
PIRC

**LOCAL AUTHORITY
PENSION PERFORMANCE ANALYTICS**



Harrow Pension Fund

Quarterly Performance Summary

Periods to end September 2018



Performance Overview

Fund Performance

	Quarter	1 Year	3 Years (% p.a.)	5 Years (% p.a.)
Fund	2.8	5.7	12.3	9.8
Benchmark	3.4	8.6	13.3	10.1
Relative	-0.5	-2.7	-0.9	-0.3

Manager Performance

	Latest Quarter			1 Year			3 Years (% p.a.)		
	Portfolio	BM	Relative	Portfolio	BM	Relative	Portfolio	BM	Relative
Longview	8.6	6.3	2.2	17.5	14.8	2.3	14.5	13.6	0.8
SSGA	5.3	5.7	-0.4	12.9	13.4	-0.4	19.5	19.8	-0.2
GMO	-3.8	0.1	-3.9	-5.1	2.0	-7.0	12.5	18.1	-4.7
Oldfield	3.2	6.3	-2.9	8.2	14.8	-5.8	19.9	19.6	0.3
Pantheon*	1.1	5.7	-4.3	12.9	12.9	0.0	17.0	19.6	-2.2
Aviva	1.3	1.7	-0.4	7.4	8.9	-1.4	6.3	7.5	-1.1
BlackRock	-0.9	-0.9	0.0	0.1	0.2	-0.1	6.6	6.2	0.3
Insight	2.1	1.2	0.9	2.2	4.6	-2.3	4.7	4.5	0.2
SLIM	0.4	1.2	-0.8	-1.6	4.6	-5.9	-0.3	4.5	-4.6

*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 Quarter		End Quarter		% BM
	GBP'000s	%	GBP'000s	%	
Equity	452,211	54	471,108	56	50
Longview	97,940	12	106,376	13	10
Passive*	210,080	25	221,144	26	24
GMO	74,409	9	71,606	8	8
Oldfield	69,782	8	71,982	8	8
Private Equity	14,116	2	13,419	2	5
Pantheon	14,116	2	13,419	2	5
Property	68,371	8	68,793	8	10
Aviva	68,371	8	68,793	8	10
Bonds	101,866	12	101,120	12	13
BlackRock	101,866	12	101,120	12	13
Diversified Growth	187,210	23	189,292	22	22
Insight	93,922	11	95,738	11	11
SLIM	93,288	11	93,554	11	11
Cash	6,814	1	3,212	0	0
Total Fund	830,588	100	846,943	100	100

The Fund asset allocation remained broadly unchanged over the quarter.

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



Performance Attribution by Manager

	Longview	Passive	GMO	Oldfield	Pantheon	Aviva	BlackRock	Insight	SLIM	Cash	Total
EndSep 2018 (£'000s)	106,376	221,144	71,606	71,982	13,419	68,793	101,120	95,738	93,554	3,212	846,943
Latest Quarter											
Fund	8.6	5.3	-3.8	3.2	1.1	1.3	-0.9	2.1	0.4		2.8
BM	6.3	5.7	0.1	6.3	5.7	1.7	-0.9	1.2	1.2		3.4
Relative	2.2	-0.4	-3.9	-2.9	-4.3	-0.4	0.0	0.9	-0.8		-0.5
<i>Manager Impact</i>	<i>0.3</i>	<i>-0.1</i>	<i>-0.3</i>	<i>-0.2</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>-0.1</i>		<i>-0.5</i>
<i>Allocation Impact</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
One Year											
Fund	17.5	12.9	-5.1	8.2	12.9	7.4	0.1	2.2	-1.6		5.7
BM	14.8	13.4	2.0	14.8	12.9	8.9	0.2	4.6	4.6		8.6
Relative	2.3	-0.4	-7.0	-5.8	0.0	-1.4	-0.1	-2.3	-5.9		-2.7
<i>Manager Impact</i>	<i>0.3</i>	<i>-0.1</i>	<i>-0.6</i>	<i>-0.5</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>-0.4</i>	<i>-0.8</i>		<i>-2.3</i>
<i>Allocation Impact</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>-0.2</i>	<i>-0.2</i>
Three Years											
Fund	14.5	19.5	12.5	19.9	17.0	6.3	6.6	4.7	-0.3		12.3
BM	13.6	19.8	18.1	19.6	19.6	7.5	6.2	4.5	4.5		13.3
Relative	0.8	-0.2	-4.7	0.3	-2.2	-1.1	0.3	0.2	-4.6		-0.9
<i>Manager Impact</i>	<i>0.1</i>	<i>0.0</i>	<i>-0.5</i>	<i>0.1</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.0</i>	<i>-0.1</i>	<i>-0.4</i>		<i>-0.7</i>
<i>Allocation Impact</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>	<i>0.0</i>	<i>-0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>-0.3</i>	<i>0.0</i>
Five Years											
Fund	13.1	11.5			16.7	9.7	7.3				9.8
BM	10.9	11.6			12.8	10.7	7.5				10.1
Relative	2.0	-0.1			3.4	-0.9	-0.2				-0.3

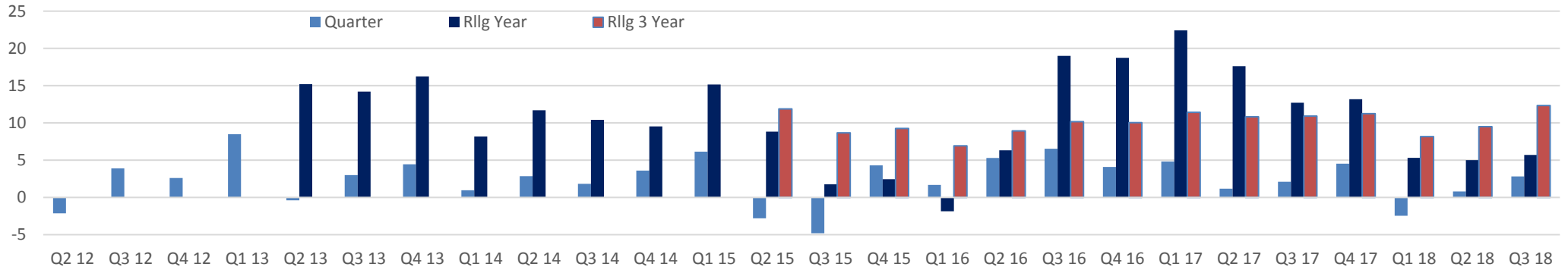
Insight was appointed in January 2015 therefore do not yet have 5 year performance available

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



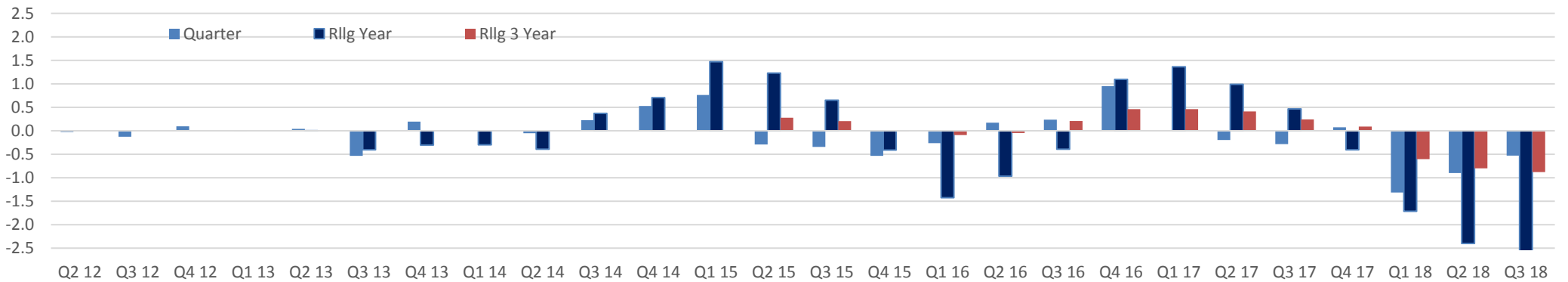
Longer Term Performance

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 outwith that band as the recent underperformance 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