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HERTFORDSHIRE PENSION FUND
INVESTMENT STRATEGY REVIEW

1. Introduction

1.1. This paper is addressed to the Pensions Committee ("the Committee") of the Hertfordshire Pension Fund ("the Fund") and sets out the steps taken and decision made by the Working Group of the Committee that was established to review the investment strategy of the Fund.

1.2. This document acts as a supporting document to the Investment Strategy Statement ("ISS") and details the rationale for the eventual investment strategy that was agreed upon by the Working Group of the Committee. It also summarises the discussions undertaken by the Working Group on the subjects of investment beliefs and 'environmental, social and governance' factors as they influence the investments of the Fund.

2. Triennial Valuation initial results

2.1. The investment strategy review process was started in December 2016, following the publication of the initial triennial results from the Fund's actuary. The funding level from the initial results in comparison with the best estimate expected funding level from analysis conducted after the 2010 actuarial valuation is shown below.

	31 March 2010	31 March 2013	31 March 2016
Expected funding level*	-	79%	84%
Actual Funding level	74%	82%	91%

*Funding level based on a 50% (best estimate) probability in the 2010 analysis, assuming a 65% growth assets / 35% matching assets strategy.

2.2. As can be seen above the Fund's funding level was materially ahead of where it was expected to be as at the 2016 valuation as it was, to a lesser extent, at the 2013 valuation.

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2.3. The reasons why the Fund was ahead of schedule were:

Positive Contributing Factors	Negative Contributing Factors
Strong Investment Returns – the Fund returned 6.9% p.a. over the three years to 31 March 2016. This return was above that assumed by the actuary.	**Reduction in Bond Yields** – given the valuation basis all else being equal a reduction in gilt yields increases the present value of liabilities
Reduction in Inflation Expectation – the Fund's inflation assumptions have changed from the 2013 valuation, the assumed "wedge" between CPI and RPI has increased by 0.2% p.a. Salary increase expectations have also changed from 0.5% p.a. above RPI to 0.9% p.a. below RPI. Overall, there was a 1.6% p.a. reduction in inflation assumptions	**Interest on the deficit** – the deficit grows by the "unwinding" of the discount rate
Membership experience over the period	
Slight change in **liability discount rate**	

3. Opportunity to De- Risk

3.1. Based on the analysis conducted for the December meeting there appeared to be an opportunity to reduce the level of investment risk that the Fund was running, whilst retaining broadly the same long-term funding objectives. In particular, the Working Group confirmed the long-term objectives as having an acceptably high probability of being fully funded in seven valuations' time (i.e. in 2037) whilst limiting the risk of falling below a particular 'downside risk' funding level (established as 75% in this case) to an acceptably low level. The benefits of the improved funding level were seen in terms of the 'downside risk floor' being able to be raised to 75% from 60% in the 2010 exercise

3.2. The Working Group agreed that there were clearly drawbacks to the traditional approach of de-risking by buying risk-free assets given the unappealing yields on offer (long-dated index-linked gilts offering real yields of -1.5% real or worse). Given this, the Group discussed the possibility of reducing the level of risk being run in equities whilst investing in assets that are still expected to produce long-term returns in excess of inflation, because of the underlying nature of their cashflows being inflation-linked (so-called 'real' assets).

3.3. In addition to reviewing the current strategy and the previously agreed target of 65% / 35% growth / matching split the Group looked at two further possible asset portfolios to aid in the discussion.

3.4. The first possible portfolio moves 10% out of equities, into a portfolio of real assets comprised of property (high lease to value (HLV) and private rented sector (PRS)) and infrastructure debt.

3.5. A second possible portfolio went further with a 20% reduction from growth assets with the strategy both increasing the allocation to index-linked gilts and introducing an allocation to real assets.

4. Reduction in Growth Assets – Analysed Portfolios

4.1. The portfolios below were analysed to judge the impact that these changes would make on the risk and return profile of the strategy and the effect this was likely to have on the time the Fund would take to reach full funding. The "value at risk" measure can be thought of as the worst case 1-in-20 increase in the Fund's deficit over a one year period.

Asset Class	Current Allocation (25/75)	Target Allocation (35/65), 35% to be bonds	Target Allocation (35/65), 35% to be real assets	Target Allocation (45/55); with de-risked assets split between bonds and real assets
UK Equity	16.0	10.0	10.0	5.0
Global Equity	34.2	30.0	30.0	25.0
Bonds	25.0	35.0	25.0	35.0
Property	8.0	8.0	8.0	8.0
HLV, Infrastructure Debt, PRS	-	-	10.0	10.0
Alternatives	10.8	11.0	11.0	11.0
Private Equity	5.0	5.0	5.0	5.0
Residual Assets / Cash	1.0	1.0	1.0	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**
Expected Return above gilts p.a.	3.5%	3.1%	3.3%	2.8%
1 Year Value at Risk	£830m	£740m	£760m	£670m

4.2. All of the above strategies would support the discount rate used as part of the actuarial valuation assumptions, and the results were not surprising, as reducing exposure to equities causes the expected return and risk levels to fall.

4.3. The portfolios were also analysed to gauge the expected time it would take to reach a fully funded position, what the median funding level was expected to be at the next valuation, and what level the 1 in 10 'downside risk' funding level was expected to be below. The risk, 1 in 10 funding level in 2019, in the table overleaf shows what the funding level could drop below in the worst 10% of scenarios. These metrics are shown in the table overleaf.

Objective	Current	35/65 Bonds	35/65 Real	45/55
Probability of being 100% funded by 2037	65%	63%	66%	63%
Time until fully funded	c.5 yrs	c.6.5 yrs	c.6 yrs	c.7 yrs
Median expected funding level in 2019	96.1%	95.4%	95.9%	95.2%
Risk, 1 in 10 funding level in 2019	73.7%	75.7%	75.4%	77.4%

4.4. It was demonstrated that all of the strategies considered had a good chance of meeting long term objectives and reducing shorter term risks, although none of the strategies appeared to meet the same fully-funded probability likelihoods as the analysis for the 2010 valuation demonstrated. This was because of the slightly higher discount rate hurdle that the strategies were required to exceed in comparison with that used in 2010.

5. Summary and Conclusion

5.1. The analysis of the current strategy and the three possible portfolios showed that all should be supportive of the actuarial valuation as all of the expected returns have a margin for prudence over the actuarial discount rate assumptions.

5.2. The main driver of risk reduction is the reduced equity exposure, rather than the lower risk assets selected.

5.3. However the longer term ‘funnel’ modelling showed that despite the funding level being ahead of previous analysis, long term ongoing funding level improvements appear harder to achieve.

5.4. Given the sensitivities of the modelling, once finalised contribution rates have been established by the actuary, the analysis will be updated.

5.5. Of the ‘strawman’ portfolios consider, the Working Group’s preference was for the portfolio with 65% in growth assets, and 35% in ‘matching’ assets of which 10% would be in real assets and 25% in bonds (as is currently targeted). **This, therefore, is the medium term strategy which is recommended by the Working Group to the Pensions Committee.**

6. Next Steps on Investment Strategy

6.1. Whilst the final strategy has yet to be confirmed, the principles of reducing the level of risk, reduced dependence on equities for returns and an increase in real assets has been the general consensus of the Working Group.

6.2. The next steps are to understand in more detail what the portfolio of real assets should look like, and how investment in these assets can be best implemented for the Fund.

7. Investment Beliefs

7.1. Underpinning the decisions that the Pensions Committee has made in running the assets of the Hertfordshire Pension Fund have been a set of investment beliefs. The existence of such beliefs has been demonstrated in the Committee's consistency of approach over many years (with beneficial results) but the beliefs themselves have been implicit rather than explicit.

7.2. The requirement for the Committee to produce an Investment Strategy Statement (ISS) and the forthcoming exercise of transferring assets to the ACCESS pool, which itself has established a common set of guiding principles across its member funds, meant that this was an opportunity for the Working Group to draft some explicit 'investment beliefs' as part of the ISS, to be agreed by the Pensions Committee.

7.3. The following areas of investment beliefs were discussed by the Working Group and codified in the draft Investment Strategy Statement:

- Objective, evidence-based investment decisions
- Long-term approach
- Relationship between risk and return
- Benefits of diversification
- Complexity of managing risk in a complex real world environment
- Trade-off between certain costs and uncertain excess returns
- Benefits of innovation and evolution
- Recognition that environmental, social and governance factors cannot be ignored.

7.4. The next steps are for the Pensions Committee to review the investment beliefs as set out in the Investment Strategy Statement.

8. Environmental, Social and Governance (ESG) issues

8.1. The Working Group received a presentation on Environmental, Social and Governance issues and how these can be addressed within the decision-making framework for the Fund. In particular the Group discussed the approach (sometimes called 'responsible investment') of incorporating ESG factors into investment decision-making processes and ownership practices in that these can affect financial performance. This is very different from the more 'old-fashioned' approach of 'ethical investment' in which investment decision-making was guided by particular moral values and traditionally implemented by negative screening or exclusion policies.

8.2. In terms of fiduciary duty, the outcome of the Law Commissions' review of 2014 was discussed: "there is no impediment to trustees taking account of environmental, social or governance factors where they are, or may be, financially material". The Working Group agreed that poor corporate governance, for example, could have a deleterious effect on the value of an investment, and it was therefore appropriate to establish policies and processes aimed at ensuring that the Fund was not overly exposed to risks of this type.

8.3. Areas which the Pensions Committee could consider in developing its approach to ESG could include:

- Education/training on the subject of ESG and related investment approaches

- Developing the Fund's policy on addressing ESG issues
- Explicitly reviewing the extent to which managers used by the Fund incorporate ESG considerations into their investment decision-making. Mercer's ESG ratings of managers will support this work
- Considering adoption of the UK Stewardship Code on governance and active ownership
- Delegating the exercise of voting to managers owning the shares but exercising scrutiny of the managers' voting policies and engagement activity
- Considering climate change risk on investments and sustainable investment opportunities.

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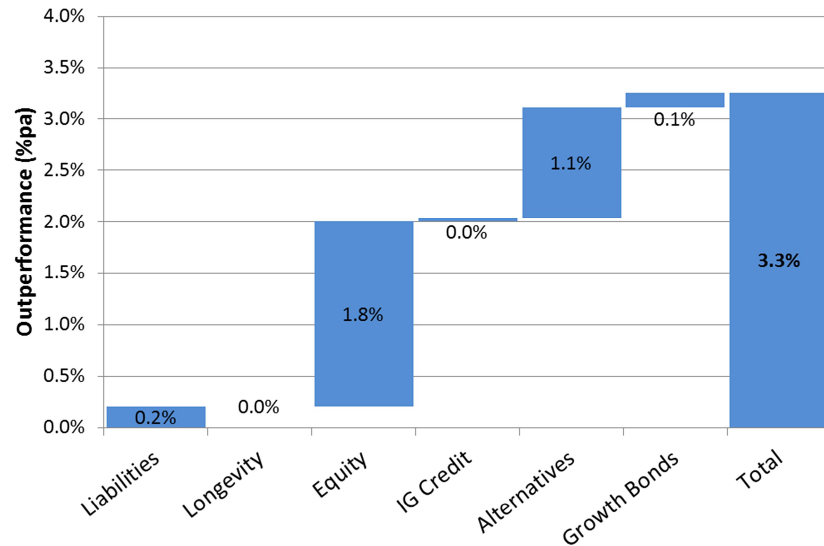
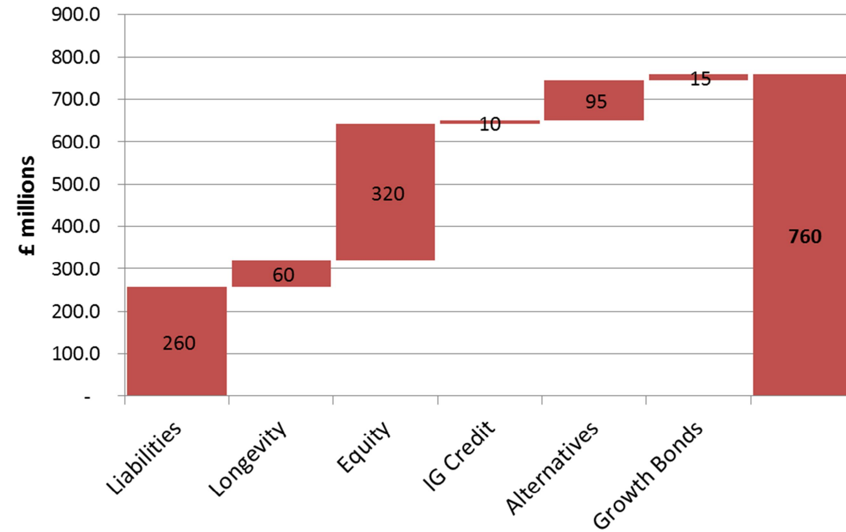
Nick Sykes
March 2017

Appendix

Risk and Return analysis for the agreed strategy, 65/35 Strategy split with a 10% allocation to Real Assets

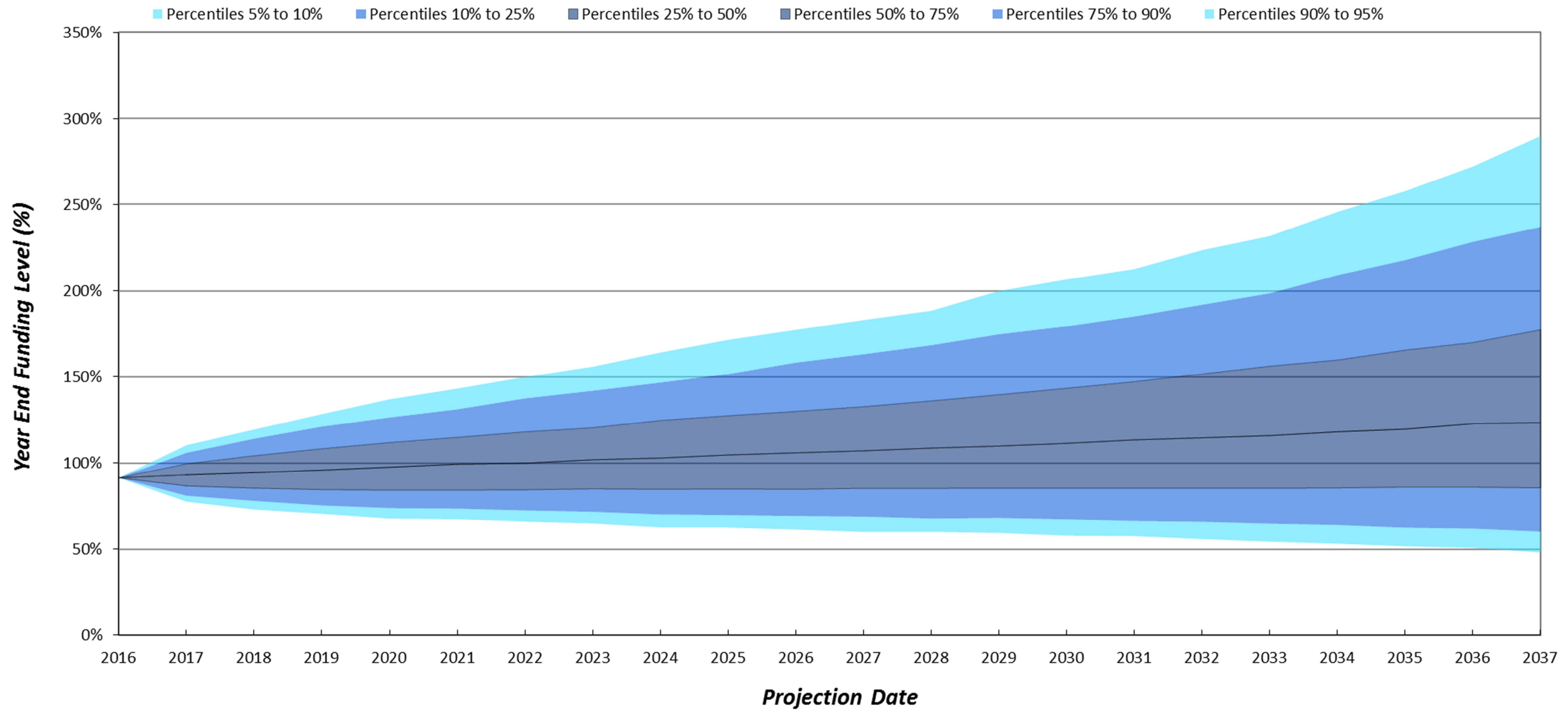




Best estimate return of 3.3% p.a. above liabilities – the expected return of the current portfolio is well in excess of the required asset out performance of 1.8% above liabilities

1 Year VaR – over the next 12 months there is a 1 in 20 chance that the deficit could increase by c.£760m

Equities and liabilities greatest sources of risk – risk has been reduced compared to the 25/75 current position but not as much as by switching to bonds which match liabilities more closely. Interestingly the risk from liabilities increases



Objective	Target	Strategy
Return, 100% funded probability	67%	66%
Risk, 1 in 10 funding level in 2019	75%	75%