

Quarterly Risk and Return Analysis

Leicestershire County Council Pension Fund



Specialists in Investment Risk and Return Evaluation

Client: Leicestershire County Council Pension Fund
 Manager: Multi-manager
 Mandate: Total Fund
 Asset Class: Combined Assets
 Benchmark: LCC - Total Fund Index
 Inception: 31-Mar-2016
 Mkt Val: £4.6bn

Total Fund Overview
Leicestershire County Council Pension Fund
Report Period: Quarter Ending September 2020

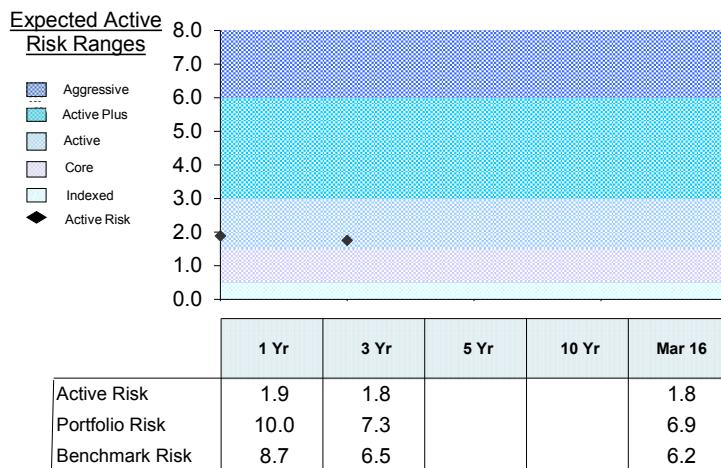


	QTR	Fin YTD	1 Yr	3 Yr	5 Yr	10Yr	Since Mar 16 (p.a.)
Excess Return	-0.3	-1.6	-4.3	-1.5			-0.3
Portfolio Return	1.8	9.7	-1.1	3.9			8.0
Benchmark Return	2.1	11.3	3.2	5.4			8.2

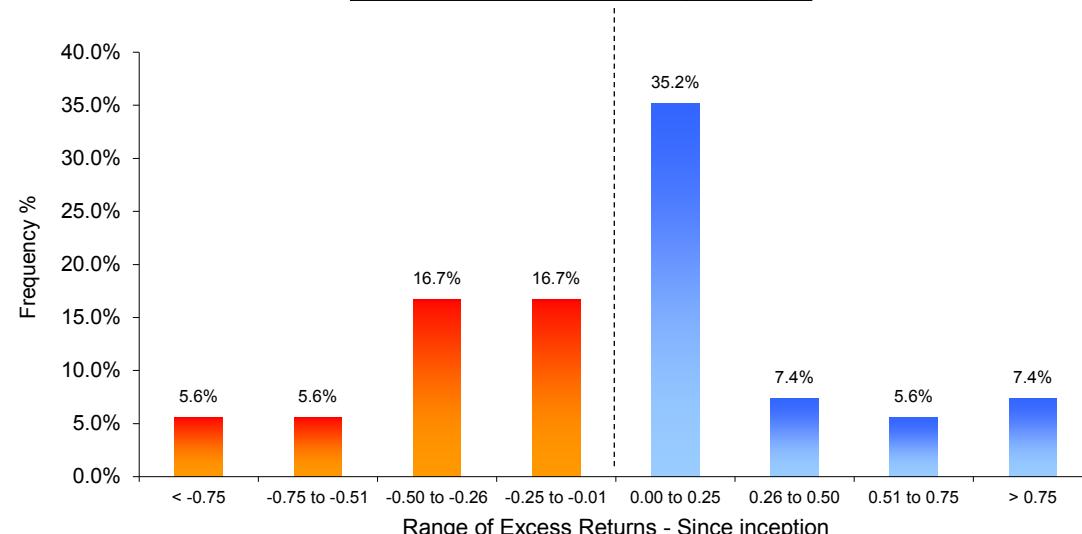
All returns for periods in excess of 1 year are annualised. The portfolio return is net.

160

Ex-Post Active Risk Analysis (%)



Excess Return Consistency Analysis



Ex-Post Active Risk measures the volatility of the actual excess returns achieved by the Portfolio/Fund.

Excess Return Consistency Analysis measures the frequency of the Portfolio/Fund's outperformance (Blue) and underperformance (Red) versus its benchmark, calculated using monthly (or quarterly if indicated) returns since inception.

Attribution to Total Fund Excess Return Analysis
Leicestershire CC Pension Fund
for Quarter Ended 30th September 2020

Market Value: £4.6bn



The **Returns Summary** details the Portfolio, Benchmark and Excess Returns. The Excess Returns are plotted. The **Asset Allocation Summary** details the weights held by the portfolio and benchmark in each asset class/manager. The green plots are the over/underweight exposures of the Fund (v Fund benchmark) at the beginning and end of the period. The **Attribution to Excess Return**, identifies how each asset class/manager has contributed to the overall excess return of the Total Fund. It is broken down into **Asset Allocation** (how successful the decision to over/underweight each asset class was) and then into **Stock Selection** (how well each manager's decisions have performed). The **Asset Allocation** plus the **Stock Selection** excess returns are all additive and equal the **Total Excess Return** of the Fund.

Attribution to Total Fund Excess Return Analysis
Leicestershire CC Pension Fund
for Financial Year to Date Ended 30th September 2020



The Returns Summary details the Portfolio, Benchmark and Excess Returns. The Excess Returns are plotted. The Asset Allocation Summary details the weights held by the portfolio and benchmark in each asset class/manager. The green plots are the over/underweight exposures of the Fund (v Fund benchmark) at the beginning and end of the period. The Attribution to Excess Return, identifies how each asset class/manager has contributed to the overall excess return of the Total Fund. It is broken down into Asset Allocation (how successful the decision to over/underweight each asset class was) and then into Stock Selection (how well each manager's decisions have performed). The Asset Allocation plus the Stock Selection excess returns are all additive and equal the Total Excess Return of the Fund.

**Manager Summary-Total Fund
Leicestershire CC Pension Fund
for Period Ended 30th September 2020**

Market Value: £4.6bn

	Benchmark	Incep Date	Market Value (£m)	Weight %	QTR			Year To Date			1 Year			3 Year			Since Inception			
					PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	
Total Equity Fund	Client Weighted Index	Mar-16	2,072.0	44.9	3.1	3.9	-0.8	20.2	22.1	-1.9	-2.2	3.7	-5.9	3.9	6.2	-2.3	10.1	10.7	-0.6	
Total Equity Fund ex Hedge	Client Weighted Index	Mar-16	2,021.8	43.8	2.0	3.1	-1.1	20.2	21.8	-1.7	-1.3	2.8	-4.1	4.1	6.3	-2.1	10.2	11.5	-1.3	
L&G Total Passive Equity Fund	Client Weighted Index	Mar-16	1,446.6	31.3	1.1	1.0	0.1	18.3	18.2	0.1	-3.5	-4.0	0.5	4.0	3.9	0.1	9.7	9.6	0.1	
L&G UK Equity Fund	FTSE All Share Index	Dec-13	313.0	6.8	-2.5	-2.9	0.4	7.6	7.0	0.6	-15.4	-16.6	1.1	-2.8	-3.2	0.4	2.4	2.3	0.1	
L&G North American Equity Fund	Client Specific Index	Dec-13	569.8	12.3	2.7	2.6	0.1	23.3	23.2	0.1	1.6	0.9	0.7	9.4	9.1	0.3	13.2	13.1	0.0	
L&G Japanese Equity Fund	FTSE All World Japan Index	Dec-13	121.3	2.6	2.3	2.4	-0.1	14.9	15.0	-0.1	2.5	2.6	-0.1	5.4	5.4	-0.1	9.4	9.5	-0.1	
L&G European Equity Fund	Client Specific Index	Dec-13	237.5	5.1	0.2	0.2	0.0	18.9	19.0	-0.2	-4.9	-4.9	0.0	0.2	0.5	-0.3	6.2	6.0	0.3	
L&G Pacific Ex Japan Equity Fund	FTSE Developed Asia Pacific Ex. Japan Index	Mar-13	118.6	2.6	0.8	0.8	0.0	22.6	22.5	0.0	-3.0	-3.0	0.0	2.2	2.3	-0.1	6.7	6.9	-0.2	
L&G Emerging Markets Equity Fund	MSCI Emerging Markets Index	Dec-13	86.3	1.9	4.4	4.8	-0.5	23.9	24.3	-0.5	5.4	5.7	-0.3	4.6	4.1	0.5	8.0	7.9	0.1	
LGPS Global Active Equity Fund	FTSE All World Index	Feb-19	387.5	8.4	4.2	3.4	0.8	26.1	23.8	2.3	4.7	5.7	-0.9	7.3	10.5	-3.2				
LGPS Central Emerging Market Active fund	FTSE All World Emerging Markets Index	Jul-19	187.7	4.1	4.3	4.5	-0.2	23.3	24.2	-0.9	4.8	4.6	0.1	0.7	1.1	-0.4				
LGPS Central Multi Factor Fund	FTSE AW Climate Balanced																			
Kames Currency Hedge Fund	LIBOR 1 Month	Mar-16	50.2	1.1	92.7	0.0	92.7	24.1	0.1	24.0	-173.0	0.5	-173.4	-191.5	0.6	-192.1	-182.5	0.5	-183.0	
Total Private Equity Fund	FTSE All World Index	Mar-16	282.6	6.1	10.8	3.4	7.4	9.3	23.8	-14.6	11.2	5.7	5.6	15.1	8.9	6.2	15.1	13.4	1.7	
Private Equity Fund (Adams, LGPSC, Catapult)	FTSE All World Index	Jan-20	258.1	5.6	12.3	3.4	8.9	8.1	23.8	-15.7				7.8	4.1		28.5	7.5	21.0	
Aberdeen Standard Private Equity Fund	Absolute Return +7.5%	Sep-19	24.5	0.5	-3.9	1.8	-5.7	20.1	3.7	16.5	28.5	7.5	21.0							
Total Real Income Fund	Client Weighted Index	Mar-16	1,013.8	22.0	-1.1	0.2	-1.3	-1.1	1.8	-2.8	-2.8	0.4	-3.3	4.1	4.6	-0.5	7.2	5.8	1.3	
Total Inflation-Linked Fund	Client Weighted Index	Dec-19	247.7	5.4	-2.2	-2.2	0.0	7.8	7.9	-0.1							10.4	9.7	0.7	
Kames Capital Index-Linked Fund	FTSE All Stocks Index Linked Index	Dec-13	247.7	5.4	-2.2	-2.2	0.0	7.8	7.9	-0.1	1.0	0.4	0.6	6.6	6.4	0.2	11.3	10.8	0.4	
Total Infrastructure Fund	LIBOR 1 Month + 4%	Dec-19	387.8	8.4	-1.6	1.0	-2.6	-6.4	2.0	-8.4							-4.8	3.2	-8.0	
JPMorgan Infrastructure Fund	LIBOR 1 Month + 4%	Jun-16	89.2	1.9	-1.8	1.0	-2.8	2.1	2.0	0.0	5.9	4.4	1.5	2.6	4.5	-1.9	5.0	4.5	0.5	
IFM Global Infrastructure Fund	LIBOR 1 Month + 4%	Dec-13	104.9	2.3	-0.9	1.0	-1.9	1.2	2.0	-0.9	-1.1	4.4	-5.5	11.7	4.5	7.2	13.5	6.3	7.2	
KKR Global Infrastructure Fund	LIBOR 1 Month + 4%	Mar-16	37.2	0.8	-1.8	1.0	-2.8	-37.5	2.0	-39.6	-19.9	4.4	-24.3	-0.9	4.5	-5.5	7.7	4.5	3.2	
Stafford Timberland Fund	LIBOR 1 Month + 4%	Mar-16	141.3	3.1	-1.0	1.0	-2.0	-0.6	2.0	-2.6	-3.2	4.4	-7.5	1.2	4.5	-3.4	3.2	4.5	-1.3	
Infracapital Infrastructure Fund	Absolute Return +7.5%	Nov-17	15.1	0.3	-12.7	1.8	-14.5	-10.3	3.7	-13.9	-21.5	7.5	-29.0				-1.0	7.5	-8.5	
Total Property Fund	IPD UK Monthly Property Index (GBP)	Mar-16	378.4	8.2	0.3	0.5	-0.2	-0.7	-1.7	1.0	-2.5	-2.4	0.0	3.4	3.2	0.2	5.3	4.2	1.2	
Colliers Pooled Property	IPD UK Monthly Property Index (GBP)	Mar-16	29.3	0.6	0.0	0.5	-0.5	0.0	-1.7	1.7	-2.9	-2.4	-0.4	3.9	3.2	0.8	3.3	4.2	-0.8	
Colliers Direct Property Fund	IPD UK Monthly Property Index (GBP)	Mar-16	96.8	2.1	0.0	0.5	-0.5	0.0	-1.7	1.7	-2.9	-2.4	-0.5	2.4	3.2	-0.8	4.4	4.2	0.3	
Aviva Property Fund	IPD UK Monthly Property Index (GBP)	Dec-13	185.1	4.0	0.5	0.5	0.0	-0.7	-1.7	1.0	-2.2	-2.4	0.2	3.8	3.2	0.6	9.0	2.8	6.2	
Kames Capital Property Fund	IPD UK Monthly Property Index (GBP)	Mar-16	22.5	0.5	0.2	0.5	-0.3	-3.1	-1.7	-1.5	-5.7	-2.4	-3.2	2.0	3.2	-1.2	5.0	5.6	-0.6	
Kames Capital II Property Fund	IPD UK Monthly Property Index (GBP)	Nov-16	44.6	1.0	0.5	0.5	0.0	-1.5	-1.7	0.2	-1.6	-2.4	0.9	3.2	3.2	0.0	4.6	4.8	-0.2	
Total Alternatives Fund	Client Weighted Index	Mar-16	1,115.9	24.2	-0.2	0.7	-0.8	3.5	2.5	1.0	-1.7	3.6	-5.3	2.4	4.5	-2.1	4.2	4.8	-0.5	
Total Targeted Return Fund	LIBOR 1 Month + 4%	Apr-16	482.7	10.5	-0.2	1.0	-1.2	3.5	2.0	1.5	-0.3	4.4	-4.6	2.5	4.5	-2.1	3.1	4.5	-1.4	
Aspect Capital Partners Fund	LIBOR 1 Month + 4%	Dec-13	132.1	2.9	-5.5	1.0	-6.5	-9.9	2.0	-12.0	-11.5	4.4	-15.9	0.5	4.5	-4.1	3.7	4.5	-0.7	
Pictet Fund	LIBOR 1 Month + 4%	Sep-15	166.8	3.6	3.0	1.0	2.0	9.9	2.0	7.8	-0.3	4.4	-4.7	1.2	4.5	-3.4	3.6	4.5	-0.9	
Ruffer Fund	LIBOR 1 Month + 4%	Dec-13	183.6	4.0	1.1	1.0	0.1	9.4	2.0	7.4	9.8	4.4	5.4	5.4	4.5	0.9	6.0	4.5	1.5	
EnTrustPermal Fund	LIBOR 1 Month + 4%	Apr-07	0.2	0.0	0.0	1.0	-1.0	0.0	2.0	-2.0	-2.0	4.7	4.4	0.3	-2.2	4.5	-6.8	0.8	3.2	-2.3
Total Emerging Market Debt Fund	LCC - Ashmore EMM Debt	Dec-19	107.5	2.3	-0.8	-3.1	2.3	14.3	6.2	8.0	-8.1	-4.7	-3.3	0.6	3.4	-2.8	7.1	4.6	2.5	
Ashmore Emerging Markets Debt Fund	LCC - Ashmore EMM Debt	Jan-14	107.5	2.3	-0.8	-3.1	2.3	14.3	6.2	8.0	-8.1	-4.7	-3.3							
Total Investment Grade Credit	LIBOR 1 Month + 4%	Dec-19	106.6	2.3	1.7	1.0	0.7	6.9	2.0	4.9							6.9	2.0	4.9	
Total Liquid Multi Asset Credit	LIBOR 1 Month + 4%	Dec-19	28.6	0.6	8.1	1.0	0.1	0.7	2.0	-1.4							0.7	3.2	-2.5	
JPMorgan Global Credit Fund	LIBOR 1 Month + 4%	Apr-15	28.6	0.6	8.1	1.0	0.1	0.7	2.0	-1.4	0.7	4.4	-3.7	2.0	4.5	-2.5	2.7	4.5	-1.8	
Total Global Credit Private Debt	Client Weighted Index	Dec-19	390.5	8.5	-1.0	1.1	-2.1	0.0	2.2	-2.2							-2.6	3.4	-6.0	
Christofferson Robb & Company Fund	Absolute Return +7.5%	Dec-17	46.9	1.0	-1.6	1.8	-3.5	0.0	3.7	-3.6	2.7	7.5	-4.8				12.2	7.5	4.6	
M&G DOF Fund	LIBOR 1 Month + 4%	Mar-16	63.3	1.4	-6.4	1.0	-7.4	-12.3	2.0	-14.3	-16.7	4.4	-21.1	-3.6	4.5	-8.2	3.3	4.5	-1.2	
Partners Group Private Debt Fund	LIBOR 1 Month + 4%	Mar-16	280.4	6.1	0.5	1.0	-0.5	3.6	2.0	1.6	0.4	4.4	-4.0	2.2	4.5	-2.3	3.5	4.5	-0.9	
Cash Fund	LIBOR 1 Month	Mar-16	133.0	2.9	0.0	0.0	0.0	0.2	0.1	0.1	2.7	0.5	2.3	1.4	0.6	0.9	1.1	0.5	0.6	
Leicestershire CC Pension Fund ex Hedge (Gross)			Mar-16	4,567.1	98.9	1.2	1.7	-0.5	9.5	11.0	-1.5	-1.0	3.0	-4.0	3.9	5.7	-1.8	8.1	8.5	-0.4
Leicestershire County Council Pension Fund (Gross)	Client Weighted Index	Mar-16	4,617.3	100.0	1.8	2.1	-0.3	9.7	11.3	-1.6	-1.1	3.2	-4.3	4.2	5.4	-1.2	8.3	8.2	0.1	
Leicestershire County Council Pension Fund (Net)	Client Weighted Index	Mar-16	4,617.3	100.0	1.8	2.1	-0.3	9.7	11.3	-1.6	-1.1	3.2	-4.3	3.9	5.4	-1.5	8.0	8.2	-0.3	

CLIENT SPECIFIC: 7.00% FTSE All Share 2.50% Ashmore Specific Index 6.50% FTSE AW North America 70% GBP Hedged 10.00% IPD UK Monthly Property Index 6.50% FTSE RAFI AW 3000 North America 70% GBP Hedged 7.50% FTSE All Stocks Index Linked 2.50% FTSE Developed Europe Ex UK 70% GBP Hedged 6.00% MSCI EMM 50% GBP Hedged 2.50% FTSE RAFI 3000 Developed Europe Ex UK 70% GBP Hedged 8.00% FTSE All World 70% GBP Hedged 2.50% FTSE AW Japan 70% GBP Hedged 4.00% FTSE All World 2.50% FTSE Developed Asia Pacific Ex Japan 50% GBP Hedged 32.00% Libor 1 Month +4%																		

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**Total Fund Reconciliation
Leicestershire CC Pension Fund
for Quarter Ended 30th September 2020**

Market Value: £4.6bn

	30th June 2020			Total Gain/Loss (£'000s)	30th Sept 2020	
	Market Val (£'000s)	Exposure (%)	Net Exp 30th Sept 2020		Market Val (£'000s)	Exposure (%)
Total Equity	2,009,027	44.5	2.4	62,965	2,071,992	44.9
Total Equity Ex Hedge	1,982,969	43.9	1.8	38,809	2,021,778	43.8
Total Passive Equity -L&G	1,431,147	31.7	15.8	15,457	1,446,604	31.3
UK Equities	309,627	6.9	3.3	-7,702	313,028	6.8
North American Equities	554,417	12.3	6.0	14,960	569,781	12.3
Japanese Equities	109,335	2.4	1.4	2,879	121,343	2.6
European Equities	256,429	5.7	2.6	616	237,534	5.1
Pacific ex Japan Equities	116,890	2.6	1.3	938	118,648	2.6
Emerging Markets Equities	84,448	1.9	0.9	3,766	86,270	1.9
LGPSC Global	371,926	8.2	0.7	15,544	387,470	8.4
LGPSC Central Emerging Markets Eq Active	179,896	4.0	0.1	7,808	187,704	4.1
LGPSC Central Multi Factor Fund	0	0.0	0.0	0	0	0.0
Kames Other (Currency Hedge)	26,058	0.6	0.6	24,156	50,214	1.1
Total Private Equity	250,154	5.5	1.4	26,962	282,621	6.1
Total Private Equity ex Aberdeen Standard	226,401	5.0		27,885	258,128	5.6
Aberdeen Standard	23,753	0.5		-923	24,493	0.5
Total Real Income	1,026,554	22.7	-2.8	-20,271	1,013,813	22.0
Total Inflation-Linked	253,146	5.6	0.4	-14,664	247,650	5.4
Kames Capital IL	253,146	5.6		-14,664	247,650	5.4
Total Infrastructure	395,441	8.8	-1.4	-6,747	387,764	8.4
JPMorgan Infrastructure	92,360	2.0		-1,570	89,249	1.9
IFM Global Infrastructure	105,849	2.3		-992	104,887	2.3
KKR Infrastructure	36,230	0.8		-701	37,225	0.8
Stafford Timberland	143,801	3.2		-1,371	141,314	3.1
Infracapital	17,202	0.4		-2,112	15,089	0.3
Total Property	377,967	8.4	-1.8	1,140	378,399	8.2
Colliers Indirect Pooled Property	29,310	0.6		0	29,310	0.6
Colliers Direct Property	96,845	2.1		0	96,845	2.1
La Salle Aviva	184,196	4.1		869	185,065	4.0
Kames Capital I	22,802	0.5		39	22,538	0.5
Kames Capital II	44,813	1.0		232	44,641	1.0
Total Alternatives	1,126,614	24.9	-3.3	-2,642	1,115,877	24.2
Total Targeted Return	483,277	10.7	3.0	-985	482,664	10.5
Aspect Capital Partners	139,458	3.1		-7,708	132,122	2.9
Pictet	161,966	3.6		4,793	166,759	3.6
Ruffer	181,679	4.0		1,930	183,609	4.0
Entrust Permal	174	0.0		0	174	0.0
Total Emerging Market Debt	109,046	2.4	-0.2	-1,611	107,527	2.3
Ashmore EMM Debt	109,046	2.4		-1,611	107,527	2.3
Total Investment Grade Credit	104,793	2.3	-0.7	1,760	106,553	2.3
Liquid Multi Asset Credit	26,450	0.6	-3.4	2,142	28,623	0.6
JPMorgan Global Credit	26,450	0.6		2,142	28,623	0.6
Total Global Credit Private Debt	403,048	8.9	-2.0	-3,948	390,509	8.5
Christofferson	47,673	1.1		-786	46,888	1.0
M&G	70,181	1.6		-4,522	63,255	1.4
Partners Group Private Debt	285,194	6.3		1,360	280,366	6.1
Millennium Currency (gain/loss not mk value)	0	0.0		0	0	0.0
Cash	103,994	2.3	2.4	0	133,014	2.9
Leicestershire County Council Pension Fund ex Hedge	4,490,286	99.4	0.0	42,858	4,567,103	98.9
Leicestershire County Council Pension Fund	4,516,344	100.0	0.0	67,015	4,617,317	100.0