

Pensions Sub-Committee

Agenda

Wednesday 15 March 2017

7.00 pm

Committee Room 3 - Hammersmith Town Hall

MEMBERSHIP

Administration:	Opposition:
Councillor Iain Cassidy Councillor PJ Murphy Councillor Guy Vincent	Councillor Michael Adam Councillor Nicholas Botterill

CONTACT OFFICER: Amrita Gill
Committee Co-ordinator
Governance and Scrutiny
☎: 0208 753 2094
E-mail: amrita.gill@lbhf.gov.uk

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Date Issued: 07 March 2017

Pensions Sub-Committee Agenda

15 March 2017

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3.	DECLARATIONS OF INTEREST If a Committee member has any prejudicial or personal interest in a particular item they should declare the existence and nature of the interest at the commencement of the consideration of that item or as soon as it becomes apparent. At meetings where members of the public are allowed to be in attendance and speak, any Councillor with a prejudicial interest may also make representations, give evidence or answer questions about the matter. The Councillor must then withdraw immediately from the meeting before the matter is discussed and any vote taken unless a dispensation has been obtained from the Standards Committee. Where Members of the public are not allowed to be in attendance, then the Councillor with a prejudicial interest should withdraw from the meeting whilst the matter is under consideration unless the disability has been removed by the Standards Committee.	
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11.	DATE OF THE NEXT MEETING	

The next meeting is scheduled for 20 June 2017.

12. ANY OTHER BUSINESS

London Borough of Hammersmith & Fulham

Pensions Sub-Committee Minutes



Wednesday 30 November 2016

PRESENT

Committee members: Councillors Michael Adam, Nicholas Botterill, Iain Cassidy (Chair), PJ Murphy and Guy Vincent

External Guests: Melanie Stephenson from Barnett Waddingham and Kevin Humpherson from Deloitte

Officers: Peter Carpenter, Peter Metcalfe, and David Abbott

1. MINUTES OF THE PREVIOUS MEETING

The minutes of the meeting held on 21 September 2016 were agreed as a correct record and were signed by the Chair.

2. APOLOGIES FOR ABSENCE

There were no apologies for absence.

3. DECLARATIONS OF INTEREST

There were no declarations of interest.

4. PENSION ACTUARIAL VALUATION AND FUNDING STRATEGY STATEMENT

Peter Carpenter presented the report and noted that Melanie Stephenson of Barnett Waddingham had attended to update the Sub-Committee on progress with the 2016 actuarial valuation. A draft funding strategy statement reflecting the changes to the CIPFA guidance was presented for consideration.

Melanie Stephenson presented an updated version of the slides at appendix 1 of the report. She noted the following points:

- The overall picture was positive – the funding level for the whole fund had increased to 87 percent.
- Section 13 of the Pensions Act provided for an independent review by the Government Actuary Department (GAD) – they would be looking at compliance, consistency, solvency, and long term cost efficiency.
- Section 13 was introduced to improve governance and give people a better understanding of how funds were performing in relation to each other.

- The LBHF fund was around the middle of the pack of funds that had reported so far.

Councillor PJ Murphy asked what the risks of non-compliance were regarding Section 13. Melanie Stephenson responded that the main risk was reputational as GAD's reports would be made public. If a fund was considered to be failing in their duties they could recommend higher payments but that would only happen in extreme cases.

Councillor Michael Adam asked how it could be that in 2013 the fund was 83 percent funded and in the top 25 percent of funds but in 2016, at 92 percent funded with the new S13 valuation, it looked to be in the lower middle percentile. Melanie Stephenson responded that not all funds had reported in yet and it was likely that the better performing funds reported first. A large proportion of the funds that had reported were in the 90 to 100 percent funded range so the LBHF fund's position was relative. Councillor Adam commented that the data presented didn't tally with the message from Government that the LGPS was in trouble.

Councillor Nicholas Botterill asked what the changes were to the discount rate. Melanie Stephenson said the rate had come down from 6 percent in 2013 to 5.4 in 2016 as the expectation of future investment returns had come down. While the funding level had improved the future service rate had gone up – i.e. the cost of benefits would be more expensive.

Councillor PJ Murphy commented that the low expected returns seemed out of sync with historical data. Melanie Stephenson said her firm used yields from investment markets and projected forward, the expectations were that they would be lower than they have been in recent years.

Councillor Michael Adam asked for clarification on why, if the fund was 92 percent funded and investment returns had been consistently good recently, hadn't liabilities reduced more. Liabilities seemed to have grown with asset growth. He also noted that some of the assumptions seemed highly unlikely – e.g. assuming a 4 percent increase in salaries. Melanie Stephenson responded that while markets had been performing well recently the figures presented represented a prudent long-term view with continuing expectations of low inflation and low investment yields.

Councillor Michael Adam said he would be interested to see a fan chart that gave some perspective on the fund's risk profile. Melanie Stephenson said she could provide that. Peter Carpenter said it would also be helpful for the Sub-Committee to get an explanation in plain English of how the calculation worked. Councillor Guy Vincent agreed that it would be useful to see the financial model.

Councillor Michael Adam noted that he had been looking at a product that could reduce the volatility of return and asked if that would be taken into account in the assumptions. Melanie Stephenson said it could be considered, after looking at the equity return. Kevin Humpherson asked if there was a way of modelling the expected return for infrastructure as that might increase the

overall expected return. Melanie Stephenson noted that even if the figures changed slightly and the recovery period shortened, the fund should still aim to keep payments in relatively stable.

The Chair asked what the timeline for a final funding strategy report was to Full Council. Hitesh Jolapara responded that the report would be going to Budget Council in February. To meet that timeline, the strategy had to be confirmed by mid-January.

The Sub-Committee noted that the new Funding Strategy Statement had to be completed by 1 April 2017 and that this would be based upon the draft contained within the papers.

The Sub-Committee agreed the following recommendations:

RESOLVED

- The Sub-Committee asked the actuary to produce a range of sensitivities with an adjusted prudence assumption to show the impact on the discount rate.
- The Sub-Committee asked the actuary to look at modelling expected return for infrastructure and also a slight reduction in the Prudence allowance – as in the figures presented infrastructure had been treated the same as property.
- Officers were asked to arrange a meeting once the updated figures had been produced to approve the draft Funding Strategy Statement.
- That officers continue with the drafting of the new Funding Strategy Statement to be produced at the next meeting.

5. PENSION FUND QUARTERLY UPDATE PACK

Peter Carpenter presented the quarterly update pack for the quarter ended 30 September 2016. He noted that the afternoon sessions meeting the fund managers had sufficiently covered the updates in the report. The Committee agreed that it had been a good exercise and noted that there were no concerns with any of the managers.

RESOLVED

That the report was noted.

6. PENSION BOARD MINUTES

Councillor PJ Murphy suggested it would be useful for the Pensions Board to have a session to meet with the fund managers.

RESOLVED

The Sub-Committee recommended that the Pensions Board had a session with the fund managers.

7. LONDON CIV UPDATE

Peter Carpenter presented the report and noted that LGIM portfolio was now fully invested in the All World index after the cash being held for emerging market equities was invested in October 2016. The London CIV had agreed with Majedie for the UK equity fund to be available on the platform. The report recommended that the whole of the current Majedie portfolio was transferred to the CIV on a base plus performance fee basis, saving an estimated £104,000 per annum. The advice from Deloitte was to pay a flat rate fee plus performance.

Councillor Nicholas Botterill asked why Deloitte were recommending a flat fee. Kevin Humpherson responded that the flat rate was slightly lower than the current rate and they expected the fund to outperform.

Councillor PJ Murphy asked if the Council could modify the management fee if the fund manager changed. Kevin Humpherson said he would check and provide that information after the meeting.

Councillor Michael Adam asked what the average fee was, including performance. Kevin Humpherson said it was very close to the fee cap, between 90 and 110 basis points.

RESOLVED

1. That the Sub-Committee agreed to transfer all the assets currently managed by Majedie Asset Management Equity fund to the CIV Majedie Equity Fund when it became available. That the Majedie Focus and Tortoise funds be looked at in terms of balances that could be used to 'rebalance' the overall investment portfolio back to the planned distribution.
2. That the Sub-Committee agreed the fee basis for the Majedie UK Equity fund as base fee only.

8. INVESTMENT REGULATIONS

Peter Carpenter presented the report and noted that the Investment Strategy Statement will have to be in place by the end of March in time for the new financial year in April. He also noted that as part of this, the sub-committee would be required to review its policy on ethical, social and corporate governance issues. He advised that the London CIV should be invited to the next meeting to discuss their governance arrangements and how the interface between Councils, the CIV, and fund managers would work in practice.

RESOLVED

1. That the sub-committee noted that a draft Investment Strategy Statement (ISS) prepared in accordance with the revised investment regulations and guidance will be presented to the 15th March 2017 meeting.
2. That the sub-committee discussed the requirement for greater detail on environmental, social and corporate governance (voting) matters

including greater consultation with interested parties, including the Pension Board, which will have to be reflected in the ISS.

3. That a meeting be set up in January to ascertain Members views in relation to investments and Risk to feed into the new Funding Strategy Statement and Investment Strategy Statement.

9. PENSION FUND MANAGER MONITORING

Peter Carpenter presented the item, noting that the first of the fund manager monitoring sessions took place on 12 October 2016 with five fund managers attending to brief the committee on their performance and outlook for the future. The main issue arising from that session was the negative outlook for equity markets and likely future returns. The second session with the remaining fund managers took place prior to the sub-committee meeting on 30 November 2016. He asked members for their feedback on the sessions.

Councillor Adams noted that he liked the format but felt there was no need to have two sessions per year if performance was good. There should instead be one annual session with managers invited to attend again if they had underperformed.

RESOLVED

That the report was noted.

10. DATE OF THE NEXT MEETING

The next meeting was scheduled for 15 March 2017.

11. EXCLUSION OF THE PUBLIC AND PRESS

RESOLVED

That under Section 100A(4) of the Local Government Act 1972, that the public and press be excluded from the meeting during the consideration of the following items of business, on the grounds that they contain the likely disclosure of exempt information, as defined in paragraph 3 of Schedule 12A of the said Act, and that the public interest in maintaining the exemption currently outweighs the public interest in disclosing the information.

12. LONDON CIV UPDATE - EXEMPT ELEMENTS

The exempt elements of the report were noted.

Meeting started: 7.00 pm

Meeting ended: 8.50 pm

Chair

Contact officer: David Abbott
Scrutiny Manager
Governance and Scrutiny
☎: 020 8753 2063
E-mail: david.abbott@lbhf.gov.uk

London Borough of Hammersmith & Fulham

Pensions Board Minutes



Tuesday 7 February 2017

PRESENT

Committee members: Councillors Ali Hashem and Rory Vaughan

Co-opted members: Eric Kersey, Orin Miller, Neil Newton, and Richard Gregg

Officers: Peter Carpenter, David Coates David Abbott, and Amrita Gill.

External Guests: Graeme Muir (Barnett Waddingham LLP)

13. MINUTES OF THE PREVIOUS MEETING

RESOLVED

That the minutes of the meeting held on 14 September 2016 were agreed as a correct record and were signed by the Chair.

14. APOLOGIES FOR ABSENCE

None.

15. DECLARATIONS OF INTEREST

There were no declarations of interest.

16. MINUTES OF PENSIONS SUB COMMITTEE

Peter Carpenter highlighted that the minutes of the Pensions Sub Committee held on 20 November 2016 were still in draft.

RESOLVED

The minutes of the Pensions Sub-Committee were noted.

17. ACTUARIAL VALUATION

Graeme Muir of Barnett Waddingham gave a presentation on the 2016 valuation and highlighted the following points:

- The core purpose of the valuation was to determine how much employers needed to pay in future to have enough assets to pay benefits.
- Section 13 of the Pensions Act provided for an independent review by the Government Actuary Department – they would be looking at compliance, consistency, solvency, and long term cost efficiency. Section 13 was introduced to improve governance and give people a better understanding of how funds were performing in relation to each other.
- The funding level as at March 2016 was 88% (compared to 83% in 2013) putting it in the middle of the 85 funds that had reported at the time of writing.

The Board asked who decided on the final figure for the discount rate. Graeme Muir responded that ultimately the actuary decided but there were a number of discussions with officers and the Pensions Sub-Committee.

The Board asked why the funding level presented by the actuary differed from the standardised funding level from the Government. Graeme Muir responded that the Government actuary used different assumptions in their calculations – national mortality tables rather than local tables etc.

18. PENSION ADMINISTRATION UPDATE

David Coates presented the report that updated the board on the performance of Surrey Pensions Services in the provision of pension administration services to the Council under the Delegation Agreement.

Members of the Board were updated on the inherited backlog from Capita. 4000 member records were deferred for data cleansing – 520 of the cases had been cleansed so far. Surrey City Council were on track to cleanse the remainder within the next 11 months.

249 H&F pensions had not been put into payment – 67 of the cases were matched to a known LBHF employee record. Monthly meetings with Surrey were planned to update on this matter.

The Board enquired how the 249 deferred members were determined and asked about the Council's legal position on the payments due. David Coates said paper records were scanned and sent to Surrey and Capita to identify payments due. The Council had to demonstrate that reasonable efforts were made to trace members however, it was a legal obligation of the individual to update the Council of any changes to their personal circumstances.

The Board was informed that there were 450 instances of historical unresolved casework and 40 cases were resolved. The remaining cases were each categorised into high, medium, and low priority - with a view to tackling the high priority cases first.

David Coates said all missing employer year-end files from 2014-2105 had been received by Surrey and had been processed. 550 H&F cases had been identified as having queries outstanding from employers. The plan was to resolve these cases by August 2017.

David Coates informed the Board that there was some disagreement on the pensions-related administrative duties between BT and Surrey. A meeting would take place to resolve these issue and agree standard operating procedures. He also highlighted that the My Pensions Helpdesk had resolved 81% of incoming calls from scheme members at the first contact. Positive feedback was received from pensions surgeries held on 6 December 2016 – with 28 members attending for advice and guidance.

The Board acknowledged the good work and efforts made by Surrey in relation to response rates and asked for positive feedback to be passed on to them.

RESOLVED

That the Pension Board noted the report, and agreed that further progress be reviewed at the next meeting.

19. PENSION ADMINISTRATION STRATEGY

David Coates presented the administration strategy report and noted that the strategy, as shown in Appendix 1 of the report, was implemented on 1 January 2017. It was noted that failure to comply with the standards shown in the report could result in charges being levied by the Administering Authority to employers in accordance with the terms set out in the schedule of charging in Section 6. There was also provision to generate a charge when the Administering Authority has procured third party advice on behalf of a Scheme Employer.

The Board asked at what level the strategy was approved. David Coates said it was approved at the Pensions Sub-Committee on 21 September 2016.

A Board member said that he welcomed the strategy and felt the penalties would be a useful lever for employers who relied on third-party payroll suppliers.

RESOLVED

That the Pensions Board noted the Pensions Administration Strategy as defined in Appendix 1 of the report.

20. RISK REGISTER

David Coates informed the Board that two minor amendments were made to the risk register at the September meeting of the Pension Sub Committee. These two amendments were presented in the appendix together with the updated risk registers. No further amendments were made at the 30 November Sub Committee meeting.

RESOLVED

The Pensions Board noted the risk register.

Minutes are subject to confirmation at the next meeting as a correct record of the proceedings and any amendments arising will be recorded in the minutes of that subsequent meeting.


21. ANY OTHER BUSINESS

Richard Gregg announced that he would be moving on in April 2017 and the Board would need to find an alternative representative. The Chair thanked him for his hard work and wished him luck in his future endeavours

Meeting started: 7:00 pm
Meeting ended: 8:45pm

Chair

Contact officer Amrita Gill
Assistant Committee Co-ordinator
Governance and Scrutiny
☎: 020 8753 2094
E-mail: amrita.gill@lbhf.gov.uk

<p style="text-align: center;">London Borough of Hammersmith & Fulham</p> <p style="text-align: center;">PENSIONS SUB-COMMITTEE</p> <p style="text-align: center;">15th MARCH 2017</p>	
<p>PENSION FUND QUARTERLY UPDATE PACK</p>	
<p>Report of the Strategic Finance Director</p>	
<p>Open Report</p>	
<p>Classification - For Information</p> <p>Key Decision: No</p>	
<p>Wards Affected: None</p>	
<p>Accountable Director: Pete Carpenter, Interim Director of Treasury and Pensions</p>	
<p>Report Author: Peter Metcalfe, Interim Pension Fund Officer</p>	<p>Contact Details: Tel: 020 76414331 E-mail: pmetcalfe@westminster.gov.uk</p>

1. EXECUTIVE SUMMARY

- 1.1. This report is the Pension Fund quarterly update pack for the quarter ended 31st December 2016. The scorecard in Appendix 1 provides a high level view of key pensions issues with more detail provided in the remaining appendices.

2. RECOMMENDATIONS

- 2.1. That the report is noted.

3. REASONS FOR DECISION

- 3.1. Not applicable.

4. PROPOSAL AND ISSUES

- 4.1. This report and associated appendices make up the pack for the quarter ended 31st December 2016. It is designed to provide sub-committee members with a high level view of key pensions issues in the scorecard (see Appendix 1) with more detailed information in the remaining appendices.

- 4.2. There are no administration indicators in the scorecard, as they are not yet available.
- 4.3. Appendix 2 provides information about the Fund's investments and performance. Alistair Sutherland from Deloitte will be attending the meeting to present this report.
- 4.4. There is no funding level update this quarter as the actuarial valuation results are elsewhere on this agenda and the information would not be meaningful until the funding basis is agreed.
- 4.5. The actual cashflow for the period October to December 2016 and the forecast up to September 2017 is shown in Appendix 3. An analysis of the differences between the actuals and the forecast for the quarter is also shown, as well as an additional analysis of the invested cash in the LGIM Sterling Liquidity fund.
- 4.6. The risk register has been reviewed by officers and is attached as Appendix 4. No changes are proposed at this time.
- 4.7. A summary of the voting undertaken by the investment managers running segregated equity portfolios forms Appendix 5.
- 4.8. Following the introduction of a Forward Plan for future Pensions sub-committee meetings at the June 2016 meeting, it has been included as Appendix 6 and will be included every quarter going forward.

5. OPTIONS AND ANALYSIS OF OPTIONS

- 5.1. Not applicable.

6. CONSULTATION

- 6.1. Not applicable.

7. EQUALITY IMPLICATIONS

- 7.1. Not applicable.

8. LEGAL IMPLICATIONS

- 8.1. None.

9. FINANCIAL IMPLICATIONS

- 9.1. None.

10. IMPLICATIONS FOR BUSINESS

10.1. None.

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

11.1. None

LIST OF APPENDICES:

Appendix 1: Scorecard at 31st December 2016

Appendix 2: Deloitte quarterly report for quarter ended 31st December 2016

Appendix 3: Cashflow monitoring

Appendix 4: Pension Fund Risk Register

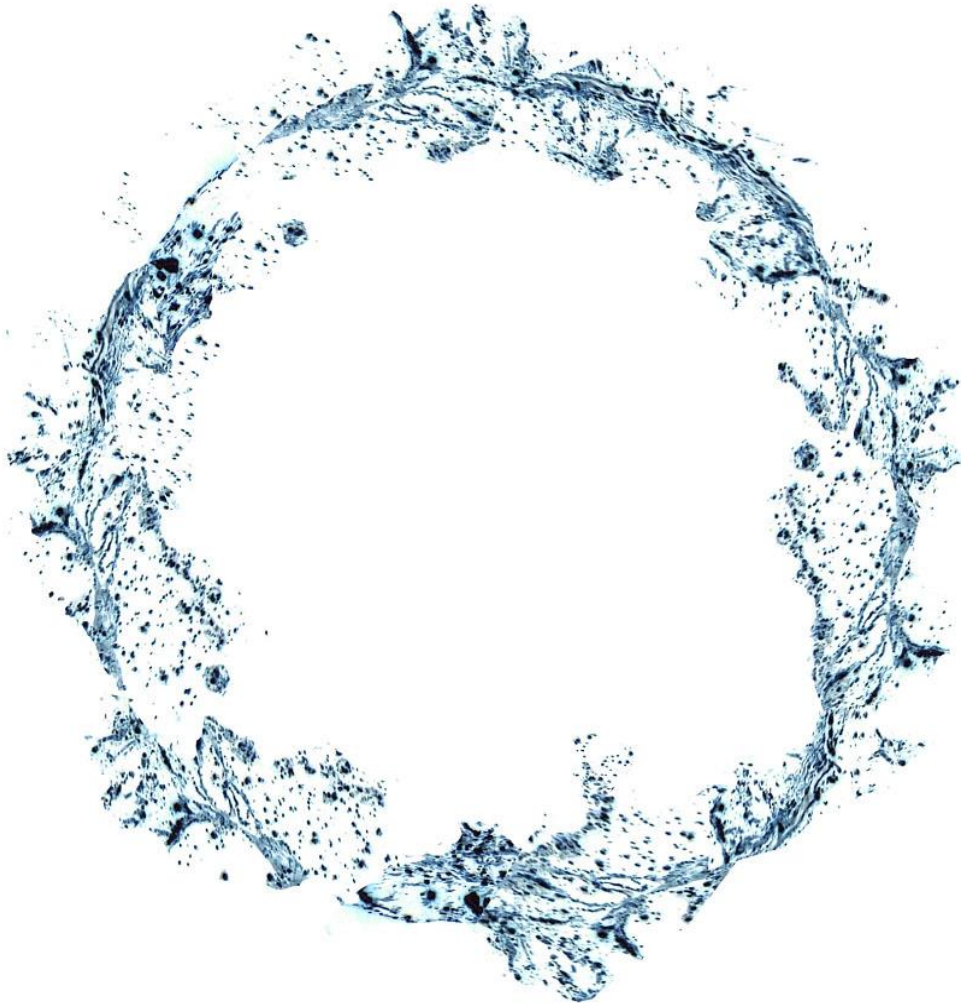
Appendix 5: Pension Fund Voting Summary

Appendix 6: Pensions Sub-committee Forward Plan

Appendix 1: Scorecard at 31st December 2016

HAMMERSMITH AND FULHAM PENSION FUND QUARTERLY MONITORING

	Mar 16	Jun 16	Sep 16	Dec 16	Comment/ Report Ref if applicable
INVESTMENTS					
Value (£m)	855.4	892.6	942.7	982.1	Deloitte report Appendix 2
% return quarter	1.5%	4.4%	6.2%	4.2%	
% return 1 year	-0.4%	5.5%	15.4%	17.4%	
LIABILITIES					
Value (£m)	966.0	-	-	-	Not available this quarter
Deficit (£m)	115.0	-	-	-	
Funding Level	88%	-	-	-	
MEMBERSHIP					
Active members	4,071	3,994	4,040	4,082	N/A
Deferred beneficiaries	5,915	6,180	5,853	5,825	
Pensioners	4,518	4,666	4,693	4,713	
Employers	38	38	38	38	
ADMINISTRATION					
None available					N/A
CASHFLOW					
Cash balance	£1.7m	£3.7m	£4.8m	-£0.1m	Appendix 3
Variance from forecast	-£0.5m	-£0.1m	£0.4m	£-3.5m	
RISK					
No. of new risks	0	1	0	0	Appendix 4
No. of ratings changed	3	0	0	0	
VOTING					
No. of resolutions voted on by fund managers	274	2,097	6,015	3,449	Appendix 5
LGPS REGULATIONS					
New consultations	None	One	None	One	N/A
New sets of regulations	None	None	One	None	



**London Borough of Hammersmith
& Fulham Pension Fund**

**Investment Performance Report to 31
December 2016**

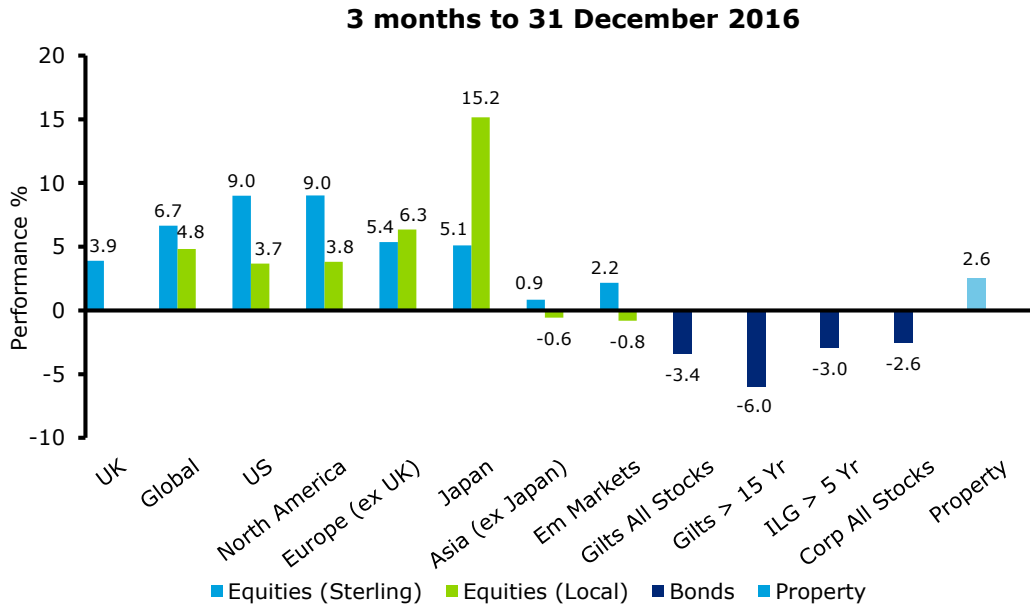
Deloitte Total Reward and Benefits Limited
March 2017

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1 Market Background

1.1 Three months to 31 December 2016



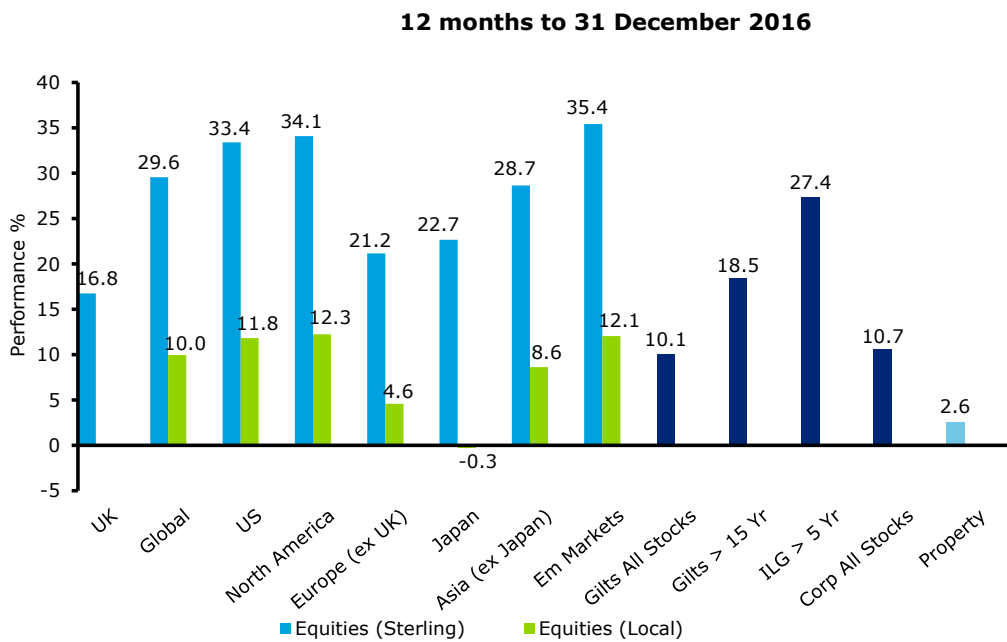
The UK equity market rose over the fourth quarter of 2016, with the FTSE All Share Index delivering a return of 3.9%. The continued depreciation of sterling and surprisingly robust economic data contributed to another quarter of strong performance for the UK equity market, mirroring the wider growth in global equity markets following President Trump’s unexpected victory in the US election.

Large UK companies marginally outperformed smaller companies over the final quarter of 2016, with both delivering strong returns. The FTSE 100 Index returned 4.3%, while the FTSE Small Cap Index delivered a return of 4.0%, with both indexes ending the final quarter of 2016 close to record highs. There was a wide spread of returns at the sector level. The top performing sector was Oil & Gas (16.2%), buoyed by the increase in oil price following OPEC’s announcement that it would cut production in 2017, while the cyclical Basic Materials sector had a second consecutive strong quarter (14.0%). The poorest performing sector was Technology (-9.0%) while Telecommunications and Utilities (-7.9% and -7.4% respectively) also struggled.

Global equity markets outperformed the UK in both sterling (6.7%) and local currency terms (4.8%) over the fourth quarter. Returns across the different regions were quite mixed. In local currency terms, Japan led the way with a return of 15.2% over the period. However Emerging Markets and Asia Pacific (excluding Japan) were the poorest performing regions returning -0.8% and -0.6% respectively in local currency terms potentially as a result of President Trump’s protectionist rhetoric and promise to walk away from the TPP trade agreement.

Following the significant fall in nominal gilt yields after the EU referendum, yields rebounded during the fourth quarter, ending the period around 40 to 50 basis points higher, due to a combination of rising inflation expectations and the sharp rise in US Treasury yields towards the end of the year, as the Fed raised interest rates. Real yields increased over the fourth quarter, albeit not to the same extent as nominal yields, therefore resulting in a further rise in inflation expectations. UK nominal gilts delivered negative returns over the final quarter of 2016, with the All Stocks Gilts Index returning -3.4%. The All Stocks Index-linked Gilts returned -2.7% over the same period. Credit spreads increased slightly over the fourth quarter, but remain below historic average levels. The iBoxx All Stocks Non Gilt Index returned -2.6% for the final quarter of 2016.

1.2 Twelve months to 31 December 2016



Over the 12 months to 31 December 2016, the FTSE All Share Index delivered a positive return of 16.8%. Whilst returns have been very strong, buoyed by Sterling depreciation, performance was also volatile, in part due to the political uncertainty created by the UK’s EU referendum and the US Presidential Election and performance varied significantly across sectors. The cyclical Basic Materials sector was the highest performing sector (84.2%), while Oil & Gas stocks returned 50.1% on the back of the oil price rebounding in 2016. In contrast, Telecommunications was the poorest performing sector over 2016 (-15.5%). Global equity markets underperformed the UK in local currency terms (10.0%) but outperformed the UK in sterling terms (29.6%) due to the depreciation of sterling in 2016, with currency hedging therefore detracting from performance.

UK nominal gilts delivered strong returns in 2016, with the All Stocks Gilts Index returning 10.1% and the Over 15 Year Gilts Index returning 18.5% as gilt yields fell significantly across all maturities. Real yields also fell significantly over the year, with the Over 5 Year Index Linked Gilts Index returning 27.4%. The narrowing of credit spreads over the year, coupled with the fall in gilt yields, resulted in strong corporate bond returns, with the iBoxx All Stocks Non Gilt Index returning 10.7%.

The IPD UK Monthly Property Index returned 2.6% for both the 3 months and the year to 31 December 2016, as the UK property market bounced back from the negative performance since the EU referendum with investors attracted to the yield premium available versus low yielding gilts.

2 Performance Overview

2.1 Investment Performance to 31 December 2016

Breakdown of Fund Performance by Manager as at 31 December 2016		3 month	1 year	2 year p.a.	3 year p.a.	5 year p.a.
Fund	Manager	(%)	(%)	(%)	(%)	(%)
Equity Mandate						
	Majedie	9.6	21.9	10.3	8.7	14.4
FTSE All Share		3.8	16.5	8.4	6.0	10.0
<i>Difference</i>		5.8	5.4	1.9	2.7	4.4
	LGIM Global Equity Mandate	6.1	28.3	n/a	n/a	n/a
FTSE All World**		6.1	28.4	n/a	n/a	n/a
<i>Difference</i>		0.0	-0.1	n/a	n/a	n/a
Dynamic Asset Allocation Mandates						
	Ruffer	1.8	12.6	7.2	6.6	7.0
3 Month Sterling LIBOR + 4% p.a.		1.1	4.5	4.5	4.5	4.6
<i>Difference</i>		0.7	8.1	2.7	2.0	2.4
	Insight	0.9	2.2	n/a	n/a	n/a
3 Month Sterling LIBOR + 2% p.a.		0.6	2.5	n/a	n/a	n/a
<i>Difference</i>		0.3	-0.3	n/a	n/a	n/a
Private Equity						
	Invesco	8.9	27.8	23.2	27.1	17.3
	Unicapital	-1.8	15.6	10.5	8.8	6.0
Secure Income						
	Partners Group MAC	2.1	7.3	n/a	n/a	n/a
3 Month Sterling LIBOR + 4% p.a.		1.1	4.5	n/a	n/a	n/a
<i>Difference</i>		1.0	2.8	n/a	n/a	n/a
	Oak Hill Advisors	1.4	12.3	n/a	n/a	n/a
3 Month Sterling LIBOR + 4% p.a.		1.1	4.5	n/a	n/a	n/a
<i>Difference</i>		0.3	7.8	n/a	n/a	n/a
	Partners Group Infrastructure	-3.3	7.2	n/a	n/a	n/a
3 Month Sterling LIBOR + 8% p.a.		2.0	8.5	n/a	n/a	n/a
<i>Difference</i>		-5.3	-1.3	n/a	n/a	n/a
Inflation Protection						
	M&G	-2.2	18.6	n/a	n/a	n/a
RPI + 2.5% p.a.		1.4	5.0	n/a	n/a	n/a
<i>Difference</i>		-3.6	13.6	n/a	n/a	n/a
	Standard Life	2.0	5.0	n/a	n/a	n/a
FT British Government All Stocks Index +2.0%		-3.0	12.1	n/a	n/a	n/a
<i>Difference</i>		5.0	-7.0	n/a	n/a	n/a
Total Fund		4.1	16.9	9.5	10.1	10.9
Benchmark*		2.7	12.2	7.9	7.8	8.4
<i>Difference</i>		1.5	4.7	1.6	2.2	2.5

Source: Northern Trust (Custodian). Figures are quoted net of fees and estimated by Deloitte. Differences may not tie due to rounding.

(*) The Total Assets benchmark is the weighted average performance of the target asset allocation.

(**) For periods prior to 17 October 2016, the benchmark is a weighted average of the benchmark performance of each of the three underlying funds held at that time (prior to the restructure).

3 Total Fund

3.1 Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)	Two Years (% p.a.)	Three Years (% p.a.)	Five Years (% p.a.)
Total Fund – Gross of fees	4.2	17.4	9.9	10.5	11.3
Net of fees ⁽¹⁾	4.1	16.9	9.5	10.1	10.9
Benchmark ⁽²⁾	2.7	12.2	7.9	7.9	8.4
Net performance relative to fixed benchmark	1.5	4.7	1.6	2.2	2.5

Source: Northern Trust. Relative performance may not sum due to rounding.

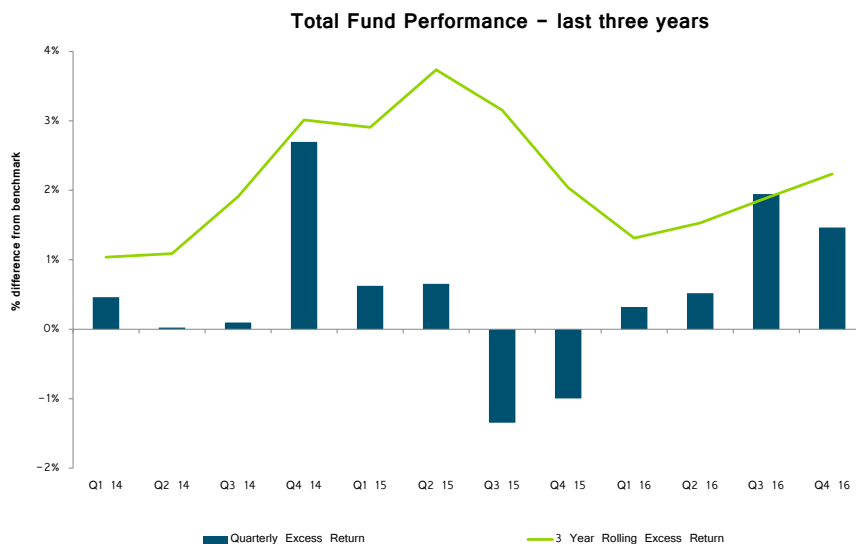
(1) Estimated by Deloitte

(2) Average weighted benchmark

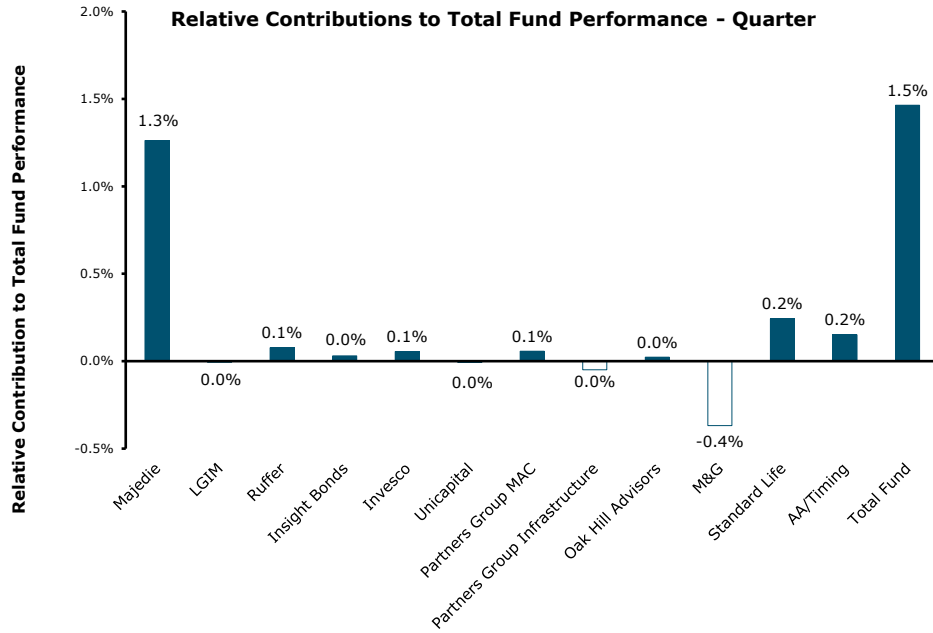
Over the quarter, the Total Fund outperformed its fixed weighted benchmark by 1.5% on a net of fees basis.

Over the 12 month period, the Fund delivered a net return of 16.9%, outperforming the benchmark by 4.7%. The Fund remains ahead of the benchmark over the three and five year periods by 2.2% p.a. and 2.5% p.a. respectively.

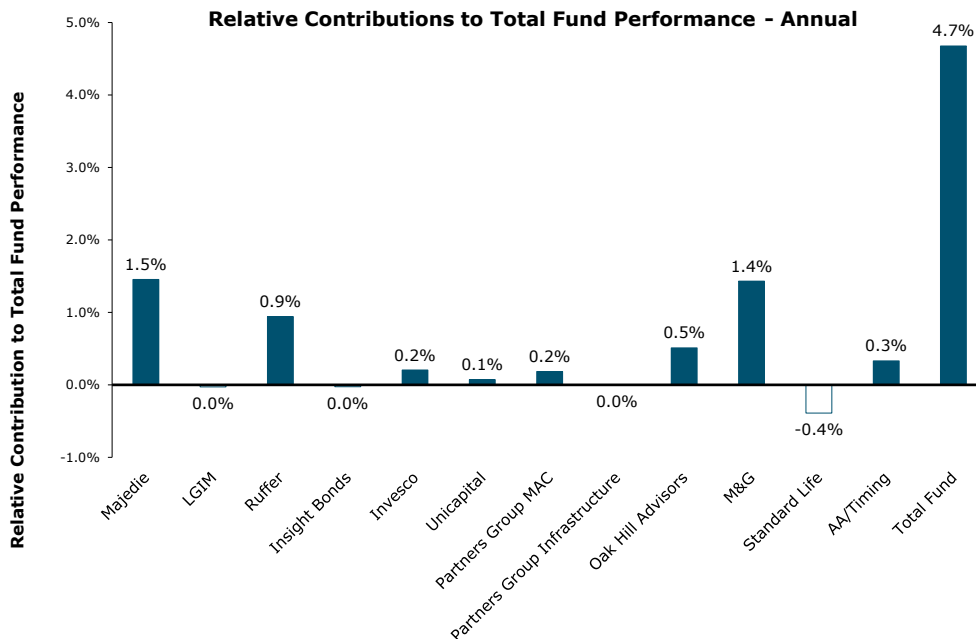
The chart below compares the net performance of the Fund relative to the fixed weight benchmark over the three years to 31 December 2016, highlighting the strong relative returns in the fourth quarter of 2014 and early 2015 – much of which can be attributed to the outperformance achieved by Majedie. The Fund delivered positive relative returns in all four quarters of 2016, with the third and fourth quarter being particularly strong.



3.2 Attribution of Performance to 31 December 2016



On a net of fees performance basis, the Fund outperformed the composite benchmark by 1.5% over the fourth quarter of 2016, largely as a result of a strong outperformance from Majedie, as well as positive contributions from Ruffer, Partners MAC and Standard Life. This outperformance helped to counteract the underperformance of M&G.



Over the year the Fund outperformed the composite benchmark by 4.7% following strong positive contributions from Majedie, M&G Ruffer and Oak Hill Advisors. The only mandate which underperformed its benchmark over the year to 31 December 2016 was Standard Life’s Long Lease Property mandate, albeit absolute returns were still positive.

3.3 Asset Allocation

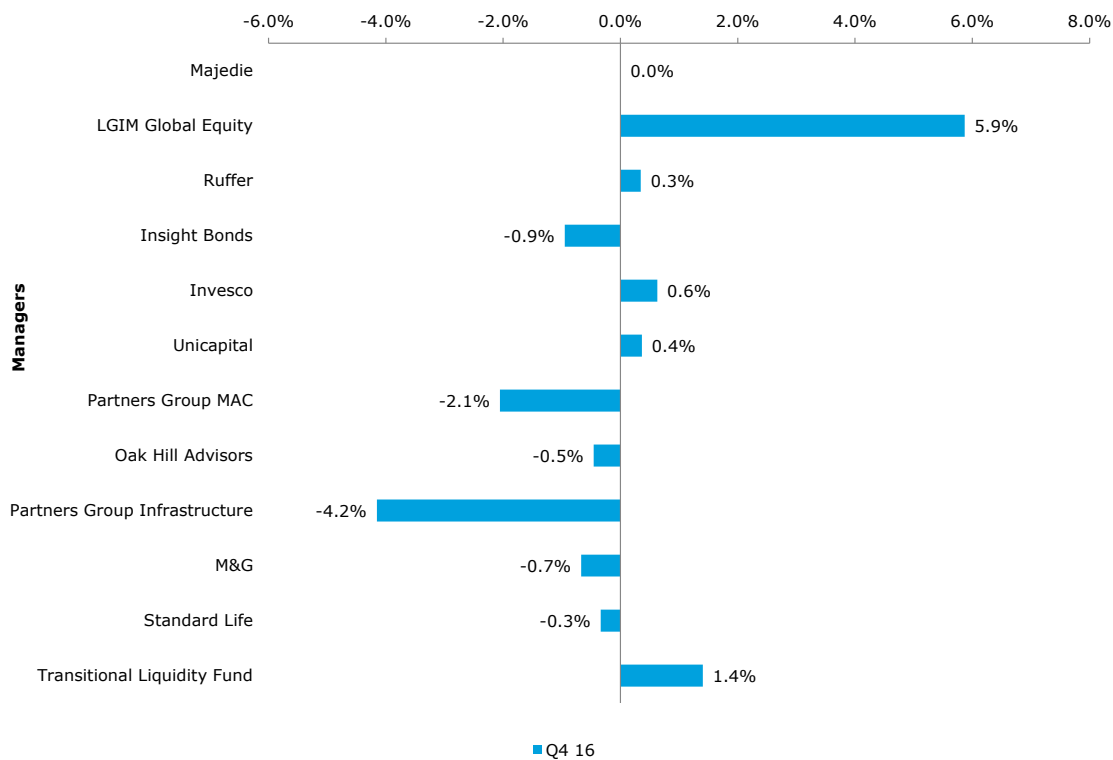
The table below shows the assets held by manager as at 31 December 2016 alongside the Target Benchmark Allocation.

Manager	Asset Class	Actual Asset Allocation				Benchmark Allocation (%)
		30 Sep 2016 (£m)	31 Dec 2016 (£m)	30 Sep 2016 (%)	31 Dec 2016 (%)	
Majedie	UK Equity (Active)	201.5	221.0	21.4	22.5	22.5
LGIM	Global Equity (passive)	262.5	278.6	27.9	28.4	22.5
	Total Equity	464.0	499.6	49.2	50.9	45.0
Ruffer	Absolute Return	99.6	101.6	10.6	10.3	10.0
Insight	Bonds Plus	88.0	88.9	9.3	9.1	10.0
	Total Dynamic Asset Allocation	187.6	190.5	19.9	19.4	20.0
Invesco	Private Equity	5.7	6.2	0.6	0.6	0.0
Unicapital	Private Equity	3.7	3.6	0.4	0.4	0.0
	Total Private Equity	9.3	9.8	1.0	1.0	0.0
Partners Group	Multi Asset Credit	52.3	53.5	5.5	5.4	7.5
Oak Hill Advisors	Diversified Credit Strategy	68.1	69.2	7.2	7.0	7.5
Partners Group	Direct Infrastructure	8.6	8.3	0.9	0.8	5.0
	Secure Income	129.0	131.0	13.7	13.3	20.0
M&G	Inflation Opportunities	93.6	91.6	9.9	9.3	10.0
Standard Life	Long Lease Property	44.8	45.8	4.8	4.7	5.0
	Total Inflation Protection	138.5	137.4	14.7	14.0	15.0
LGIM	Liquidity Fund	13.8	13.8	1.5	1.4	0.0
	Total	942.3	982.1	100.0	100.0	100.0

Source: Northern Trust (Custodian) and have not been independently verified
 Figures may not sum to total due to rounding

The Fund remains overweight Equities by 5.9% and underweight Secure Income by 6.7%. The Secure Income allocation should continue to increase as the Partners Group Direct Infrastructure Fund is drawn down. Partners Group will gradually draw down funds into the Infrastructure fund as further assets are purchased. These calls will be funded in the first instance from the cash held in LGIM's Liquidity Fund.

The asset allocation chart overleaf shows the relative underweight and overweight positions of the Fund against the benchmark allocations.



3.4 Yield Analysis as at 31 December 2016

The following table shows the running yield on the Fund’s investments

Manager	Asset Class	Yield as at 31 December 2016
Majedie	UK Equity	2.73%
LGIM	Global Equity	0.21%*
Ruffer	Dynamic Asset Allocation	1.20%
Insight Bonds	Dynamic Asset Allocation	2.99%
Partners Group MAC	Secure Income	4.75%
Oak Hill Advisors	Secure Income	5.94%
M&G	Inflation Protection	2.20%
Standard Life	Inflation Protection	4.40%
	Total	2.16%

*Represents yield available from NDIP. Benchmark yield was 2.48%.

4 Summary of Manager Ratings

The table below summarises Deloitte's ratings of the managers employed by the Fund and triggers against which managers should be reviewed.

Manager	Mandate	Triggers for Review	Rating
Majedie	UK Equity	Further turnover within the core investment team Re-opening the UK equity products with no clear limits on the value of assets that they would take on	1
LGIM	Global Equities	Major deviation from the benchmark return Significant loss of assets under management	1
Ruffer	Absolute Return	Departure of either of the co-portfolio managers from the business Any significant change in ownership structure	1
Insight	Bonds Plus	A significant increase or decrease to the assets under management with no set limits Significant changes to the team managing the Fund	1
Partners Group	Multi Asset Credit	Significant changes to the investment team responsible for the Fund *Note the mandate is subject to a 7 year lock-up period	1
	Direct Infrastructure	Significant changes to the investment team responsible for the Fund. *Note the mandate is subject to a 10 year lock-up period	1
Oak Hill Partners	Diversified Credit Strategy	Significant changes to the investment team responsible for the Fund. Significant changes to the liquidity of underlying holdings within the Fund.	1
M&G	Inflation Opportunities	If the Fund's portfolio manager Gary Parker was to leave the business or cease to be actively involved in the Fund, this would trigger a review of the Fund. Failure to find suitable investments within the initial two year funding period.	1
Standard Life	Long Lease Property	Richard Marshall leaving the business or ceasing to be actively involved in the Fund without having gone through an appropriate hand-over. A build up within the Fund of holdings with remaining lease lengths around 10 years.	1

4.1 Majedie

Business

Majedie continues to recycle capacity as many of its existing clients de-risk out of equities. Over the quarter, Majedie won a new £125m mandate for the UK Focus Fund. This was for a UK corporate DB Pension Scheme and a new client to Majedie. This client also invested £125m in Majedie's Global Focus Fund. In addition, a charity endowment has decided to invest an initial £24m, also across both of these funds.

Total AUM for Majedie as at 31 December 2016 was £13.6bn, an increase of £0.3bn from last quarter.

Personnel

James Mowat joined Majedie as Client Director in December 2016 as Simon Hazlitt's replacement. James joined having spent 14 years at Baillie Gifford where he was a member of the Global Alpha client team since its inception in 2005.

Deloitte view – We continue to rate Majedie positively for its UK Equity capabilities.

4.2 LGIM

Business

As at 30 June 2016, Legal & General Investment Management ("Legal & General") had total assets under management of c. £842bn, of which, £342bn was in passive solutions.

Personnel

Over the quarter, there were a number of senior personnel moves. These all represent internal hires who maintain the same LGIM philosophies.

- Aaron Meder will become CEO of LGIM America, leaving his current role as LGIM Head of Investment in London in early 2017;
- Anton Eser, currently Co-Head of LGIM's Global Fixed Income, will replace Aaron as LGIM Head of Investment in London;
- Colin Reddie, currently Head of Euro Credit, will in-turn replace Anton as Co-Head of Global Fixed Income.

Deloitte View – We do not see these structural changes to the team as having a negative impact on the business or funds, given the portfolio management teams for index equity and index fixed income remain intact, however we will continue to closely monitor any further developments. We continue to rate Legal & General positively for its passive capabilities.

4.3 Ruffer

Business

Total assets under management were £20.6bn as at 31 December 2016, up from £20.0bn at the end of Q3. This growth was primarily driven by performance rather than significant cashflows from new or existing clients.

Personnel

Clemmie Vaughn will take over as Chief Executive Officer from April 2017. Henry Maxey has held the dual position of CEO and CIO for the past 5 years, but will stay on in his role as CIO from April. Clemmie joined Ruffer in 2005 and has been Jonathan Ruffer's number two on the private client side for most of her period at Ruffer. The decision was taken due to the company's growth to 230 people – Henry has relinquished the role to focus on leading Ruffer's investment strategy.

Deloitte view – The Ruffer product is distinctive within the universe of diversified growth managers with the manager willing to take contrarian, long term positions drawing, where necessary, on the expertise of external funds.

4.4 Insight

Business

Insight continued to see an inflow of assets over the quarter, with AUM growing beyond £520bn. Insight has won 17 new clients with assets totalling c. £2.0bn over the six months to 31 December 2016, and lost none. 21 existing clients extended their LDI mandates over the same period, resulting in an extra £8.4bn of assets under management.

Of the total 257 LDI clients Insight has, 24 invest in bespoke QIAFs, 91 have segregated accounts and 142 invest in multi-client pooled funds, with the Enhanced Selection funds experiencing the most significant growth.

Deloitte view – We rate Insight positively for its Fixed Income capabilities and continue to monitor how growth is being managed across the business.

4.5 Partners Group

Multi Asset Credit

The net asset value of the MAC Fund was £258.2m as at 31 December 2016.

The successor program, the Multi-Asset Credit 2015 Fund, made its first distribution of 1.8% on 31 December 2016, with the second distribution planned for 30 June 2017. The Multi-Asset Credit 2016 Fund, launched in July 2016, is currently £336m in size with seven UK investors and is currently targeting its final close for April 2017 and the target fund size is £500m. The Fund has built up a diversified portfolio of 15 investments to date.

Direct Infrastructure

As at 31 December 2016, €400m had been raised in the European sleeve and \$900m in the US sleeve of the fund. At the same date, \$600m of funds had been committed to infrastructure assets. More investors have shown interest and the fund is expected to close in the next few months, with a potential upper fund capacity of €1.5-2bn (€2bn hard cap).

Personnel

Bill Berry joined as the co-head of private debt at Partners Group, from Merrill Lynch where he was Head of Syndicated Debt. There were no other changes to the teams managing the Multi Asset Credit Fund or PG Direct Infrastructure Fund during the fourth quarter of 2016.

Deloitte View - We continue to rate Partners Group for its private market and infrastructure capabilities.

4.6 Oak Hill Advisors – Diversified Credit Strategy (DCS)**Business**

The total capital which Oak Hill Advisors ("OHA") manages was approximately \$30.3bn as at 31 December 2016, increasing by c. \$0.6bn from 30 September 2016. Total assets under management in the DCS Fund as at 31 December 2016 was \$4.6bn, with \$2.7bn in the pooled vehicle.

Personnel

There were no other significant personnel changes over the fourth quarter.

Deloitte view – We are comfortable with how the strategy is being managed and the level of risk within the strategy.

4.7 M&G – Inflation Opportunities Fund**Business**

The AUM of the Inflation Opportunities Fund V as at 31 December 2016 was c. £508m. The Fund largely consists of index-linked gilts (c. 50%), Long Lease (c. 28%), Income Strips (c. 17%) and ground rents (c. 5%).

Personnel

Kevin Vickers joined the real estate team in November 2016 as a replacement for Kris McPhail. Kevin joins the acquisition team and is responsible for originating, structuring and executing transactions across the UK and the rest of Europe. Kevin previously worked at Deloitte where he specialised in real estate finance, leading transactions and advising corporate occupiers across a diverse range of financial structures and property asset classes.

Holly Johnstone who has worked on the Long Lease Property team for five years, has been promoted to assistant fund manager on SPIF. The consensus was she has been doing much of the work for this role for a while and it is now reflected in her title.

Deloitte view – We are comfortable with how the strategy is being managed and continue to rate M&G positively in this area.

4.8 Standard Life – Long Lease Property**Business**

The Fund's assets under management increased slightly due to positive performance however remains at c. £1.7bn. There were no significant inflows or outflows over the quarter.

Personnel

There were no personnel changes over the fourth quarter of 2016.

Deloitte View – We remain positive on long lease property given the long-term, inflation-linked nature of the contractual cashflows which arise from this type of investment.

5 Majedie – UK Equity

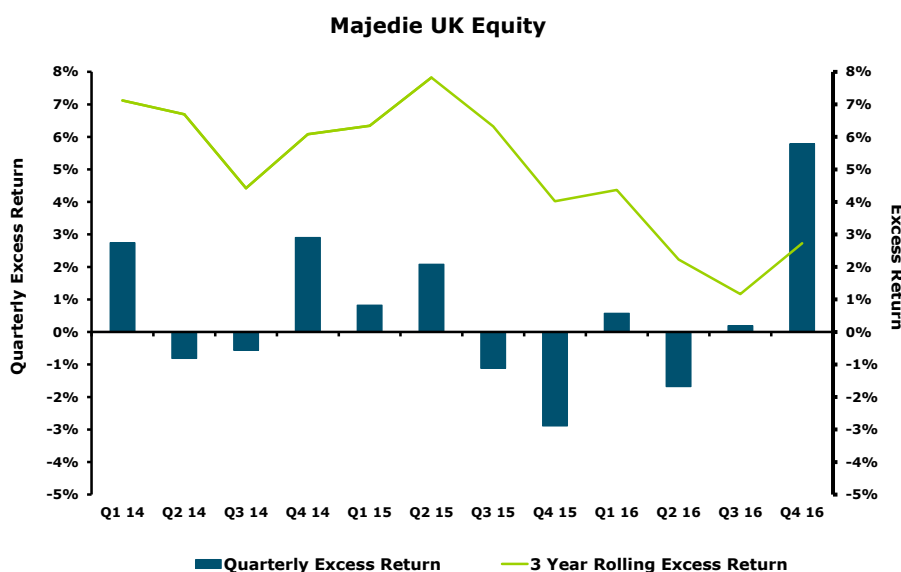
Majedie was appointed to manage an actively managed segregated UK equity portfolio. The manager's remuneration is a combination of a tiered fixed fee, based on the value of assets and a performance related fee of 20% of the outperformance which is payable when the excess return over the FTSE All Share +2% p.a. target benchmark over a rolling three year period. The investment with Majedie comprises a combination of the UK Equity Fund (no more than 30%), the UK Focus Fund and a holding in Majedie's long/short equity fund, Tortoise (no more than 10%).

5.1 UK Equity – Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)	Two Years (% p.a.) ⁽¹⁾	Three Years (% p.a.)	Five Years (% p.a.)
Majedie – Gross of fees	9.7	22.3	10.7	9.1	14.8
Net of fees ⁽¹⁾	9.6	21.9	10.3	8.7	14.4
Benchmark	3.8	16.5	8.4	6.0	10.0
Target	4.3	18.5	10.4	8.0	12.0
Net performance relative to Benchmark	5.8	5.4	1.9	2.7	4.4

Source: Northern Trust

(1) Estimated by Deloitte



The Fund returned 9.6% over the quarter against a benchmark return of 3.8%, which takes the annual performance to 21.9% versus the 16.5% benchmark. Over both the three year and five year periods, the Fund is ahead of the benchmark and stated target outperformance.

Over the quarter, banks were the biggest positive contributor to performance with Barclays and Royal Bank of Scotland being the top performing stocks. Majedie has held the view for several quarters now that the banking sector has turned a corner and that this was not reflected in the price of stocks. Majedie's exposure in the mining sector also contributed as this industry continued its strong run. A stronger China, which consumes half of the world's commodities, and better capital discipline have led to companies like Anglo American performing well.

Over the fourth quarter, the UK Equity Fund delivered 8.7% and the Focus Fund delivered 10.4%. The Tortoise Fund returned 4.2% with many of the short positions detracting in a period which saw the strong rises in the wider market.

6 Legal and General – Global Equity

Legal and General Investment Manager ("LGIM") was appointed to manage a global equity portfolio with the objective of replicating the performance of the FTSE All World Index benchmark. The manager is remunerated on a tiered fixed fee based on the value of assets.

6.1 Global Equity – Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
LGIM – Gross of fees	6.1	28.4
<i>Net of fees⁽¹⁾</i>	6.1	28.3
Benchmark	6.1	28.4
Net Performance relative to Benchmark	0.0	-0.1

Source: LGIM. Relative performance may not tie due to rounding.

(1) Estimated by Deloitte

LGIM restructured the mandate over the quarter (17 October), consolidating the three existing funds into the FTSE All World Fund. The underlying exposure of the mandate has remained unchanged (as the three funds were designed to be held in proportion to match the FTSE All World Fund). As part of this restructuring, the Fund has now allocated the Emerging Market exposure, and is no longer holding a 'cash-proxy'.

The Fund performed in line with the benchmark over the quarter, and slightly underperformed the benchmark over the year to 31 December 2016. The performance over the quarter includes the performance of the three funds (UK, global ex-UK and cash) from 30 September to 17 October, and the performance of the All World Equity index from 17 October to 31 December. Performance over longer periods includes the performance of the three regional funds which has deviated slightly to the performance of the FTSE All World index (due to the cash-proxy). Over the three and five year periods, the LGIM All World Equity index has performed in line with (and within reasonable tolerance levels) of the FTSE All World index.

7 Ruffer – Absolute Return

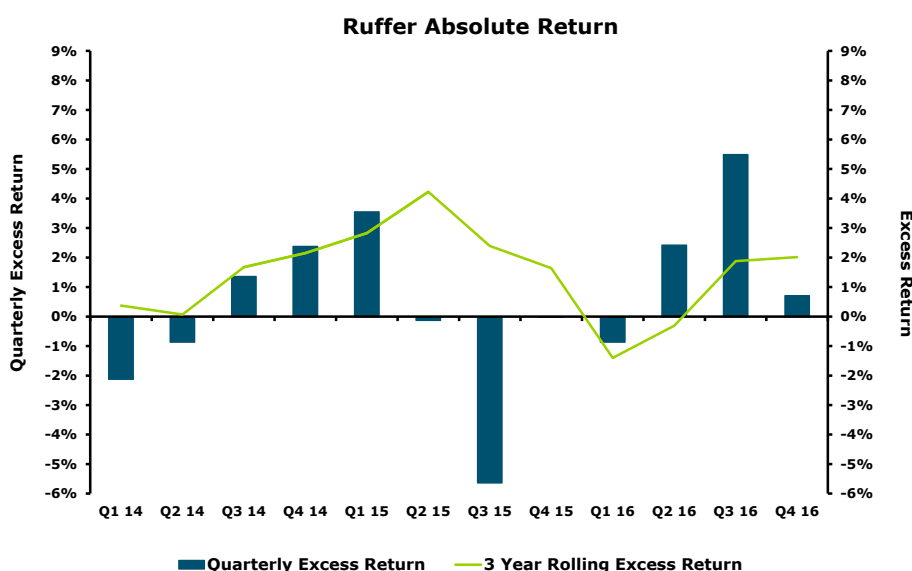
Ruffer was appointed to manage an absolute return mandate with the aim of outperforming the 3 month Sterling LIBOR benchmark by 4% p.a. The manager has a fixed fee based on the value of assets.

7.1 Dynamic Asset Allocation – Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)	Two Years (% p.a.) ⁽¹⁾	Three Years (% p.a.)	Five Years (% p.a.)
Ruffer - Gross of fees	2.0	13.5	8.1	7.4	7.8
Net of fees ⁽¹⁾	1.8	12.6	7.2	6.6	7.0
Benchmark / Target	1.1	4.5	4.5	4.5	4.6
Net performance relative to Benchmark	0.7	8.1	2.7	2.0	2.4

Source: Northern Trust. Relative performance may not tie due to rounding.

(1) Estimated by Deloitte



Ruffer outperformed its Libor +4% p.a. target over the fourth quarter by 0.7% net of fees. This takes the 12 month and three year relative performance to 8.1% and 2.0% p.a. respectively.

A key contributor to performance over the quarter was Ruffer’s holdings in Japanese equities. In Q4 rising global bond yields did hit parts of the portfolio, particularly the index-linked gilt holdings, but boosted Japanese banks and life insurers. Western equities also delivered strong performance due to the shift of the portfolio’s equity exposure to value/cyclical holdings.

Over the 12 months, Ruffer’s allocation to index-linked gilts has been the main contributor to outperformance (albeit some of these gains were given back over Q4). Although the portfolio has a 41% allocation to ILGs, it has been the 10-15% holding in long dated ILGs which has really driven performance. Ruffer sees these as key assets for the portfolio going forward and has no plans to sell down, however it will continue to place ‘hedge’ positions which are likely to benefit in environments where these bonds would suffer – as seen over the latest quarter.

8 Insight – Bonds Plus

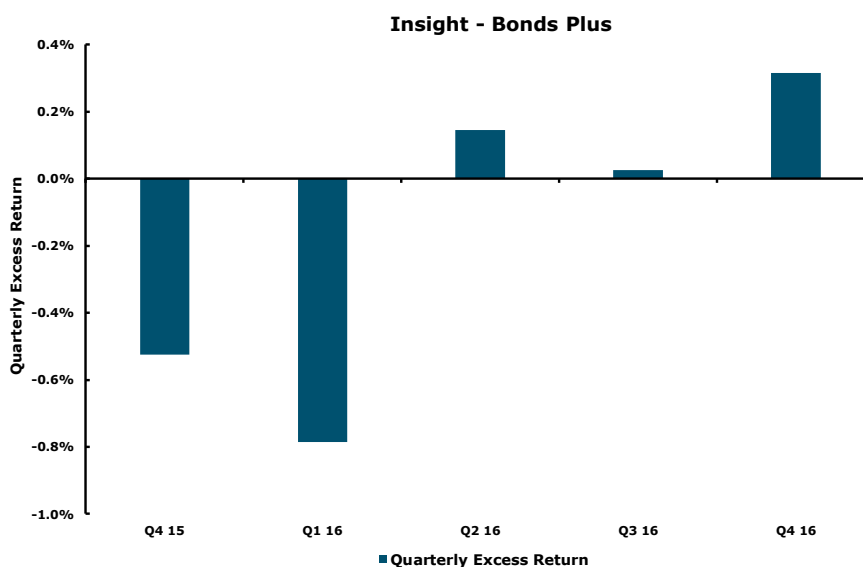
Insight was appointed to manage an active bond portfolio with an aim of outperforming the 3 Month Sterling LIBOR by 2% over a rolling three year period. The fees are based on the value of assets invested in the fund.

8.1 Absolute Return – Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
Insight - Gross of fees	1.0	2.7
Net of fees ⁽¹⁾	0.9	2.2
Benchmark / Target	0.6	2.5
Net performance relative to Benchmark	0.3	-0.3

Source: Northern Trust. Relative performance may not tie due to rounding

(1) Estimated by Deloitte



Insight outperformed its target over the quarter to 31 December 2016 by 0.3% net of fees. For the year to 31 December 2016, the fund underperformed its target by 0.3% net of fees.

The Fund's US breakeven inflation position was the largest contributor to relative performance due to a rise in the inflation risk premium over the quarter following Trump's victory in the US election. Investment grade credit, ABS and loans also contributed as spreads tightened.

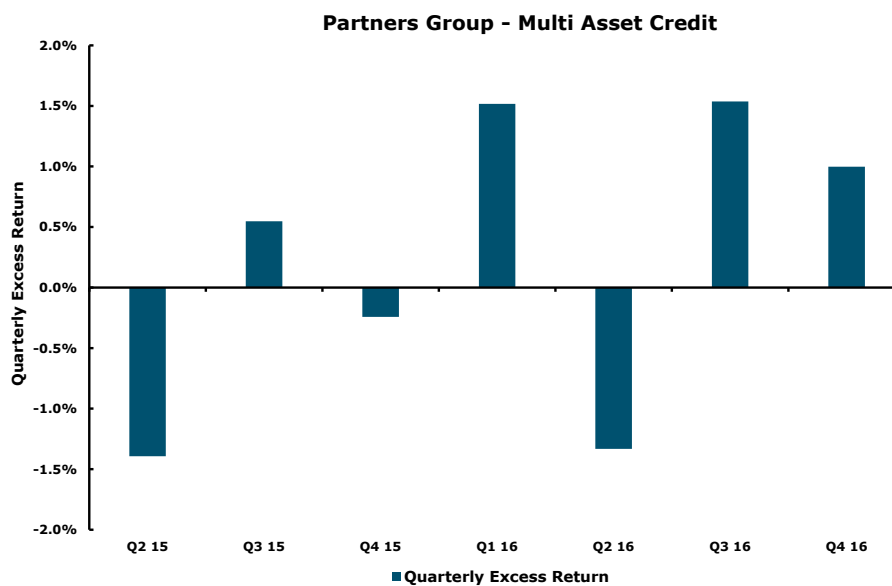
9 Partners Group – Multi Asset Credit

Partners Group was appointed to manage a multi asset credit mandate with the aim of outperforming the 3 month Sterling LIBOR benchmark by 4% p.a. The manager has an annual management fee and performance fee.

9.1 Multi Asset Credit - Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
Partners Group MAC - Gross of fees	2.3	8.2
Net of fees ⁽¹⁾	2.1	7.3
Benchmark / Target	1.1	4.5
Net performance relative to Benchmark	1.0	2.8

Source: Northern Trust. Relative performance may not tie due to rounding.

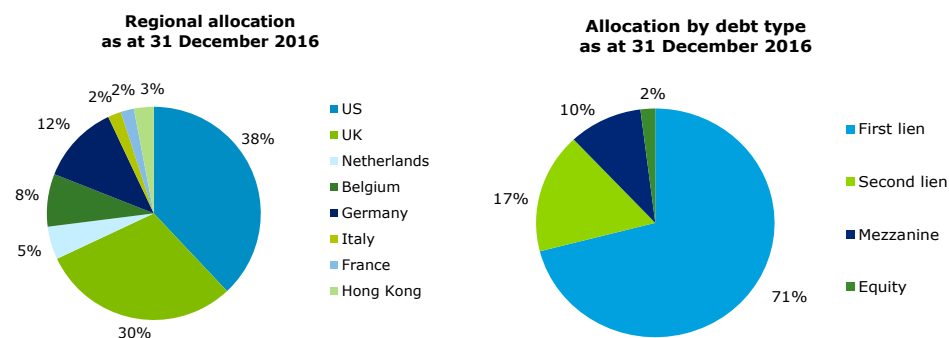


The Fund outperformed its benchmark by 1.0% over the quarter, net of fees, returning 2.3% in absolute terms.

Over the longer 12 months period to 31 December 2016, the Fund returned 7.3%, net of fees, outperforming the benchmark by 2.8%.

9.2 Asset Allocation

The charts below show that the majority of the Fund is invested in senior secured debt.



Note: Based on information provided by Partners Group.

The table below shows details of the Fund's five largest holdings based on net asset value as at 31 December 2016.

Investment	Description	Type of Debt	Tranche	Maturity Date	Current IRR (%)	NAV (£m)	% of NAV
Mirion Technologies, Inc.	US Electronic company.	Corporate	First Lien	31 Mar 2022	6.7	8.9	5.9%
		Corporate	Second Lien	31 Mar 2022	10.3	6.3	
Advanced Computer Software	UK software developer.	Corporate	First lien	20 Mar 2022	8.4	14.7	5.7%
Springer Science + Business Media	Large European global science & business publishing company.	Corporate	First Lien	14 Aug 2020	12.7	12.0	5.4%
		Corporate	Mezzanine	14 Aug 2021	5.2	2.1	
AS Adventure	Large European specialist multi-brand outdoor retail group.	Corporate	First lien	28 Apr 2022	5.4	13.7	5.3%
Cote Bistro	UK restaurant chain offering value for money French cuisine.	Corporate	First Lien	14 Jul 2022	5.5	12.5	4.8%

Note: Information provided by Partners Group. Current IRR is net of cost and fees of the investment partner but gross of Partners Group fees. For investments with a holding period less than 12 months, the IRR is not annualised.

9.3 Fund Activity

- The Fund is still in its 3 year investment period which means Partners Group may replace assets and make new investments if it finds more attractive opportunities or if an existing asset is refinanced or repaid early. However any investments which are realised post July 2017 will be repaid to investors as Partners Group cannot reinvest from this point onwards.
- The MAC 2014 Fund remains broadly stable with little activity as Partners Group has invested all of the Fund's commitments. The Fund made one new investment, realised one investment and refinanced an investment as detailed in further detail below.
- In October 2016, the Fund entered into a new debt financing investment for Devonshire Square, an office and retail complex in the City of London, owned by Blackstone. The fund manager believes the investment represents good value and benefits from its prime location adjacent to Liverpool St station.
- Over the fourth quarter, the Fund realised its investment in Materne Mont Blanc, a filling manufacturer in the food industry, following the acquisition by Bel Group which was completed in December 2016. During the life time of the MAC 2014 Fund's investment, Materne Mont Blanc had grown significantly opening a new US-based manufacturing plant and creating c. 250 new jobs.
- Also in December 2016, the Fund refinanced its investment in Vestcom International ("Vestcom"), a US-based communications solutions provider for the food and pharmaceutical sectors. The original debt finance provided by the MAC 2014 Fund was repaid following Charlesbank Capital Partners' ("Charlesbank") acquisition of Vestcom, but Partners simultaneously agreed to provide a new financing deal to support Charlesbank's acquisition.

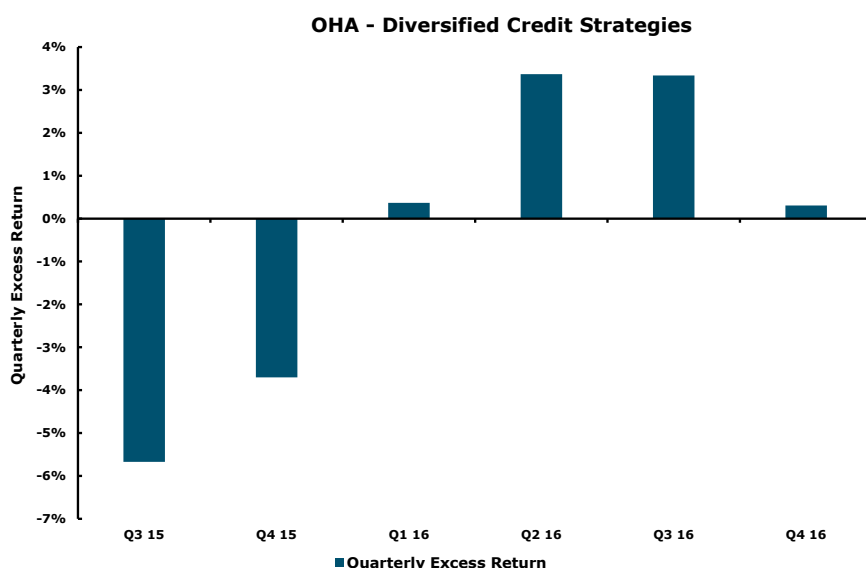
10 Oak Hill Advisors – Diversified Credit Strategies Fund

Oak Hill Advisors was appointed to manage a multi asset credit mandate with the aim of outperforming the 3 month Sterling LIBOR benchmark by 4% p.a. The manager has an annual management fee and performance fee.

10.1 Diversified Credit Strategies - Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
OHA – Gross of fees	1.6	13.0
Net of fees ⁽¹⁾	1.4	12.3
Target	1.1	4.5
Net Performance relative to Benchmark	0.3	7.8

Source: Northern Trust. Relative performance may not tie due to rounding.



Over the quarter the Diversified Credit Strategies Fund delivered 1.4% net of fees, outperforming its target by 0.3%. The structured finance and high tech holdings in companies such as TIBCO Software were the biggest absolute quarterly contributors while the healthcare, education and childcare industries detracted slightly from Fund performance.

Over the longer 12 months period to 31 December 2016, the Fund returned 12.3% net of fees, outperforming its target by 7.8% for the year. The portfolio was defensively positioned over 2016 as Oak Hill had concerns over the various macro risks throughout the year (Trump, China, Brexit) however, as was the story over the quarter, structured finance and high tech sectors provided the largest contributions to performance over the year.

The Fund is relatively defensively positioned compared to its peer group, with over 40% in secured credit. The Fund continues to hold a significant cash allocation of 12%. The manager expects a significant level of volatility in the markets in 2017 and believes this will create opportunities to take advantage of.

11 Partners Group – Direct Infrastructure

Partners Group was appointed to manage a global infrastructure mandate with the aim of outperforming the 3 month Sterling LIBOR benchmark by 8% p.a. The manager has an annual management fee and performance fee.

11.1 Direct Infrastructure - Investment Performance to 31 December 2016

As at 31 December 2016 the Partners Group Direct Infrastructure 2015 Fund was still raising funds and is expected to close in the first half of 2017. The Fund held a seventh capital call on 27 February, taking the total commitment in the European sleeve to €430m, €77.7m of which has been called (€9.9m of Hammersmith and Fulham's €55m commitment).

The Fund now has nine investments in the portfolio, making three new investments during the fourth quarter – Raven, Sapphire Wind Farm and High Capacity Metro Trains PPP. Further details of these assets are set out below.

Partners Group continues to see attractive assets throughout Asia, North America and Europe. There are a further eight transactions in the pipeline; three in Europe, three in the Americas and two in Asia.

Raven

The Fund has secured a 50% equity share in a midstream clean-energy processing facility in Texas, with the remaining finance provided by co-investor Quanta Capital Solutions and institutional investors. Site preparation activities have begun with the construction expected to be completed in 2018.

Sapphire Wind Farm

In December 2016, Partners Group invested AUD 250m into Sapphire Wind Farm. This is an on-shore windfarm in Australia that is expected to be the second largest in the country once construction is completed in 2018, consisting of 75 turbines and expected to generate enough energy to power 110,000 Australian households. The Australian government has set an ambitious renewable energy target, and to meet this target has offered favourable tariffs to attract the required investment in renewable energy. Partners Group was attracted by the AAA government backed 20 year contracted revenues on this asset.

High Capacity Metro Trains PPP

Partners Group and its consortium partners invested in High Capacity Metro Trains in November 2016, a public-private partnership (PPP) project to supply trains that will run on an upgraded metro line in Melbourne, Australia. This involves the delivery and maintenance of rolling stock and will benefit from stable and recurring cash flows from the state of Victoria, an investment grade counterparty. Partners Group is part of a strong consortium of partners with a proven track record in the rail transit space.

11.2 Investments Held

The table below shows a list of the investments held by the Partners Group Direct Infrastructure Fund as at 31 December 2016.

Investment	Description	Type	Sector	Country	Commitment Date
Fermaca	Gas infrastructure operator based in Mexico.	Lead	Energy	Mexico	July 2015
Japan Solar General Partner	Solar platform based in Japan	Joint-lead	Solar Power	Japan	July 2015
Silicon Ranch	Solar platform based in US	Lead	Solar Power	USA	April 2016
Axia NetMedie	Internet and data network provider based in Canada and France	Lead	Communication	Canada & France	July 2016
Merkur Offshore	Wind farm based in German North Sea.	Lead	Wind Power	Germany	August 2016
Green Island Renewable Solar Platform	Solar power platform in Taiwan.	Lead	Solar Power	Taiwan	September 2016
High Capacity Metro Trains PPP	Delivery and maintenance of rolling stock for Australian State government.	Lead	Transportation	Australia	November 2016
Raven	Midstream clean energy processing facility in Texas.	Lead	Energy	USA	December 2016
Sapphire Wind Farm	Onshore windfarm in Australia.	Lead	Wind Power	Australia	December 2016

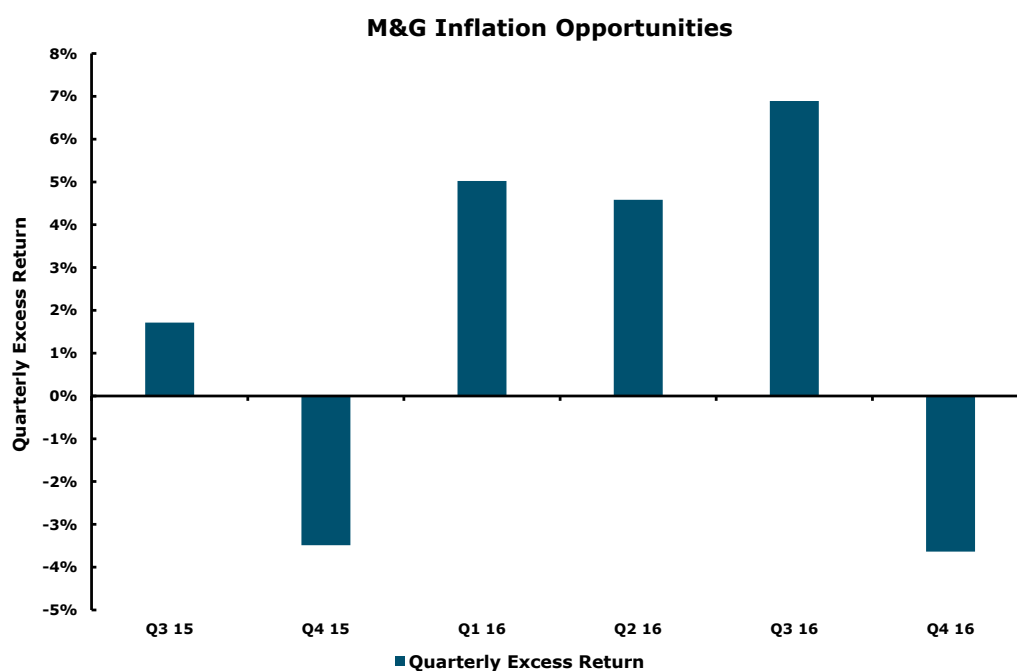
12 M&G – Inflation Opportunities

M&G was appointed to manage an inflation opportunities mandate with the aim of outperforming the RPI benchmark by 2.5% p.a. The manager has an annual management fee which is calculated based on the underlying assets

12.1 M&G Inflation Opportunities - Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
M&G Inflation Opportunities – Gross of fees	-2.1	19.0
Net of fees ⁽¹⁾	-2.2	18.6
Target	1.4	5.0
Net Performance relative to Benchmark	-3.6	13.6

Source: Northern Trust. Relative performance may not tie due to rounding.



Over the fourth quarter of 2016 the Fund returned -2.2% net of fees, underperforming the target by 3.6%. Over the longer 12 month period to 31 December 2016, the Fund delivered 18.6% net of fees, outperforming its target by 13.6%.

Negative performance over the quarter was largely driven by the Fund's c. 50% allocation to index-linked gilts as yields rose over the period. The allocation to income strips and long lease property offset some of these losses to an extent as both asset classes performed well over the quarter.

At of 31 December 2016, the Fund comprised c. 50% index-linked gilts, c. 28% long lease property, c. 17% income strips, c. 4.6% ground rents and a small cash allocation. The allocations to long lease property and income strips (once fully drawn down) are now in line with the target allocation. The allocation to income strips increased from 13.8% in Q3 2016. M&G's Secure Lease Income Fund ("SLIF") invested in the second tranche of a portfolio of pubs and lodges run by Marston's PLC this quarter at a net price of £55.4m. The inflation opportunities fund has an additional 8.6% allocation to income strips yet to be drawn down.

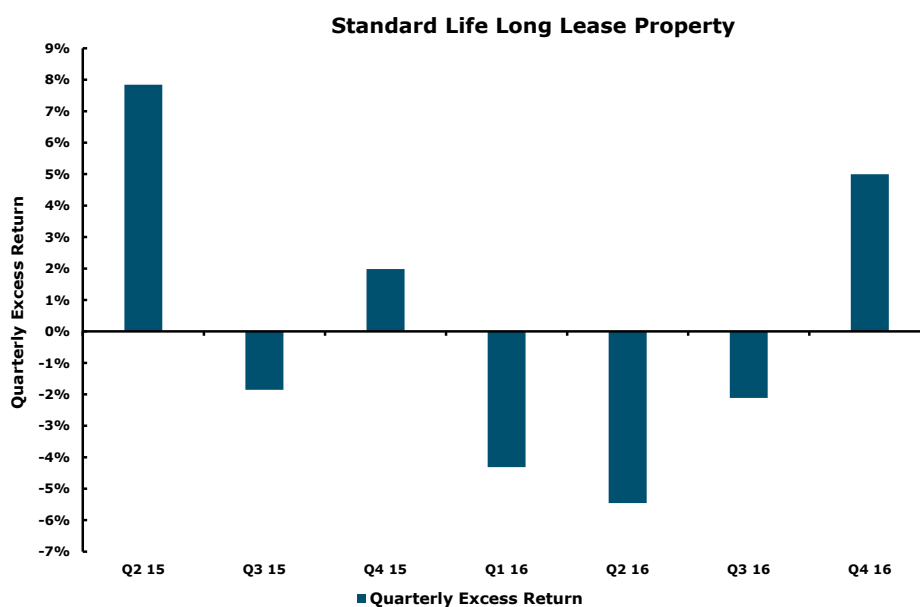
13 Standard Life Investments – Long Lease Property

Standard Life Investments was appointed to manage a long lease property mandate with the aim of outperforming the FT British Government All Stocks Index benchmark by 2.0% p.a. The manager has an annual management fee.

13.1 Long Lease Property - Investment Performance to 31 December 2016

	Last Quarter (%)	One Year (%)
SLI Long Lease Property – Gross of fees	2.2	5.6
Net of fees ⁽¹⁾	2.0	5.0
Target	-3.0	12.1
Net Performance relative to Benchmark	5.0	-7.0

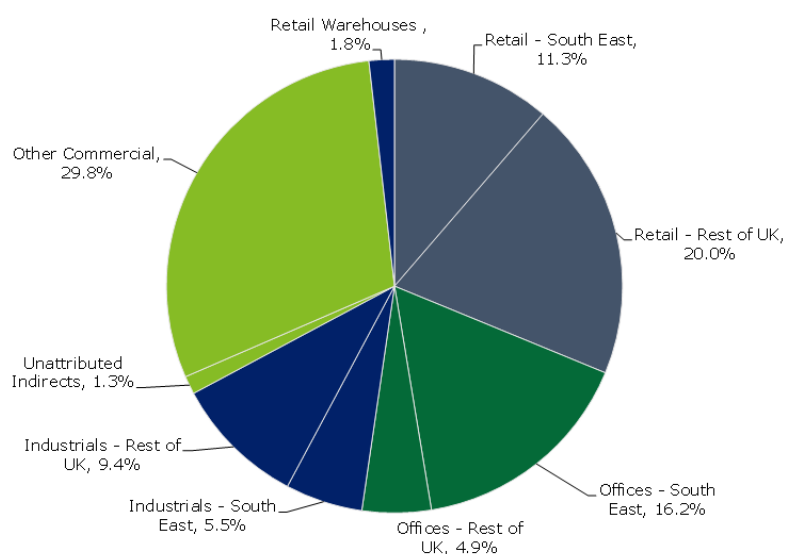
Source: Northern Trust. Relative performance may not tie due to rounding.



The SLI Long Lease Property Fund returned 2.0% net of fees over the fourth quarter of 2016, outperforming the benchmark of the FTSE Gilt All Stocks Index + 2% by 5.0% net of fees. Over the year the Fund remains behind the benchmark by 7.0% on a net basis. The relative performance is more down to the volatility of the gilt market rather than representing anything particularly notable about the Long Lease Property Fund. In absolute terms the Fund is performing in line with expectations and in line with most other long lease funds.

13.2 Portfolio Holdings

The sector allocation in the Long Lease Property Fund as at 31 December 2016 is shown in the graph below.



The Fund remains underweight the office sector (21.1% compared to 31.1%) and remains underweight in the industrial sector (14.9% compared to 21.7%) at the end of the fourth quarter of 2016. The Fund is also overweight the retail sector (33.1% compared to 26.9%).

The Fund continues to be significantly overweight the "Other" sector (29.8% compared to 9.0%) as a result of its holdings in a range of car parks, student accommodation, hotels, medical centres and law courts, as well as its indirect holding in the Standard Life Investments Commercial Ground Rent Fund.

The table below shows details of the top ten tenants in the Fund measured by percentage of net rental income:

Tenant	Total Rent £m p.a.	% Net Income
Tesco	7.89	10.4
Whitbread	5.06	6.7
Sainsbury's	4.91	6.5
Marston's	4.56	6.0
Asda	4.42	5.8
Salford University	3.69	4.9
Save The Children	3.65	4.8
Poundland	3.60	4.7
Glasgow City Council	3.10	4.1
Travis Perkins Group	2.99	3.9
Total	43.87	57.7*

*Total may not equal sum of values due to rounding

The top 10 tenants contribute 57.7% of the total net income into the Fund. Supermarkets continue to dominate with Tesco, Sainsbury's and Asda contributing 22.7% to the Fund's total net rental income as at 31 December 2016.

The Fund's average unexpired lease term increased slightly over the quarter from 25.6 years to 25.7 years.

13.3 Sales and Purchases

During the quarter the Fund made three sales to align with their strategy of disposing of shorter lease assets with the expectation of underperformance.

- A student accommodation asset let to Solent University in Southampton was sold for £11.9m reflecting a yield of 5.6%.
- A Mercedes Benz dealership in Birmingham was sold for £12.85m reflecting a yield of 5.1%. This asset was sold to the existing tenant at a sale price of 22% above the most recent valuation.
- The Fund also sold a Volkswagen showroom in Exeter for £3m due to a concern about future performance with the shortening of the lease term and the prospect of the tenant relocating to a new facility.

The proceeds from these sales were used to purchase a portfolio of five Marston's pubs and two budget hotels for £22m, reflecting a yield of 4.2%. The 40 year lease has annual RPI-linked rent reviews with a cap and collar of 4% and 1% respectively.

Appendix 1 – Fund and Manager Benchmarks

The tables in this Appendix detail the benchmarks and outperformance targets, for the Total Fund and each individual manager.

Total Fund

Inception: 31 December 1999.

Manager	Asset Class	Allocation	Benchmark	Inception Date
Majedie	UK Equity	22.5%	FTSE All-Share Index +2% p.a. over three year rolling periods	31/08/05
LGIM	Global Equity	22.5%	FTSE All World Index	30/11/15
Ruffer	Dynamic Asset Allocation	10.0%	3 Month Sterling LIBOR +4% p.a.	31/07/08
Insight	Bonds Plus	10.0%	3 Month Sterling LIBOR +2% p.a.	30/09/15
Invesco	Private Equity	0.0%	n/a	30/09/09
Unicapital	Private Equity	0.0%	n/a	30/09/09
Partners Group	Multi Asset Credit	7.5%	3 Month Sterling LIBOR +4% p.a.	28/01/15
Oak Hill Advisors	Multi Asset Credit	7.5%	3 Month Sterling LIBOR +4% p.a.	01/05/15
Partners Group	Infrastructure Fund	5.0%	3 Month Sterling LIBOR +8% p.a.	31/08/2015
M&G	Inflation Opportunities	10.0%	RPI +2.5%	01/05/15
Standard Life Investments	Long Lease Property	5.0%	FT British Government All Stocks Index +2.0%	09/04/15
	Total	100.0%		

Note, for the benchmark performance calculation, we assume a 10% allocation to Partners Group MAC and Oak Hill Advisors MAC, and 0% allocation to Partners Group Infrastructure. This will be re-weighted as the Infrastructure Fund is drawn down.

Appendix 2 – Manager Ratings

Based on our manager research process, we assign ratings to the investment managers for specific products or services. The ratings are based on a combination of quantitative and qualitative factors, where the inputs for the qualitative factors come from a series of focused meetings with the investment managers. The ratings reflect our expectations of the future performance of the particular product or service, based on an assessment of:

- The manager’s business management;
- The sources of ideas that go to form the portfolio (“alpha generation”);
- The process for including the ideas into the portfolio (“alpha harnessing”); and
- How the performance is delivered to the clients.

On the basis of the research and analysis, managers are rated from 1 (most positive) to 4 (most negative), where managers rated 1 are considered most likely to deliver outperformance, net of fees, on a reasonably consistent basis. Managers rated 1 will typically form the basis of any manager selection short-lists.

Where there are developments with an investment manager that cause an element of uncertainty we will make the rating provisional for a short period of time, while we carry out further assessment of the situation.

Appendix 3 – Risk warnings & Disclosures

- Past performance is not necessarily a guide to the future.
- The value of investments may fall as well as rise and you may not get back the amount invested.
- Income from investments may fluctuate in value.
- Where charges are deducted from capital, the capital may be eroded or future growth constrained.
- Investors should be aware that changing investment strategy will incur some costs.
- Any recommendation in this report should not be viewed as a guarantee regarding the future performance of the products or strategy.

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Appendix 3: CASHFLOW MONITORING: October to December 2016

Pension Fund current account cashflow actuals and forecast for period October 2016 to September 2017

	Oct16 £000	Nov16 £000	Dec16 £000	Jan17 £000	Feb17 £000	Mar17 £000	Apr17 £000	May17 £000	Jun17 £000	Jul17 £000	Aug17 £000	Sep17 £000
	Actual	Actual	Actual	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast
Balance b/f	4,825	3,077	1,630	-119	1,826	346	1,616	8,341	6,941	5,766	4,591	3,191
Contributions	1,823	1,890	1,961	1,820	1,820	1,820	9,900	2,000	2,000	2,000	2,000	2,000
Pensions	-2,690	-2,540	-2,637	-2,500	-2,500	-2,500	-2,600	-2,600	-2,600	-2,600	-2,600	-2,600
Lump Sums	-396	-142	-518	-450	-450	-450	-450	-450	-450	-450	-450	-450
Net TVs in/(out)	-376	-460	-523	-75	-75	-75	-75	-75	-75	-75	-75	-75
Expenses	-109	-195	-32	-50	-275	-525	-50	-275	-50	-50	-275	-50
Net cash in/(out) in month	-1,748	-1,447	-1,749	-1,255	-1,480	-1,730	6,725	-1,400	-1,175	-1,175	-1,400	-1,175
Net movements from invested cash (see overleaf)				3,200		3,000						
Balance c/f	3,077	1,630	-119	1,826	346	1,616	8,341	6,941	5,766	4,591	3,191	2,016

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Current account cashflow actuals compared to forecast in October to December 2016 quarter

	October 2016		November 2016		December 2016		Oct to Dec 2016
	Forecast	Actual	Forecast	Actual	Forecast	Actual	Variance
	£000	£000	£000	£000	£000	£000	£000
Contributions	1,820	1,823	1,820	1,890	1,820	1,961	214
Pensions	-2,500	-2,690	-2,500	-2,540	-2,500	-2,637	-367
Lump Sums	-450	-396	-450	-142	-450	-518	294
Net TVs in/(out)	-75	-376	-75	-460	-75	-523	-1,134
Expenses	-125	-109	-690	-195	-50	-32	529
Withdrawals from Fund Managers	0	0	0	0	3,000	0	-3,000
Totals	-1,330	-1,748	-1,895	-1,447	1,745	-1,749	-3,464

Notes on variances in quarter:

- The withdrawal from invested cash which had previously been forecast to take place at the end of December did not occur until early January 2017.
- Net transfers out over the quarter were higher than forecast by £1.1.m. Other variances were relatively minor and due to timing differences.

Actuals and forecast of invested cash balance for period Oct 2016 to Sep 2017

	Oct16 £000	Nov16 £000	Dec16 £000	Jan17 £000	Feb17 £000	Mar17 £000	Apr17 £000	May17 £000	Jun17 £000	Jul17 £000	Aug17 £000	Sep17 £000
	Actual	Actual	Actual	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast	F'cast
Balance b/f	14,861	14,861	14,861	14,861	11,661	11,661	7,366	7,366	7,366	7,316	7,316	7,316
Interest						15			10			10
Distributions												
Private Equity						1,565			1,565			1,565
Multi Asset Credit					1,488				1,250			1,250
Infrastructure												
Drawdowns paid to Infrastructure fund						-2,875			-2,875			-2,875
Paid to/from current account (see table above)				-3,200		-3,000						
Balance c/f	14,861	14,861	14,861	11,661	11,661	7,366	7,366	7,366	7,316	7,316	7,316	7,266

The forecast indicates that there should be sufficient cash available to fund pension payments and infrastructure drawdowns until 2018. The cash flow position will need to continue to be monitored.




Appendix 4: Pension Fund risk register, March 2017




Changes to the risk register since previous quarter




Type	Ref	Risk	Rationale
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No changes this quarter.



Pension Fund risk register, March 2017



Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
1	STRATEGIC: INVESTMENT That the combination of assets in the investment portfolio fails to fund the liabilities in the long term.	<ul style="list-style-type: none"> Investment strategy in place and reviewed periodically. Performance is measured against a benchmark. Fund performance is reviewed quarterly. 	2	3	Low 6 	Director of Treasury & Pensions	March 2017
2	STRATEGIC: INVESTMENT Fund managers fail to achieve the returns agreed in their management agreements.	<ul style="list-style-type: none"> Independent monitoring of fund manager performance by custodian against targets. Investment adviser retained to keep watching brief. Fund manager performance is reviewed quarterly. 	3	3	Low 9 	Director of Treasury & Pensions	March 2017
3	STRATEGIC: INVESTMENT Failure of custodian or counterparty.	<ul style="list-style-type: none"> At time of appointment, ensure assets are separately registered and segregated by owner. Review of internal control reports on an annual basis. Credit rating kept under review. 	2	3	Low 6 	Director of Treasury & Pensions	March 2017



Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
4	STRATEGIC: FUNDING The level of inflation and interest rates assumed in the valuation may be inaccurate leading to higher than expected liabilities.	<ul style="list-style-type: none"> Review at each triennial valuation and challenge actuary as required. Growth assets and inflation linked assets in the portfolio should rise as inflation rises. 	4	3	Medium 12 	Director of Treasury & Pensions	March 2017
5	STRATEGIC: FUNDING There is insufficient cash available in the Fund to meet pension payments leading to investment assets being sold at sub-optimal prices to meet pension payments.	<ul style="list-style-type: none"> Cashflow forecast maintained and monitored. Cashflow position reported to sub-committee quarterly. Cashflow requirement is a factor in investment strategy reviews. 	2	1	Very Low 2 	Director of Treasury & Pensions	March 2017
6	STRATEGIC: FUNDING Scheme members live longer than expected leading to higher than expected liabilities.	<ul style="list-style-type: none"> Review at each triennial valuation and challenge actuary as required. 	4	2	Low 8 	Director of Treasury & Pensions	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
7	STRATEGIC: FUNDING Scheme matures more quickly than expected due to public sector spending cuts, resulting in contributions reducing and pension payments increasing.	<ul style="list-style-type: none"> Review maturity of scheme at each triennial valuation. Deficit contributions specified as lump sums, rather than percentage of payroll to maintain monetary value of contributions. Cashflow position monitored quarterly. 	2	3	Low 6 	Director of Treasury & Pensions	March 2017
8	STRATEGIC: REGULATION Pensions legislation or regulation changes resulting in an increase in the cost of the scheme or increased administration.	<ul style="list-style-type: none"> Maintain links with central government and national bodies to keep abreast of national issues. Respond to all consultations and lobby as appropriate to ensure consequences of changes to legislation are understood. 	3	4	Medium 12 	Director of Treasury & Pensions and Bi-borough Director of HR	March 2017
9	STRATEGIC: REGULATION Introduction of European Directive MiFID II results in a restriction of Fund's investment options and an increase in costs.	<ul style="list-style-type: none"> Officers are engaging with Fund Managers to understand the position better Knowledge and Skills Policy in place for Officers and Members of the Committee Maintain links with central government and national bodies to keep abreast of this developing issue. 	2	2	Very Low 4 	Director of Treasury & Pensions	March 2017



Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
10	OPERATIONAL: GOVERNANCE Failure to comply with legislation leads to ultra vires actions resulting in financial loss and/or reputational damage.	<ul style="list-style-type: none"> Officers maintain knowledge of legal framework for routine decisions. Eversheds retained for consultation on non-routine matters. 	2	2	Very Low 4 	Director of Treasury & Pensions	March 2017
11	OPERATIONAL: GOVERNANCE Sub-committee members do not have appropriate skills or knowledge to discharge their responsibility leading to inappropriate decisions.	<ul style="list-style-type: none"> External professional advice is sought where required Knowledge and skills policy in place 	3	3	Low 9 	Director of Treasury & Pensions	March 2017
12	OPERATIONAL: GOVERNANCE Officers do not have appropriate skills and knowledge to perform their roles resulting in the service not being provided in line with best practice and legal requirements. Succession planning is not in place leading to reduction of knowledge when an officer leaves.	<ul style="list-style-type: none"> Person specifications are used at recruitment to appoint officers with relevant skills and experience. Training plans are in place for all officers as part of the performance appraisal arrangements. Shared service nature of the pensions teams provides resilience and sharing of knowledge. 	3	3	Low 9 	Director of Treasury & Pensions and Bi-borough Director of HR	March 2017


Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
13	OPERATIONAL: GOVERNANCE Inadequate, inappropriate or incomplete investment or actuarial advice is actioned leading to a financial loss or breach of legislation.	<ul style="list-style-type: none"> At time of appointment ensure advisers have appropriate professional qualifications and quality assurance procedures in place. Sub-committee and officers scrutinise and challenge advice provided. 	2	2	Very Low 4 	Director of Treasury & Pensions	March 2017
14	OPERATIONAL: GOVERNANCE London CIV has inadequate resources to monitor the implementation of investment strategy and as a consequence are unable to address underachieving fund managers.	<ul style="list-style-type: none"> Pensions sub-committee Chair is a member of the Joint member Committee responsible for the oversight of the CIV and can monitor and challenge the level of resources through that forum. Director of Treasury & Pensions is a member of the officer Investment Advisory Committee which gives the Fund influence over the work of the London CIV. 	3	2	Low 6 	Director of Treasury & Pensions	March 2017


Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
15	<p>OPERATIONAL: FUNDING Failure of an admitted or scheduled body leads to unpaid liabilities being left in the Fund to be met by others.</p>	<ul style="list-style-type: none"> • Transferee admission bodies required to have bonds in place at time of signing the admission agreement. • Regular monitoring of employers and follow up of expiring bonds. • Review of bond status within all admission agreements to be undertaken and finished in Quarter 2. 	3	2	<p>Low</p> <p>6</p> 	<p>Director of Treasury & Pensions and Bi-borough Director of HR</p>	March 2017
16	<p>OPERATIONAL: FUNDING Ill health costs may exceed “budget” allocations made by the actuary resulting in higher than expected liabilities particularly for smaller employers.</p>	<ul style="list-style-type: none"> • Review “budgets” at each triennial valuation and challenge actuary as required. • Charge capital cost of ill health retirements to admitted bodies at the time of occurring. • Occupational health services provided by the Council and other large employers to address potential ill health issues early. 	3	2	<p>Low</p> <p>6</p> 	<p>Director of Treasury & Pensions and Bi-borough Director of HR</p>	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
17	OPERATIONAL: FUNDING Transfers out increase significantly as members transfer to DC funds to access cash through new pension freedoms.	<ul style="list-style-type: none"> • Monitor numbers and values of transfers out being processed. • If required, commission transfer value report from Fund Actuary for application to Treasury for reduction in transfer values. 	2	3	Low 6 	Director of Treasury & Pensions and Bi-borough Director of HR	March 2017
18	OPERATIONAL: ADMINISTRATION Loss of funds through fraud or misappropriation leading to negative impact on reputation of the Fund as well as financial loss.	<ul style="list-style-type: none"> • Third parties regulated by the FCA and separation of duties and independent reconciliation procedures in place. • Review of third party internal control reports. • Regular reconciliations of pension payments undertaken by Pensions Finance Team. • Periodic internal audits of Pensions Finance and HR teams. • Mortality screening arrangements reviewed by HR and Surrey County Council leading to improvements. 	4	2	Low 8 	Director of Treasury & Pensions and Bi-borough Director of HR	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
19	OPERATIONAL: ADMINISTRATION Failure of fund manager or other service provider without notice resulting in a period of time without the service being provided or an alternative needing to be quickly identified and put in place.	<ul style="list-style-type: none"> Contract monitoring in place with all providers. Procurement team send alerts whenever credit scoring for any provider changes for follow up action. 	3	1	Very Low 3	Director of Treasury & Pensions and Bi-borough Director of HR	March 2017
20	OPERATIONAL: ADMINISTRATION Failure of financial system leading to lump sum payments to scheme members and supplier payments (to fund managers and advisers) not being made and Fund accounting not being possible.	<ul style="list-style-type: none"> Contract in place with BT to provide service enabling smooth processing of payments. Officers are tracking payments through the system to ensure scheme members and suppliers receive them. Officers undertaking regular reconciliation work to verify accounting transactions. 	2	2	Very Low 4	Director of Treasury & Pensions	March 2017
21	OPERATIONAL: ADMINISTRATION Failure of pension payroll system resulting in pensioners not being paid in a timely manner.	<ul style="list-style-type: none"> Pensioner payroll system is subject to daily software backups and off-site duplication of records. Disaster recovery procedures allow for pensioner payrolls to be run from alternative sites if required. 	1	5	Very Low 5	Bi-borough Director of HR	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
22	OPERATIONAL: ADMINISTRATION Failure to pay pension benefits accurately leading to under or over payments.	<ul style="list-style-type: none"> • SCC's Altair system allows for all pensioner benefits to be automatically calculated by the administration system. • Pensioner benefits are double-checked by another team member in SCC before being released. • Spot checks are undertaken by the Client Team for accuracy. 	2	3	Low 6 	Bi-borough Director of HR	March 2017
23	OPERATIONAL: ADMINISTRATION Failure of pension administration system resulting in loss of records and incorrect pension benefits being paid or delays to payment.	<ul style="list-style-type: none"> • Pensioner administration system Altair is subject to daily software backups and off-site duplication of records. • Disaster recovery procedures allow for Altair to be run from an alternative site if required. Payments can be made from other UK sites other than SCC's HQ. 	1	5	Very Low 5 	Bi-borough Director of HR	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
24	<p>OPERATIONAL: ADMINISTRATION Administrators do not have sufficient staff or skills to manage the service leading to poor performance and complaints.</p>	<ul style="list-style-type: none"> • SCC's pension teams are highly skilled and knowledgeable in the area of LGPS administration. • The work is split across multiple officers to ensure skills are fully developed so that there is no single point of failure. • Team members received regular training on LGPS and on changes or enhancements to the pension administration system. • There are regular monthly meetings with the Client Manager to review performance. 	2	3	<p>Low</p> <p>6</p> 	Bi-borough Director of HR	March 2017

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
25	<p>OPERATIONAL: ADMINISTRATION</p> <p>The quality of scheme member data inherited from Capita does not meet the comprehensiveness and level of accuracy required for Surrey County Council to correctly administer the LGPS to scheme members.</p>	<ul style="list-style-type: none"> Some key data cleansing work was undertaken as part of the data preparation for the triennial review data to be given to the Actuary in July 2016. Data deficiencies inherited from Capita have been identified by Surrey County Council. A data recovery plan is expected to be agreed with Surrey and LBHF staff by the end of September 2016. Surrey County Council has been given authority to recruit 2 additional FTE for an initial period of 1 year (shared with RBKC) to work through data deficiencies. 	3	5	<p>Medium</p> <p>15</p> 	Bi-borough Director of HR	March 2017

Appendix 5: Pension Fund Voting Summary: October to December 2016

The investment managers managing the Fund's assets on a segregated basis are able to report on how they have voted the Fund's specific holdings at AGMs and EGMs of companies the Fund is invested in. Majedie is the only manager continuing to manage investments on a segregated basis at 31st December 2016. They use the services of Institutional Shareholder Services (ISS) who are a leading provider of corporate governance research and provide advice to its clients about voting in line with corporate governance principles.

The table below provides information about the votes cast in respect of the segregated assets during the quarter October to December 2016. This includes the number of occasions the managers voted against management recommendations and ISS recommendations.

No. of meetings	26
No. of resolutions	186
Votes not in line with management	5
Votes not in line with ISS	12

LGIM, who manage the global passive equity portfolio on behalf of the Fund, undertake extensive engagement with the companies they are invested in as well as voting. Below is a summary of the meetings they voted at and the engagement they undertook during the October to December 2016 quarter.

VOTING	
No. of companies	376
No. of meetings	381
No. of resolutions	3,263

ENGAGEMENT	
No. of companies	91
No. of meetings	108
Top 3 themes	Governance Finance & Strategy Environment & Social

Forward Plan for Pensions sub-committee – March 2017

Area of work	20 th Jun 2017	19 th Sep 2017	TBC Nov 2017	TBC Mar 2018
Governance	Quarterly Update Pack Business Plan Progress on compliance with TPR Code of Practice Review of Governance Compliance Statement	Quarterly Update Pack Annual report of Pension Board activities Annual Report	Quarterly Update Pack Pension Board minutes	Quarterly Update Pack Pension Board minutes
Investments	Investment Strategy Review Annual report to Scheme Advisory Board re pooling arrangements	Investment Strategy Review	Fund Manager monitoring	Investment Strategy Statement Review
Funding				

<p style="text-align: center;">London Borough of Hammersmith & Fulham</p> <p style="text-align: center;">PENSIONS SUB-COMMITTEE</p> <p style="text-align: center;">15th MARCH 2017</p>	
<p>2017/18, 2018/19 AND 2019/20 PENSION FUND CONTRIBUTION RATES AND ACTUARIAL CERTIFICATION</p>	
<p>Report of the Strategic Finance Director</p>	
<p>Open Report</p>	
<p>Classification - For Noting</p> <p>Key Decision: No</p>	
<p>Wards Affected: None</p>	
<p>Accountable Director: Pete Carpenter, Interim Director of Treasury and Pensions</p>	
<p>Report Author: Pete Carpenter, Interim Director of Treasury and Pensions</p>	<p>Contact Details: Tel: 020 7641 2832 E-mail: pcarpenter@westminster.gov.uk</p>

1. EXECUTIVE SUMMARY

- 1.1. Council Pension Funds undergo a valuation exercise on a 3 yearly basis to ensure that assets contained within the fund are adequate to meet future liabilities. This report is the final report from the Council's Actuary Barnett Waddingham certifying the rates that will be used for 2017/18, 2018/19 and 2019/20 are appropriate and will reduce the overall Pension Fund deficit in the appropriate timescales.

2. RECOMMENDATIONS

- 2.1. That the Sub-Committee note the Pension Fund rates to be used by the Council, Admitted and Scheduled bodies for the next 3 years and the Actuaries certification that these rates are appropriate to reduce the deficit in line with Government Actuarial requirements.

3. REASONS FOR DECISION

- 3.1. The Fund is required to be regularly valued to ensure a plan is in place and payments can be made from the Council and all Admitted and Scheduled bodies to ensure that future liabilities can be met.

4. PROPOSAL AND ISSUES

ACTUARIAL VALUATION

- 4.1. A number of meetings have taken place between the Pensions Sub-Committee and the Actuary, Barnett Waddingham, during November and December 2016. In the meetings, Members of the Sub-Committee challenged the assumptions and rationale of the valuation and how this had changed since the last valuation in 2013.
- 4.2. Following these discussions, a final position for the overall Fund as well as the Council portion was reached. From these meetings, Pension Fund contribution rates for the Council and all Admitted and Scheduled Bodies was then supplied by the Actuary.
- 4.3. The proposed Pension Fund rates to be charged for future years have now been communicated to Admitted and Scheduled bodies and have been included in the Council's Medium Term Financial Strategy.
- 4.4. Appendix A is the Actuaries certification of the process followed and contains all rates to be used in the 2017/18, 2018/19 and 2019/20 financial years.

5. OPTIONS AND ANALYSIS OF OPTIONS

- 5.1. Not applicable.

6. CONSULTATION

- 6.1. Consultation with Admitted and Scheduled Bodies has taken place with new contribution rates communicated and feedback taken.

7. EQUALITY IMPLICATIONS

- 7.1. Not applicable.

8. LEGAL IMPLICATIONS

- 8.1. None.

9. FINANCIAL IMPLICATIONS

- 9.1. Implications have been included in the Medium Term Financial Plan and Pension Fund contribution rates communicated to all Admitted and Scheduled Bodies.

10. IMPLICATIONS FOR BUSINESS

- 10.1. None.


11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

- 11.1. Actuarial Reports from Committee in November and December 2016.

LIST OF APPENDICES:

Appendix A - Barnett Waddingham Certification Document (Document will follow)

Agenda Item 7

<p>London Borough of Hammersmith & Fulham</p> <p>PENSIONS SUB-COMMITTEE</p> <p>15th MARCH 2017</p>	
Changes to Investment Regulations	
Report of the Strategic Finance Director	
Open Report	
Classification - For Noting	
Key Decision: No	
Wards Affected: None	
Accountable Director: Pete Carpenter, Interim Director of Treasury and Pensions	
Report Author: Pete Carpenter, Interim Director of Treasury and Pensions	Contact Details: Tel: 020 7641 2832 E-mail: pcarpenter@westminster.gov.uk

1. EXECUTIVE SUMMARY

- 1.1. The Pensions Sub-Committee, at its meeting on the 30th November, received a paper presenting setting out the requirements of a new Investment Strategy Statement (ISS) which replaces the existing Statement of Investment Principles (SIP). The new ISS has been completed and is presented here for approval.

2. RECOMMENDATIONS

- 2.1. That the Pensions Sub-Committee approve the new ISS required by changes of Legislation to be implemented as at the 1st April 2017.
- 2.2. That the Pensions Sub-Committee approve the changes made to the Draft Funding Strategy Statement approved in the November 2016 meeting.

3. REASONS FOR DECISION

- 3.1. The Government issued revised investment regulations during September 2016 to have effect from 1 November 2016. The centrepiece of the regulations was the replacement of the SIP with a

requirement to prepare and operate in accordance with an ISS. Guidance was issued on the preparation of the ISS in the autumn of 2016. Each scheme is required to have an ISS by 1 April 2017.

4. PROPOSAL AND ISSUES

BACKGROUND

- 4.1. The Government has issued guidance on the preparation of the ISS as required under the revised investment regulations.
- 4.2. The investment environment under the new regulations will be one of increased freedom but with more onerous justification of investment policy together with greater requirements to consult with interested parties and to report on the application of policy. There will also be greater Government powers of intervention, mainly, but not exclusively, aimed at pooling.
- 4.3. The Sub Committee has not had to alter its current investment strategy as a consequence of the introduction of the ISS.
- 4.4. The ISS includes a section setting out the Sub Committee's policy on ethical, social and corporate governance issues and also particular to the oversight of voting and ethical, social and corporate governance issues with the London CIV.
- 4.5. The Pension Sub-Committee's current approach to pooling is reflected in the ISS.

OVERVIEW OF THE INTEGRATED STRATEGY STATEMENT

- 4.6. The ISS sets out the requirements of the legislation and the Investment Committee's terms of reference. The six main objectives of the legislation are then detailed in relation to the London Borough of Hammersmith and Fulham's Pension Fund (the Fund) policies and strategies. These are:
 - 4.6.1. Objective 7.2 (a): A requirement to invest fund money in a wide range of instruments – This sets out how the investment strategy deals with diversification and return to meet the long term objectives of the fund;
 - 4.6.2. Objective 7.2(b): The authority's assessment of the suitability of particular investments and types of investment – this sets out how the Investment Committee assesses the suitability of Investments and measures their suitability;
 - 4.6.3. Objective 7.2(c): The authority's approach to risk, including ways in which risks are to be measured and managed – this sets out how the Investment Committee

assesses the different types of risk in order to establish what is acceptable to ensure that the fund meets its obligations;

4.6.4. Objective 7.2(d): The authority's approach to pooling investments, including the use of collective investment vehicles – this sets out the Investment Committee's approach to pooling and also what the London Collective Investment Vehicle (CIV) can offer in terms of Investment opportunities;

4.6.5. Objective 7.2(e): How social, environmental or corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments – this sets out how the fund meets these obligations and also how potential investments with the London CIV will comply with these obligations;

4.6.6. Objective 7.2(f): The exercise of rights (including voting rights) attaching to investments - this sets out how the fund meets these obligations and also how potential investments with the London CIV will be dealt with.

OVERVIEW OF THE FUNDING STRATEGY STATEMENT

4.7. A Draft Funding Strategy Statement was presented to the Committee on the 15th November. This which reflects the revised CIPFA guidance. The main changes are:

- There is much greater emphasis on achieving and maintaining solvency than before;
- There is more on achieving returns within reasonable risk parameters;
- Maintaining the stability of contribution rates becomes an aspiration which is subordinate to meeting the solvency issues and achieving long term cost efficiency.

4.8. At the meeting on the 15th November it was highlighted that the statement might require further modification once the results of the 2016 valuation are known. Following the final Actuarial Report, there is just one section of the report, 7.2, which has been updated. This relates to the monitoring arrangements for assessing the financial health of Employers. In addition, Section 12 has been corrected to refer to the new ISS and not the old SIP.

5. IMPLICATIONS FOR THE COMMITTEE

5.1. The new investment regulations and guidance provide greater freedom to set strategy. The greater degree of explanation required in setting the investment strategy should be seen as best practice, although with an unwelcome degree of Government oversight.

5.2. The ISS and FSS presented sets out the requirements of the legislation in regards to the Fund. It includes elements of the London CIV's ISS which will apply, to those items the Fund has invested through the London CIV.

6. CONSULTATION

6.1. Consultation is with the Pensions Sub Committee.

7. EQUALITY IMPLICATIONS

7.1. Not applicable.

8. LEGAL IMPLICATIONS

8.1. None.

9. FINANCIAL IMPLICATIONS

9.1. This document reflects present Investment Strategy and as such there is no change to existing financial implications.

10. IMPLICATIONS FOR BUSINESS

10.1. None.

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

11.1. Integrated Strategy Statement and Funding Strategy Statement papers from 30th November Pensions Sub Committee.

LIST OF APPENDICES:

Appendix A - The London Borough of Hammersmith and Fulham Pension Fund Integrated Strategy Statement

Appendix B – the London Borough of Hammersmith and Fulham Pension Fund Funding Strategy Statement

London Borough of Hammersmith & Fulham Pension Fund Investment Strategy Statement 2017/18

1. Introduction

- 1.1 This is the first Investment Strategy Statement (ISS) adopted by the London Borough of Hammersmith & Fulham Pension Fund (“the Fund”).

Under The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 the London Borough of Hammersmith & Fulham Pension Fund is required to publish this ISS. It replaces the Statement of Investment Principles which was previously required under Schedule 1 of The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009.

The Regulations require administering authorities to outline how they meet each of 6 objectives aimed at improving the investment and governance of the Fund.

- 1.2 This Statement addresses each of the objectives included in the 2016 Regulations:

- A requirement to invest fund money in a wide range of instruments
- The authority’s assessment of the suitability of particular investments and types of investment
- The authority’s approach to risk, including the ways in which risks are to be measured and managed
- The authority’s approach to pooling investments, including the use of collective investment vehicles
- The authority’s policy on how social, environmental or corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments

We deal with each of these in turn below.

- 1.3 The Pension Sub-Committee of the Fund oversees the management of the Fund’s assets. Although not trustees, the Members of the Pension Sub-Committee owe a fiduciary duty similar to that of trustees to the council-tax payers, who would ultimately have to meet any shortfall in the assets of the Fund, as well as to the contributors and beneficiaries of the Fund.

- 1.4 The relevant terms of reference for the Pension Sub-Committee within the Council’s Constitution are:

- To make all decisions under Regulations made pursuant to Sections 7, 12 or 24 of the Superannuation Act not otherwise falling to the Director of Finance to determine as set out in the officers’ scheme of delegation.
- Consideration and approval of the authority statement of accounts in accordance with the relevant Accounts & Audit Regulations made from time to time.
- The Committee shall be a member of the Local Authority Pension Fund Forum.

The role of the Pensions Sub-Committee is to have responsibility for all aspects of the investment and other management activity of the Fund:

- To agree the investment strategy and strategic asset allocation having regard to the advice of the fund managers and the Investment Consultant.
- To monitor performance of the Pension Fund, individual fund managers, custodians, actuary and other external advisors to ensure that they remain suitable;
- To determine the Fund management arrangements, including the appointment and termination of the appointment of the Fund Managers, Actuary, Custodians and Fund Advisers.
- To agree the ISS, the Funding Strategy Statement, the Business Plan for the Fund, the Governance Policy Statement, the Communications Policy Statement and the Governance Compliance Statement and to ensure compliance with these.
- To approve the final statement of accounts of the Fund and to approve the Annual Report.
- To receive actuarial valuations of the Fund regarding the level of employers' contributions necessary to balance the Fund.
- To oversee and approve any changes to the administrative arrangements, material contracts and policies and procedures of the Council for the payment of pensions, and allowances to beneficiaries.
- To make and review an admission policy relating to admission agreements generally with any admission body.
- To ensure compliance with all relevant statutes, regulations and best practice with both the public and private sectors.
- To review the arrangements and managers for the provision of Additional Voluntary Contributions for fund members.
- To receive and consider the Auditor's report on the governance of the Fund.
- To determine any other investment or pension fund policies that may be required from time to time so as to comply with Government regulations and to make any decisions in accordance with those policies.

The Pension Sub-Committee has responsibility for:

- Determining an overall investment strategy and strategic asset allocation, with regard to diversification and the suitability of asset classes
- Appointing the investment managers, an independent custodian, the actuary, the investment advisor(s) and any other external consultants considered necessary
- Reviewing on a regular basis the investment managers' performance against benchmarks, portfolio risk and satisfying themselves as to the managers' expertise and the quality of their internal systems and controls
- Monitoring compliance with the ISS & Funding Strategy Statement (FSS) and reviewing its contents
- Reviewing policy on social, environmental and ethical considerations, and on the exercise of voting rights

The Director of Finance and the appointed consultants and actuaries support the Committee. The day-to-day management of the Fund's assets is delegated to investment managers.

- 1.5 This ISS will be reviewed at least once a year, or more frequently as required - in particular following valuations, future asset/liability studies and performance reviews, which may indicate a need to change investment policy, or significant changes to the FSS.
- 1.6 Under the previous Regulations the Statement of Investment Principles required administering authorities to state how they complied with the revised six investment principles as outlined within the CIPFA Pensions Panel Principles. Although not formally required under the 2016 Regulations this information is given in Appendix A.

2. Objective 7.2 (a): A requirement to invest fund money in a wide range of instruments

- 2.1 Funding and investment risk is discussed in more detail later in this ISS. However, at this stage it is important to state that the Committee is aware of the risks it runs within the Fund and the consequences of these risks.
- 2.2 In order to control risk the Pension Sub-Committee recognises that the Fund should have an investment strategy that has:
 - Exposure to a diverse range of sources of return, such as market, manager skill and through the use of less liquid holdings.
 - Diversity in the asset classes used.
 - Diversity in the approaches to the management of the underlying assets.

A consequence of this approach is that the Fund's assets are invested in a wide range of instruments.

- 2.3 This approach to diversification has seen the Fund dividing its assets across 7 broad categories; UK equities, Global equities, Secure Income, Dynamic Asset Allocation, Absolute Return Bonds, Inflation Opportunities and Long Lease Property. The table in Section 5 (on page 8) below shows current asset allocation. The size of assets invested in each category will vary depending on investment conditions. However, it is important to note that each category is itself diversified.
- 2.4 The main risk the Pension Sub-Committee is concerned with is to ensure the long-term ability of the fund to meet pension and other benefit obligations, as they fall due, is met. As a result the Pension Sub-Committee place a high degree of importance on ensuring the expected return on the assets is sufficient to do so, and does not have to rely on a level of risk which the Pension Sub-Committee considers excessive.

The Fund currently has a surplus of income over expenditure when taking into account investment income. The Pensions Sub-Committee keeps the liquidity within the Fund monitored through regular reporting of cash flows.

At all times the Pension Sub-Committee takes the view that their investment decisions, including those involving diversification, in the best long term interest of Fund beneficiaries.

- 2.5 To mitigate these risks the Pension Sub-Committee regularly reviews both the performance and expected returns from the Fund's investments to measure whether it has met, and is likely to meet in future, its return objective. In addition to keeping their investment strategy and policy under regular review the Pension Sub-Committee will keep this ISS under review to ensure that it reflects the approaches being taken.

3. Objective 7.2(b): The authority's assessment of the suitability of particular investments and types of investment

- 3.1 When assessing the suitability of investments the Fund takes into account a number of factors:
- Prospective return
 - Risk
 - Concentration
 - Risk management qualities the asset has, when the portfolio as a whole is considered
 - Geographic and currency exposures
 - Whether the management of the asset meets the Fund's ESG criteria.
- 3.2 Suitability is a critical test for whether or not a particular investment should be made.
- 3.3 Each of the Fund's investments has an individual performance benchmark which their reported performance is measured against.
- 3.3 The Pension Sub-Committee monitors the suitability of the Fund's assets on a quarterly basis. To that end, they monitor the investment returns and the volatility of the individual investments together with the Fund level returns and risk. This latter point being to ensure the risks caused by interactions between investments within the portfolio is properly understood. Where comparative statistics are available the Pension Sub-Committee will also compare the Fund asset performance with those of similar funds.
- 3.4 The Pension Sub-Committee relies on external advice in relation to the collation of the statistics for review.

4. Objective 7.2(c): The authority's approach to risk, including ways in which risks are to be measured and managed

- 4.1 The Pension Sub-Committee recognises that there are a number of risks involved in the investment of the assets of the Fund amongst which are the following:
- 4.2 Geopolitical and currency risks:
- are measured by the value of assets (the concentration risk), in any one market leading to the risk of an adverse influence on investment values arising from political intervention; and

- are managed by regular reviews of the actual investments relative to policy and through regular assessment of the levels of diversification within the existing policy.
- 4.3 Manager risk:
- is measured by the expected deviation of the prospective risk and return as set out in the manager(s) investment objectives, relative to the investment policy; and
 - is managed by monitoring the actual deviation of returns relative to the objective and factors inherent in the manager(s) investment process.
- 4.4 Solvency and mismatching risk:
- are measured through a qualitative and quantitative assessment of the expected development of the liabilities relative to the current and alternative investment policies; and
 - are managed by assessing the progress of the actual growth of the liabilities relative to the selected investment policy.
- 4.5 Liquidity risk:
- is measured by the level of cash flow required over a specified period; and
 - managed by assessing the level of cash held in order to limit the impact of the cash flow requirements on the investment cash policy
- 4.6 Custodial risk:
- is measured by assessing the creditworthiness of the global custodian and the ability of the organisation to settle trades on time and provide secure safekeeping of the assets under custody.
- 4.7 Employer contributions are based upon financial and demographic assumptions determined by the actuary. The main risks to the Fund are highlighted within sections 12 to 15 of the Funding Strategy Statement. The risks to the Fund are controlled in the following ways:
- The adoption and monitoring of asset allocation benchmarks, ranges and performance targets constrain the investment managers from deviating significantly from the intended approach while permitting the flexibility for managers to enhance returns
 - The appointment of more than one manager with different mandates and approaches provides for the diversification of manager risk
- 4.8 The investment management agreements constrain the manager's actions in areas of particular risk and set out the respective responsibilities of both the manager and the Fund.

4.9 The Fund and the Pension Sub-Committee are aware investment risk is only one aspect of the risks facing the Fund. The other key risk they are aware of is the ability of the Fund to ascertain the required future contributions, support the investment risk (i.e. the level of volatility of investment returns) and underwrite actuarial risk, namely the volatility in the actuarial funding position and the impact this has on contributions.

4.10 The Fund and the Pension Sub-Committee are of the view that the diversification of the Fund assets is sufficiently broad to ensure the investment risk is low and will continue to be low. When putting in place the investment strategy the Pension Sub-Committee carefully considered both the individual asset risk characteristics and those of the combined portfolio to ensure the risks were appropriate.

Estimating the likely volatility of future investment returns is difficult as it relies on both estimates of individual asset class returns and also the correlation between them. These can be based on historic asset class information for some of the listed asset classes the Fund uses. However, for other private market and less liquid assets it is much more difficult.

The Pension Sub-Committee is also mindful that correlations change over time and at times of stress can be significantly different from they are in more benign market conditions.

To help manage risk the Pension Sub-Committee uses an external investment adviser to monitor the risk. In addition when carrying out their investment strategy review the Pension Sub-Committee also had different investment advisers assess the level of risk involved.

4.11 The Fund targets a return of 5.9% as aligned with the latest triennial valuation from the actuary. The investment strategy is considered to have a low degree of volatility.

4.12 When reviewing the investment strategy on a quarterly basis the Pension Sub-Committee considers advice from their advisers and the need to take additional steps to protect the value of the assets that may arise or capitalise on opportunities if they are deemed suitable.

4.13 At each review of the Investment Strategy Statement the assumptions on risk and return and their impact on asset allocation will be reviewed.

5 Objective 7.2(d): The authority's approach to pooling investments, including the use of collective investment vehicles.

5.1 The Fund recognises the Government's requirement for LGPS funds to pool their investments and is committed to pursuing a pooling solution that ensures maximum cost effectiveness for the Fund, both in terms of return and management cost.

- 5.2 The Fund has formally agreed to join the London Collective Investment Vehicle (CIV) as part of the Government's pooling agenda. The London CIV has been operational for some time and is in the process of opening a range of sub-funds covering liquid asset classes, with less liquid asset classes to follow.
- 5.3 The Fund has already transitioned assets into the London CIV with a value of £101.6m or 10.3% of the assets and will look to transition further liquid assets as and when there are suitable investment strategies available on the platform that meet the needs of the Fund.
- 5.4 The Fund will transition liquid assets into the London CIV when there are suitable investment strategies that meet the asset allocation and investment strategy available on the London CIV platform. The Fund anticipates being able to transition some of the liquid assets across in advance of April 2018.
- 5.5 The Fund is monitoring developments and the opening of investment strategy fund openings on the London CIV platform with a view to transitioning liquid assets across to the London CIV as soon as there are suitable sub-funds to meet the Fund's investment strategy requirements.
- 5.6 The Fund holds £278.6m or 28.4% of its assets in life funds and intends to retain these outside of the London CIV in accordance with government guidance on the retention of life funds outside pools for the time being. The Fund agrees for the London CIV to monitor the passive funds as part of the broader pool.
- 5.7 The Fund holds £71.6m or 7.3% of the Fund held in illiquid assets and these will remain outside of the London CIV pool. The cost of exiting these strategies early would have a negative financial impact on the Fund. These will be held as legacy assets until such time as they mature and proceeds re-invest through the pool assuming it has appropriate strategies available or until the Fund changes asset allocation and makes a decision to disinvest.
- 5.8 The Fund and the Pension Sub-Committee are aware that certain of the assets held within the Fund have limited liquidity and moving them would come at a cost. Whilst it is the expectation to make use of the London CIV for the management of the majority of the Fund assets in the longer term, the Pension Sub-Committee recognises that transitioning from the current structure to the London CIV will be a protracted exercise spread over a number of years to ensure unnecessary costs are not incurred.

London Borough of Hammersmith & Fulham Pension Fund	Value as at 31 Dec 2016 (£m)	Available on CIV	Transferred (£m)
UK Equities			
Majedie	221.0	Due April 2017	
Overseas Equities			
L&G World Equity	278.6	Not yet – see 5.6 above	
Secure Income			
Oak Hill Advisers	69.2	Not yet	
Partners Group Multi Asset Credit	53.5	n/a – illiquid	
Infrastructure			
Partners Group Infrastructure	8.3	n/a – illiquid	
Dynamic Asset Allocation			
Ruffer	101.6	Yes	101.6
Absolute Return Bonds			
Insight Bonds	88.9	Not yet	
Inflation Opportunities			
M&G Inflation Opportunities Fund	91.6	Not yet	
Long Lease Property			
Standard Life	45.8	Not yet	
Private Equity			
Invesco	6.2	n/a – illiquid	
Unigestion	3.6	n/a – illiquid	
Cash and liquidity funds			
L&G Liquidity Fund	13.8	n/a – illiquid	
Total	982.1		101.6

5.9 At each review of the investment strategy, which will happen at least every three years, the investment of the above assets will be actively considered by the Fund, including in particular whether a collective investment option is appropriate.

5.10 More information on the London CIV and its operation is included in Appendix D of this statement.

6 Objective 7.2(e): How social, environmental or corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments

6.1 The Fund recognises that the neglect of corporate governance and corporate social responsibility may lead to poor or reduced shareholder returns. The Pensions Sub-Committee has considered how the Fund may best implement a corporate social responsibility policy, given the current resources available to the Fund. Accordingly, the Pensions Sub-Committee has delegated social, environmental and ethical policy to the investment managers, but also approved

a Governance Strategy. The Pensions Sub-Committee believes this is the most efficient approach whilst ensuring the implementation of policy by each manager is consistent with current best practice and there is appropriate disclosure and reporting of actions taken. To that extent, the Pensions Sub-Committee maintains a policy of non-interference with the day-to-day decision making of the investment managers

- 6.2 As a responsible investor the Fund wishes to promote corporate social responsibility, good practice and improved performance amongst all companies in which it invests. Whilst there has been a great deal of emphasis on the relationship of business, financial and economic factors to investment performance, the impact on returns of less tangible non-financial and reputational factors is more difficult to identify. Nevertheless, it is clear that adverse publicity relating to low corporate, environmental or social standards can have an adverse impact on shareholder value, the Fund, its beneficiaries and local taxpayers. By having a good public image, the morale of the workforce will be higher, thus making it easier to attract and retain quality employees. The Fund considers that the pursuit of high corporate social responsibility standards by Companies will lead to higher returns in the long term. A good public image may help to increase sales volumes. An improved financial standing will improve credit ratings, thus allowing a company to attract lower cost funding. By addressing outside factors, the company is able to demonstrate an above average standard of management competence which will improve the long term potential and sustainability of the organisation. At the very least the Fund expects the Companies in which it invests to comply with all applicable laws and regulations in home markets and to conform to local best practice when operating overseas.
- 6.3 In furtherance of this stance, the Fund will support standards of best practice by Companies in both the disclosure and management of corporate social responsibility issues consistent with the Fund's fiduciary responsibilities. To this end the Fund will pursue a policy of active shareholder engagement with companies using its own efforts, those of its Fund managers and alliances with other investors. The Fund is a member of the Local Authority Pension Fund Forum.
- 6.4 The Fund will consider excluding certain types of investment from its actively managed portfolios, following appropriate advice on the implications for performance and diversification. Fund managers are instructed not to invest segregated elements of their portfolio in companies that generate over half of their income from tobacco products on investment prospects grounds. Fund managers are required to have policies regarding Environmental, Social and Governance (ESG) issues and to monitor their compliance with those policies.
- 6.5 The Fund is committed to being a long term steward of the assets in which it invests and expects this approach to protect and enhance the value of the Fund in the long term. In making investment decisions, the Fund seeks and receives proper advice from internal and external advisers with the requisite knowledge and skills. In addition the Pension Sub-Committee undertakes training on a regular basis and this will include on training and information sessions on matters of social, environmental and corporate governance.
- 6.6 Sections 6.7 to 6.12 below relate to the Fund's holdings in the London CIV.

- 6.7 The Fund requires its investment managers to integrate all material financial factors, including corporate governance, environmental, social, and ethical considerations, into the decision-making process for all fund investments. It expects its managers to follow good practice and use their influence as major institutional investors and long-term stewards of capital to promote good practice in the investee companies and markets to which the Fund is exposed.
- 6.8 The Fund expects its external investment managers (and specifically the London CIV through which the Fund will increasingly invest) to undertake appropriate monitoring of current investments with regard to their policies and practices on all issues which could present a material financial risk to the long-term performance of the fund, such as corporate governance and environmental factors. The Fund expects its fund managers to integrate material ESG factors within its investment analysis and decision making.
- 6.9 Effective monitoring and identification of these issues can enable engagement with boards and management of investee companies to seek resolution of potential problems at an early stage. Where collaboration is likely to be the most effective mechanism for encouraging issues to be addressed, the Fund expects its investment managers to participate in joint action with other institutional investors as permitted by relevant legal and regulatory codes.
- 6.10 The Fund monitors this activity on an ongoing basis with the aim of maximising its impact and effectiveness.
- 6.11 The Fund will invest on the basis of financial risk and return having considered a full range of factors contributing to the financial risk including social, environment and governance factors to the extent these directly or indirectly impact on financial risk and return.
- 6.12 The Fund in preparing and reviewing its Investment Strategy Statement will consult with interested stakeholders including, but not limited to Fund employers, investment managers, Local Pension Board, advisers to the Fund and other parties that it deems appropriate to consult with

7 Objective 7.2(f): The exercise of rights (including voting rights) attaching to investments

- 7.1 The Fund is committed to making full use of its shareholder rights. The Fund's policy on voting rights is based on the Cadbury, Greenbury and Hampel codes, as well as the stock exchange combined code, and the principles of protecting shareholder rights, minimising risk and enhancing value.
- 7.2 The Fund expects its Fund Managers to vote in an appropriate and informed manner and report their voting actions in their quarterly investment reports. The exercise of shareholder's rights is delegated to the Fund Managers as part of their mandate. Fund Managers will vote in accordance with their Corporate Governance Policy Statements. These policy statements have been developed with the recommendations of Institutional Shareholder Service, National Association of Pension Funds and the Association of British Insurers.
- 7.3 The Pensions Sub-Committee has delegated the Fund's voting rights to its investment managers, who are required, where practical, to make considered

use of voting in the interests of the Fund. The Committee expects the investment managers to vote in the best interests of the Fund.

- 7.4 Sections 7.5 to 7.20 below relate to the Fund's holdings in the London CIV.
- 7.5 The investment managers are required to regularly report voting actions and highlight where they do not vote in accordance with their stated policy.
- 7.6 The Fund recognises the importance of its role as stewards of capital and the need to ensure the highest standards of governance and promoting corporate responsibility in the underlying companies in which its investments reside. The Fund recognises that ultimately this protects the financial interests of the Fund and its ultimate beneficiaries. The Fund has a commitment to actively exercising the ownership rights attached to its investments reflecting the Fund's conviction that responsible asset owners should maintain oversight of the companies in which it ultimately invests, recognising that the companies' activities impact upon not only their customers and clients, but more widely upon their employees and other stakeholders and also wider society.
- 7.7 The Fund's investments through the London CIV are covered by the voting policy of the CIV which has been agreed by the Pensions Sectoral Joint Committee. Voting is delegated to the external managers and monitored on a quarterly basis. The CIV will arrange for managers to vote in accordance with voting alerts issued by the Local Authority Pension Fund Forum (LAPFF) as far as practically possible to do so and will hold managers to account where they have not voted in accordance with the LAPFF directions.
- 7.8 The Fund will incorporate a report of voting activity as part of its Pension Fund Annual Report which is published on the Council website: <http://democracy.lbhf.gov.uk>
- 7.9 The Fund has not issued a separate Statement of Compliance with the Stewardship Code, but fully endorses the principles embedded in the 7 Principles of the Stewardship Code.
- 7.10 The Fund expects its external investment managers to be signatories of the Stewardship Code and reach Tier One level of compliance or to be seeking to achieve a Tier One status within a reasonable timeframe. Where this is not feasible the Fund expects a detailed explanation as to why it will not be able to achieve this level.
- 7.11 In addition, the Fund expects its investment managers to work collaboratively with others if this will lead to greater influence and deliver improved outcomes for shareholders and more broadly.
- 7.12 The Fund through its participation in the London CIV will work closely with other LGPS Funds in London to enhance the level of engagement both with external managers and the underlying companies in which it invests

8 Feedback on this statement

Any feedback on this investment Strategy Statement is welcomed. If you have any comments or wish to discuss any issues then please contact:

Peter Carpenter – Tri-Borough Director of Pensions and Treasury

pcarpenter@westminster.gov.uk

020 7641 2832

Investment Strategy Statement: Appendix A

Compliance with CIPFA Pensions Panel Principles for investment decision making in the local government pension scheme in United Kingdom

Decision Making

Regulation 12(3) of The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009 requires an administering authority to report on its compliance with the six Myners' Principles, in accordance with guidance given by the Secretary of State. The guidance for the Local Government Pension Scheme is set out in the CIPFA publication "Investment Decision Making and Disclosure in the Local Government Pension Scheme in the United Kingdom 2012".

The Fund aims to comply with all of the Myners' Principles, recognising it is in all parties' interests if the Fund operates to standards of investment decision-making and governance identified as best practice. It is also recognised as important to demonstrate how the Fund meets such principles and best practice.

The Secretary of State has previously highlighted the principle contained in *Roberts v. Hapwood* whose administering bodies exercise their duties and powers under regulations governing the investment and management of Funds:

"A body charged with the administration for definite purposes of funds contributed in whole or in part by persons other than members of that body owes, in my view, a duty to those latter persons to conduct that administration in a fairly business-like manner with reasonable care, skill and caution, and with a due and alert regard to the interest of those contributors who are not members of the body. Towards these latter persons the body stands somewhat in the position of trustees or managers of others".

The Myners' Principles are seen as supporting this approach. The principles, together with the Fund's position on compliance, are set out below:

Principle 1 - Effective decision-making

Administering authorities should ensure that:

- **Decisions are taken by persons or organisations with the skills, knowledge, advice and resources necessary to make them effectively and monitor their implementation; and**
- **Those persons or organizations have sufficient expertise to be able to evaluate and challenge the advice they receive, and manage conflicts of interest.**

Full Compliance

The Council has delegated the management and administration of the Fund to the Pension Sub-Committee, which meets at least quarterly. The responsibilities of the Pension Sub-Committee are described in paragraph 1.4 of the ISS.

The Pension Sub-Committee is made up of elected members of the Council who each have voting rights. Representatives from the admitted and scheduled bodies within the Fund and from trade unions may attend as observers.

The Pension Sub-Committee obtains and considers advice from and is supported by the Director of Finance, Corporate Finance and as necessary from the Fund's appointed actuary, investment managers and advisors. A review of the investment advice received by the Fund was completed in 2016/17 to ensure it continues to be fit for purpose in the changing investment and legislative environment.

The Pension Sub-Committee has delegated the management of the Fund's investments to professional investment managers, appointed in accordance with the scheme's regulations, whose activities are specified in detailed investment management agreements and regularly monitored.

Business plans are presented to the Pension Sub-Committee annually and progress is monitored on a quarterly basis.

Several of the Pension Sub-Committee members have extensive experience of dealing with Investment matters and training is made available to new Pension Sub-Committee members. Pension Sub-Committee Members are required to undertake a minimum of three days of investment training a year – there is an on-going programme of training available to members.

Principle 2 - Clear objectives

An overall investment objective(s) should be set for the Fund that takes account of the pension liabilities, the potential impact on local tax payers, the strength of the covenant for non-local authority employers, and the attitude to risk of both the administering authority and scheme employers, and these should be clearly communicated to advisors and investment managers.

Full Compliance

The aims and objectives of the Fund are set out within the FSS and the ISS. The main Fund objective is to meet the cost of pension liabilities and to enable employer contribution rates to be kept as nearly constant as possible at reasonable cost to the taxpayers and admitted bodies.

The investment strategy has been set with the objective of controlling the risk that the assets will not be sufficient to meet the liabilities of the Fund while achieving a good return on investment (see paragraphs 4 and 5 above). The approach taken reflects the Fund's liabilities and was decided upon without reference to any other funds. The Fund's performance is measured against the investment objective on a quarterly basis.

The Fund's strategy is regularly reviewed.

Principle 3 – Risk and liabilities

In setting and reviewing their investment strategy, administering authorities should take account of the form and structure of liabilities. These include the implications for local tax payers, the strength of the covenant for participating employers, the risk of their default and longevity risk.

Full Compliance

The Pension Sub-Committee has, in conjunction with its advisers, agreed an investment strategy that is related to the Fund's liabilities. An actuarial valuation of the Fund takes place every three years, with the most recent triennial valuation taking place in 2016. The investment strategy is designed to give diversification and specialisation and achieve optimum return against acceptable risk.

The asset allocation of the Fund is set to maximise the potential to close the funding deficit over future years. The current allocation is outlined in Section 5 of the ISS.

During 2014/15, the Fund established an Admitted/Scheduled Body policy, which outlines its approach to assessing the strength of the covenant for participating employers and the risk assessment undertaken when new employers wish to join the Fund.

Principle 4 – Performance Assessment

Arrangements should be in place for the formal measurement of performance of the investments, investment managers and advisors. Administering authorities should also periodically make a formal assessment of their own effectiveness as a decision-making body and report on this to scheme members

Full Compliance

The Pensions Sub-Committee has appointed investment managers with clear index strategic benchmarks within an overall Investment objective which place maximum accountability for performance against that benchmark on the manager.

The managers are monitored at quarterly intervals against their agreed benchmarks. Independent detailed monitoring of the Fund's performance is carried out by Deloitte, the Fund's investment adviser and by Northern Trust, the Fund's custodian who provide the performance figures. Moreover, portfolio risk is measured on quarterly basis and the risk/return implications of different strategic options are fully evaluated.

The investment adviser is assessed on the appropriateness of asset allocation recommendations and the quality of advice given.

The actuary is assessed on the quality and consistency of the actuarial advice received. Both the advisor and the actuary have fixed term contracts which when expired are tendered for under the Official Journal of the European Union (OJEU) procedures.

The Pension Sub-Committee monitors the investment decisions it has taken, including the effectiveness of these decisions. In addition the Pension Sub-Committee receives quarterly reports as to how the Fund has performed against their investment objective. The performance figures are included in the extract from the accounts which is sent to stakeholders annually.

Principle 5 – Responsible Ownership

Administering authorities should:

- **Adopt, or ensure their investment managers adopt, the Institutional Shareholders Committee Statement of Principles on the responsibilities of shareholders and agents.**

- **Include a statement of their policy on responsible ownership in the statement of investment principles.**
- **Report periodically to scheme members on the discharge of such responsibilities.**

Full Compliance

The Fund is committed to making full use of its shareholder rights. The approach used is outlined in Section 7 of the ISS. Authority has been delegated to the investment managers to exercise voting rights on behalf of the Fund. The investment managers are required to report how they have voted in their quarterly reports.

The Fund believes in using its influence as a shareholder to promote corporate social responsibility and high standards of corporate governance in the companies in which it invests – the Fund’s approach to this is outlined in Section 7 of the ISS.

The ISS is publically available to all scheme members.

Principle 6 – Transparency and reporting

Administering authorities should:

- **Act in a transparent manner, communicating with stakeholders on issues relating to their management of investments, its governance and risks, including performance against stated objectives.**
- **Provide regular communications to scheme members in the form they consider most appropriate.**








Full Compliance

Links to the Governance Compliance Statement, the ISS, the FSS, the SRI Policy and the Communications Statement are all included in the Pensions Fund Annual Report which is published and is accessible to stakeholders of the Fund on the Council’s web site, internal intranet and a website developed specifically for the Fund.



All Pensions Sub-Committee meetings are open to members of the public and agendas and minutes are published on the Council’s website and internal intranet. The Fund’s Annual Report includes an assessment of the Fund’s performance and an extract from the accounts is sent to stakeholders annually.

Investment Strategy Statement: Appendix B – Risk Register

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
1	STRATEGIC: INVESTMENT That the combination of assets in the investment portfolio fails to fund the liabilities in the long term.	<ul style="list-style-type: none"> Investment strategy in place and reviewed periodically. Performance is measured against a benchmark. Fund performance is reviewed quarterly. 	2	3	Low 6 	Director of Treasury & Pensions	Nov 2016
2	STRATEGIC: INVESTMENT Fund managers fail to achieve the returns agreed in their management agreements.	<ul style="list-style-type: none"> Independent monitoring of fund manager performance by custodian against targets. Investment adviser retained to keep watching brief. Fund manager performance is reviewed quarterly. 	3	3	Low 9 	Director of Treasury & Pensions	Nov 2016
3	STRATEGIC: INVESTMENT Failure of custodian or counterparty.	<ul style="list-style-type: none"> At time of appointment, ensure assets are separately registered and segregated by owner. Review of internal control reports on an annual basis. Credit rating kept under review. 	2	3	Low 6 	Director of Treasury & Pensions	Nov 2016
4	STRATEGIC: FUNDING The level of inflation and interest rates assumed in the valuation may be inaccurate leading to higher than expected liabilities.	<ul style="list-style-type: none"> Review at each triennial valuation and challenge actuary as required. Growth assets and inflation linked assets in the portfolio should rise as inflation rises. 	4	3	Medium 12 	Director of Treasury & Pensions	Nov 2016
5	STRATEGIC: FUNDING There is insufficient cash available in the Fund to meet pension payments leading to investment assets being sold at sub-optimal prices to meet pension payments.	<ul style="list-style-type: none"> Cashflow forecast maintained and monitored. Cashflow position reported to sub-committee quarterly. Cashflow requirement is a factor in investment strategy reviews. 	2	1	Very Low 2 	Director of Treasury & Pensions	Nov 2016
6	STRATEGIC: FUNDING Scheme members live longer than expected leading to higher than expected liabilities.	<ul style="list-style-type: none"> Review at each triennial valuation and challenge actuary as required. 	4	2	Low 8 	Director of Treasury & Pensions	Nov 2016
7	STRATEGIC: FUNDING Scheme matures more quickly than expected due to public sector spending cuts, resulting in contributions reducing and pension payments increasing.	<ul style="list-style-type: none"> Review maturity of scheme at each triennial valuation. Deficit contributions specified as lump sums, rather than percentage of payroll to maintain monetary value of contributions. Cashflow position monitored quarterly. 	2	3	Low 6 	Director of Treasury & Pensions	Nov 2016
8	STRATEGIC: REGULATION Pensions legislation or regulation changes resulting in an increase in the cost of the scheme or increased administration.	<ul style="list-style-type: none"> Maintain links with central government and national bodies to keep abreast of national issues. Respond to all consultations and lobby as appropriate to ensure consequences of changes to legislation are understood. 	3	4	Medium 12 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
9	STRATEGIC: REGULATION Introduction of European Directive MiFID II results in a restriction of Fund's investment options and an increase in costs.	<ul style="list-style-type: none"> Officers are engaging with Fund Managers to understand the position better Knowledge and Skills Policy in place for Officers and Members of the Committee Maintain links with central government and national bodies to keep abreast of this developing issue. 	2	2	Very Low 4 	Director of Treasury & Pensions	Nov 2016

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
10	OPERATIONAL: GOVERNANCE Failure to comply with legislation leads to ultra vires actions resulting in financial loss and/or reputational damage.	<ul style="list-style-type: none"> Officers maintain knowledge of legal framework for routine decisions. Eversheds retained for consultation on non-routine matters. 	2	2	Very Low 4 	Director of Treasury & Pensions	Nov 2016
11	OPERATIONAL: GOVERNANCE Sub-committee members do not have appropriate skills or knowledge to discharge their responsibility leading to inappropriate decisions.	<ul style="list-style-type: none"> External professional advice is sought where required Knowledge and skills policy in place 	3	3	Low 9 	Director of Treasury & Pensions	Nov 2016
12	OPERATIONAL: GOVERNANCE Officers do not have appropriate skills and knowledge to perform their roles resulting in the service not being provided in line with best practice and legal requirements. Succession planning is not in place leading to reduction of knowledge when an officer leaves.	<ul style="list-style-type: none"> Person specifications are used at recruitment to appoint officers with relevant skills and experience. Training plans are in place for all officers as part of the performance appraisal arrangements. Shared service nature of the pensions teams provides resilience and sharing of knowledge. 	3	3	Low 9 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
13	OPERATIONAL: GOVERNANCE Inadequate, inappropriate or incomplete investment or actuarial advice is actioned leading to a financial loss or breach of legislation.	<ul style="list-style-type: none"> At time of appointment ensure advisers have appropriate professional qualifications and quality assurance procedures in place. Sub-committee and officers scrutinise and challenge advice provided. 	2	2	Very Low 4 	Director of Treasury & Pensions	Nov 2016
14	OPERATIONAL: GOVERNANCE London CIV has inadequate resources to monitor the implementation of investment strategy and as a consequence are unable to address underachieving fund managers.	<ul style="list-style-type: none"> Pensions sub-committee Chair is a member of the Joint member Committee responsible for the oversight of the CIV and can monitor and challenge the level of resources through that forum. Director of Treasury & Pensions is a member of the officer Investment Advisory Committee which gives the Fund influence over the work of the London CIV. 	3	2	Low 6 	Director of Treasury & Pensions	Nov 2016
15	OPERATIONAL: FUNDING Failure of an admitted or scheduled body leads to unpaid liabilities being left in the Fund to be met by others.	<ul style="list-style-type: none"> Transferee admission bodies required to have bonds in place at time of signing the admission agreement. Regular monitoring of employers and follow up of expiring bonds. Review of bond status within all admission agreements to be undertaken and finished in Quarter 2. 	3	2	Low 6 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
16	OPERATIONAL: FUNDING Ill health costs may exceed "budget" allocations made by the actuary resulting in higher than expected liabilities particularly for smaller employers.	<ul style="list-style-type: none"> Review "budgets" at each triennial valuation and challenge actuary as required. Charge capital cost of ill health retirements to admitted bodies at the time of occurring. Occupational health services provided by the Council and other large employers to address potential ill health issues early. 	3	2	Low 6 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
17	OPERATIONAL: FUNDING Transfers out increase significantly as members transfer to DC funds to access cash through new pension freedoms.	<ul style="list-style-type: none"> Monitor numbers and values of transfers out being processed. If required, commission transfer value report from Fund Actuary for application to Treasury for reduction in transfer values. 	2	3	Low 6 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
18	OPERATIONAL: ADMINISTRATION Loss of funds through fraud or misappropriation leading to negative impact on reputation of the Fund as well as financial loss.	<ul style="list-style-type: none"> Third parties regulated by the FCA and separation of duties and independent reconciliation procedures in place. Review of third party internal control reports. Regular reconciliations of pension payments undertaken by Pensions Finance Team. Periodic internal audits of Pensions Finance and HR teams. Mortality screening arrangements reviewed by HR and Surrey County Council leading to improvements. 	4	2	Low 8 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
19	OPERATIONAL: ADMINISTRATION Failure of fund manager or other service provider without notice resulting in a period of time without the service being provided or an alternative needing to be quickly identified and put in place.	<ul style="list-style-type: none"> Contract monitoring in place with all providers. Procurement team send alerts whenever credit scoring for any provider changes for follow up action. 	3	1	Very Low 3 	Director of Treasury & Pensions and Bi-borough Director of HR	Nov 2016
20	OPERATIONAL: ADMINISTRATION Failure of financial system leading to lump sum payments to scheme members and supplier payments (to fund managers and advisers) not being made and Fund accounting not being possible.	<ul style="list-style-type: none"> Contract in place with BT to provide service enabling smooth processing of payments. Officers are tracking payments through the system to ensure scheme members and suppliers receive them. Officers undertaking regular reconciliation work to verify accounting transactions. 	2	2	Very Low 4 	Director of Treasury & Pensions	Nov 2016
21	OPERATIONAL: ADMINISTRATION Failure of pension payroll system resulting in pensioners not being paid in a timely manner.	<ul style="list-style-type: none"> Pensioner payroll system is subject to daily software backups and off-site duplication of records. Disaster recovery procedures allow for pensioner payrolls to be run from alternative sites if required. 	1	5	Very Low 5 	Bi-borough Director of HR	Nov 2016
22	OPERATIONAL: ADMINISTRATION Failure to pay pension benefits accurately leading to under or over payments.	<ul style="list-style-type: none"> SCC's Altair system allows for all pensioner benefits to be automatically calculated by the administration system. Pensioner benefits are double-checked by another team member in SCC before being released. Spot checks are undertaken by the Client Team for accuracy. 	2	3	Low 6 	Bi-borough Director of HR	Nov 2016
23	OPERATIONAL: ADMINISTRATION Failure of pension administration system resulting in loss of records and incorrect pension benefits being paid or delays to payment.	<ul style="list-style-type: none"> Pensioner administration system Altair is subject to daily software backups and off-site duplication of records. Disaster recovery procedures allow for Altair to be run from an alternative site if required. Payments can be made from other UK sites other than SCC's HQ. 	1	5	Very Low 5 	Bi-borough Director of HR	Nov 2016

Ref	Risk	Mitigating Actions	Residual risk score		Risk Rating	Officer responsible	Review Date
			Likelihood	Impact			
24	<p>OPERATIONAL: ADMINISTRATION Administrators do not have sufficient staff or skills to manage the service leading to poor performance and complaints.</p>	<ul style="list-style-type: none"> • SCC's pension teams are highly skilled and knowledgeable in the area of LGPS administration. • The work is split across multiple officers to ensure skills are fully developed so that there is no single point of failure. • Team members received regular training on LGPS and on changes or enhancements to the pension administration system. • There are regular monthly meetings with the Client Manager to review performance. 	2	3	<p>Low</p> <p>6</p> 	Bi-borough Director of HR	Nov 2016
25	<p>OPERATIONAL: ADMINISTRATION The quality of scheme member data inherited from Capita does not meet the comprehensiveness and level of accuracy required for Surrey County Council to correctly administer the LGPS to scheme members.</p>	<ul style="list-style-type: none"> • Some key data cleansing work was undertaken as part of the data preparation for the triennial review data to be given to the Actuary in July 2016. • Data deficiencies inherited from Capita have been identified by Surrey County Council. A data recovery plan is expected to be agreed with Surrey and LBHF staff by the end of September 2016. • Surrey County Council has been given authority to recruit 2 additional FTE for an initial period of 1 year (shared with RBKC) to work through data deficiencies. 	3	5	<p>Medium</p> <p>15</p> 	Bi-borough Director of HR	Nov 2016

Investment Strategy Statement: Appendix C

Information on London CIV

Stewardship Statement is attached – Other London CIV details are included in ISS main Statement

LONDON CIV DRAFT UK STEWARDSHIP CODE STATEMENT

The London Collective Investment Vehicle (CIV) was formed as a voluntary collaborative venture by the London Local Authorities in 2014 to invest the assets of London Local Government Pension Scheme (LGPS). The London CIV and its London Local Authority investors recognise the importance of being long term stewards of capital and in so doing supports the UK Stewardship Code, which it recognises as best practice.

The London LGPS CIV Limited (“London CIV”) is fully authorised by the FCA as an Alternative Investment Fund Manager (AIFM) with permission to operate a UK based Authorised Contractual Scheme fund (ACS Fund). The London CIV in the management of its investments has appointed a number of external investment managers. We therefore see our role as setting the tone for the effective delivery of stewardship managers on our behalf and on behalf of our investing Funds. We are clear that we retain responsibility for this being done properly and fully in the interests of our own shareholders.

This Statement sets out how the London CIV implements the seven principles of the Code.

Principle 1

Institutional investors should publicly disclose their policy on how they will discharge their stewardship responsibilities.

The London CIV on behalf of its London Local Authority Shareholders recognises its position as an investor on their behalf with ultimate responsibility to members and beneficiaries and recognises that effective stewardship can help protect and enhance the long-term value of its investments to the ultimate benefit of all stakeholders in the LGPS.

As we do not invest directly in companies, we hold our fund managers accountable for the delivery of stewardship on our behalf in terms of day-to-day implementation of its stewardship activity. We require the appointed fund management teams to be responsible for holding to account the management and boards of companies in which they invest. The London CIV believes that this approach is compatible with its stewardship responsibilities as it is the most effective and efficient manner in which it can promote and carry out stewardship activities in respect of its investments, and ensure the widest reach of these activities given the CIV’s investment arrangements.

A key related area where stewardship is integrated into the wider process is in the selection and monitoring of external investment managers. When considering the appointment of external investment managers the consideration of Environmental Social and Governance (ESG) integration and stewardship activity of each investment manager is part of the selection process.

The London CIV expects its equity investment managers to adhere to the principles within the UK Stewardship Code. This position is communicated to the Fund's investment managers and forms the basis of the approach to monitoring the investment managers as outlined in this document. Whilst the Stewardship Code is primarily directed at UK equity investments, the CIV encourages its investment managers to apply the principles of the Code to overseas equity holdings where possible.

The primary mechanisms for the application of effective stewardship for the CIV are exercise of voting rights and engagement with investee companies. The CIV expects its external equity investment managers that invest directly in companies, to pursue both these mechanisms. We receive quarterly reporting from managers which includes their stewardship and voting activities where appropriate. We seek consistently to ensure that these stewardship activities are carried out actively and effectively in the furtherance of good long-term investment returns.

We expect all of the CIV's equity managers to be signatories to the Code and have publicly disclosed their policy via their Statements on how they will discharge their stewardship responsibilities. We expect managers that invest in companies directly to discharge their responsibilities by:

- having extensive dialogue with the company's management throughout the year on a range of topics such as governance, financial performance and strategy; and
- voting, either directly or via the services of voting agencies.

Principle 2

Institutional investors should have a robust policy on managing conflicts of interest in relation to stewardship which should be publicly disclosed.

Day-to-day implementation of the Fund's stewardship activity has been delegated to external investment managers. The CIV expects its investment managers to document their approach to stewardship, which should include how they manage any conflicts of interest that arise to ensure that the interests of the CIV's Investors are prioritised. The CIV will review annually the conflicts of interest policy of its managers and how any conflicts have been managed during the year.

The London CIV has policies in place to manage conflicts of interest that may arise for the Board and its officers when making decisions on its behalf. The Conflicts of Interest policy is reviewed by the CIV board on a regular basis. A Conflicts of Interest Register is maintained.

Shareholders of the CIV attending the Pensions Sectoral Joint Committee are required to declare any conflicts of interest at the start of any meeting.

Principle 3

Institutional investors should monitor their investee companies.

We recognise that active and ongoing monitoring of companies is the foundation of good stewardship, reminding companies in which we invest that they have obligations to their shareholders to deliver returns over the appropriate long-term investment timeframe and, consistent with this, to manage any related environmental and social risks responsibly.

The CIV requires its external investment managers to monitor investee companies. Issues to be monitored are likely to vary, however typically these might include a company's corporate strategy, financial performance, risk (including those from environmental and social factors), capital structure, leadership team and corporate governance. The CIV encourages its investment managers to satisfy themselves that investee companies adhere to the spirit of the UK Corporate Governance Code.

The CIV reviews investment managers in this area as part of their regular meetings. For equity investment managers this includes consideration of:

- who has overall responsibility for ESG risk analysis and integration;
- resources and experience of the team;
- at what stages of the process ESG risks are considered;
- exposures to environmental, social or governance risk within the portfolio; and
- the investment manager's willingness to become an insider and, if so, whether the manager has a policy setting out the mechanisms through which this is done.

Principle 4

Institutional investors should establish clear guidelines on when and how they will escalate their stewardship activities.

The CIV recognises that constructive engagement with company management can help protect and enhance shareholder value. Typically, the CIV expects its investment managers to intervene with investee companies when they view that there are material risks or issues that are not currently being adequately addressed.

The CIV reviews investment managers in this area as part of their regular meeting. For equity investment managers that invest directly in Companies, this includes consideration of:

- whether voting activity has led to any changes in company practice;
- whether the investment manager's policy specifies when and how they will escalate engagement activities;
- overall engagement statistics (volume and areas of focus);
- example of most intensive engagement activity discussed as part of the manager's annual review meeting; and
- the estimated performance impact of engagement on the strategy in question.

Given the range of fund managers and Fund investments, the CIV carries out its monitoring at the manager level to identify:

- trends to ensure progress is being made in stewardship activities;
- specific managers where progress or the rate of progress is not adequate; and
- appropriate specific actions necessary.

Principle 5

Institutional investors should be willing to act collectively with other investors where appropriate.

As day-to-day management of the Fund's assets has been delegated to external investment managers, the CIV expects its investment managers to get involved in collective engagement where this is an efficient means to protect and enhance long-term shareholder value.

In addition the London CIV will work collectively with other investors including other LGPS Asset pools and the Local Authority Pension Fund Forum (LAPFF) to enhance the impact of their engagement activities.

Principle 6

Institutional investors should have a clear policy on voting and disclosure of voting activity.

The CIV has delegated its voting rights to the Fund's investment managers and requires them to vote, except where it is impractical to do so. The CIV also monitors the voting alerts of the LAPFF and where these are issued, requires the investment managers to take account of these alerts as far as practical to do so. Where the investment manager does not vote in line with the LAPFF voting alerts, the CIV will require detailed justification for non compliance.

The CIV reviews and monitors the voting policies and activities of its investment managers, this includes consideration of:

- the manager's voting policy and, what areas are covered;
- the level of voting activity
- whether the investment manager typically informs companies of their rationale when voting against or abstaining (and whether this is typically in advance of the vote or not);
- if securities lending takes place within a pooled fund for the strategy, whether the stock is recalled for all key votes for all stocks held in the portfolio; and
- whether a third party proxy voting service provider is used and, if so, how.

Principle 7

Institutional investors should report periodically on their stewardship and voting activities.

The London CIV encourages transparency from its investment managers and expects its managers to report publicly on their voting in an appropriate manner. In addition the London CIV receives reviews and monitors quarterly the voting and stewardship engagement activities of its investment managers.

The CIV reports quarterly to its investors and will include information on voting and engagement activities from investment managers where appropriate including updates as required on updated stewardship and voting policies of managers. The CIV also requires its managers to provide it with annual assurances on internal controls and compliance through recognised framework such as the AAF01/06 or equivalent.

This statement will be reviewed regularly and updated as necessary.

LONDON BOROUGH OF HAMMERSMITH AND FULHAM PENSION FUND FUNDING STRATEGY STATEMENT 2016

1. Purpose of the Funding Strategy Statement

- 1.1 The purpose of this Funding Strategy Statement is to explain the funding objectives of the London Borough of Hammersmith and Fulham Pension Fund (the “Fund”) and in particular:
- How the costs of the benefits provided under the Local Government Pension Scheme (the “Scheme”) are met through the Fund in a prudent way;
 - The objectives in setting employer contribution rates and the desirability of maintaining stability in the primary contribution rate; and
 - Ensuring that the regulatory requirements to set contributions that will maintain the solvency and long term cost-efficiency of the Fund are met.

2. Aims and Purpose of the Fund

- 2.1 The aims of the Fund are to:
- Manage employers’ liabilities effectively and ensure that sufficient resources are available to meet all liabilities as they fall due;
 - Enable primary contribution rates to be kept as nearly constant as possible; and
 - Seek returns on investment within reasonable risk parameters.
- 2.2 The purpose of the Fund is to:
- Pay pensions, lump sums and other benefits provided under the Regulations;
 - Meet the costs associated in administering the Fund; and
 - Receive contributions, transfer values and investment income.

3. Responsibilities of Key Parties

- 3.1 The key parties involved in the funding process and their responsibilities are as follows:

The Administering Authority

- 4.2 The Administering Authority for the Pension Fund is the London Borough of Hammersmith and Fulham. The main responsibilities of the Administering Authority are to:
- Operate a pension fund;
 - Collect employee and employer contributions investment income and other amounts due to the Fund, as stipulated in the LGPS Regulations;
 - Invest the Fund’s assets in accordance with the LGPS regulations;

- Pay the benefits due to Scheme members; as stipulated by the LGPS regulations;
- Ensure that cash is available to meet liabilities as and when they fall due;
- Take measures as set out in the regulations to safeguard the Fund against the consequences of employer default;
- Manage the actuarial valuation process in conjunction with the Fund Actuary;
- Prepare and maintain this FSS, the SIP and ISS after consultation with other interested parties; and
- Monitor all aspects of the Fund's performance and funding, amending the FSS and ISS accordingly;
- Manage any potential conflicts of interest arising from the Borough's dual role as scheme employer and fund administrator
- Enable the pension board to review the valuation process as set out in their terms of reference.

Individual Employers

- 4.3 In addition to the administering authority, a number of scheduled and admitted bodies participate in the Fund.

The responsibilities of each individual employer that participates in the Fund, including the administering authority, are to:

- Deduct contributions from employees' salaries correctly and pay these, together with their own employer contributions as certified by the Fund Actuary, to the administering authority within the statutory timescales;
- Notify the administering authority of all changes in Scheme membership and any other membership changes promptly;
- Exercise any discretions permitted under the Regulations; and
- Meet the costs of any augmentations or other additional costs, such as early retirement strain, in accordance with agreed policies and procedures.

Fund Actuary

- 4.4 The Fund Actuary for the Fund is Barnett Waddingham LLP. The main responsibilities of the Fund Actuary are to:

- Prepare valuations including the setting of employers' contribution rates at a level to ensure Fund solvency and long term cost efficiency, after agreeing assumptions with the administering authority and having regard to the FSS and the LGPS regulations;
- Prepare advice and calculations in connection with bulk transfers and the funding aspects of individual benefit related matters, such as pension strain costs, ill health retirement costs, compensatory added years costs, etc.;

- Provide advice and valuations on the exiting of employers from the Fund;
- Advise the administering authority on Bonds and other forms of security against the financial effect on the Fund of employer default;
- Assist the administering authority in assessing whether employer contributions need to be revised between valuations, as permitted or required by the regulations;
- Ensure that the administering authority is aware of any professional guidance or other professional requirements that may be of relevance to the administrator's role in advising the fund; and
- Advise on other actuarial matters affecting the financial position of the Fund.

5. Solvency Issues and Target Funding Levels

- 5.1 Given the statutory position of the LGPS administering authorities and the tax-backed nature of employing authorities who make up the core of the Scheme and the statutory basis of the Scheme, the LGPS remains outside the solvency arrangements established for private sector occupational pension schemes.
- 5.2 LGPS regulations require each administering authority to secure fund solvency and long-term cost efficiency by means of employer contribution rates established by mandatory valuation exercises.
- 5.3 Maintaining as nearly a constant a primary employer contribution rate is a desirable outcome, but not a regulatory requirement. It is for LGPS administering authorities to seek to achieve a balance between the objectives in a prudent manner.
- 5.4 Solvency is defined as meaning that the rate of employer contributions should be set at such a level as to ensure that the scheme's liabilities can be met as they arise. This does not mean that the Fund should be 100% funded at all times, but that the rate of employer contributions should be set to target a funding level for the whole fund of 100% over an appropriate time period and using an appropriate set of actuarial assumptions.
- 5.5 Employers should collectively have the financial capacity to increase employer contributions and/or the Fund should be able to realise contingent assets if future circumstances require, in order to continue to target a funding level of 100%. If these conditions are met, it is anticipated that the Fund will be able to pay scheme benefits as they fall due.
- 5.6 The rate of employer contributions shall be deemed to be set at an appropriate level to ensure long-term cost efficiency, if the rate of employer contributions is sufficient to make provision for the cost of current benefit accrual, with an appropriate adjustment to the rate for any surplus or deficit in the Fund. The Government Actuary's Department (GAD) will assess whether this condition is met.

6. Primary rate of the employers' contribution

- 6.1 The primary rate for each employer is that employer's future service contribution rate which is the contribution rate required to meet the cost of the future accrual of benefits, expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any specific employer circumstances.
- 6.2 The primary rate for the whole Fund is the weighted average, by payroll, of the individual employers' primary rates.
- 6.3 The secondary rate of the employer's contribution is an adjustment to the primary rate to arrive at the rate each employer is required to pay. It may be expressed either as a percentage adjustment to the primary rate and/or as a cash adjustment for each of the three years of the inter-valuation period. This will be set out in the rates and adjustments certificate. For any employer, the rate they are actually required to pay is the sum of the primary and secondary rates.
- 6.4 The actuary should disclose the secondary rates for the whole scheme in each of the three inter-valuation years. These should be calculated as a weighted average based on the whole scheme payroll. The purpose of this is to facilitate a single net rate of contributions expected to be received over each of the three years that can be readily compared with other rates and reconciled with actual receipts.

7 Solvency Issues and Non Local Authority Employers

- 7.1 The number and type of non-local government bodies operating within the LGPS has grown considerably since 2004, when Funding Strategy Statements were first introduced. There are now many more private sector contractors, companies spun off from local authorities and academies which have employees who continue to qualify for membership by dint of transferred rights under the TUPE regulations. Employees in academies qualify for the scheme because of academies' scheduled body status. Key issues are:
- The need to set appropriate employer contribution levels and deficit recovery periods for these employers which do not have tax-raising powers and therefore have weaker covenants than local authorities;
 - The underlying investment strategy of the assets backing the liabilities of these employers;
 - The financial standing of those employers (or their parent companies or guarantors) and their ability to meet the cost of current membership, fund any deficit and ability to ensure against default;
 - The long and short term effects of high contribution rates on non local authority employers in terms of their financial viability.
- 7.2 In the interests of transparency, the FSS should clearly set out the risk assessment methodology to assess the long term financial health of employers and how this will be monitored. This is undertaken by:

- Having the correct Risk Assessments made when new Admitted and Scheduled bodies join the fund and security via a bond is requested;
- Admitted and Scheduled bodies being consulted on Triennial revaluation rates; and
- Pension contributions being monitored “in year” to ensure Admitted and Scheduled bodies are making the required payments.

8. Valuation Assumptions and Funding Model

- 8.1 In completing the actuarial valuation it is necessary to formulate assumptions about the factors affecting the Fund's future finances such as inflation, pay increases, investment returns, rates of mortality, early retirement and staff turnover etc.
- 8.2 The assumptions adopted at the valuation can therefore be considered as:
- The statistical assumptions which are essentially estimates of the likelihood of benefits and contributions being paid; and
 - The financial assumptions which will determine the estimates of the amount of benefits and contributions payable and their current or present value.

Future Price Inflation

- 8.3 The base assumption in any valuation is the future level of price inflation over a period commensurate with the duration of the liabilities. This is derived by considering the average difference in yields over the appropriate period from conventional and index linked gilts during the six months straddling the valuation date to provide an estimate of future price inflation as measured by the Retail Price Index (or “RPI”).

Future Pay Inflation

- 8.4 As some of the benefits are linked to pay levels at retirement, it is necessary to make an assumption as to future levels of pay inflation. Historically, there has been a close link between price and pay inflation with pay increases exceeding price inflation in the longer term. However, in recent years, this model has broken down due to pay freezes in the public sector and continuing restraint to restrict salary growth across many sectors.

Future Pension Increases

- 8.5 Pension increases are linked to changes in the level of the Consumer Price Index (or “CPI”). Inflation as measured by the CPI has historically been less than RPI due mainly to different calculation methods. An adjustment is therefore made to the RPI assumption to derive the CPI assumption.

Future Investment Returns/Discount Rate

- 8.6 To determine the value of accrued liabilities and derive future contribution requirements it is necessary to discount future payments to and from the Fund to present day values.
- 8.7 The discount rate that is adopted will depend on the funding target adopted for each employer.
- 8.8 For open employers, the discount rate that is applied to all projected liabilities reflects a prudent estimate of the rate of investment return that is expected to be earned from the underlying investment strategy by considering average market yields in the six months straddling the valuation date. The discount rate so determined may be referred to as the “ongoing” discount rate.
- 8.9 For closed employers, an adjustment may be made to the discount rate in relation to the remaining liabilities, once all active members are assumed to have retired if at that time (the projected “termination date”), the employer either wishes to leave the Fund, or the terms of their admission require it.
- 8.10 The Fund Actuary will incorporate such an adjustment after consultation with the Administering Authority.
- 8.11 The adjustment to the discount rate for closed employers is to set a higher funding target at the projected termination date, so that there are sufficient assets to fund the remaining liabilities on a “minimum risk” rather than on an ongoing basis. The aim is to minimise the risk of deficits arising after the termination date.

Asset Valuation

- 8.12 For the purposes of the valuation, the asset value used is the market value of the accumulated Fund at the valuation date adjusted to reflect average market conditions during the six months straddling the valuation date.

Statistical Assumptions

- 8.13 The statistical assumptions incorporated into the valuation, such as future mortality rates, are based on national statistics. These are adjusted as appropriate to reflect the individual circumstances of the Fund and/or individual employers.

9. Deficit Recovery/Surplus Amortisation Periods

- 9.1 Whilst one of the funding objectives is to build up sufficient assets to meet the cost of benefits as they accrue, it is recognised that at any particular point in time, the value of the accumulated assets will be different to the value of accrued liabilities, depending on how the actual experience of the Fund differs to the actuarial assumptions. Accordingly, the Fund will normally either be in surplus or in deficit.

- 9.2 Where the actuarial valuation discloses a significant surplus or deficit then the levels of required employers' contributions will include an adjustment to either amortise the surplus or fund the deficit over a period of years.
- 9.3 The period that is adopted for any particular employer will depend on:
- The significance of the surplus or deficit relative to that employer's liabilities;
 - The covenant of the individual employer and any limited period of participation in the Fund; and
 - The implications in terms of stability of future levels of employers' contribution.

10. Pooling of Individual Employers

- 10.1 The policy of the Fund is that each individual employer should be responsible for the costs of providing pensions for its own employees who participate in the Fund. Accordingly, contribution rates are set for individual employers to reflect their own particular circumstances.
- 10.2 However, certain groups of individual employers are pooled for the purposes of determining contribution rates to recognise common characteristics or where the number of Scheme members is small. This is the reason for pooling academies within the Fund.
- 10.3 The main purpose of pooling is to produce more stable employer contribution levels in the longer term whilst, recognising that ultimately there will be some level of cross-subsidy of pension cost amongst pooled employers.

11. Cessation Valuations

- 11.1 On the cessation of an employer's participation in the Scheme, the Fund Actuary will be asked to make a termination assessment. Any deficit in the Fund in respect of the employer will be due to the Fund as a termination contribution, unless it is agreed by the Administering Authority and the other parties involved that the assets and liabilities relating to the employer will transfer within the Fund to another participating employer.
- 11.2 In assessing the deficit on termination, the Fund Actuary may adopt a discount rate based on gilt yields and adopt different assumptions to those used at the previous valuation in order to protect the other employers in the Fund from having to fund any future deficits which may arise from the liabilities that will remain in the Fund.

12. Links with the Investment Strategy Statement (ISS)

- 12.1 The main link between the Funding Strategy Statement (FSS) and the ISS relates to the discount rate that underlies the funding strategy as set out in the FSS, and the expected rate of investment return which is expected to be achieved by the underlying investment strategy as set out in the ISS.

12.2 As explained above, the ongoing discount rate that is adopted in the actuarial valuation is derived by considering the expected return from the underlying investment strategy. This ensures consistency between the funding strategy and investment strategy.

13. Risks and Countermeasures

13.1 Whilst the funding strategy attempts to satisfy the funding objectives of ensuring sufficient assets to meet pension liabilities and stable levels of employer contributions, it is recognised that there are risks that may impact on the funding strategy and hence the ability of the strategy to meet the funding objectives.

13.2 The major risks to the funding strategy are financial, although there are other external factors including demographic risks, regulatory risks and governance risks.

14. Financial Risks

14.1 The main financial risk is that the actual investment strategy fails to produce the expected rate of investment return (in real terms) that underlies the funding strategy. This could be due to a number of factors, including market returns being less than expected and/or the fund managers who are employed to implement the chosen investment strategy failing to achieve their performance targets.

14.2 The valuation results are most sensitive to the real discount rate. Broadly speaking an increase/decrease of 0.5% per annum in the real discount rate will decrease/increase the liabilities by 10%, and decrease/increase the required employer contribution by around 2.5% of payroll.

14.3 However, the Pensions Sub-committee regularly monitors the investment returns achieved by the fund managers and receives advice from the independent advisers and officers on investment strategy.

14.4 The Pensions Sub-committee may also seek advice from the Fund Actuary on valuation related matters.

14.5 In addition, the Fund Actuary provides funding updates between valuations to check whether the funding strategy continues to meet the funding objectives.

15. Demographic Risks

15.1 Allowance is made in the funding strategy via the actuarial assumptions for a continuing improvement in life expectancy. However, the main demographic risk to the funding strategy is that it might underestimate the continuing improvement in longevity. For example, an increase of one year to life expectancy of all members in the Fund will reduce the funding level by between 0.5 to 1%.

- 15.2 The actual mortality of pensioners in the Fund is monitored by the Fund Actuary at each actuarial valuation and assumptions are kept under review.
- 15.3 The liabilities of the Fund can also increase by more than has been planned as a result of early retirements.
- 15.4 However, the Administering Authority monitors the incidence of early retirements; and procedures are in place that require individual employers to pay additional amounts into the Fund to meet any additional costs arising from early retirements.

16. Regulatory Risks

- 16.1 The benefits provided by the Scheme and employee contribution levels are set out in Regulations determined by central government. The tax status of the invested assets is also determined by central government.
- 16.2 The funding strategy is therefore exposed to the risks of changes in the Regulations governing the Scheme and changes to the tax regime which may affect the cost to individual employers participating in the Scheme.
- 16.3 However, the Administering Authority participates in any consultation process of any proposed changes in Regulations and seeks advice from the Fund Actuary on the financial implications of any proposed changes.

17. Governance

- 17.1 Many different employers participate in the Fund. Accordingly, it is recognised that a number of employer-specific events could impact on the funding strategy including:
- Structural changes in an individual employer's membership;
 - An individual employer deciding to close the Scheme to new employees; and
 - An employer ceasing to exist without having fully funded their pension liabilities.
- 17.2 However, the Administering Authority monitors the position of employers participating in the Fund, particularly those which may be susceptible to the events outlined, and takes advice from the Fund Actuary when required.
- 17.3 In addition, the Administering Authority keeps in close touch with all individual employers participating in the Fund to ensure that, as Administering Authority, it has the most up to date information available on individual employer situations. It also keeps individual employers briefed on funding and related issues.

18. Monitoring and Review

- 18.1 This FSS is reviewed formally, in consultation with the key parties, at least every three years to tie in with the triennial actuarial valuation process.
- 18.2 The Administering Authority also monitors the financial position of the Fund between actuarial valuations and may review the FSS more frequently if necessary.

Agenda Item 8

<p>London Borough of Hammersmith & Fulham</p> <p>PENSIONS SUB-COMMITTEE</p> <p>15th MARCH 2017</p>	
Update on London Collective Investment Vehicle (CIV) Progress	
Report of the Strategic Finance Director	
Open Report	
Classification - For Noting	
Key Decision: No	
Wards Affected: None	
Accountable Director: Pete Carpenter, Interim Director of Treasury and Pensions	
Report Author: Pete Carpenter, Interim Director of Treasury and Pensions	Contact Details: Tel: 020 7641 2832 E-mail: pcarpenter@westminster.gov.uk

1. EXECUTIVE SUMMARY

- 1.1. Councils are being requested by the Department for Communities and Local Government (DCLG) to move Pension Fund assets into Collective Investment Vehicles (CIV) in order to create economies of scale and achieve lower fees from Investment Managers. This paper sets out what is presently available through the London CIV and the prospective pipe-line of Investment Managers becoming available through it during 2017.

2. RECOMMENDATIONS

- 2.1. That the Pensions Sub-Committee note the present position in regards to Fund Managers presently available via the London CIV, and the pipeline of Managers becoming available, and uses this to inform future Investment decisions.

3. REASONS FOR DECISION

- 3.1. The Department for Communities and Local Government (DCLG) set out in 2014 to reduce the costs of the Local Government Pension

Scheme by examining fees for active management within the funds. It has requested Council Pension Funds to join Collective Investment Vehicles (CIVs) in order to obtain economies of scale with fund managers and reduce fees.

- 3.2. There are a number of CIVs being set up across the Country. The 33 London Pension Funds are part of the London CIV.

4. PROPOSAL AND ISSUES

LONDON CIV OFFERING

- 4.1. The table in Appendix A sets out the present position in regards to Fund Managers presently available through the London CIV and those who will become available over the upcoming year.
- 4.2. Although there is not legislation in place to force the LBHF Pension Fund to transfer assets into the London CIV, the direction of travel from the Government is to encourage this move to take place as quickly as possible. Therefore, future investment decisions need to take account of what is available via the London CIV, and Funding Strategy and Investment Strategy Statements need to include sections on London CIV views on Economic, Social and Governance issues.
- 4.3. The table in Appendix A also includes those LBHF Funds which have already been transferred into the London CIV or are about to be transferred to the London CIV.

5. OPTIONS AND ANALYSIS OF OPTIONS

- 5.1. Investment Manager options are available via Fund Managers being available for investment via the London CIV. Transfer documentation will include a full analysis of fees and expected returns.

6. CONSULTATION

- 6.1. Any changes to Investment Managers will require the approval of the Pensions Sub-Committee.

7. EQUALITY IMPLICATIONS

- 7.1. Not applicable.

8. LEGAL IMPLICATIONS

- 8.1. None.

9. FINANCIAL IMPLICATIONS

- 9.1. Implications of returns and associated fees when a transfer takes place from an existing Fund Manager to the CIV will be reviewed and authorised on a Case by Case basis.

10. IMPLICATIONS FOR BUSINESS

- 10.1. None.

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

- 11.1. London CIV data on Fund Managers presently available and the future pipeline.

LIST OF APPENDICES:


Appendix A - London CIV Investment Managers Pipe-line

Appendix A - London CIV Investment Managers Pipe-line

Fund	Type	Available from	LBHF Transfer
Allianz Global Investors GMBH	Global Equity Alpha Fund	2 December 2015	
Baillie Gifford & Co	Diversified Growth Fund	15 February 2016	
Baillie Gifford & Co	Global Alpha Growth Fund	11 April 2016	
Pyrford International Limited	Global Total Return Fund	17 June 2016	
Ruffer LLP	Absolute Return Fund	21 June 2016	Has Transferred
Newton Investment Management	Real Return Fund	16 December 2016	
Newton	Global Equity	May 2017	
Majedie	UK Equity	May 2017	UK portion of fund will transfer in May. Remainder will be re-allocated
Longview	Global Equity	June 2017	
Transitional Management Framework (National Frameworks – LCIV Founder Member)		Summer 2017	
Proposed Global Equity Sub-Funds: <ul style="list-style-type: none"> • Income • Emerging Markets • Sustainable Equities • Value 	Global Equity	September 2017	
Additional Global Equity Funds <ul style="list-style-type: none"> • 4 Sub-Funds TBC – depending on Investor Demand 	Global Equity	Winter 2017/2018	
Fixed Income / Cashflow Delivery Funds <ul style="list-style-type: none"> • 2x sub-funds – currently under consideration 	Fixed Income / Cashflow Multi- asset income	Winter/Spring 2017/2018	

Note, Legal and General Global Equities Fund is taking advantage of the London CIV's renegotiation of rates although it cannot yet transfer

Agenda Item 9

<p>London Borough of Hammersmith & Fulham</p> <p>PENSIONS SUB-COMMITTEE</p> <p>15th MARCH 2017</p>	
Pension Fund - Alternative Funding Paper	
Report of the Strategic Finance Director	
Open Report	
Classification - For Noting	
Key Decision: No	
Wards Affected: None	
Accountable Director: Pete Carpenter, Interim Director of Treasury and Pensions	
Report Author: Pete Carpenter, Interim Director of Treasury and Pensions	Contact Details: Tel: 020 7641 2832 E-mail: pcarpenter@westminster.gov.uk

1. EXECUTIVE SUMMARY

1.1. This Report should be read in conjunction with the London CIV Progress Report and also the Integrated Strategy Statement which set out the present position. The London Borough of Hammersmith and Fulham's (LBHF) Pension Fund's future investment policy needs to ensure that:

- Its fiduciary responsibilities are met;
- It fully understands where it invests at the moment and how this relates to its asset allocation model;
- It has options available to rebalance the Investment portfolio going forward to take account of Environmental, Social and Economic (ESG) constraints;
- It has options available to rebalance the Investment portfolio going forward to take account of the requirements of the triennial valuation results.

2. RECOMMENDATIONS

2.1. That the Pension Sub-Committee consider the options set out in this Report to provide direction to future work required by the Pension Fund to take forward:

- Its future Investment Strategy
- Its Transfer Policy to the London CIV
- Its Environmental, Social and Governance Policies

While ensuring it keeps within its fiduciary responsibilities.

2.2 That to move the requirements forward that the Pension Sub-Committee:

- Set up of a working group to re-examine the Investment Strategy taking account of:
 - Funding Requirements following the Triennial valuation
 - Agreement of the ESG Policy including assessment of “Carbon Free” requirements set out in this Report
- Agree the proposed London CIV transfer Protocol;
- Become part of the London CIV Low Carbon Group;
- Draft and agree a Stewardship Strategy and a Socially Responsible Policy.

3. REASONS FOR DECISION

3.1. The LBHF Pension Fund has just had its triennial valuations and as such this is the point where Investment Strategy must be reviewed to ensure it meets the funds fiduciary responsibilities.

3.2. In addition there is significant pressure on Pension Funds from both the Government and Lobby Groups to invest their funds in certain ways. An example of this is the Friends of the Earth queries, whose views are set out in the ESG section. The present Investment Strategy needs to be updated to take account, where required, of these external factors as well as ensuring that all other legislative responsibilities are delivered.

4. PROPOSAL AND ISSUES

Fiduciary Responsibilities

4.1. The fiduciary responsibilities of the Committee are important and paramount in decisions being made. These are included in the introductory statement to the new Investment Strategy Statement.

4.2. The Pension Sub-Committee of the LBHF oversees the management of the Pension Fund’s assets. Although not trustees, the Members of the Pension Sub-Committee owe a fiduciary duty similar to that of trustees

to the council-tax payers, who would ultimately have to meet any shortfall in the assets of the Fund, as well as to the contributors and beneficiaries of the Fund.

- 4.3. In addition, this is further elaborated in Objective 7.2 (a): A requirement to invest money in a wide range of instruments” of the new Investment Strategy Statement which states the following:
- 4.4. The main risk the Pension Sub-Committee is concerned with is to ensure the long-term ability of the fund to meet pension, and other benefit obligations, as they fall due is met. As a result the Pension Sub-Committee place a high degree of importance on ensuring the expected return on the assets is sufficient to do so, and does not have to rely on a level of risk which the Pension Sub-Committee considers excessive.
- 4.5. At all times the Pension Sub-Committee takes the view that their investment decisions, including those involving diversification, are in the best long term interest of Fund beneficiaries

Present Investment Strategy

- 4.6. The present Investment Strategy is contained in the SIP. The following table sets out the funding Allocation in the present Strategy.

Asset Class	Target Allocation
UK equities	22.50%
Overseas equities	22.50%
Secure Income	20%
Dynamic Asset Allocation	10%
Absolute Return Bonds	10%
Inflation Opportunities	10%
Long Lease Property	5%
	100.00%

- 4.7. The present allocations are set out in the following table. These allocations are different to those in the present SIP. There is the requirement to reassess allocations to ensure they meet the changing requirements of the fund. One thing to check, along with the requirement to deliver the required returns is that cash flows from the specified Investment Instruments meet the needs of the fund.

Asset Class	Target Allocation
UK equities	22.50%
Overseas equities	22.50%
Dynamic Allocation - Absolute Return	10%
Dynamic Allocation - Bonds	10%
Credit	15%
Direct Infrastructure	5%
Inflation	10%
Long Lease Property	5%
	100.00%

4.8. An immediate action to take is to set up a Working Group from the Committee to re-examine the asset allocation model. This should be done taking into account present funding requirements, fiduciary responsibilities, any transfer policy to the CIV (Pooling), cash flow requirements, and Environmental, Social, and Governance requirements.

4.9. Items to consider in these areas are set out in the following sections.

Outcome from Investment Beliefs Session

4.10. An Investment Beliefs session took place with Pension Sub Committee Members on the 24th January. In the session Unigestion presented their views on how the Council's present allocation strategy links to the key "macro regimes" of Recession, Inflation Shock, Market Stress and Steady Growth.

4.11. An assessment of data since 1974 shows that during this period the economy has been in the Marco Regimes for the following percentages of time:

Macro Regime	Percentage of Time
Steady Growth	64%
Recession	16%
Inflation Shock	12%
Market Stress	8%

4.12. An assessment of present Investments indicates that a correlation of 81% to Steady Growth – which is significantly higher than the percentage of time this macro Regime occurs.

4.13. A full review of the session on the 24th January is contained in Appendix A. Questions were raised during the session, some of which have been subsequently answered and included in the Paper, others require more work. Pertinent responses received include:

- 4.14. *Could Unigestion look at Market Stress and implications on changing investments in during these periods?*
- 4.15. Unigestion defines Market Stress regimes as episodes where there are shocks in market prices that may not be fuelled by a fundamental deterioration in the developed market economies that are looked at. There were 13 such periods in the history that were looked at between 1974 and 2014. On average, each period lasted 3 months. Appropriate examples of such periods are the Dotcom bubble in 2000; the Russian Financial Crisis and devaluation of the rouble in 1998; the Asia Financial Crisis in 1997.
- 4.16. *What Protection can be purchased to safeguard investments against currency changes? What is a normal reduction on return for a hedge of this by equity type?*
- 4.17. Some investment managers offer the facility to limit the extent of any downside experienced in periods of market declines – these strategies can be implemented at nil cost to the investor by “selling away” any rises in the market above a certain level. These strategies are typically implemented using over the counter derivatives implemented with an investment bank with a set term. A key consideration with these structures is that while the structure can be implemented effectively at nil cost, the investor will only derive the full benefit if the market decline coincides with the term of the option. While it is possible to revise the structure of the initial protection strategy during its life to reflect more up to date market conditions, there will potentially be costs associated with cancelling the initial structure (usually achieved by matching offsetting derivative positions).

Short Term Portfolio Balancing Options

- 4.18. As part of the Unigestion Presentation, 2 options for diversification of the portfolio were presneted. These were:
- 4.18.1. Reallocation of 10% of the equity allocation to Alternative Risk Premia. These instruments have a relatively high return characteristics with low correlation to equity markets, and introduces more idiosyncratic risk into the portfolio, and
 - 4.18.2. Reallocation of 10% of equities to Private Equity. This would provide some additional inflation protection without compromising on expected return assumptions.
- 4.19. The upcoming transfer of UK Majedie assets to the CIV will leave the remaining Global Majedie assets free to be reallocated to other Investment instruments. The liquidation of the remaining Majedie assets would provide resources for any possible rebalancing requirements of the overall Portfolio to reduce overall risk.

- 4.20. For comparison purposes Unigestion have confirmed that the Alternative Risk Premia would have achieved returns of +2.3% and +0.4% respectively. Private Equity would have delivered -19.3% and -2.6% respectively. During the same periods, global equities were down -39% and -16%.

Transfer Policy to the London Collective Investment Vehicle (CIV)

- 4.21. Given Government guidance on pooling, it would be wise to have Transfer Policy of Assets moving from direct management to CIV management. The proposed policy is:
- 4.22. That the LBHF Pension Fund will move assets into the CIV when appropriate funds in relation to the Investment Strategy become available;
- 4.23. When the same instruments become available that the LBHF Pension Fund will undertake a transfer from Fund Control to CIV control immediately;
- 4.24. When alternate instruments similar to what is required in the Investment Strategy becomes available the LBHF Pension Fund take a view immediately on if to take advantage of the instrument;
- 4.25. That the LBHF Pension Fund come to a view on alternate instruments as they become available to ensure they properly evaluate if new instruments can generate the required returns and deliver appropriate diversification to the overall Portfolio;
- 4.26. Before all transactions, a full cost benefit analysis must be carried out to ensure costs of moving investments from Council Management to CIV management are beneficial. Transfers should not take place if the move is not cost effective to the Pension Fund.
- 4.27. In addition, the LBHF Pension Fund must still carry out a full due-diligence process of mandates on the CIV, prior to any investment, as it would for any other investment allocation.
- 4.28. If instruments are not available and the Investment Strategy requires their use in the near future get the CIV involved in LBHF Pension Fund Tender processes, but try if possible to move into pooled and not segregated vehicles.
- 4.29. Limit intermediate tactical changes where possible to pooled vehicles to minimise costs and transfer payment arrangements

ESG Options

- 4.30. In the Investment Beliefs session on the 24th January, Environmental, Social and Governance factors were discussed. These outcomes of the discussion are set out in Appendix A. The view was that the Council should be investing in “Good Companies”.
- 4.31. However, in the session, questions were asked to ensure that the Committee has the right information to reinforce what a “Good Company” was. This is difficult to define as characteristics of a “Good Company” will change depending on what sector the investments are in. However, a common trait across Sectors will be good underlying Management and Governance processes in these Companies.
- 4.32. Another question raised was what the potential costs and benefits might be of moving to a strategy such as Carbon Free and what the current ESG policies of the Funds Investment Managers.
- 4.33. Members of the Committee are now being lobbied by external groups on ESG policies. As an example, Friends of the Earth have asked for:
- 4.33.1. An immediately freeze any new investment made by the Hammersmith and Fulham pension fund or Hammersmith and Fulham council itself in the top 200 publicly-traded fossil fuel companies with largest known carbon reserves (oil, coal, and gas);
 - 4.33.2. The Fund to divest from any commingled funds that include fossil fuel public equities and corporate bonds in the top 200 list and shift these funds to ethical and environmentally friendly investments within 5 years;
 - 4.33.3. The Fund to ensure the security of this move by advocating that the London Collective Investment Vehicle include a choice of multiple fossil free equity funds within its portfolio that will enable divested councils to fully commit to their pledges.
- 4.34. The table below, provided by Deloitte, sets out present Managers approaches to ESG issues. It should be noted that all are signatories to the United Nations Principles for Responsible Investment (UNPRI). Further details are set out in Appendix E.

Investment Manager	Do they have an ESG policy?	Are they a signatory of UNPRI?	Are there any exclusion policies?	Can schemes ask for restrictions?	How do they report on ESG?
Insight	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
LGIM	Yes	Yes	Yes – Cluster	LGIM run a number	A quarterly report

			munitions	of ethical funds that avoid investing in certain companies and industries.	detailing voting results and select case studies.
M&G	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	No formal report but have a responsible investment website.
Majedie	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
Oakhill	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	No formal report.
Partners Group	Yes	Yes	Yes – Cluster munitions, weapons, tobacco	Restrictions can be implemented through a bespoke solution.	Annual report and quarterly update on ESG integration highlights.
Ruffer	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
Standard Life	Yes	Yes	Yes – Cluster munitions	SLI run a number of ethical funds that avoid investing in certain companies and industries.	A quarterly report detailing voting results and select case studies.

4.35. *A query raised in the meeting was what If LBHF were to Go Green and move out of all Fossil Fuel Investments, what would be the effect?*

4.36. Deloitte have had an initial view of this and their view is the following:

4.37. A topic within ESG which is attracting particular attention is carbon/fossil fuels/climate change. Theory would suggest that given the non-sustainability of fossil fuels, companies which are run with “carbon-intensive” operations are at risk of sustaining their operations in the future. When this point in the future may be is unknown, as it is hard to measure the rate at which societies around the world will make the transition to a clean or low carbon energy mix. However, if a company’s sustainability is in question, the investment return of its shares are directly affected

4.38. Major indices are overexposed to fossil fuels, and under-exposed to renewable energy i.e. the representation of renewable energy in stock markets is significantly lower than its share in the economy. This partly reflects the relative maturity of the associated businesses, with a lot of the renewable energy investment sitting within infrastructure related strategies rather as listed entities. Therefore a policy action to promote the transition towards a low-carbon economy could cause a significant impact to the share price of the affected companies and the index as a whole

- 4.39. Should this be of particular importance, the Committee could conduct a review of the Fund's fossil-fuel exposure. While the outcomes of this review would dictate any appropriate actions, one option may be to alter the benchmark which the Fund's passive equities replicate to a "carbon-free" benchmark – over the last 12 months or so, we have seen some of the passive providers launching strategies with a bias towards companies with a lower carbon footprint and reducing the relative weighting of organisations with a high footprint.
- 4.40. As more and more Investments move to the CIV however, there will be the requirement to follow their ESG Policies. These Policies are set out in the Investment Strategy Statement (ISS) however there will be the choice for Councils to use more "environmentally friendly" investment options.
- 4.41. Appendix C sets out the present ESG strategy as is set out in the SIP, the proposed changed Strategy and also the CIV strategy for comparison. While the Council is in the position of having Investments in Managed by itself and also the CIV there will be the need to have 2 different Policies. What the Committee need to move towards is where this Policy converges so that whatever the investment, the Policy followed will be the same.

Possible ESG Investment Alternatives for the Council to Consider

- 4.42. At the CIV Stewardship Seminar on the 1st February and the CIV Conference on the 1st March, a number of alternatives were suggested for more ESG friendly instruments. These will generally fit into the following categories:
- Exclusion Policies (which are the most common)
 - More inclusive Policies – which are now becoming more common
- 4.43. In the latest meeting of the CIV Investment Advisory Committee in February 2017 Councils were advised that there is interest from a number of Councils in a Carbon Free investment vehicle. The CIV is undertaking work in March and April to ensure it fully understands the requirements of the Councils requiring this option before it moves forward this Investment Option. It is proposed that the LBHF Pension Fund join this grouping.
- 4.44. Appendix F gives the example of a fund which will become available soon from Legal and General. This fund which is called The Future World Fund is designed to incorporate the long term transition towards a low Carbon Economy.
- 4.45. However, the Fund also needs to consider in this process if divesting from certain investments is the correct route and in the full fiduciary interest of the fund. There is evidence that becoming a committed

activist in funds might actually move forward ESG change even more quickly.

Possible Gaps in Present Policies

- 4.46. In writing the ISS, however and comparing to a draft template provided by Actuaries Barnett Waddingham the Fund does seem to have gaps to be filled at the moment in terms of a full Stewardship Strategy and also a Socially Responsible Policy. An example of draft Strategies are included in Appendix D.
- 4.47. It should be noted that the CIV does have a draft Stewardship Policy and this is included in the ISS.

Work to be delivered to ensure the LBHF Investment Strategy meets its needs

- 4.48. The points raised in this section point to the following to be undertaken:
- Set up of a working group to re-examine the Investment Strategy taking account of:
 - Funding Requirements following the Triennial valuation
 - Agreement of the ESG Policy including assessment of “Carbon Free” requirements set out in this Report
 - Agree the proposed London CIV transfer Protocol;
 - Become part of the London CIV Low Carbon Group;
 - Draft and agree a Stewardship Strategy and a Socially Responsible Policy.

5. OPTIONS AND ANALYSIS OF OPTIONS

- 5.1. Assess the proposed way forward and associated timescales on items discussed in section 4 above

6. CONSULTATION

- 6.1. Any changes to Investment Policy or Strategy will require the approval of the Pensions Sub-Committee.

7. EQUALITY IMPLICATIONS

- 7.1. Not applicable.

8. LEGAL IMPLICATIONS

- 8.1. None.

9. FINANCIAL IMPLICATIONS

- 9.1. Implications of returns and associated fees when a transfer takes place from an existing Fund Manager to the CIV or an alternative provider will be reviewed and authorised on a Case by Case basis. Any changes to the Funding Strategy will affect return which directly affect revenue streams of the Council.

10. IMPLICATIONS FOR BUSINESS

- 10.1. None.

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

- 11.1. London CIV data on Fund Managers presently available and the future pipeline.

LIST OF APPENDICES:

- Appendix A – Output from Governance Meeting 24th January
- Appendix B – Unigestion Output
- Appendix C - Present ESG Strategies
- Appendix D - Possible Draft Stewardship Code
- Appendix E – Deloitte Response on Alternative Funding
- Appendix F – Legal and General Future World Fund

Member Investment Beliefs Session – 24th January 2017

Present Cllrs Cassidy & Vincent
Apologies – Cllr Adam

Presentation by Unigestion on Investment Risk Metrics

Unigestion gave a presentation based on the present LBHF Investment Portfolio Weightings. They use a model that is taken from data from the past 45 years which is linked to 4 specific Macro-Economic Regimes which are:

- Steady Growth - 64% of the time
- Inflationary – 12% of the time
- Recession – 16% of the time
- Market Street – 8% of the time
-

Unigestion question in making their analysis if the right benchmarks being used for the investments in a portfolio – as these align directly to the analysis to the various different Macro-Economic models (in terms of correlation) the use.

Unigestion reviewed the risk distribution of the assets within the Councils Investment Portfolio and aligned them to the different Macro-Economic regimes. All agreed that over the past 20 years, Local Government Pension Funds have been very successful in generating returns with this high level of weight to equities.

From the model it suggests that there is an 81% correlation between Investment Instruments used against “Growth” with a view that this weighting should be significantly lower (in the 60% range). However, from the Councils allocations, it indicates that there are a number of investments outside “Equities” that exhibit similar characteristics to equities which gives such a high correlation to “Growth”.

Unigestion gave 2 alternatives to reduce the level of Investments and the present high correlation of Investments to “Growth” Macro-Economic regimes to diversify the Portfolio

In discussions it was noted that:

- Private Equity does give Inflation protection and returns between 7-7.5% but the downside is the illiquidity of instruments.
- Direct Lending as alternative is definitely not conventional, although it was noted by Unigestion that the Banks still get this significantly wrong – Current yields are in the region of 6% – 7%, however as this is an area of specialism, there are only a handful of managers and products which Deloitte believe have the capability to invest in this asset class.

- There is a move now from Bond Coupons to Long Lease Property to give Income to supplement cash flow requirements

It was questioned that if for 6 years out of every 10 years equity grows and that if these are long term investment why diversify?

- however, if there is a significant shock to the stock market all investments would suffer

The Council needed to assess the “Equity” and “Non-Equity” allocations to reduce overall exposure to Equity type transactions which are closely aligned to Growth Periods

However, the 2 key questions are

- 1) When will equities drop and is the Council agile enough to take advantage of changes
- 2) What are the real alternatives to equities to give a properly diversified portfolio

Members Investment Views/Beliefs Session (will be briefing documents going out on this)

Notes on Present Beliefs centred in a number of questions:

The CIV will influence Investments going forward – the question was raised will Councils with Strong beliefs (potentially Political and not Investment) dominate the CIV?

How will Green Investments influence investments – will the CIV have Green and Non Green Alternatives (Oil, Cigarettes)?

What will be the belief system be for the CIV – how is the CIV going to hold its Fund Managers accountable for investment decisions (Sports Direct Example) In particular – how will Environmental/Social/Governance issues be managed by the CIV and how will the Council being arms-length influence this?

The Councils would rather invest in “Good” companies with Good governance rather than have lines of demarcation for investments.

If this is the case – how then do the CIV make Investment Manager Decisions and how do they choose “Good” Companies?

It was asked – does risk get rewarded appropriately – example given of Start-up companies and the high proportion that go bust in the initial year

An ESG Paper based on the above principles will be prepared for the next Committee.

Questions Raised during the session which are being worked on:

Could Unigestion look at Market Stress and implications on changing investments in during these periods?

Response is in the main text of the report

There is a requirement to list those present investments acting like Equities but outside the equities portfolio.

Still need to deliver this piece of work

Unigestion were requested to look at what would have been the change/costs of the portfolio had not made the changes that had made since the 20/1/15. By investing as LBHF has done, is it ahead of the game?

Still need to deliver this piece of work

What Protection can be purchased to protect investment from currency fluctuations?

Response is in the main text of the report

Are there statistics available on how Managers actually make their decisions in terms of ESG issues?

Response is in the main text of the report and also Appendix E

Do the Fund have a view on the present risks that the LBHF take in terms of its investment decisions?

This is contained in the new Investment Strategy Statement paper

If LBHF were to Go Green and move out of all Fossil Fuel Investments – what is the effect – is this a big job to do (have an estimate before we start the job) for those items not in Unit allocations?

This is a substantial piece of work. Partial responses are contained in the main text of the report and Appendix E.

Appendix B – Outputs from the Unigestion Meeting

Appendix C – Present ESG Strategies

ESG Strategy in the Present SIP

The Fund recognises that the neglect of corporate governance and corporate social responsibility may lead to poor or reduced shareholder returns. The Committee has considered how the Fund may best implement a corporate social responsibility policy, given the current resources available to the Fund. Accordingly, the Committee has delegated social, environmental and ethical policy to the investment managers, but also approved a Governance Strategy. The Committee believes this is the most efficient approach whilst ensuring the implementation of policy by each manager is consistent with current best practice and there is appropriate disclosure and reporting of actions taken. To that extent, the Committee maintains a policy of non-interference with the day-to-day decision making of the investment managers

Updated ESG Strategy

A full of review of the Fund's approach to SRI was completed in March 2015. The Fund adopted an SRI Policy which outlines its approach to the management of Environmental, Social and Governance (ESG) issues within its investment portfolio. The SRI Policy is publically available and will be reviewed as deemed appropriate.

The Fund recognises that the neglect of corporate governance and corporate social responsibility may lead to poor or reduced shareholder returns. The Committee has considered how the Fund may best implement a corporate social responsibility policy, given the current resources available to the Fund. Accordingly, the Committee has delegated social, environmental and ethical policy to the investment managers, but also approved a Governance Strategy. The Committee believes this is the most efficient approach whilst ensuring the implementation of policy by each manager is consistent with current best practice and there is appropriate disclosure and reporting of actions taken. To that extent, the Committee maintains a policy of non-interference with the day-to-day decision making of the investment managers

As a responsible investor The London Borough of Hammersmith & Fulham Pension Fund wishes to promote corporate social responsibility, good practice and improved performance amongst all companies in which it invests. Whilst there has been a great deal of emphasis on the relationship of business, financial and economic factors to investment performance, the impact on returns of less tangible non-financial and reputational factors is more difficult to identify. Nevertheless it is clear that adverse publicity relating to low corporate, environmental or social standards can have an adverse impact on shareholder value, the Fund, its beneficiaries and local taxpayers. By having a good public image, the morale of the workforce will be higher, thus making it easier to attract and retain quality employees. The Fund considers that the pursuit of high corporate social responsibility standards by Companies will lead to higher returns in the long term. A good public image may help to increase sales volumes. An improved financial standing will improve credit

ratings, thus allowing a company to attract lower cost funding. By addressing outside factors, the company is able to demonstrate an above average standard of management competence which will improve the long term potential and sustainability of the organisation. At the very least the Fund expects the Companies in which it invests to comply with all applicable laws and regulations in home markets and to conform to local best practice when operating overseas.

In furtherance of this stance the Fund will support standards of best practice by Companies in both the disclosure and management of corporate social responsibility issues consistent with the Fund's fiduciary responsibilities. To this end the Fund will pursue a policy of active shareholder engagement with companies using its own efforts, those of its Fund managers and alliances with other investors. The Fund is a member of the Local Authority Pension Fund Forum.

The Fund will consider excluding certain types of investment from its actively managed portfolios, following appropriate advice on the implications for performance and diversification. Fund managers are instructed not to invest segregated elements of their portfolio in companies that generate over half of their income from tobacco products on investment prospects grounds. Fund managers are required to have policies regarding Environmental, Social and Governance (ESG) issues and to monitor their compliance with those policies. The Fund is committed to being a long term steward of the assets in which it invests and expects this approach to protect and enhance the value of the Fund in the long term. In making investment decisions, the Fund seeks and receives proper advice from internal and external advisers with the requisite knowledge and skills. In addition the Pension Sub-Committee undertakes training on a regular basis and this will include on training and information sessions on matters of social, environmental and corporate governance.

CIV ESG Strategy

The Fund requires its investment managers to integrate all material financial factors, including corporate governance, environmental, social, and ethical considerations, into the decision-making process for all fund investments. It expects its managers to follow good practice and use their influence as major institutional investors and long-term stewards of capital to promote good practice in the investee companies and markets to which the Fund is exposed.

The Fund expects its external investment managers (and specifically the London Collective Investment Vehicle through which the Fund will increasingly invest) to undertake appropriate monitoring of current investments with regard to their policies and practices on all issues which could present a material financial risk to the long-term performance of the fund such as corporate governance and environmental factors. The Fund expects its fund managers to integrate material ESG factors within its investment analysis and decision making.

Effective monitoring and identification of these issues can enable engagement with boards and management of investee companies to seek resolution of potential problems at an early stage. Where collaboration is likely to be the most effective mechanism for encouraging issues to be addressed, the Fund expects its investment managers to participate in joint action with other institutional investors as permitted by relevant legal and regulatory codes.

The Fund monitors this activity on an ongoing basis with the aim of maximising its impact and effectiveness.

The Fund will invest on the basis of financial risk and return having considered a full range of factors contributing to the financial risk including social, environment and governance factors to the extent these directly or indirectly impact on financial risk and return.

The Fund in preparing and reviewing its Investment Strategy Statement will consult with interested stakeholders including, but not limited to Fund employers, investment managers, Local Pension Board, advisers to the Fund and other parties that it deems appropriate to consult with

Appendix D - Possible Draft Stewardship Code

Compliance with the Stewardship Code

The **Stewardship Code** is a set of principles or guidelines released in 2010 and updated in 2012 by the Financial Reporting Council directed at institutional investors who hold voting rights in United Kingdom companies. Its principal aim is to make shareholders, who manage other people's money, be active and engage in corporate governance in the interests of their beneficiaries.

The Code applies to pension funds and adopts the same "comply or explain" approach used in the UK Corporate Governance Code. This means that it does not require compliance with principles but if fund managers and institutional investors do not comply with any of the principles set out, they must explain why they have not done so.

The seven principles, together with the council's position on compliance, are set out below:

1. Publicly disclose their policy on how they will discharge their stewardship responsibilities.

The Stewardship responsibilities are outlined in section 1.4 of the ISS, which outlines the terms of reference of the Pension Sub-Committee.

Investment Managers, authorised under the regulations, are appointed to manage virtually all the assets of the Fund. The Pension Sub-Committee actively monitor the Fund Managers through quarterly performance analysis, annual and periodic meetings with the Fund Managers and through direct monitoring by the Fund's investment advisor, which includes monitoring and reporting on:

- Fund manager performance
- Investment Process compliance and changes
- Changes in personnel (joiners and leavers)
- Significant portfolio developments
- Breaches of the IMA
- Business wins and losses; and
- Corporate and other issues.

Voting is delegated to Fund Managers through the Investment Management Agreement (IMA), which is reported on a quarterly basis to Pension Sub-Committee members via the Council's intranet site.

All the Fund's equity, fixed income and diversified managers have signed up to the FRC Stewardship Code including:

LIST managers:

2. Have a robust policy on managing conflicts of interest in relation to stewardship and this policy should be publicly disclosed.

The Pension Sub-Committee encourages its fund managers to have effective policies addressing potential conflicts of interest.

Pension Sub-Committee members are also required to make declarations of interest prior to all Pension Sub-Committee meetings.

3. Monitor their investee companies.

Day-to-day responsibility for managing the Fund's investments are delegated to the relevant fund managers, who are expected to monitor companies, intervene where necessary, and report back regularly on activity undertaken.

The Fund's expectations with regards to voting and engagement activities are outlined in its SRI Policy.

Reports from fund managers on voting and engagement activity are received and will be reported to the Pension Sub-Committee members on a quarterly basis. Concerns are raised directly with the fund managers and issues raised are reported back to the Pension Sub-Committee at the subsequent Pension Sub-Committee meeting.

Fund manager Internal Control reports are monitored, with breaches reported back to the Pension Sub Committee.

4. Establish clear guidelines on when and how they will escalate their activities as a method of protecting and enhancing shareholder value.

Day-to-day interaction with companies is delegated to the Fund's asset managers, including the escalation of engagement when necessary. The Fund's expectations with regards to voting and engagement activities are outlined in its SRI Policy.

The Fund Managers are expected to have their own SRI/ESG policy and to disclose their guidelines for such activities in their own statement of adherence to the Stewardship Code.

5. Willing to act collectively with other investors where appropriate.

The Fund seeks to work collaboratively with other institutional shareholders in order to maximize the influence that it can have on individual companies.

The Fund is a member of the Local Authority Pension Fund Forum (LAPFF) and currently one member of the IC and the Chair is a member of the LAPFF Executive Committee. The LAPFF provides ad hoc briefings on companies where contentious votes are due or there are serious corporate governance failings or concerns. Where these relate to companies within the Fund's portfolio, these concerns are raised with the relevant fund manager and appropriate action is taken. Where LAPFF issue a voting direction on a particular issue, fund managers will be expected to comply with this or explain any non-compliance.

Where possible, the Fund seeks to exercise its voting rights attached to its non- UK equity holdings by delegation through Power of Attorneys.

On environmental issues in particular, the Fund also pursues engagement with companies through membership of the Institutional Investors Group on Climate Change (IIGCC). One of the core objectives of the IIGCC is to engage in dialogues

6. Have a clear policy on voting and disclosure of voting activity.

The Fund currently votes on all decisions and this is reported via Northern Trust. The Fund's approach to voting is clearly outlined in the ISS and SRI Policy,

7. Report periodically on their stewardship and voting activities.

A section on voting is included in each quarterly Business Plan Update, with a yearly review of the policy.

The Fund's annual report includes information about the Fund's voting and engagement work

Asset allocation analysis prepared for
London Borough of Hammersmith and Fulham
A view from the perspective of macro-economic regimes

Executive summary

In this note, we have reviewed the current strategic allocation of the London Borough of Hammersmith and Fulham fund. The analysis completed by Unigestion focuses on the current risk allocation of the overall portfolio to key macro risk factors.

In summary we can conclude that from a macro point of view, the portfolio is largely dominated by growth risk. We would highlight from previous similar exercises we have completed for LGPS clients, this is not uncommon although it is at the higher end of the range of LGPS clients we have looked at. Another key finding is that the portfolio also has a significant exposure to idiosyncratic risk, this means that while the portfolio could suffer large losses in case of any adverse event (e.g. a recession, an inflationary shock or a market stress), this type of risk does provide elements of diversification.

In relation to the Fund's targeted return expectation of the investment strategy, analysis has shown that this is at a comparable level to funds with similar arrangements. A key driver of this is the higher relative exposure to equities, infrastructure, and property.

Taking into account that above points, our conclusion is that we believe that the portfolio's risk-return profile, and its behaviour during market extremes, could be improved through consideration of a different approach.

Proposal:-

First, we would consider shifting part of the equities allocation to an Alternative Risk Premia strategy, which presents higher return characteristics with a low correlation to equity markets, thus introducing more idiosyncratic risk into the portfolio i.e. increasing benefits of diversification. This strategy also provides the portfolio with more protection in Recession regimes. Further, we look at replacing part of the existing equity allocation with Private Equity, which should provide some additional inflation protection without compromising on expected return assumptions.

While our proposals do not completely change the portfolio's exposure to risk factors, they would offer diversification away from Steady Growth risk, deliver better risk-adjusted expected returns and lower drawdowns, while offering comparable expected returns.

Introduction

The purpose of this note is to perform a macro factor analysis of the strategic allocation for London Borough of Hammersmith and Fulham.

The analysis completed by Unigestion has focused on macro risk factor analysis because such an analysis provide outcomes that has better economical interpretation when compared to traditional market risk factors or statistical factors analysis.

Following completion of our analysis on your fund's exposure, we would propose specific and targeted modifications of the portfolio that aim to provide improvements to the risk/return profile of the portfolio.

The document is organized as follows:

Section 1 outlines the strategic portfolio.

Section 2 provides with the macro analysis methodology and results.

Section 3 suggests some alternative portfolios with the purpose of seeking to improve the risk-return profile of the portfolio.

Section 1 – Strategic portfolio

The strategic allocation of London Borough of Hammersmith and Fulham has been taken from the annual report and discussed with your advisor Deloitte to ensure that our analysis is aligned with the asset class exposures that you hold. This is displayed in Table 1. You will note that for each asset class we have analysed the actual fund holding or appropriate index. We have used the “Total Return” version of the indices or returns where possible. Further, we have also removed foreign currency effects where possible to isolate pure asset class exposure.

Table 1: Strategic allocation

Asset Class	PercentageIndex	
UK Equities	22.5%	FTSE All Share Index
Global Equities	22.5%	FTSE All World Index
Dynamic Allocation – Absolute return	10%	Ruffer Absolute Return
Dynamic Allocation – Bonds	10%	Insight Bonds Plus
Credit	15%	Credit Suisse Leveraged Loans Index
Direct infrastructure	5%	MSCI World Infrastructure Index
Inflation	10%	50% FTSE UK Gilts Indexed + 50% MSCI World Infra.
Long Lease Property	5%	UK IPD Total Return All Property Index

Section 2 – Macroeconomic factors analysis

Methodology

1 - Identification of macroeconomic regimes

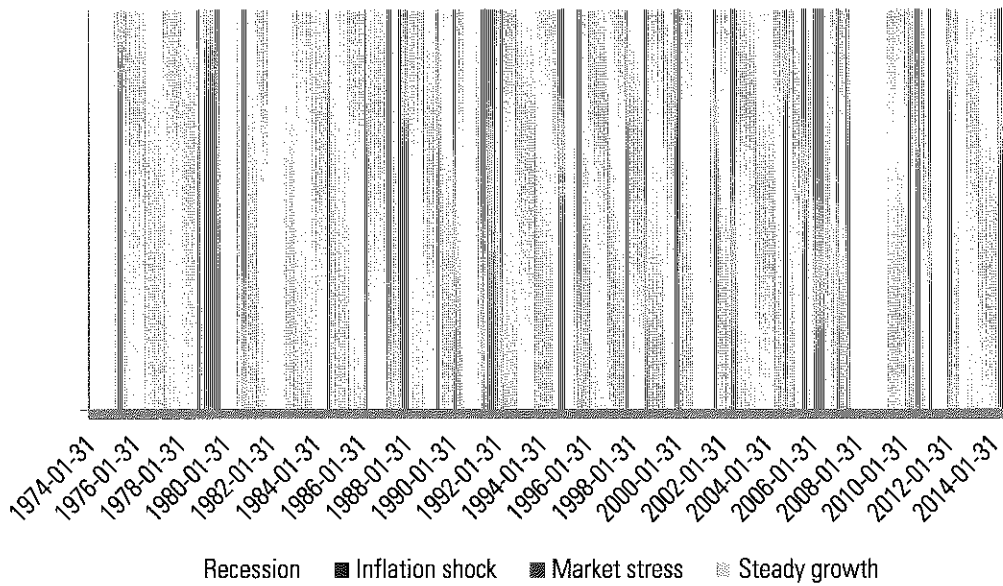
Macro risk factors are the macroeconomic fundamentals that affect asset class prices. We identify three major macro risk factors: economic activity (recession), inflation shocks and market stress. It is important to note that if we do not believe any one of the macro risk factors noted materialise or are dominant then we would say that we are in a period of steady growth.

We therefore consider that the economic and financial environment consists of four regimes:

- Recession regime: in this configuration, economic growth sustains a severe shock and falls below its potential. Excess production capacity generates a rise in unemployment and a significant decrease in consumption. Investments are reduced and the risk of default rises significantly.
- Inflation shock regime: in this configuration, inflationary pressures are no longer controlled by the central banks. Inflation exceeds the expectations of economic agents. This shock results from excess demand in relation to supply. This excess can come from the labour market (demand shock) or the commodity market (supply shock). In order to identify periods of inflation shock, we analyse the dynamics of actual inflation and compare it with the inflation expectations provided by surveys. When actual inflation accelerates and exceeds expectations, we consider the economy to be in a regime of inflation shock.
- Market stress regime: in this configuration, macroeconomic fundamentals have not changed, contrary to previous regimes. The sharp rise in risk aversion typical of this regime can occur following a period of exuberance in one or several markets and/or a specific event of limited duration. In order to identify this regime, we use econometric modelling techniques to analyse changes in regimes (Markov switching model) based on actual and implied volatility of equity markets (S&P 500 index).
- Steady growth regime: in this regime, economic growth is close to or above potential, the unemployment rate falls, lending to the private sector expands, economic agents' sentiment is positive. Inflationary pressures are reined in by a restrictive monetary policy.

At Unigestion we have completed research to assess the frequency and duration of each economic regime. We have research going back to the early 70's and across different geographical areas. Based on a global view are findings are shown in Chart 2.

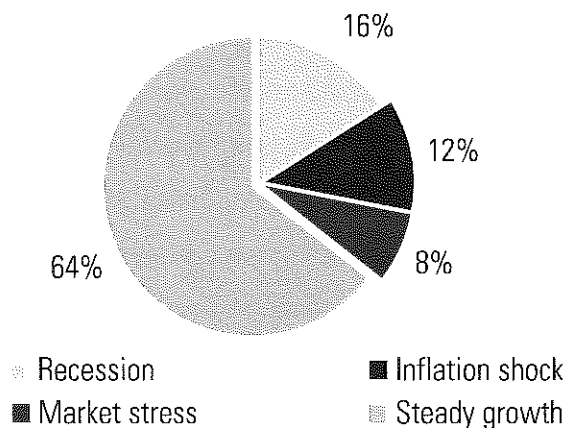
Chart 2: Periods of economic regimes occurrences (1974-2015)



Source: Unigestion, Bloomberg, OECD, MSCI.

Chart 3 shows the related probabilities of each regime reoccurring. Recession periods observed since 1974 represent roughly 16%. Around 12% of inflation shocks have occurred outside recession periods. The frequency of market stress regimes, outside recession regimes and inflation shocks, is about 8%. By past standards, the steady growth regime represents slightly more than 64% of occurrences.

Chart 3: Distribution of economic regimes (1974-2014)

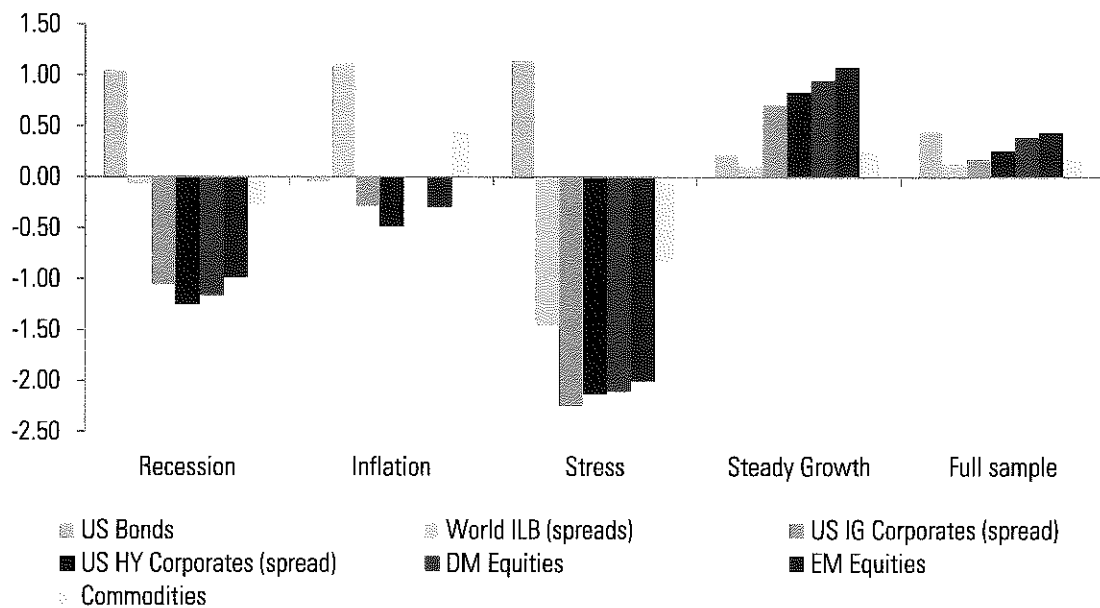


Source: Unigestion, Bloomberg, OECD, MSCI.

Implication for the behaviour of asset classes

The interest of breaking down the cycle in this way is that it shows a strong link between economic regimes and asset class performances. Chart 4 thus illustrates the fact that the risk-adjusted performance of the main asset classes varies strongly depending on the regime.

Chart 4: Sharpe ratios of main asset classes across economic regimes (1974-2014)



Notes: US bonds: 1973-2014, World ILB: 1997-2014, US IG Corporates: 1973-2014, US HY Corporates: 1983-2014, DM Equities: 1970-2014, EM Equities: 1987-2014 and Commodities: 1970-2014.
Sources: Unigestion, Bloomberg.

Government bonds tend to outperform other assets during periods of recession and stress. Developed equities and credit prefer growth periods without accentuated inflation. Conversely, commodities show superior performance during inflation shocks. Lastly, emerging equities offer an attractive compromise in inflationary growth periods.

This makes this analytical framework particularly well suited to assessing a portfolio's risk, making it possible to study the effects of various economic scenarios on its performance. It is also extremely attractive in terms of portfolio construction, making it possible to define a robust strategic allocation over time as well as directly transposing macroeconomic views in terms of implementation.

However, the data corresponding to these risk factors are not always available with sufficient frequency (for example, GDP data are quarterly and revised subsequently) to carry out a reliable risk exposure analysis.

Market-proxies for macroeconomic factors

For this purpose, we construct baskets of risk premiums linked to risky assets whose trends are closely linked to that of the above-mentioned factors. These correlations have been established on the basis of historical analyses taking into account several decades of observations and various geographical regions.

“Proxy” risk factors are constructed as follows:

Growth: risk-weighted equities (MSCI World) and credit spreads (CDX NA HY)

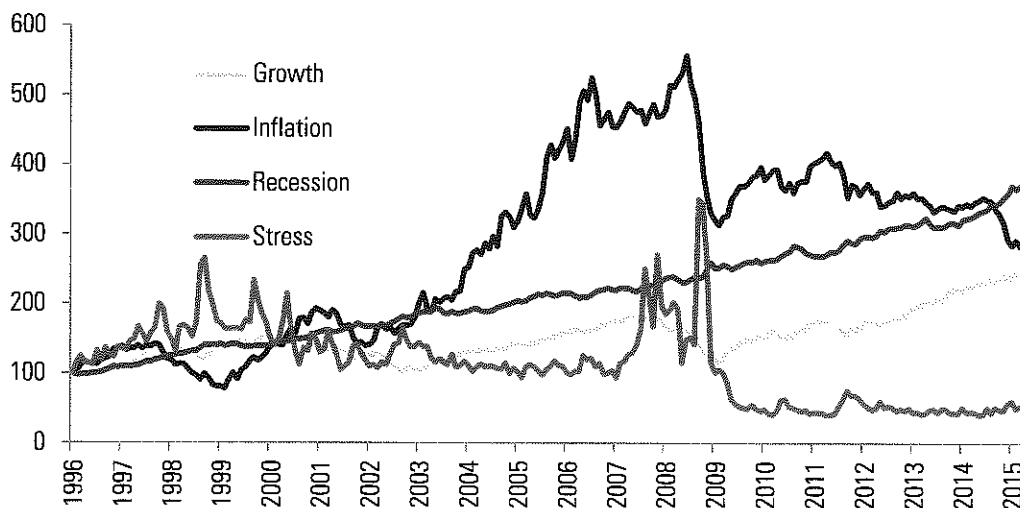
Recession: UK government bonds (Citigroup UK GBI)

Inflation: basket of commodities and inflation swaps (25% Bloomberg Energy, 25% Bloomberg Industrial Metals, 50% Deutsche Bank US Inflation Swaps 5Y)

Stress: implied volatility of US equities (VIX Index) and TED spread (3m USD LIBOR - 3m US government rate)

Chart 5 illustrates the change over time of these risk factors proxies.

Chart 5: Performance of macroeconomic risk factors proxies (1996-2015)



Source: Unigestion.

2 - Static analysis (Jun 2006 – September 2016)

Table 6 shows asset classes' sensitivity to macroeconomic risk factors. Sensitivities highlighted in bold are those that are statistically significant at the 95% confidence level. We have used the local currency version of the indices to isolate the macro factor exposure of the asset class from that of foreign currency returns.

Table 6: Sensitivities of asset classes across macroeconomic regimes

	<i>Betas</i>	Steady Growth	Recession	Inflation	Stress	R2
Equity	FTSE All Share Index	1.08	0.24	-0.02	-0.01	74%
	FTSE All World Index	1.19	0.08	-0.06	-0.02	87%
Dynamic Allocation	Ruffer Absolute Return	0.28	0.24	-0.01	-0.10	27%
	Insight Bonds Plus	0.10	0.04	0.00	-0.02	20%
Secure Income	CS Leverage Loan Index	0.62	0.08	0.06	0.00	79%
	Infrastructure Index	0.96	0.30	0.08	0.07	60%
Inflation protection	50% ILG / 50% Infrastructure	0.55	0.51	0.12	0.00	71%
	IPD Index	0.48	-0.01	-0.10	0.23	33%

Source: Unigestion, Bloomberg

We notice that most asset classes are significantly exposed to one or more risk factors, and in particular to the risk of economic growth. As expected, the mixed allocation to Inflation-Linked Gilts and Infrastructure exhibits a significant, positive sensitivity to inflation and risk, Dynamic Asset Allocation funds are less exposed to growth than other investments with Ruffer Absolute Return even showing some positive sensitivity to Recession risk. Interestingly, Infrastructure also offers some degree of sensitivity to Recession, due to the yield sensitivity of the asset class.

Table 7 aggregates these results for the full portfolio, using the weights given in Table 1. In particular, it shows aggregated beta (which measures correlation with macro risk factors) for the portfolio as well as the breakdown of explained total risk (risk contributions) and unexplained risk (idiosyncratic risk).

Before we look in detail at the results it is important to understand the methodology we use to 'measure risk'

The risk measure applied is the 95% **Expected Shortfall** (ES) over a one-year horizon. In other words, the expected loss in the forthcoming year within the 5% worst scenarios is estimated to be this amount. Expected Shortfall is measured through a proprietary model encompassing various dimensions including:

- Volatility: measures the dispersion of returns for a given security or market index
- Skewness: assets whose distribution is negatively skewed are penalised. This is particularly relevant in the current context of low bond yields, as bond prices have much more downside potential than upside.
- Kurtosis: assets which have fat tails are penalised. For example, global high yield bonds tend to have more extreme returns relative to what would be expected in a normal distribution.
- Liquidity: less liquid assets are penalised as their volatility are normally understated due to stale pricing, for example, in the case of direction property investments.
- Carry: carry is the expected return of an asset should pricing remain unchanged. For two assets with the same volatility, the one with a higher carry can be considered less risky when estimating downside risk.

Table 7: Sensitivities of portfolio across regimes

	Steady Growth	Recession	Inflation	Stress	Idiosyncratic risk	Total
Betas	0.77	0.18	0.00	0.00	0.03	-
Risk contributions (1-year 95% ES)	14.1%	0.8%	0.0%	0.1%	2.3%	17.4%
Risk proportions	81%	5%	0%	1%	13%	100%

Source: Unigestion, Bloomberg

All in all, the Growth factor dominates the portfolio as it accounts for 81% of the portfolio’s total risk. This is significantly higher than the 60% we would recommend for a “risk-balanced” exposure, in order to match the expected frequency of steady growth periods. As a result, the portfolio also seems to lack “hedging” assets for recessionary, inflationary or market stress regimes. However, it does have a significant contribution from idiosyncratic risk, which is likely a result of the portfolio’s allocation to property, and “dynamic asset allocation” assets.

Table 8 summarises the average expected nominal returns and risk-adjusted return ratios for the current portfolio. Nominal expected carry is higher than we usually see in pension fund portfolios due to the high exposure to alternatives.

Table 8: Expected nominal return and risk-adjusted returns of the portfolios

Nominal expected carry	Expected ES	Nominal expected carry/ES	Nominal expected carry/Max Drawdown
7.3%	17.4%	0.42	0.24

Source: Unigestion, Bloomberg

Table 9 summarises the historical performances of the portfolio during periods of market stress

Table 9: Performances during periods of market stress

Great Financial Crisis	29-Aug-08	27-Feb-09	-23.5%
Summer 2011	31-May-11	30-Sep-11	-8.0%

Source: Unigestion, Bloomberg

The simulation of the Great Financial Crisis of 2008 shows a drop in the value of the assets that is comparatively lower than anticipated given the asset mix and the outcome for similarly structured portfolios.

Section 3 – Alternative portfolios

In this section, we consider alternatives to the current strategic portfolio.

1 - Description of the alternative proposed portfolios

While the portfolio is quite well diversified in as such that it has a significant exposure to both liquid and illiquid alternatives, the portfolio's existing equity allocation has a strong home bias. In light of the uncertainty for businesses post-Brexit and concentration risk in general, we would consider some alternative portfolios. To investigate whether risk-adjusted returns can be improved, we consider two alternative allocations which incorporate a broader universe of risk premia:

- Proposal 1 : Shifting 10% of equities allocation (UK and World) to Alternative Risk Premia
- Proposal 2 : Shifting 10% of equities allocation (UK and World) to Private Equity

A summary of the proposed portfolios is summarised in Table 10.

Table 10: Proposed allocations versus current allocation

	Current	Proposal 1 (ARP)	Proposal 2 (PE)
Inflation linked Gilts	0.0%	0.0%	0.0%
FTSE All Share Index	22.5%	17.5%	17.5%
FTSE All World Index	22.5%	17.5%	17.5%
Low-Vol World Equities	0.0%	0.0%	10.0%
Ruffer Absolute Return	10.0%	10.0%	10.0%
Insight Bonds Plus	10.0%	10.0%	10.0%
CS Leverage Loan Index	15.0%	15.0%	15.0%
Infrastructure Index	5.0%	5.0%	5.0%
50% ILG / 50% Infrastructure	10.0%	10.0%	10.0%
IPD Index	5.0%	5.0%	5.0%
Alternative Risk Premia	0.0%	10.0%	0.0%
Private Equity	0.0%	0.0%	10.0%

We have proxied Private Equity by the Cambridge US Private Equity index. The Alternative Risk Premia strategy targets 8% volatility and consists of various underlying strategies including equity factors, trend following, carry, value and convexity. Full details of these strategies are in the Appendix of this document.

2 – Full portfolio simulation

Table 11 shows the additional risk premia's sensitivities to macroeconomic risk factors. Sensitivities highlighted in bold are those that are statistically significant at the 95% confidence level.

Table 11: Additional risk premia's sensitivities to macro risk factors

<i>Betas</i>	Steady Growth	Recession	Inflation	Stress	R2
Alternative Risk Premia	0.09	0.21	-0.09	0.03	7%
Private Equity	0.84	0.01	0.13	-0.02	75%

Source: Unigestion, Bloomberg

Table 12 summarises the beta exposure to the various macroeconomic risk factors of the proposed portfolios. Table 13 summarises the 1-year 95% ES of the proposed portfolios, while Table 14 presents the risk contributions as percentages of total portfolio risk.

Table 12: Beta exposures of the various portfolios to the macroeconomic risk factors

<i>Betas</i>	Steady Growth	Recession	Inflation	Stress	Idiosyncratic risk
Current	0.77	0.18	0.00	0.00	0.03
Proposal 1	0.66	0.19	0.00	0.00	0.03
Proposal 2	0.73	0.15	0.02	0.00	0.03

Source: Unigestion, Bloomberg

Table 13: 1-year 95% ES of the various portfolios across regimes

95% 1 year ES	Steady Growth	Recession	Inflation	Stress	Idiosyncratic risk	Total (%)	Total (£)
Current	14.1%	0.8%	0.0%	0.1%	2.3%	17.4%	£149m
Proposal 1	11.9%	0.7%	0.0%	0.0%	2.3%	14.9%	£127m
Proposal 2	13.3%	0.7%	0.2%	0.1%	2.6%	17.0%	£145m

Source: Unigestion, Bloomberg

Table 14: Risk proportions of the various portfolios across regimes

Risk proportions	Steady Growth	Recession	Inflation	Stress	Idiosyncratic risk	Total
Current	81%	5%	0%	1%	13%	100%
Proposal 1	80%	5%	0%	0%	15%	100%
Proposal 2	78%	4%	1%	1%	15%	100%

Source: Unigestion, Bloomberg

Both proposals have in common an overall reduction in risk for the portfolio compared to the current Strategic Asset Allocation. As expected, idiosyncratic risk is increased in Proposal 1 where we introduced exposure to Alternative Risk Premia and sensitivity to inflation is slightly increased for Proposals 2 where we introduced exposure to Private Equity. However, in all cases the portfolio risk remains dominated by the “Growth” factor. Re-balancing toward more Recession or Inflation protection would require more drastic changes in the allocation.

Table 15 summarises the average expected nominal returns and risk-adjusted return ratios for the current and proposed portfolios. Expected nominal return/risk and expected carry/max drawdown ratios are improved in all proposals, with improvements in “Proposal 1” being more significant.

Table 15: Expected nominal return and risk-adjusted returns of the portfolios

	Nominal expected carry	Expected ES	Nominal expected carry/ES	Nominal expected carry/Max Drawdown
Current	7.3%	17.4%	0.42	0.24
Proposal 1	7.7%	14.9%	0.51	0.30
Proposal 2	7.4%	17.0%	0.44	0.27

Source: Unigestion, Bloomberg

Table 16 shows that during historical periods of market stress, drawdowns can also be reduced in the proposed portfolios.

Table 16: Performances during periods of market stress

			Current	Proposal 1	Proposal 2
Great Financial Crisis	29-Aug-08	27-Feb-09	-23.5%	-19.8%	-22.2%
Summer 2011	31-May-11	30-Sep-11	-8.0%	-6.5%	-6.5%

Source: Unigestion, Bloomberg

In summary, we believe a combined solution of the two proposals could be an interesting proposition for LBHF as both Alternative Risk Premia and Private Equity provides diversification away from Steady Growth risk, offering comparable returns, lower drawdowns and improved risk-adjusted returns.

Appendix – Proposed Strategies

Alternative Risk Premia, as at 30 September 2016

An innovative, actively managed alternative risk premia strategy, targeting returns of cash+7% p.a. gross of fees over a 3- to 5-year investment horizon. Designed with daily liquidity within a UCITS structure, the strategy also seeks to limit volatility to 8%, potentially providing smoother risk-adjusted returns for investors.

Meeting today's investment challenges through risk premia

We believe that a liquid portfolio of alternative risk premia offers investors an improved way of addressing equity investment.

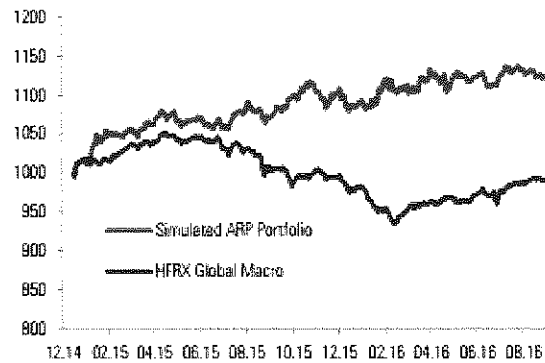
Our alternative risk premia approach rests on three distinctive pillars:

- 1) Unigestion's proprietary definition of risk premia, which seeks to improve on the standard definitions of momentum, valuation, size and quality. We also seek to harvest returns from strategies such as trend following, and carry in bonds, credit, volatility and FX.
- 2) Macro-based allocations that are dynamically blended to suit the prevailing economic environment.
- 3) Robust risk management, including the use of an expected shortfall model, which allows us to manage the high tail risk of alternative asset classes.

Unigestion's approach

- 1) We choose the underlying alternative risk premia based on external academic research and our own experience.
- 2) We apply proprietary risk models that incorporate a broad range of risk dimensions.
- 3) Based on our understanding of the macroeconomy and the sensitivities of alternative risk premia to the business cycle, we define the most efficient capital allocation to create well-balanced exposure to macroeconomic regimes.

Unigestion's simulated ARP strategy



Sources: Bloomberg, HFR, Unigestion, as at 31.08.2016, net of fees (0.75% p.a.) in US dollar terms. Unigestion Alternative Risk Premia strategy aims to deliver cash + 7% over a full market cycle with a target volatility of 8%. It harvests the following risk premia: trend following, carry and equity factors. The strategy is composed of a risk-based allocation to six individual risk premia. Returns of the individual risk premia are simulations based on carve-outs from a Unigestion multi-asset fund. The equity factor premium has been implemented as a long-only solution in this multi-asset fund from 15.12.2014 to 30.05.2016. In order to replicate the long/short equity factor premium we use returns of the long-only premium, and subtract 70% of the performance from the MSCI World (in order to build a beta neutral portfolio). From 11.05.2016, we use the performance of our factors long/short fund. Please refer to Important Information at the end of this document. Past performance is not indicative of future performance. Risk statistics are based on daily data.

**1. Alternative risk
premia selection and
design**

**2. Advanced risk-
based portfolio
construction**

**3. Enhanced allocation
creates Uni-Global –
Alternative Risk
Premia**

Private Equity at Unigestion, as at 30 September 2016

Key facts about Unigestion

AUM:

USD 20.6bn; EUR 18.3bn

Investment solutions:

Alternatives
Private Equity
Equities
Multi Asset investments

Employees:

203

Ownership:

Largely owned by senior management.
Shareholder equity of over: USD 180m;
EUR 170m

Key facts about Private Equities at Unigestion

AUM:

USD 3.5bn; EUR 3.1bn

Investment solutions:

Customised mandates
Direct funds
Secondary funds

Investment team:

19 people globally supported by a
centralised service platform of 122
people

Unigestion is a boutique asset manager with the scale to deliver global tailor-made investment solutions for thoughtful investors.

Our core values – integrity, independence, excellence and guidance – are at the heart of everything we do. We are responsible for managing some US\$20bn in client assets across our four areas of expertise: equity, multi asset investing, private equity and alternatives.

We believe that risk management is an enduring driver of long-term investment performance, and we therefore apply a risk lens to all our strategies.

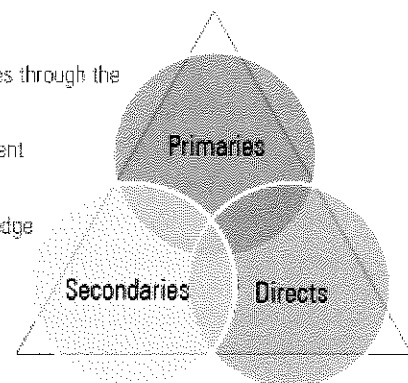
Extracting the best out of private equity

- ↳ Active investor since 1988
- ↳ Specialists in small & middle markets across direct, secondaries and primaries
- ↳ Direct investments since 1997, returns of 2.1x multiple of cost / 18% IRR
- ↳ Secondary investments since 2000, returns of 1.6x multiple of cost / 20% IRR across three secondary funds

Integrated approach to cover the full spectrum of investment types

Exploiting synergies of a one team approach

- ↳ Sourcing of direct, secondaries and primaries through the same long-standing relationships
- ↳ Accurate and efficient evaluation of investment opportunities thanks to a holistic view
- ↳ Portfolio monitoring through in-depth knowledge of companies and funds



One team with global coverage – located in Europe, the US and Asia

Focus on small and middle market investing since the 1990s

The benefits of small and middle market private equity

1. Breadth of opportunities – over **500,000** private companies around the globe
2. Attractive valuations – up to **50%** lower than in large buyouts
3. Lower leverage – historically **20%** lower than in large buyouts
4. Scope to improve operations – true **value improvement** and not financial engineering

Source: S&P Capital IQ

Current offering

Unigestion Direct Opportunities 2015

Global exposure to small and middle market companies

- Target fund size EUR 200 million (first closing in December 2015)
- 12 to 15 investments – first three investments completed
- Focus on small and middle buyouts as well as growth capital
- Portfolio diversified across sectors, regions and investment partners

Unigestion Secondary Opportunity Fund IV

Global exposure to non-auctioned secondary opportunities

- Target fund size EUR 300 million (first closing in August 2016)
- Transactions below EUR 30 million in size
- Focus on single, high quality buyout and growth capital fund interests
- Bottom-up pricing of each underlying company
- Focus on value upside, not discounts

Customised mandates

Unigestion has a long and successful history in managing customised private equity programmes. We work closely with our clients and use both our expertise as well as our unique tool – the Private Asset Allocator® – to match client specific requirements with the right opportunities. Fully exploiting our toolbox, we can structure private portfolios to maximise performance, reduce downside risk, increase the velocity of cash flows or complement an existing private equity portfolio.

To maximise the value of your customised mandate, at Unigestion we:

- Provide you with meaningful exposure to the best opportunities by building concentrated portfolios
- Create additional value through active and dynamic portfolio management across economic cycles
- Validate the robustness of our investment process through academic research
- Leverage the expertise of Unigestion's investment professionals
- Provide you with the long-term support of a solid, well capitalised and independent partner

Strategy	Investment universe	Process	Implementation
Equity factors	MSCI World	<p>Long/short allocation to momentum, valuation, small, and quality equity factors.</p> <p>Long low volatility first quintile, short market cap last quintile.</p> <p>Beta neutral.</p> <p>Long assets with positive trend, short assets with negative trend.</p> <p>Trend = average of sign of 1y and 3m past performance.</p> <p>Risk weighted portfolio.</p>	<p>Long individual stocks, short individual stocks through an equity swap.</p> <p>Short positions might be implemented with futures.</p> <p>Bonds futures: US, Canada, Germany, France, Italy, UK, Australia, Japan.</p> <p>CDS on indices: iTraxx Europe, iTraxx Crossover, CDX NA IG, CDX NA HY, CDX EM</p> <p>DM Equity indices: S&P 500, Russell 2000, Nasdaq, , TSX 60, EuroStoxx 50, DAX, CAC, IBEX, FTSE MIB, AEX, SMI, FTSE 100, Topix, ASX 200, VIX</p> <p>EM Equity indices: Hang Seng, Hang Seng China Enterprises, Kospi, Nifty, JSE Top 40, Bovespa, MSCI EM</p> <p>Precious Metals forwards: Gold, Silver, Palladium, Platinum</p> <p>G10 FX futures: CAD, EUR, CHF, GBP, SEK, NOK, JPY, NZD, AUD</p> <p>EM FX forwards and futures: BRL, MXN, PLN, RUB, TRY, ZAR, INR, KRW, SGD, CNH</p>
Trend following	Long term rates, credit indices, equity indices, precious metals, FX		
Bonds carry	Long term rates	<p>Long rates with above median carry, short rates with below median carry.</p> <p>Higher absolute weights for rates with largest difference from median.</p> <p>Duration neutral portfolio.</p>	Bonds futures
Credit carry	CDS on Europe and North America indices	<p>Long HY credit indices, short IG credit indices.</p> <p>Risk based HY vs. IG weightings.</p> <p>Long currencies with above median carry, short currencies with below median carry.</p>	iTraxx Europe, iTraxx Crossover CDX NA IG, CDX NA HY
DM FX carry	G10 FX	<p>Higher absolute weights for currencies with largest difference from median.</p> <p>Risk based portfolio.</p> <p>Long currencies with above median carry, short currencies with below median carry.</p>	FX Futures and forwards on CAD, EUR, CHF, GBP, NOK, SEK, JPY, NZD, AUD
EM FX carry	EM FX	<p>Higher absolute weights for currencies with largest difference from median.</p> <p>Risk based portfolio.</p>	FX futures and forwards on BRL, MXN, PLN, RUB, TRY, ZAR, INR, KRW, TWD, SGD, and CNH
Dividends carry	EuroStoxx 50	<p>Long a synthetic 1y constant maturity EuroStoxx 50 dividend future, short EuroStoxx 50 futures.</p> <p>Ratio of EuroStoxx 50 to Dividend futures based on 22-day beta</p>	F0 and F1 EuroStoxx 50 Dividend futures EuroStoxx 50 futures
Volatility carry	S&P 500	<p>Short (long) VIX futures and S&P 500 futures when VIX in contango (backwardation).</p> <p>Risk-based ratio of S&P 500 to VIX futures</p> <p>Valuation computed as the ratio between spot rates and OECD PPP rates.</p>	VIX futures, S&P 500 futures
G10 FX value	G10 FX	<p>Long most undervalued currencies, short most overvalued currencies on a cross-sectional basis (ie always long and short even if all currencies under or over-valued)</p> <p>Risk based portfolio.</p>	FX Futures

Source: Unigestion

Important information

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LBHF - Alternative Funding Paper Deloitte Section

Outcome from Investment Beliefs Session

Q – Define market stress regimes.

Unigestion defines Market Stress regimes as episodes where there are shocks in market prices that may not be fuelled by a fundamental deterioration in the developed market economies that are looked at. There were 13 such periods in the history that were looked at between 1974 and 2014. On average, each period lasted 3 months. Appropriate examples of such periods are the Dotcom bubble in 2000; the Russian Financial Crisis and devaluation of the rouble in 1998; the Asia Financial Crisis in 1997.

Q – How would the “proposed assets” (alternative risk premia and private equity) have performed during the same periods as noted in the report?

Unigestion confirmed that the Alternative Risk Premia would have achieved returns of +2.3% and +0.4% respectively. Private Equity would have delivered -19.3% and -2.6% respectively. During the same periods, global equities were down -39% and -16%.

Deloitte comment: We would add that as well as the performance of these assets over certain periods of market stress, there are other issues which can be affected by market shocks, particularly with illiquid investments. Timing can be a big risk with illiquid investments given the structure of these funds and investors could be exposed to risks associated with the vintage of the fund (i.e. trying to sell/buy assets at a point of market stress). Finally we would stress the fact that past performance is no guide to the future.

Q – What protection can be purchased?

Deloitte comment:

Some investment managers offer the facility to limit the extent of any downside experienced in periods of market declines – these strategies can be implemented at nil cost to the investor by “selling away” any rises in the market above a certain level. These strategies are typically implemented using over the counter derivatives implemented with an investment bank with a set term. A key consideration with these structures is that while the structure can be implemented effectively at nil cost, the investor will only derive the full benefit if the market decline coincides with the term of the option. While it is possible to revise the structure of the initial protection strategy during its life to reflect more up to date market conditions, there will potentially be costs associated with cancelling the initial structure (usually achieved by matching offsetting derivative positions).

ESG Options

The table below summarises the Fund's managers and their approach to ESG.

Investment manager	Do they have an ESG policy?	Are they a signatory of UNPRI? **	Are there any exclusion policies?	Can schemes ask for restrictions?	How do they report on ESG?
Insight	Yes	Yes	Yes – Cluster munitions*	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
LGIM	Yes	Yes	Yes – Cluster munitions	LGIM run a number of ethical funds that avoid investing in certain companies and industries.	A quarterly report detailing voting results and select case studies.
M&G	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	No formal report but have a responsible investment website.
Majedie	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
Oakhill	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	No formal report.
Partners Group	Yes	Yes	Yes – Cluster munitions, weapons, tobacco	Restrictions can be implemented through a bespoke solution.	Annual report and quarterly update on ESG integration highlights.
Ruffer	Yes	Yes	Yes – Cluster munitions	Restrictions can be implemented through a bespoke solution.	An annual report detailing voting results and select case studies.
Standard Life	Yes	Yes	Yes – Cluster munitions	SLI run a number of ethical funds that avoid investing in certain companies and industries.	A quarterly report detailing voting results and select case studies.

***Cluster Munitions.** In 2008 the Convention on Cluster Munitions was adopted by over 100 countries to completely ban the use of this weapon. This was due to these weapons having a “wide-area effect” making them inherently inaccurate when used and causing unacceptable harm to civilians, as well as leaving behind large numbers of unexploded ordnance. The Convention prohibits the use, production, transfer and stockpiling of cluster munitions.

****United Nations Principles for Responsible Investment (UNPRI).** In 2005, then UN Secretary-General Kofi Annan invited some of the world’s largest institutional investors to develop the Principles for Responsible Investment. Since being launch in 2006, the list of signatories has grown from 100 to over 1600. In implementing the principles, investors contribute to developing a more sustainable global financial system and can incorporate ESG issues into their investment practice. The six principles for responsible investment are listed below:

1. We will incorporate ESG issues into investment analysis and decision-making processes.

2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the principles.
6. We will each report on our activities and progress toward implementing the principles.

As can be seen, all the Fund's investment managers have an ESG policy and are a signatory of UNPRI. They all also report on their ESG business, in most cases by producing an annual report.

What can the Fund do?

Monitor their investment managers' ESG considerations.

All the Fund's investment managers have an ESG policy and are a signatory of UNPRI. They all also report on their ESG business on an annual basis as a minimum. We note below a few examples of highlights where ESG has been incorporated by the investment managers:

- Partners Group Private Infrastructure Fund invests in Japan Solar, which is one of Japan's leading independent solar power producers, with over 400MW of projects under construction or development. Solar power contributes to the carbon emissions goals agreed on at the December 2015 Paris climate change conference. Through the Private Infrastructure Fund, 400,000 metric tons of carbon dioxide emissions have been avoided by direct low-carbon power assets as at June 2015.
- Oakhill Advisors recently invested in a company called Grifols, a leading provider of blood-plasma derived products and transfusion medicine. They produce plasma products that are required for providing beneficial healthcare outcomes for a range of patients. In addition, this company has an Environmental Program with specific goals related to the reduction of electricity, gas and water consumption, a goal of reducing CO₂ equivalent emissions and increasing recycling.
- M&G implemented an improved management regime at Minster Court, their large multi-let office building in London and managed to improve CO₂ efficiency by 22% and significantly reduce water consumption between 2009 and 2013. This was brought about by a number of small interventions rather than the undertaking of a major project.

The Fund could collect this data from the investment managers, as well as a full breakdown of all corporate actions and how the manager voted on such actions over the 12 months and review to ensure each manager is fulfilling its ESG duties appropriately, and to the Fund's satisfaction.

If the Fund is to implement monitoring of adherence to a stated policy, there needs to be agreement for how the Committee would react in situations where the manager has not followed their policy.

Fossil Fuel exposure.

A topic within ESG which is attracting particular attention is carbon/fossil fuels/climate change. Theory would suggest that given the non-sustainability of fossil fuels, companies which are run with "carbon-intensive" operations are at risk of sustaining their operations in the future. When this point in the future may be is unknown, as it is hard to measure the rate at which societies around the world will make the transition to a clean or low carbon energy mix. However, if a company's sustainability is in question, the investment return of its shares are directly affected.

Major indices are overexposed to fossil fuels, and under-exposed to renewable energy i.e. the representation of renewable energy in stock markets is significantly lower than its share in the economy. This partly reflects the relative maturity of the associated businesses, with a lot of the renewable energy investment sitting within infrastructure related strategies rather as listed entities. Therefore a policy action to promote the transition

towards a low-carbon economy could cause a significant impact to the share price of the affected companies and the index as a whole.

Should this be of particular importance, the Committee could conduct a review of the Fund's fossil-fuel exposure. While the outcomes of this review would dictate any appropriate actions, one option may be to alter the benchmark which the Fund's passive equities replicate to a "carbon-free" benchmark – over the last 12 months or so, we have seen some of the passive providers launching strategies with a bias towards companies with a lower carbon footprint and reducing the relative weighting of organisations with a high footprint.

**Deloitte Total Reward and Benefits Limited
March 2017**

Risk Warnings

- Past performance is not necessarily a guide to the future.
- The value of investments may fall as well as rise and you may not get back the amount invested.
- Income from investments may fluctuate in value.
- Where charges are deducted from capital, the capital may be eroded or future growth constrained.
- Investors should be aware that changing investment strategy will incur some costs.
- Any recommendation in this report should not be viewed as a guarantee regarding the future performance of the products or strategy.

Our advice will be specific to your current circumstances and intentions and therefore will not be suitable for use at any other time, in different circumstances or to achieve other aims or for the use of others. Accordingly, you should only use the advice for the intended purpose.



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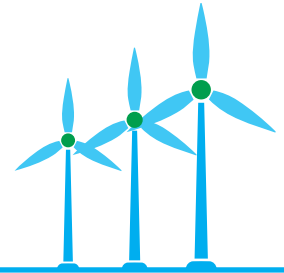
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The Future World Fund

Investing for the world you want to live in



The Future World Fund targets better risk-adjusted equity returns than a traditional index strategy. It also incorporates a climate ‘tilt’ to address the investment risks associated with climate change.

Aiming to provide better risk-adjusted returns over the long term	Responding to climate change risk	Influencing change in a positive way
<p>The Fund invests using an alternatively weighted index. This index weights constituents according to certain ‘factors’ or attributes, rather than according to their size as with a traditional market-capitalisation index. These alternative weights or ‘tilts’ provide the potential for improved risk-adjusted returns.</p>	<p>As the transition to a low carbon economy continues, companies that fail to respond to these changes present a risk to your portfolio. The Fund aims to capture this transition by having a lower exposure to companies with worse-than-average carbon emissions and fossil fuel assets, and higher exposure to companies that generate revenue from low carbon opportunities.</p>	<p>The Fund incorporates LGIM’s Climate Impact Pledge, a targeted engagement process where we will work directly with the companies we invest in to bring about positive change. We do this by encouraging them to build strong governance practices and strategies that will help them to be successful over the long term. Companies that don’t meet minimum criteria will be excluded from the Fund if proactive engagement does not bring about positive change.</p>

FACTOR-BASED TILTS AND THE POTENTIAL FOR BETTER RISK-ADJUSTED RETURNS OVER THE LONGER TERM

Academic research* has shown that we can ‘tilt’ a traditional market capitalisation weighted index according to the following four factors, that have been selected with the aim of adding value.

<p>Value: Stocks that are ‘cheap’ or trading at a discount to their fair value based on company financial data</p>	<p>Low volatility: Stocks that have exhibited more stable stock market prices over time</p>
<p>Quality: Stocks with strong, sustainable returns characterised by high profitability and low debt levels</p>	<p>Size: Smaller companies, that have historically outperformed larger companies</p>

The Future World Fund retains the transparency and cost effectiveness of a conventional index fund, but also provides the opportunity to enhance investment returns by incorporating these factor tilts. Please note that the factor mix may change over time. We ensure that the factors are relevant to the longer-term time horizon of investors in the Fund.

* Sources of academic research are available on request.

EFFECTIVELY MANAGING YOUR CLIMATE CHANGE RISK

The Future World Fund tracks an index that aims to incorporate the long-term transition towards a low carbon economy. Climate change presents a series of material risks to certain companies’ future earnings through regulatory restrictions, taxes on carbon emissions and technological advances that threaten incumbent business models.

The Fund’s ‘climate tilt’ is an innovative approach to selecting investments within specific sectors. It reduces exposure to companies with worse-than-average carbon emissions and fossil fuel assets, while increasing exposure to those which are successfully generating revenue from the green transition.

The Fund has been created to respond to our clients’ concerns over the risks associated with climate change. It also provides an opportunity for investors to take advantage of the transition to a low carbon economy, and finance the future they want to live in.

ENGAGEMENT WITH IMPACT TO DRIVE LONG-TERM CHANGE

LGIM's Climate Impact Pledge:

“To engage with the world’s largest companies that are required to adapt their business models and drive innovation in order to meet the global climate change goals. LGIM commits to encourage and accelerate the transition to a low carbon economy for the long-term benefit of all companies and their investors.”

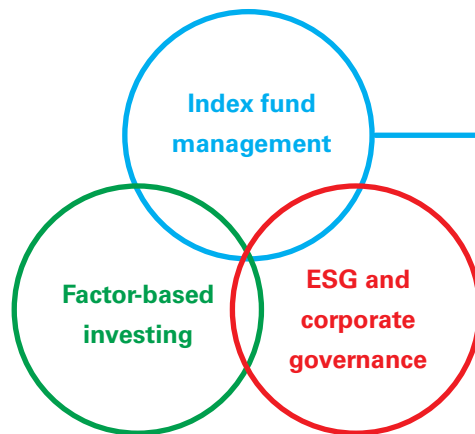
How the pledge works: LGIM believes that the engagement process should have real consequences. Through our research, LGIM identifies some of the largest companies that are critical to the shift to a low-carbon economy, and ranks them against criteria such as commitment to the low carbon transition, board composition, strategy and transparency. LGIM commits to engage with them to improve their ranking and help them strive to be the best in their sectors.

Companies that consistently fail to meet our minimum expectations will be eventually excluded from the Fund. This approach can be a powerful tool to drive better company behaviour and raise standards across the market.

FUND ADVISORY BOARD

To future-proof the Fund, LGIM has appointed an Advisory board consisting of both LGIM employees and independent members who are responsible for:

- Providing informed and expert advice to the Fund
- Ensuring the Fund remains representative of clients’ needs
- Acknowledging changing markets with regards to factor-based investing and best practices in corporate governance



WHY LGIM?

- As the largest manager of institutional assets in the UK¹, LGIM has significant experience in index fund management and factor-based investing, alongside a firm commitment to corporate governance issues.
- Tenth largest asset manager worldwide¹, with £842 billion of assets under management².
- A leader in index fund management: We are one of the largest global providers of index funds, with over £300bn AUM³.
- Expertise in factor based investing: We run over £25bn³ across 20 different factor based strategies, and have been running funds against alternatively-weighted indices for over a decade.
- ESG and corporate governance focus: LGIM has shown industry leadership on ESG issues. We use our scale to influence company behaviour on behalf of our clients, striving to achieve positive financial and societal impacts through our investments.

1. Source: IPE Research 2016

2. Source: LGIM internal data as at 30 June 2016. These figures include assets managed by LGIMA, an SEC Registered Investment Advisor. Data includes derivative positions.

3. as at 30 June 2016

For further information, please visit the website: www.lgim.com/futurefund

Important Information

The value of an investment and any income taken from it is not guaranteed and may down as well as up.


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<p>London Borough of Hammersmith & Fulham</p> <p>PENSIONS SUB-COMMITTEE</p> <p>15th MARCH 2016</p>	
FUND MANAGER MONITORING ARRANGEMENTS	
Report of the Strategic Finance Director	
Open Report	
Classification - For Information	
Key Decision: No	
Wards Affected: None	
Accountable Director: Pete Carpenter, Director of Treasury and Pensions	
Report Author: Pete Carpenter	Contact Details: Tel: 020 7641 2832 E-mail: pcarpenter@westminster.gov.uk

1. EXECUTIVE SUMMARY

- 1.1. The second of the fund manager monitoring sessions took place on Wednesday 30th November 2016 with four fund managers attending to brief the committee on their performance and outlook for the future. Issues arising from each manager were different reflecting the diversity of investments.

2. RECOMMENDATIONS

- 2.1. That the report is noted.

3. REASONS FOR DECISION

- 3.1. Not applicable.

4. PROPOSAL AND ISSUES

- 4.1. At the sub-committee's meeting on 22nd June 2016 it was agreed that members would meet with the fund managers managing the Fund's investments on an annual basis. It was agreed that two late afternoon/evening sessions be arranged where each manager would have 30 minutes to give a

refresher of their mandate and updates on their people, processes and performance.

4.2. The second session took place on Wednesday 30th November 2016 in Committee Room 3 and the schedule was:

- 3.30pm Partners Group – Infrastructure
- 4.15pm Partners Group – Multi Asset Credit
- 5.00pm Oak Hill Advisers – Multi Asset Credit
- 5.45pm Insight Investments – Absolute Return Bonds

4.3 Attached at Appendix 1 are the notes of the meetings highlighting the key points discussed. No fund manager specific issues were identified. This will input into the investment strategy review to commence once the actuarial valuation results are known and is included as another paper on this agenda.

5. OPTIONS AND ANALYSIS OF OPTIONS

5.1. The options for fund manager monitoring were discussed at the sub-committee's meeting on 22nd June 2016 and the questions the managers were asked to discuss were agreed at the sub-committee's meeting on 21st September 2016.

6. CONSULTATION

6.1. Not applicable.

7. EQUALITY IMPLICATIONS

7.1. Not applicable.

8. LEGAL IMPLICATIONS

8.1. None.

9. FINANCIAL IMPLICATIONS

9.1. None.

10. IMPLICATIONS FOR BUSINESS

10.1. None.

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

11.1. None.

LIST OF APPENDICES:

Appendix 1: Notes of meeting with fund managers 30th November 2016.

LBHF Fund Manager monitoring meetings – 30th November 2016

Attendees:

Sub-committee members

Cllr Cassidy
Cllr Adam
Cllr Botterill
Cllr Murphy
Cllr Vincent

Officers

Peter Carpenter
Peter Metcalfe

Adviser

Kevin Humpherson, Deloitte

1. Partners Group Infrastructure – represented by Sergio Jovele and Brandon Prater

People & business

- No changes in key personnel – the business has long term incentive plans in place to retain key staff.
- No significant changes to the business although it continues to grow – now 900 employees globally. The business has 36 LGPS clients and this remains a key market sector.

Process

- The methodology of investing has not changed since inception – they typically do not invest in auctions preferring to research less obvious parts of the market. No investment exceeds 15% of the total portfolio once fully invested.
- The portfolio carries equity risk predominantly and therefore returns can provide a premium compared to credit portfolios hence the LIBOR +8% target.

Performance

- This portfolio is in the fund raising and initial investment stage. It is a Euro fund and hedged to the Euro.
- The investment in Fermaca (pipelines in Mexico) shows an investment multiple of 1.12x to date but Partners Group expect this to increase to circa 1.6x in future.

Outlook

- To date the portfolio has 6 investments – 3 in solar power. There are 2 new holdings signed up in November 2016; Metro Trains in Australia and Raven, shale gas by-product (plastic) in the USA offering both sector and geographical diversification.
- Partners Group expect the fund to be circa 70% committed in a year's time.

- Partners Group expect the fund to achieve its target return of LIBOR +8% after fees.

2. **Partners Group – Multi Asset Credit** – represented by Sergio Jovele and Chris Bone

People & business

- No leavers amongst the key staff. One new Senior hire has been added.
- No changes to the business – 110 credit professionals globally, with sector specialists.

Process

- The fund invests in private debt – corporate and asset backed with 10-15% in real estate debt.
- Loans are LIBOR+ but they have a floor to mitigate risk.
- This market has offered good opportunities since stricter bank lending regulations and constraints came in.

Performance

- To date IRR has been 6.5% as at 30 September 2016. Target is LIBOR +4% so ahead.
- Portfolio is well diversified and although there is some refinancing and tail-end risk there are covenants in place to mitigate these.
- Partners Group will provide details of current occupancy at Devonshire Square (London City offices - asset backed debt).

Outlook

- Increased market volatility arising from recent political changes may increase margins if banks lend less.
- To date only 1 investment has reduced in value, the rest have increased.
- A successor fund to our existing investment is now being offered following the same established strategy.

3. **Oak Hill – Multi Asset Credit** – represented by Declan Tiernan and Lucy Panter

People & business

- No changes to key personnel.
- No changes to the business – multi strategy credit manager since inception. It has industry focussed research teams and an intense focus on downside protection. Assets under management of \$9.6 billion in multi credit strategy.

Process

- The objectives of this portfolio are to take less risk than the market whilst generating excess return.
- This is achieved by dynamically moving the portfolio to capture the best risk/reward opportunities.

- This has not changed since inception.

Performance

- Performance from inception to date is 6.2% net of fees.
- Well ahead of target of LIBOR +4%.
- This fund is hedged back to GBP.

Outlook

- In the USA, the Fed may increase interest rates. The portfolio holds 33% in Floating Rate Notes. Increased volatility is expected but also faster growth in USA.
- Prospects for high yield look good in USA, but more difficult in Europe.
- The biggest unknown is how US dollar will fare.
- Aspiration is to continue to return 6 to 8% net.

4. Insight Investments – represented by Gary Wilkinson and Andy Burgess

People & business

- Insight has 688 staff globally. 8 investment professionals joined and 5 left in the last year.
- No changes to key staff on this portfolio.
- No changes to philosophy or approach for this fund.

Process

- This fund utilises a broad range of opportunities: government stocks, inflation linked, corporate, emerging market debt, high yield, loans, asset backed securities, currency and associated derivatives.
- This fund has £4 billion assets under management and is now closed.

Performance

- Portfolio has returned 2.33% over LIBOR before fees (50bps) since inception. Target is LIBOR +2%.
- In the past year, gains were made through long duration position in US, offset with shorts in Europe.
- Flattening yield curves and overweight long-dated bonds detracted from performance.

Outlook

- This fund targets consistent returns with low volatility. Future expectations are for this to continue.
- The portfolio will benefit if inflation goes up in USA. This is the area with the highest units of risk.
- It would also benefit from a stronger US dollar. A modest short position has been taken on Sterling.