PIRC LOCAL AUTHORITY PENSION PERFORMANCE ANALYTICS



Harrow Pension Fund

Quarterly Performance Summary

Periods to end June 2018



Performance Overview

Fund Performance

			3 Years	5 Years
	Quarter	1 Year	(% p.a.)	(% p.a.)
Fund	0.8	5.0	9.5	9.8
Benchmark	1.8	7.6	10.4	10.2
Relative	-0.9	-2.4	-0.8	-0.3

Fund has underperformed its strategic benchmark over the latest quarter and the longer term.

The key reason for this has been the relatively poor results from the Diversified Growth magers - particularly Standard Life.

Manager Performance

		Latest Quarter			1 Year			3 Years (% p.a.)		
	Portfolio	BM	Relative	Portfolio	BM	Relative	Portfolio	BM	Relative	
Longview	8.8	8.1	0.6	10.2	10.0	0.2	9.1	8.4	0.6	
SSGA	6.8	6.8	0.0	9.3	9.3	0.0	15.2	15.2	-0.1	
GMO	-3.6	-2.1	-1.6	2.0	6.4	-4.1	11.3	12.0	-0.7	
Oldfield	5.4	8.1	-2.5	7.2	9.6	-2.3	14.4	15.2	-0.7	
Pantheon*	12.1	6.8	4.9	13.4	8.9	4.2	18.2	15.1	2.7	
Aviva	1.8	1.8	0.0	8.2	9.6	-1.2	6.6	7.9	-1.2	
BlackRock	-0.9	-0.7	-0.2	0.9	0.9	0.0	7.4	7.1	0.3	
Insight	0.1	1.2	-1.1	2.2	4.5	-2.2	2.6	4.5	-1.9	
SLIM	-2.3	1.2	-3.5	-2.0	4.5	-6.2	-1.1	4.5	-5.3	

*The Pantheon performance uses the previous quarter value adjusted for cash flows in the month. As a long term investment the longer term results are the key indicators for this portfolio.



Asset Allocation

Asset Allocation

	Start Qu	Start Quarter			End Quarter		
	GBP'000s	%		GBP'000s	%	% BM	
Equity	430,169	52		452,211	54	50	
Longview	90,034		11	97,940	12	10	
SSGA	196,717		24	210,080	25	24	
GMO	77,182		9	74,409	9	8	
Oldfield	66,236		8	69,782	8	8	
Private Equity	13,844	2		14,116	2	5	
Pantheon	13,844		2	14,116	2	5	
Property	67,656	8		68,371	8	10	
Aviva	67,656		8	68,371	8	10	
Bonds	102,446	12		101,866	12	13	
BlackRock	102,446		12	101,866	12	13	
Diversified Growth	189,579	23		187,210	23	22	
Insight	93,978		11	93,922	11	11	
SLIM	95,601		12	93,288	11	11	
Cash	12,439	1		6,814	1	0	
Total Fund	816,132	100		830,588	100	100	

The Fund asset allocation remained broadly unchanged over the quarter.

Equity allocation increeased due to the relatively strong returns from the area over the period.

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Performance Attribution by Manager

	Longview	SSGA	GMO	Oldfield	Pantheon	Aviva	BlackRock	Insight	SLIM	Cash	Total
End June 2018 (£'000s)	97,940	210,080	74,409	69,782	14,116	68,371	101,866	93,922	93,288	12,204	830,588
Latest Quarter											
Fund	8.8	6.8	-3.6	5.4	12.1	1.8	-0.9	0.1	-2.3		0.8
BM	8.1	6.8	-2.1	8.1	6.8	1.8	-0.7	1.2	1.2		1.8
Relative	0.6	0.0	-1.6	-2.5	4.9	0.0	-0.2	-1.1	-3.4		-0.9
Manager Impact	0.1	0.0	-0.2	-0.2	0.1	0.0	0.0	0.0	-0.4		-0.7
Allocation Impact	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
One Year											
Fund	10.2	9.3	2.0	7.2	13.4	8.2	0.9	2.2	-2.0		5.0
BM	10.0	9.3	6.4	9.6	8.9	9.6	0.9	4.5	4.5		7.6
Relative	0.2	0.0	-4.1	-2.3	4.2	-1.2	0.0	-2.3	-6.3		-2.4
Manager Impact	0.0	0.0	-0.4	-0.2	0.3	-0.2	0.0	-0.3	-0.8		-1.7
Allocation Impact	0.0	-0.1	0.0	-0.1	0.1	0.0	0.0	0.1	0.1	-0.4	-0.3
Three Years											
Fund	9.1	15.2	11.3	14.4	18.2	6.6	7.4	2.6	-1.1		9.5
BM	8.4	15.2	12.0	15.2	15.1	7.9	7.1	4.5	4.5		10.4
Relative	0.6	-0.1	-0.7	-0.7	2.7	-1.2	0.3	-1.9	-5.3		-0.8
Manager Impact	0.1	0.0	0.0	0.0	0.1	-0.1	0.0	-0.2	-0.4		-0.6
Allocation Impact	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.2	-0.1
Five Years											
Fund	13.0	11.6			16.0	9.8	8.0				9.8
BM	10.9	11.6			11.6	10.8	8.0				10.2
Relative	1.9	0.0			3.9	-0.9	0.0				-0.3

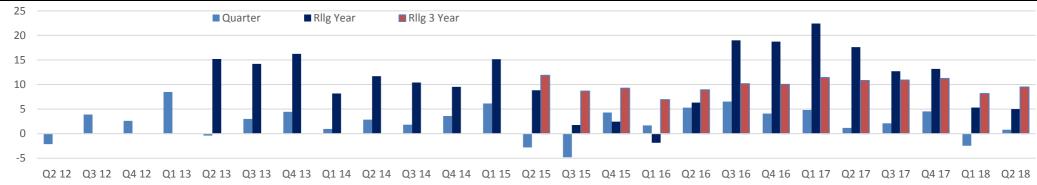
Insight was appointed in January 2015 therefore do not yet have 5 year performance available

GMO and Oldfields were appointed November 2014 and SLIM appointed June 2013 therefore no 5 year results available.



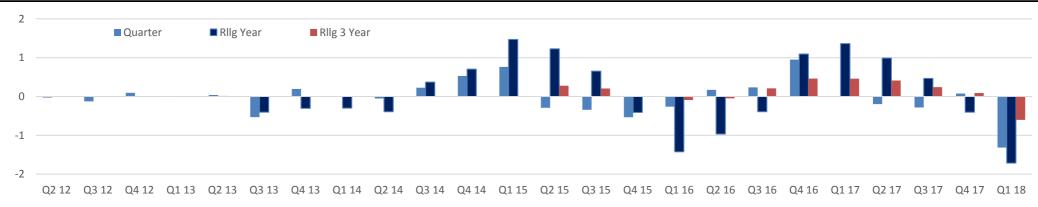
Longer Term Performance

Absolute Returns



The Fund has produced a positive return in almost every quarter of the last five years and most rolling one and three year periods.

Relative Returns



The Fund has performed within a tight range of its Benchmark - within +/- 2% quarterly and longer term.

After a period ahead of Benchmark the Fund is now trailing as the latest quarter feeds in to the longer term.



Benchmark Allocation

The Fund restructured in late 2017 and the Benchmark was altered from the start of 2018 to reflect the changes:

%	To 31/12/2017	From 1/1/2018	
Equity	62	50	
	31	24	FTSE AW (50% Hedged)*
	21	18	MSCI World NDR (50% Hedged)
	10	8	MSCI Emerging Markets
Bonds	13	13	
	10.4	10	BAML Eurosterling > 10 years
	2.6	3	FTSE Index Linked Gilts > 5 years
Property	10	10	IPD All Balanced Funds
Diversified Growth	10	22	3 Month LIBOR +4%
Private Equity	5	5	FTSE All World **

* from Q2 2016, previously MSCI AW 50% Hedged **from Q2 2014, previously LIBID