PIRC

LOCAL AUTHORITY PENSION PERFORMANCE ANALYTICS



Harrow Pension Fund

Quarterly Performance Summary

Periods to end December 2018



Performance Overview

Fund Performance

			3 Years	5 Years
	Quarter	1 Year	(% p.a.)	(% p.a.)
Fund	-4.7	-3.6	9.0	7.8
Benchmark	-4.6	-0.8	9.8	8.2
Relative	-0.1	-2.9	-0.8	-0.4

Marked falls in global equity markets meant that the Fund delivered a negative return in the latest quarter and over the latest year.

The Fund suffered further from manager underperformance, particularly from the Diversified Growth portfolios (SLIM and Insight) who are now having a large drag on both the short and medium term results.

Manager Performance

		Latest Quarter			1 Year			3 Years (% p.a.)		
	Portfolio	BM	Relative	Portfolio	BM	Relative	Portfolio	BM	Relative	
Longview	-8.0	-11.4	3.8	4.3	-3.0	7.6	10.3	6.9	3.2	
SSGA	-10.6	-10.7	0.1	-3.9	-3.6	-0.3	12.2	12.4	-0.1	
GMO	-3.7	-5.3	1.7	-15.0	-9.3	-6.3	9.8	14.7	-4.2	
Oldfield	-7.2	-11.4	4.7	-4.0	-3.0	-1.0	14.6	11.8	2.5	
Pantheon*	5.8	-10.7	18.5	5.0	-3.6	9.0	15.1	12.4	2.5	
Aviva**	1.4	1.5	-0.1	6.0	7.2	-1.1	5.9	7.0	-1.1	
BlackRock	0.2	0.4	-0.2	-2.8	-2.3	-0.5	6.7	6.5	0.2	
Insight	-4.1	1.2	-5.3	-5.0	4.7	-9.2	3.2	4.5	-1.3	
SLIM	-1.9	1.4	-3.1	-5.4	5.6	-10.6	-1.5	5.4	-6.5	

^{*}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.

^{**} Final figures not yet received





Asset Allocation

Asset Allocation

	Start Qu	Start Quarter			End Quarter		
	GBP'000s	%		GBP'000s	%		% BM
Equity	471,108	56		431,514	54		50
Longview	106,376	13		97,896	12		10
Passive*	221,144	26		197,822	25		24
GMO	71,606	8		68,970	9		8
Oldfield	71,982	8		66,826	8		8
	13,419	2		13,260	2		5
Pantheon	13,419	2		13,260	2		5
Property	68,793	8		68,793	9		10
Aviva	68,793	8		69,000	9		10
Bonds	101,120	12		101,002	13		13
BlackRock	101,120	12		101,002	13		13
Diversified Growth	189,292	22		183,206	23		22
Insight	95,738	11		91,669	11		11
SLIM	93,554	11		91,537	11		11
Cash	3,212	0		6,950	1		0
Total Fund	846,943	100		799,750	100		100

The equity allocation fell over the quarter as the result of the negative market returns .

^{*}The passive equity assets were moved from SSGA to Blackrock on September 7th.

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Performance Attribution by Manager

	Longview	Passive	GMO	Oldfield	Pantheon	Aviva	BlackRock	Insight	SLIM	Cash	Total
End Dec 2018 (£'000s)	106,375	221,144	71,616	71,982	13,419	68,793	101,120	95,738	93,554	7,722	843,876
Latest Quarter											
Fund	-8.0	-10.6	-3.7	-7.2	5.8	1.4	0.2	-4.1	-1.9		-4.7
BM	-11.4	-10.7	-5.3	-11.4	-10.7	1.5	0.4	1.2	1.4		-4.6
Relative	3.8	0.1	1.7	4.7	18.5	-0.1	-0.2	-5.3	-3.3		-0.1
Manager Impact	0.5	0.0	0.1	0.4	0.3	0.0	0.0	-0.6	-0.4		0.3
Allocation Impact	-0.1	-0.1	0.0	-0.1	0.2	-0.1	-0.1	0.0	0.0	0.0	-0.3
One Year											
Fund	4.3	-3.9	-15.0	-4.0	5.0	6.0	-2.8	-5.0	-5.4		-3.6
BM	-3.0	-3.6	-9.3	-3.0	-3.6	7.2	-2.3	4.7	5.7		-0.8
Relative	7.6	-0.3	-6.3	-1.0	9.0	-1.1	-0.5	-9.2	-10.6		-2.9
Manager Impact	0.9	-0.1	-0.6	-0.1	0.1	-0.1	-0.1	-1.1	-1.3		-2.2
Allocation Impact	-0.1	-0.2	-0.1	-0.1	0.2	-0.2	0.0	0.0	0.0	0.0	-0.5
Three Years (% p.a.)											
Fund	10.3	12.2	9.8	14.6	15.1	5.9	6.7	3.2	-1.5		9.0
BM	6.9	12.4	14.7	11.8	12.4	7.0	6.5	4.5	5.4		9.8
Relative	3.2	-0.1	-4.2	2.5	2.4	-1.1	0.2	-1.3	-6.6		-0.8
Manager Impact	0.4	0.0	-0.4	0.3	0.1	-0.1	0.0	-0.3	-0.6		-0.6
Allocation Impact	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1
Five Years (% p.a.)											
Fund	9.4	7.9			17.4	9.1	7.4				7.8
BM	6.5	8.0			10.4	10.1	7.4				8.2
Relative	2.7	-0.1			6.4	-0.9	0.1				-0.4

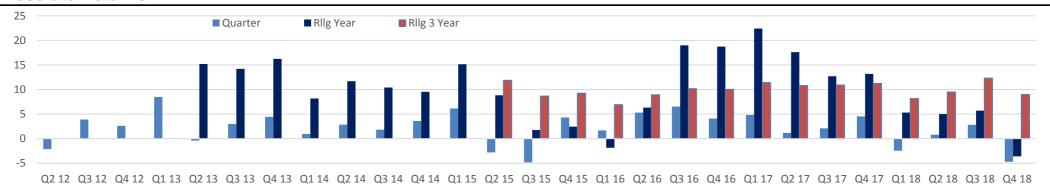
Insight was appointed in January 2015 therefore do not yet have 5 year performance available

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



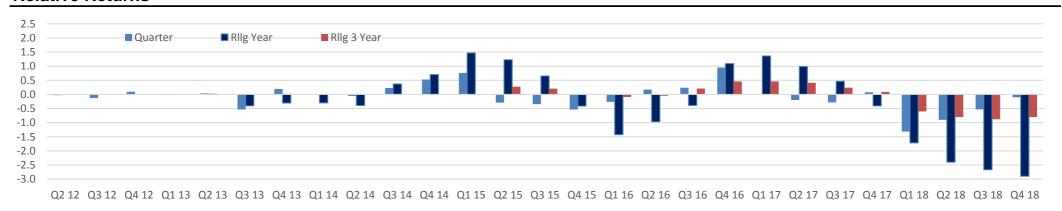
Longer Term Performance

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 outwith that band as the recent underperformance continues to feed 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	MSCI AC World NDR (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 Q4 2018, previously FTSE AW 50% Hedged until Q2 2016, prior to that MSCI AW 50% Hedged

^{**}from Q2 2014, previously LIBID