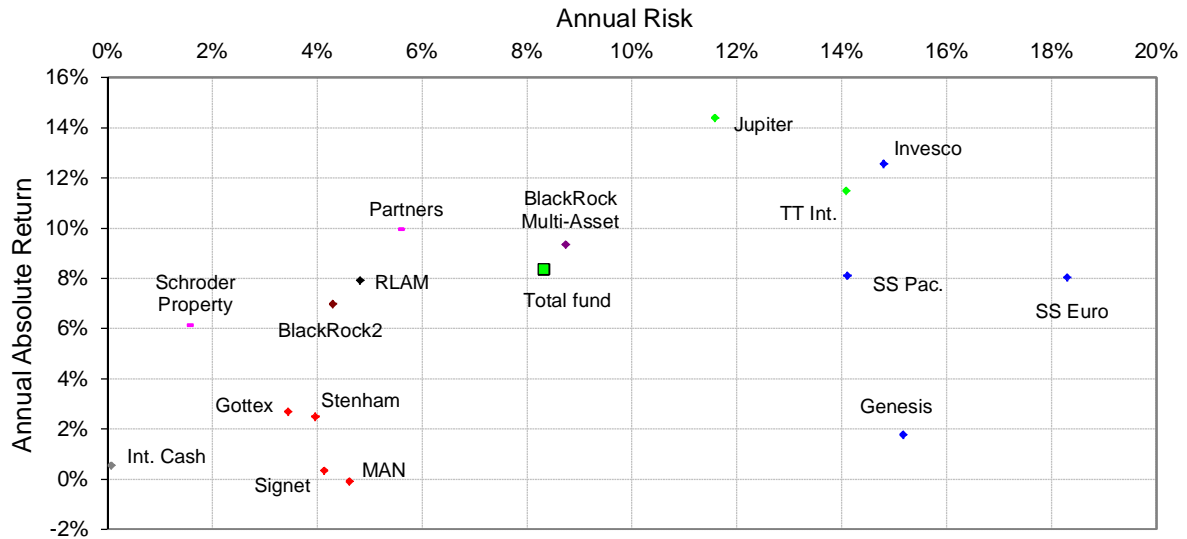


Source: Data provided by WM Performance Services

- The managers are colour coded by asset class, as follows:
 - » Green: UK equities Blue: overseas equities
 - » Red: fund of hedge funds Black: bonds
 - » Maroon: multi-asset Brown: BlackRock No. 2 portfolio
 - » Grey: internally managed cash Pink: Property
 - » Green Square: total Fund
- The one-year returns of each of the developed equity managers have remained above 20%, apart from Schroders.
- The Genesis emerging equity return has fallen from 10.2% to 3.6%, with RLAM's one-year return falling from 10.6% to 6.4%.
- Each of the hedge fund managers has seen their one-year returns decrease.
- The one year-risk figures have generally increased slightly, with the notable exception of RLAM corporate bonds.

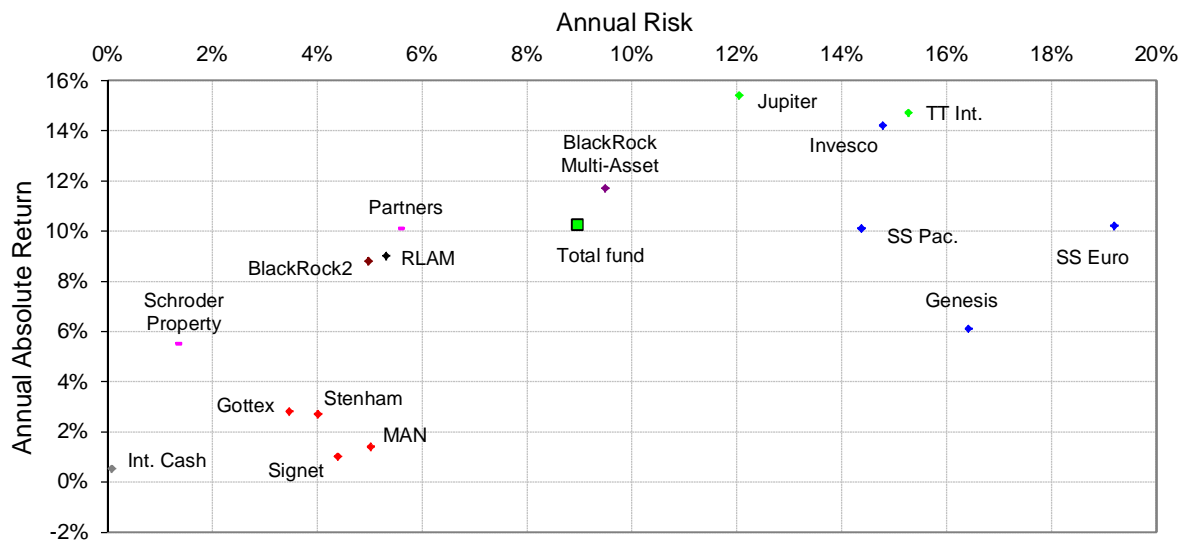
The chart below shows the 3 year absolute return (“Annual Absolute Return”) against the 3 year volatility of absolute returns (“Annual Risk”), based on monthly/quarterly (as available) data points in sterling terms, to the end of September 2013 of each of the funds. We also show the same chart, but with data to 30 June 2013 for comparison.

3 Year Risk v 3 Year Return to 30 September 2013



Source: Data provided by WM Performance Services

3 Year Risk v 3 Year Return to 30 June 2013



Source: Data provided by WM Performance Services

- The managers are colour coded by asset class, as follows:
 - » Green: UK equities Blue: overseas equities
 - » Red: fund of hedge funds Black: bonds
 - » Maroon: multi-asset Brown: BlackRock No. 2 portfolio
 - » Grey: internally managed cash Pink: Property
 - » Green Square: total Fund
- There has been a fall in the three-year returns for all managers except Schroder Property.
- Most notable are the equity funds, in particular TT's return has fallen from 14.7% p.a. to 11.5% p.a., and Genesis' return has fallen from 6.1% p.a. to 1.8% p.a.
- The three-year risk figures have fallen slightly for all managers, again except for Schroder Property. As would be expected, the equity-based funds have the highest volatility and hedge funds, property and fixed interest the lowest, in line with the market returns chart on page 13.

Conclusion

- The strongest returns over the one year period are from the equity and Blackrock Multi-asset funds. The one-year return from all managers was positive in absolute terms.
- Over three years, the best performer remains Jupiter at 14.4% p.a. Hedge fund returns remain the lowest at 0-3% p.a.
- Generally returns were broadly consistent with those seen last quarter, with the exception of Genesis which has seen its one and three year return fall sharply as a result of underperformance from the emerging markets relative to developed equities.
- The Fund of Hedge Fund and property managers continue to provide low volatility over both the 1 and three year period. However, over the longer three year period they have each underperformed their assumed strategic return. Each of the equity-based funds has outperformed the assumed strategic return over three years.

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Appendix 1: Market Events

Asset Class	What happened?	
	Positive Factors	Negative Factors
UK Equities	<ul style="list-style-type: none"> ■ The new BoE Governor, Mark Carney, in his forward guidance policy reaffirmed his commitment to maintain rates at low levels at least until unemployment falls below 7%. ■ The UK economy posted a strong quarter in Q2, with growth at 0.7%. This was led by construction and manufacturing, suggesting recovery in the economy continues. ■ According to Markit and the Chartered Institute of Purchasing & Supply, August 2013 Purchasing Managers' Index (PMI) rose to a two-and-a-half year high of 57.2, up from July's figure of 54.8. ■ UK equity dividend yields remain comfortably in excess of government bond yields while UK equities remain the cheapest developed equity market globally on a P/E (price to earnings) basis. 	<ul style="list-style-type: none"> ■ The UK trade deficit doubled in the month of July to £3.1 billion from £1.3 billion in June, due to falling exports to countries outside European Union. ■ The equity market continues to be nervous about the extent to which the US Federal Reserve will "taper" its programme of asset purchases. ■ Towards the end of the quarter, markets became concerned about a possible escalation of the conflict in Syria that could destabilise the wider region.
Overseas Equities:		
North America	<ul style="list-style-type: none"> ■ The US Federal Reserve refrained from any tapering of QE and assured the markets that a hike in interest rates will follow only when jobless rate falls below 6.5% and the outlook for inflation is no higher than 2.5%. These comments led to a decrease in the 10-Year Treasury bond yield by 15 basis points and equity markets touching a new high. ■ The underlying fundamentals in terms of consumer spending, housing and business confidence are slowly improving, making equities look inexpensive. ■ Positive earnings growth and accelerating economic momentum suggest stronger performance from US equities. 	<ul style="list-style-type: none"> ■ Uncertainty over the starting date of Fed's "taper" of quantitative easing, and concerns over potential conflict in Syria, led to a fall in the US equity markets. ■ Revised US GDP forecasts by the Fed reflected a decrease in the growth rate by 0.3%. The GDP is set to increase by 2.0% to 2.3% in 2013, down from a June projection of 2.3% to 2.6% growth. ■ Though employment figures look reassuring, the rate of growth in jobs and the quality of new jobs remains a concern. ■ The acrimonious debate on the raising of the debt ceiling is a growing cause for concern.

Asset Class	What happened?	
	Positive Factors	Negative Factors
Europe	<ul style="list-style-type: none"> ■ The Eurozone emerged from an 18 month recession in the second quarter, as GDP grew by 0.3% for the 17-nation currency area. Germany and France showed the strongest signs of recovery with Q2 growth rates of 0.7% and 0.5%, respectively. ■ Business activity in the Eurozone, as measured by the Purchasing Managers' Index (PMI), rose to its highest level since June 2011. ■ The European Central Bank President, Mario Draghi, assured the markets that the ECB would be willing to extend its long-term bank lending programme in order to keep short term interest rates low. ■ The ECB left its main refinancing rate at a historic low of 0.5%, staying true to its commitment to keep rates at current or lower levels for "an extended period". 	<ul style="list-style-type: none"> ■ Standard and Poor's Ratings Services downgraded Italy's sovereign credit rating by one notch, citing the country's worsening economic prospects. S&P lowered the country's rating two levels above junk territory, from BBB+ to BBB. ■ IMF estimates see the output gap peaking in 2013 at 3%, as unemployment rates remained at an all time high of 12.1% in the month of August. Youth unemployment continued to edge higher, up from 23.3% a year ago to 23.4%. ■ According to the IMF, Greece has a shortfall of €11 billion cash in its second bailout and Eurozone governments need to fill half of that gap before the end of this year.
Japan	<ul style="list-style-type: none"> ■ Japan's consumer price index has now risen for three consecutive months, rising at the fastest pace in almost five years in August 2013, by 0.9%. This represents good progress towards achieving the targeted annual inflation of 2% in the next two years. These rises have fuelled hopes that the economy is pulling out of deflation. ■ Japan's economy expanded at an annualised rate of 3.8% in Q2, largely driven by strong consumer spending. This shows the benefits of Mr Abe's reflationary policies and the Bank of Japan's aggressive monetary stimulus. 	<ul style="list-style-type: none"> ■ In an attempt to ease the nation's colossal debt, Mr Abe has confirmed the raising of sales tax to 8% in April 2014 and further to 10% in Oct 2015, from 5% as of today. Although this increase will be paired with new stimulus spending, economists fear that this move will derail the nascent economic recovery in the short term. ■ Slowing growth in emerging markets is affecting demand for exports, whilst a weaker yen has hit importers.
Asia Pacific	<ul style="list-style-type: none"> ■ In an attempt to boost economic growth, the Reserve Bank of Australia (RBA) cut interest rates by 0.25% to a record low of 2.5%. ■ Upbeat Chinese trade and inflation data brought cheers to the Asian equity markets. August inflation was benign at 2.6% while export growth of 7.2% created the highest August trade surplus for the country since 2008. 	<ul style="list-style-type: none"> ■ Rising capital costs and currency depreciations have negatively affected most Asian economies. Those with large current account deficits such as India have fared particularly poorly, seeing their currencies depreciate significantly. ■ Slower commodity demand from key economies such as China still affects the wider region.

Asset Class	What happened?	
	Positive Factors	Negative Factors
Emerging Markets	<ul style="list-style-type: none"> ■ Buying opportunities can be seen in emerging markets as equity valuations look cheap after recent falls. ■ Higher consumer demand from the developed economies, coupled with a weak currency, is supporting the growth of emerging economies which are export oriented. 	<ul style="list-style-type: none"> ■ During the quarter, we have seen emerging economies struggle with weak currencies and dependency on foreign capital inflows to fund their current-account deficits. ■ Mexico has cut its 2013 GDP growth forecast to 1.8%, down from the 3.1% that was forecast back in July, on the back of an unexpected drop of 0.7% in the Q2 GDP figures. ■ Most emerging market economies are still facing some headwinds due to inflation pressures and are raising their interest rates to combat high prices. Brazil has raised its interest rates for the fourth time since April, while Indonesia has raised interest rates to the highest level since 2009.
Gilts	<ul style="list-style-type: none"> ■ With the release of the August Inflation Report, the MPC adopted formal forward rate guidance, stating that it did not intend to increase interest rates until the unemployment rate has fallen to at least 7%. 	<ul style="list-style-type: none"> ■ Gilt yields continued to rise until the final week of the quarter, with the 10-year yield peaking at a two year high above 3% due to the growing view that the Federal Reserve would begin to 'taper' its monthly asset purchases.
Index Linked Gilts	<ul style="list-style-type: none"> ■ Post a positive response for the new 2068 index-linked gilts, the Debt Management Office (DMO) has offered to issue an extra £750 million of inflation-linked bonds over the current financial year. 	<ul style="list-style-type: none"> ■ In an environment where central banks are able to control inflation within a target range, there is a limited upside to the return expectations on these instruments.
Corporate Bonds	<ul style="list-style-type: none"> ■ Spreads over Government Bonds remained 'tight' over the quarter and prices have tended to follow movements in Government bonds. ■ Corporations continue to maintain healthy balance sheets. 	<ul style="list-style-type: none"> ■ The corporate bond market still suffers from a lack of liquidity while uncertainty looms over a rise in the interest rate.
Property	<ul style="list-style-type: none"> ■ Commercial real estate values rose for the fourth straight month in August 2013. The retail sector saw growth for the first time since October 2011. ■ Mortgage approvals in the UK rose to a five year high in July 2013. Demand in housing is supported by policy measures such as the Funding for Lending Scheme and Help to Buy. ■ The construction PMI grew at the fastest pace in six years in August 2013 amid a revival in the housing market, adding to signs the economic recovery is gaining traction. 	<ul style="list-style-type: none"> ■ Over H1 2013, 77,686 homes were approved for construction which is still well short of the 220,000 per year needed to meet housing demand.

Economic statistics

	Quarter to 30 September 2013			Year to 30 September 2013		
	UK	Europe ⁽¹⁾	US	UK	Europe ⁽¹⁾	US
Real GDP growth	0.8%	n/a	0.7%	1.5%	n/a	1.6%
Unemployment rate	7.7%	11.1% ⁽⁴⁾	7.3%	7.7%	11.1% ⁽⁴⁾	7.3%
Previous	7.8%	11.2%	7.6%	7.9%	10.7%	7.8%
Inflation change ⁽²⁾	0.7%	0.1%	0.4% ⁽⁴⁾	2.7%	1.1%	1.5% ⁽⁴⁾
Manufacturing Purchasing Managers' Index	56.7	51.1	56.2	56.7	51.1	56.2
Previous	52.5	48.8	50.9	48.4	46.1	51.5
Quantitative Easing / LTRO ⁽³⁾	£375bn	€1,018bn	\$3,539bn	£375bn	€1,018bn	\$3,539bn
Previous	£375bn	€1,018bn	\$3,284bn	£375bn	€1,018bn	\$2,694bn

Source: Thomson Reuters, market, Institute for Supply Management, Eurostat, United States Department of Labor, US Bureau of Economic Analysis. All figures to 30 September 2013 unless otherwise stated. "Previous" relates to data as at the previous quarter or year end.

(1) 15 Country Euro area; (2) CPI inflation measure; (3) Refers to amounts announced and therefore ignores changes due to debt maturing. LTRO refers to the European Central Bank's Long Term Refinancing Operation; (4) As at Aug 2013.

Appendix 2: Glossary of Terms

Term	Definition
Absolute Return	The actual return, as opposed to the return relative to a benchmark.
Annualised	Figures expressed as applying to 1 year.
Bond Assets	Assets held in the expectation that they will exhibit a degree of sensitivity to yield changes. The value of a benefit payable to a pensioner is often calculated assuming the invested assets in respect of those liabilities achieve a return based on UK bonds.
Growth Assets	Assets held in the expectation that they will achieve more than the return on UK bonds. The value of a benefit payable to a non-pensioner is often calculated assuming the invested assets in respect of those liabilities achieve a return based on UK bonds plus a premium (for example, if holding equities an equity risk premium may be applied). The liabilities will still remain sensitive to yields although the Growth assets may not.
Duration	The weighted average time to payment of cashflows (in years), calculated by reference to the time and amount of each payment. It is a measure of the sensitivity of price/value to movements in yields.
Funded Liabilities	The value of benefits payable to members that can be paid from the existing assets of the plan (i.e. those liabilities that have assets available to meet them).
High Yield	A type of bond which has a lower credit rating than traditional investment grade corporate bonds or government bonds. These bonds pay a higher yield than investment grade bonds.
Market Statistics Indices	The following indices are used for asset returns: UK Equities: FTSE All-Share Index Overseas Equities: FTSE AW All-World ex UK UK Gilts (>15 yrs or >20 yrs): FTSE Brit Govt Fixed Over 15 (or 20) Years Index Corporate Bonds(>15 yrs AA): iBoxx £ Corp 15+ Years AA Index Non-Gilts (>15 yrs): iBoxx £ Non-Gilts 15+ Years Index Index Linked Gilts (>5yrs): FTSE Brit Govt Index Link Over 5 Years Index Hedge Funds: CS/Tremont Hedge Fund Index Commodities: S&P GSCI Commodity GBP Total Return Index High Yield: Bank Of America Merrill Lynch Global High Yield Index Property: IPD Property Index (Monthly) Cash: 7 day London Interbank Middle Rate Price Inflation: All Items Retail Price Index Earnings Inflation: UK Average Weekly Earnings Index - Whole Economy excluding Bonuses
Market Volatility	The impact of the assets producing returns different to those assumed within the actuarial valuation basis, excluding the yield change and inflation impact.

Term	Definition
Mercer Gilt Yield	An estimate of the yield available on a notional portfolio of UK Government conventional gilt stocks whose cashflows approximately match the Fund's estimated benefit cashflows
Money-Weighted Rate of Return	The rate of return on an investment including the amount and timing of cashflows.
Non-Pensioner Liability	The value of benefits payable to those who are yet to retire, including active and deferred members.
Pensioner Liability	The value of benefits payable to those who have already retired, irrespective of their age.
Relative Return	The return on a fund compared to the return on another fund, index or benchmark. For IMAGE purposes this is defined as: Return on Fund less Return on Index or Benchmark.
Scheme Investments	Refers only to the invested assets, including cash, held by your investment managers.
Surplus/Deficit	The estimated funding position of the Scheme. This is not an actuarial valuation and is based on estimated changes in liabilities as a result of bond yield changes, asset movements and, if carried out, output from an asset liability investigation (ALI). If no ALI has been undertaken the estimate is less robust.
Three-Year Return	The total return on the fund over a three year period expressed in percent per annum.
Time-Weighted Rate of Return	The rate of return on an investment removing the effect of the amount and timing of cashflows.
Unfunded Liabilities	The value of benefits payable to members that cannot be paid from the existing assets of the Scheme (i.e. those liabilities that have no physical assets available to meet them). These liabilities are effectively the deficit of the Scheme.
Yield (Gross Redemption Yield)	The return expected from a bond if held to maturity. It is calculated by finding the rate of return that equates the current market price to the value of future cashflows.

Appendix 3: Summary of Mandates

Manager	Mandate	Benchmark	Outperformance target (p.a.)
Jupiter	UK Equities (Socially Responsible Investing)	FTSE All Share	+2%
TT International	UK Equities (Unconstrained)	FTSE All Share	+3-4%
Invesco	Global ex-UK Equities Enhanced (En. Indexation)	MSCI World ex UK NDR	+0.5%
Schroder	Global Equities (Unconstrained)	MSCI AC World Index Free	+4%
SSgA	Europe ex-UK Equities (Enhanced Indexation)	FTSE AW Europe ex UK	+0.5%
SSgA	Pacific inc. Japan Equities (Enhanced Indexation)	FTSE AW Dev Asia Pacific	+0.5%
Genesis	Emerging Market Equities	MSCI EM IMI TR	-
MAN	Fund of Hedge Funds	3M LIBOR + 5.75%	-
Signet	Fund of Hedge Funds	3M LIBOR + 3%	-
Stenham	Fund of Hedge Funds	3M LIBOR + 3%	-
Gottex	Fund of Hedge Funds	3M LIBOR + 3%	-
BlackRock	Passive Multi-asset	In line with customised benchmarks using monthly mean fund weights	0%
BlackRock	Overseas Property	Customised benchmarks using monthly mean fund weights	0%
RLAM	UK Corporate Bond Fund	iBoxx £ non-Gilts all maturities	+0.8%
Schroder	UK Property	IPD UK pooled	+1.0%
Partners	Global Property	IPD Global pooled	+2.0%
Cash	Internally Managed	7 day LIBID	



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