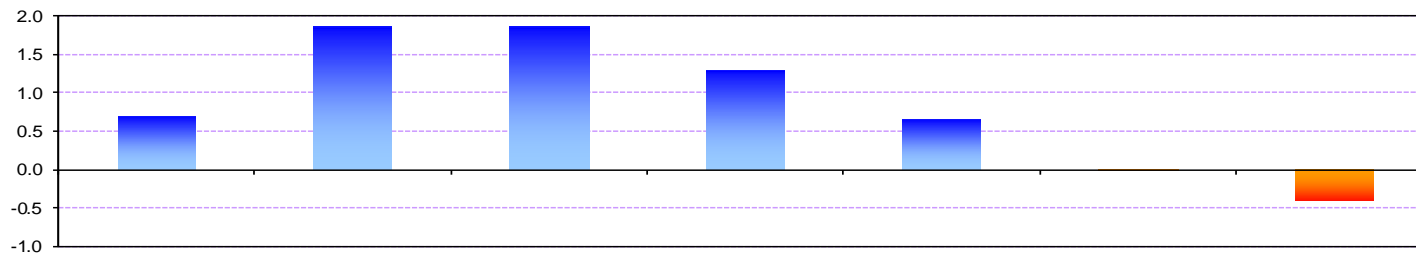

Portfolio Evaluation Ltd
Worcestershire County Council Pension Fund
Investment Overview 2017/18

Overview of Today

- Market Review
 - Asset class results
 - Themes
 - Market trends and developments
- Evaluation of the Worcestershire County Council Pension Fund results
 - Total fund results (short and long term)
 - Attribution of 2017/18 results

Total Fund Results – Ending March 2018

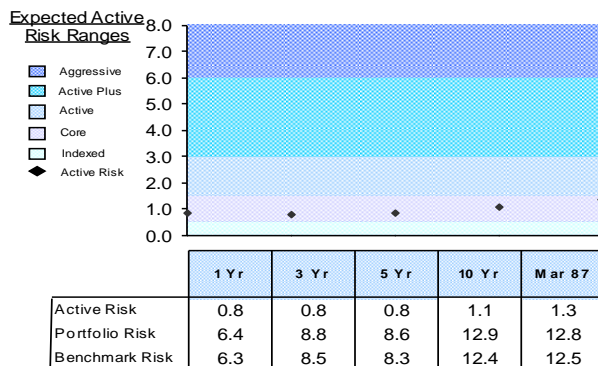
Excess Return Analysis (%)



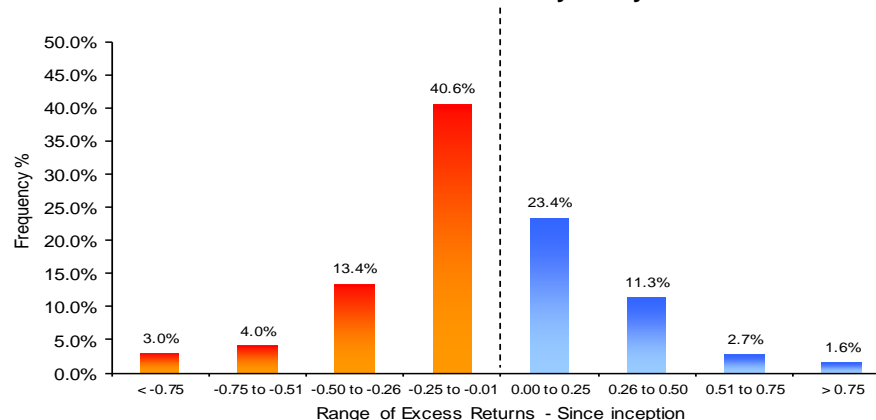
	QTR	YTD	1 Yr	3 Yr	5 Yr	10Yr	Since Mar 87 (p.a.)
Portfolio Return	-3.5	5.4	5.4	9.4	9.2	7.9	8.1
Benchmark Return	-4.1	3.5	3.5	8.1	8.5	7.9	8.6
Excess Return	0.7	1.9	1.9	1.3	0.7	0.0	-0.4

All returns for periods in excess of 1 year are annualised.

Ex-Post Active Risk Analysis (%)

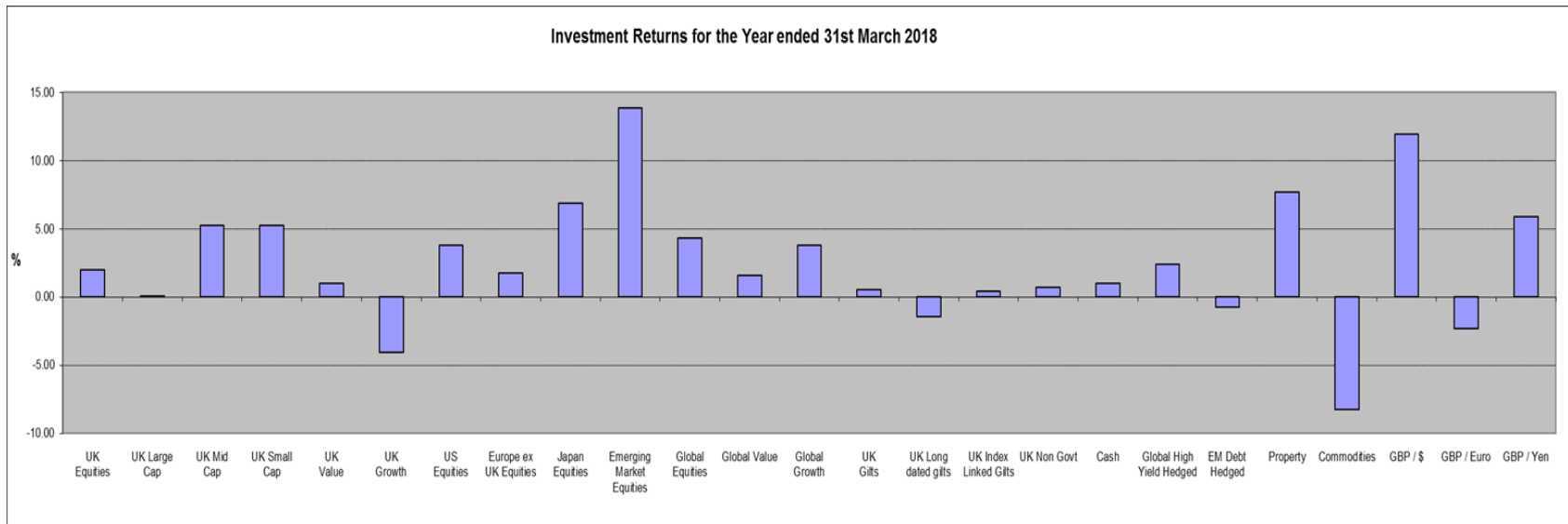


Excess Return Consistency Analysis



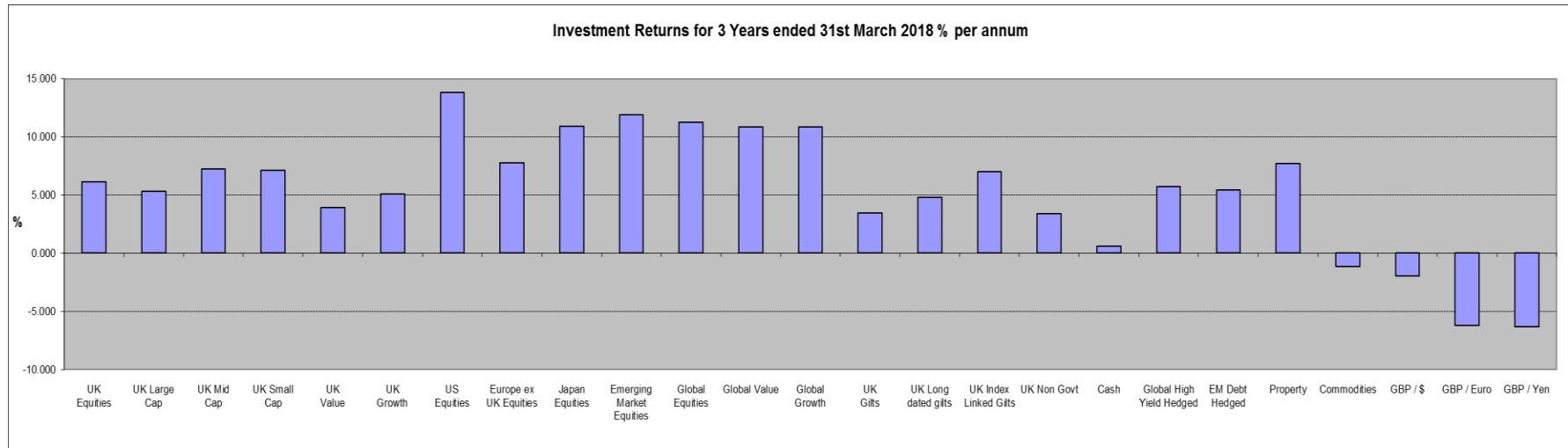
- Positive real returns generated by the Fund over all time periods.
- Positive excess over 1 year, 3 years and 5 years.
- Returns in excess of cash and inflation
- No change in risk and return profile when compared to last year
- The Fund has a higher return than our LAPF average.

Market Results – Year Ended March 2018



- A variable year with equity markets doing well until Q1 2018.
- UK equity market not as buoyant as other markets partly due to lack of overseas investors (and domestic to some degree) over concerns about UK growth and Brexit.
- Bond yields rose globally in Q1 after being 'soft' all year.
- High returns due to global economic growth.
- Investors believe that the global economy is moving from a recovery phase to an expansion phase.
- Market risk increased in 2018

Market Results - Three Years Ended March 2018



- Global economic growth consistently positive
- Strong returns from markets
- Risk levels at historic lows on an ex-post basis
- Sterling depreciation a significant return generator
- Impact of QE beneficial from a returns perspective

Client Trends and Market Developments

- Fund activity;
 - Growth in investments within 'Alternative Asset Classes' including Infrastructure and Private Debt.
 - Uptake of equity protection strategies
 - More currency hedging – typically versus additional sterling depreciation.
 - Increased exposure to alternative benchmark index strategies such as RAFI
 - Removal of underperforming managers increased partly because of limited time to make up differential because of pooling (these assets typically have been indexed)
 - Investment fees reducing.

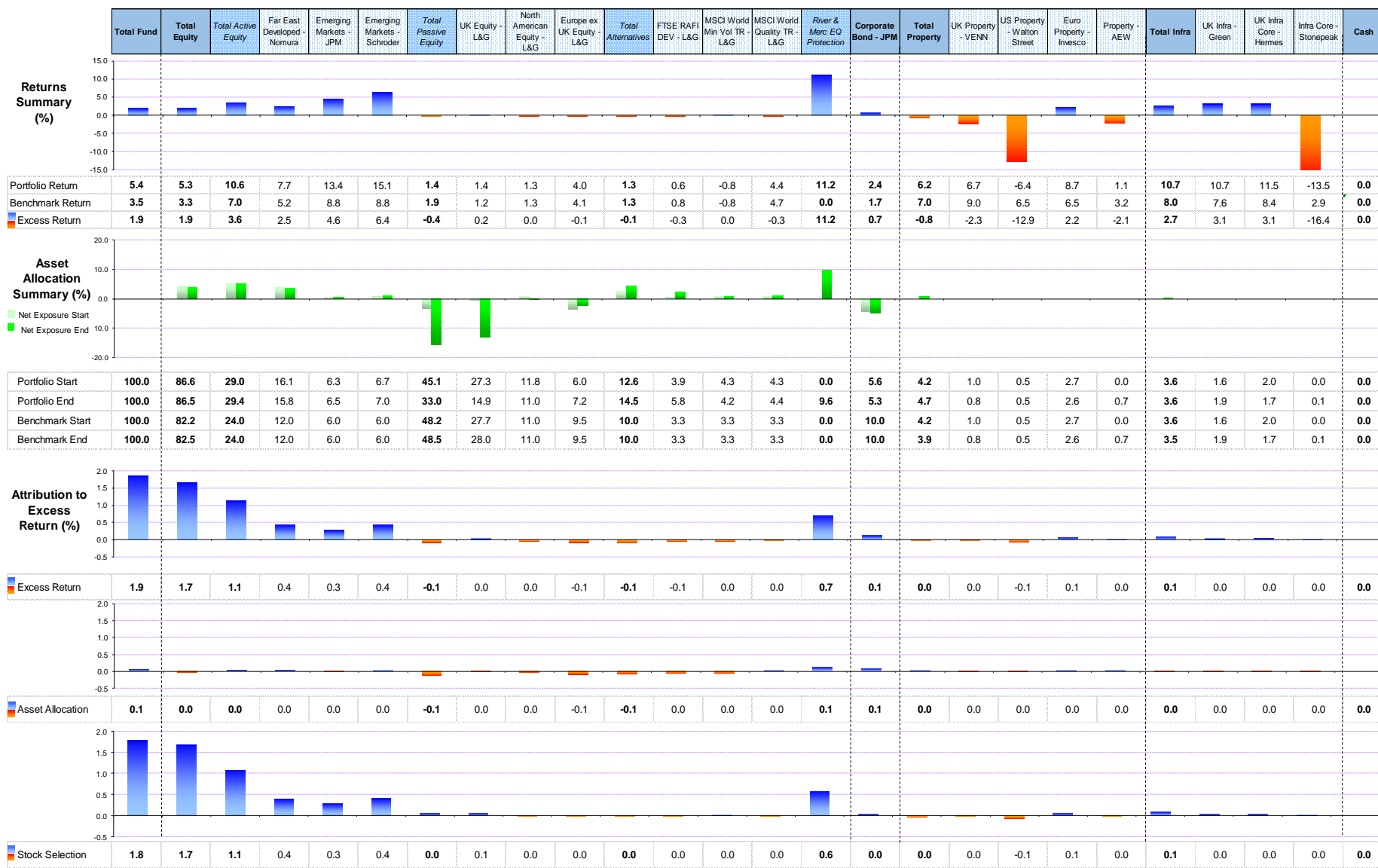
- Local Government Pension Scheme Pooling
 - Currently in early stages of transition
 - Transition due in 2018 / 19
 - Wide range of solutions
 - Fee pressures

- Investment monitoring developments
 - Increased focus on net and gross of fees reporting
 - Equity style analysis
 - Restructuring of funds significant

Developments at the Fund

- Fund activity;
 - Increasing exposure to infrastructure managers (Stonepeak).
 - Increasing exposure to property (AEW).
 - New equity protection strategy (River & Mercantile).
 - New investment in EQT.
 - Reduced exposure to indexed UK equities.

Attribution to Total Fund Excess Return Analysis - Year Ending March 2018



Fund and Portfolio Summary Page- Year Ending March 2018

	Benchmark	Incep Date	Market Value (£m)	Weight	QTR			Year To Date			1 Year			3 Year			5 Year			10 Year			Since Inception		
					PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER
Total Equity Fund	Client Specific Weighted Index	Mar-16	2,314.0	86.5	-4.0	-5.0	0.9	5.3	3.3	1.9	5.3	3.3	1.9										17.2	15.6	1.6
<i>Total Active Equity Fund</i>	Client Specific Weighted Index	Mar-16	786.2	29.4	-2.8	-3.1	0.3	10.6	7.0	3.6	10.6	7.0	3.6										23.5	20.3	3.2
Far East Developed Fund - Nomura	FTSE Developed Asia Pacific Index	Feb-03	424.1	15.8	-4.3	-4.1	-0.2	7.7	5.2	2.5	7.7	5.2	2.5	12.8	10.7	2.0	10.4	9.0	1.4	9.0	8.6	0.4	11.1	10.9	0.2
Emerging Markets Fund - JPM	FTSE All World Emerging Market Index	Dec-11	174.0	6.5	-0.5	-2.2	1.6	13.4	8.8	4.6	13.4	8.8	4.6	13.1	10.4	2.8	7.8	6.9	0.9				9.5	8.3	1.2
Emerging Markets Fund- Schroder	FTSE All World Emerging Market Index	Oct-11	188.1	7.0	-1.5	-2.2	0.7	15.1	8.8	6.4	15.1	8.8	6.4	12.4	10.4	2.0	8.9	6.9	2.0				9.9	7.5	2.4
<i>Total Passive Equity Fund</i>	Client Specific Weighted Index	Mar-16	883.9	33.0	-6.1	-5.9	-0.2	1.4	1.9	-0.4	1.4	1.9	-0.4										13.5	13.4	0.1
UK Equity Fund - L&G	FTSE All Share Index	Dec-15	398.4	14.9	-6.8	-6.9	0.0	1.4	1.2	0.2	1.4	1.2	0.2										11.4	11.1	0.3
North American Equity Fund- L&G	FTSE All World North American Index	Dec-15	293.2	11.0	-4.6	-4.5	0.0	1.3	1.3	0.0	1.3	1.3	0.0										17.8	17.8	0.0
Europe ex UK Equity Fund- L&G	FTSE Developed Europe Ex. UK Index	Dec-15	192.3	7.2	-4.4	-4.6	0.1	4.0	4.1	-0.1	4.0	4.1	-0.1										15.0	15.1	-0.2
<i>Total Alternatives Fund</i>	Client Specific Weighted Index	Mar-16	387.3	14.5	-4.9	-5.0	0.1	1.3	1.3	-0.1	1.3	1.3	-0.1										14.2	14.4	-0.2
FTSE RAFI DEV Fund - L&G	FTSE RAFI Developed 1000 QSR Net Index	Dec-15	155.5	5.8	-5.8	-5.8	0.0	0.6	0.8	-0.3	0.6	0.8	-0.3										17.1	17.3	-0.2
MSCI World Min Vol TR Fund - L&G	MSCI World Minimum Volatility Net Index	Dec-15	113.0	4.2	-5.1	-5.1	0.0	-0.8	-0.8	0.0	-0.8	-0.8	0.0										15.0	14.9	0.0
MSCI World Quality TR Fund - L&G	MSCI World Quality Total Return Net Index	Dec-15	118.8	4.4	-3.4	-3.4	0.0	4.4	4.7	-0.3	4.4	4.7	-0.3										16.9	17.1	-0.1
<i>Equity Protection - River & Mercantile</i>		Jan-18	256.5	9.6	11.2	0.0	11.2																11.2	0.0	11.2
Corporate Bond Fund- JPM	Barclays Capital Global Aggregate - Ex Treasury, Ex Government Related 100% Hedged to GBP	Mar-03	141.1	5.3	-1.9	-1.8	-0.1	2.4	1.7	0.7	2.4	1.7	0.7	2.4	2.1	0.3	3.7	3.2	0.5	5.8	5.7	0.1	5.2	5.3	-0.2
Total Property Fund	Client Specific Weighted Index	Mar-16	124.5	4.7	-0.5	1.7	-2.2	6.2	7.0	-0.8	6.2	7.0	-0.8										9.1	7.1	2.0
UK Property Fund - VENN	Absolute Return +9%	Jul-15	21.0	0.8	0.0	2.2	-2.2	6.7	9.0	-2.3	6.7	9.0	-2.3										11.3	9.3	2.0
US Property Fund- Walton Street	Absolute Return + 6.5%	Jan-16	14.6	0.5	-3.6	1.6	-5.2	-6.4	6.5	-12.9	-6.4	6.5	-12.9										11.0	6.0	5.0
Euro Property Fund- Invesco	Absolute Return + 6.5%	Feb-16	70.2	2.6	0.0	1.6	-1.6	8.7	6.5	2.2	8.7	6.5	2.2										10.3	6.2	4.2
Property Fund- AEW	Absolute Return + 6.5%	Oct-17	18.8	0.7	1.4	1.6	-0.2																1.1	3.2	-2.1
Total Infrastructure Fund	Client Specific Weighted Index	Mar-16	96.2	3.6	5.0	1.9	3.1	10.7	8.0	2.7	10.7	8.0	2.7										10.3	8.0	2.3
UK Infrastructure Fund - Green	Absolute Return +7.6%	Apr-15	49.6	1.9	4.2	1.8	2.4	10.7	7.6	3.1	10.7	7.6	3.1										6.6	7.6	-0.9
UK Infrastructure Core Fund - Hermes	Absolute Return +8.4%	May-15	44.6	1.7	5.7	2.0	3.7	11.5	8.4	3.1	11.5	8.4	3.1										9.7	8.4	1.3
Infrastructure Core Fund - Stonepeak	Absolute Return +12%	Jan-18	2.0	0.1	-13.5	2.9	-16.4																-13.5	2.9	-16.4
Worcestershire CC Total Fund		Mar-87	2,675.9	100.0	-3.5	-4.1	0.7	5.4	3.5	1.9	5.4	3.5	1.9	9.4	8.1	1.3	9.2	8.5	0.7	7.9	7.9	0.0	8.1	8.6	-0.4

Summary

- The Fund has outperformed its benchmark over the one, three and five year periods.
- The Fund has outperformed the LGPS universe (Portfolio Evaluation Ltd) over 1 and 3 years.
- Over the one year the Fund has outperformed due to;
 - Stock selection was the dominant contributor and primarily due to the successful outperforming active equity managers.
 - Asset allocation over the year was marginally positive due to being underweight the low returning bond asset class and overweight the new equity protection strategy.
- The Total Risk of the Fund is consistent with that of a typical multi asset class Fund. Active risk is also consistent with a typical multi asset class Fund that uses both passive and active strategies.