ANNEX 2

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Notwithstanding the above paragraph 22, 23, 24, 27 and 39 - 45 constitutes investment advice on the basis that the ISS is updated to reflect the strategic advice. If the Trustees are in any doubt as to whether the ISS will be updated to reflect the strategic advice they should not seek to rely on the investment advice.

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PENSION FUND COMMITTEE – 6 MARCH 2020

FUNDAMENTAL REVIEW OF ASSET ALLOCATION

Report by the Independent Financial Adviser

Introduction

1. A Fundamental Review of the Asset Allocation of the Pension Fund is undertaken once every three years, to synchronise with the triennial Actuarial Valuation carried out by the Scheme Actuary. Its purpose is to take a hard look at the existing structure of the Fund's assets, to assess the need for changes and to make recommendations to the Pension Fund Committee accordingly.

2. In my previous Review (presented to the March 2017 Committee), the main recommendation was to reduce the Equity weight by 5% and to increase the Fixed Interest weight by 5%. This switch was implemented later in 2017.

3. Once the Brunel Pension Partnership had been established, I wrote 'Transfer of Assets to Brunel Partnership' for the March 2018 Committee. This made recommendations as to how the Oxfordshire Fund should transition its assets into the different sub-funds being set up by Brunel.

4. In this report I shall revisit those transition proposals, showing which ones have been implemented, and considering how the remainder of the Oxfordshire Fund should be transitioned to Brunel sub-funds within an updated asset allocation strategy. (paras 8-24)

5. To assist in formulating this strategy, I have drawn on the results of a Strategic Asset Allocation Review prepared by a separate team within MJ Hudson Allenbridge. A summary of this review is contained in the Appendix, and my comments on it are in paras 25 - 28.

6. The next section of the paper (paras 29-38) deals with the structure of the Fund – covering several choices as to how the broad asset allocation strategy can be implemented. My recommendations are summarised in paras 39-45.

7. Previous Fundamental Reviews have included an assessment of each external investment manager's performance, with a recommendation as to whether they should be retained. As the Fund's remaining externally-managed mandates will be transitioning to Brunel within the next year, it is not felt necessary to carry out a similar assessment in this report.

The transition to Brunel

8. By the end of 2019 almost 50% of the Oxfordshire Fund had been transitioned into sub-funds run by Brunel. The progress by asset class is shown in the following tables, which are based on tables from my 2018 'Transfer of Assets' paper.

9. Passive Equities – both the UK and the Global Equities were moved to Brunel's funds (also managed by Legal & General) in Q3 2018

Fund code	Benchmark	UK %	O/S Dev'd %	Emerging %	Allocation	Action
EPU	**FTSE All-Share**	**100**	**0**	**0**	**7.2**	**Q3 '18**
EPD	**MSCI World**	**7**	**93**	**0**	**9.0**	**Q3 '18**
EPE	**MSCI Emerging**	**0**	**0**	**100**	**0**	
EPL	**MSCI World**	**7**	**93**	**0**	**0**	
EPS	**MSCI World**	**7**	**93**	**0**	**0**	
	Combined	**7.8**	**8.4**	**0.0**		

Table 1 – Allocation to Passive Equity Portfolios

10. **Active Equities –** in Q4 2018 the UK portfolio managed by Baillie Gifford transitioned to the Brunel portfolio managed by Invesco, Baillie Gifford and Aberdeen Standard Investments. In Q4 '19, the bulk of Wellington's Global Equity portfolio (which was closing at the end of 2019 in any event) was moved into Brunel's High Alpha Developed Equity product (managed by AllianceBernstein, Baillie Gifford, Fiera Capital, Harris Associates and Royal London Asset Management). At the same time, Brunel's Emerging Market Equities sub-fund (managed by Genesis, Wellington and Investec Asset Management) was funded from Oxfordshire's Wellington and UBS portfolios, together with some cash.

Fund code	Target return	UK	O/S Dev'd (%)	Emerging	Allocation (%)	Action
EUK	**FTSE All-Share +2%**	**100**	**0**	**0**	**17**	**Q4 '18**
EGC	**MSCI ACWI +1-2%**	**6**	**82**	**12**	**8.8**	
EDH	**MSCI World +2-3%**	**7**	**93**	**0**	**9.0**	**Q4 '19**
ELV	**MSCI ACWI +**	**6**	**82**	**12**	**0**	
ESG	**MSCI ACWI +2%**	**6**	**82**	**12**	**0**	
ESC	**MSCI Sm Cos +2%**					
EEM	**MSCI Emerging +2-3%**	**0**	**0**	**100**	**3**	**Q4 '19**
	Combined	**18.0**	**15.8**	**4.0**		

Table 2 – Allocation to Active Equity Portfolios

11. **Fixed Interest** – Brunel are at the stage of defining their Fixed Interest offerings, in consultation with the clients, so it is still too early to make any recommendations regarding the sub-finds on offer. Brunel held a consultation session with funds and advisers in January 2020, and the next stage will be Brunel's publication of their list of Fixed Income funds on offer. As Oxfordshire will want to transition its existing Legal & General Fixed Income portfolio en bloc into a selection of Brunel's funds, the transition may not happen until the first half of 2021 when the full list of Brunel funds becomes available.

12. **Alternative Assets** – the allocations adopted in March 2018 are shown in the Table below, with notes on how each asset class is intended to be integrated into the BPP portfolio.

%	**Target**	**Range**	
Property	**8**	**6-10**	**Fund-of-funds to transfer (2020?)**
Private Equity	**9**	**7-11**	**£100m committed to BPP**
Multi-Asset (DGF)	**5**	**4-6**	**To be decided**
Infrastructure	**3**	**2-4**	**£50m committed to BPP**
Secured Income	**5**	**4-6**	**£60m committed to BPP (from FI)**
Cash	**0**	**0-5**	

Table 3– Allocation to Alternative Assets

13. Oxfordshire's 5% allocation to **Multi-Asset**, in the form of a Diversified Growth Fund (DGF) managed by Insight, was made in 2014. This formed part of a switch from Equity (4%), Private Equity (1%) and Hedge Funds (3%) into Multi-Asset (5%) and Infrastructure (3%). The intention of Multi-Asset was to achieve equity-like returns over 5-year periods but with lower volatility than equities (and at a lower cost than via Hedge Funds). In the past five years Insight's Fund has delivered (gross of fees) [Cash +3.74% p.a.] compared with its target of [Cash +4.5% p.a.] with much lower volatility than global equities. Insight's strategy is based on actively-managed allocations to traditional asset classes (Equities, Fixed Income, Real Assets) in addition to an array of Total Return strategies.

14. Brunel's approach to multi-asset is very different from Oxfordshire's. The four managers in Brunel's DGF product are:

- Lombard Odier adopt a quantitative tactical asset allocation approach on traditional assets. 80% of return is driven by asset allocation with the remaining 20% driven by alternative risk premia

- JPMorgan offer pure quantitative exposure to alternative risk premia across traditional asset classes. The strategy focusses on Value, Momentum, Carry & Quality risk premia
- William Blair undertake a forward-looking qualitative macro approach, which allocates between beta, security selection, currency and total risk. The strategy has a disciplined valuation framework based on 30 years of analysis
- UBS invest purely in wide range of currencies via forward contracts. The strategy targets currencies that deviate from its long-term fundamental value in terms of its real purchasing power parity

15. Leaving aside the complexity of this arrangement, there is very little common ground with Insight's approach, which has served Oxfordshire well. Consequently, Oxfordshire has declined to invest in Brunel's DGF product.

16. Although **Secured Income** is classified by Brunel as an Alternative portfolio, Oxfordshire decided to commit 5% to this fund from its existing Fixed Interest allocation. To date £60m has been committed to Brunel who committed £22m each to two Secured Income funds based on long-lease property in October 2018. Because of the queues of investors for both funds, only £2.9m of this sum has so far been drawn down. £16.4m has recently been committed to an Operating Infrastructure Fund. The undrawn money is being held in Oxfordshire's Fixed Interest portfolio until required.

17. My 'Review of Private Equity' for the December 2019 Committee included forecasts from Adams Street, Partners Group and Epiris showing that some **£63m** of net distributions is expected to flow back to the Oxfordshire Fund from them in the four years 2020-23. In addition, the listed portfolio is expected to distribute **£11m** in dividends during these four years. This combined total of **£74m** is more than sufficient to meet the remaining commitments of Oxfordshire's Private Equity **(£6.4m**), Real Estate **(£14.4m**) and Infrastructure **(£9.8m**).

18. The balance, some **£43m**, will be needed to meet the commitments to Brunel in respect of Alternative Assets. Less than 10% of the Brunel Private Equity commitment, and less than 20% of the Infrastructure and Secured Income commitments, have been drawn to date. The undrawn balances on Brunel commitments at end-2019 stood at:

    - **Private Equity**: **£91.7m**
    - **Infrastructure**: **£41.5m**
    - **Secured Income**: **£49.3m**

19. Member funds need to submit plans for new commitments to Brunel Private Markets by the end of March 2020, to cover their requirements for the next two years. My proposals for these new commitments are as follows.

Private Equity

20. There is inevitably a delay between the date when Oxfordshire makes a commitment to Brunel and the date when investment takes place. As a first stage the Brunel Private Markets team needs to identify PE funds which meet their requirements, and then conduct detailed analysis and due diligence before making a commitment. At the second stage, the managers (‘GPs’) of the selected funds will then need to identify and analyse attractive companies to invest in. This second stage may be shorter in the case of Secondaries funds, or Co-Investment funds, but overall it may be 5 years or more before an Oxfordshire commitment to Brunel has been fully invested.

21. Based on this pace of investment and using cashflow projections on Oxfordshire’s own portfolio from my Annual Review of Private Equity, I have estimated the effect which March 2020 commitments to Brunel would have on Oxfordshire’s overall PE exposure during the next four years. (This estimate disregards any distributions to be received from Brunel’s existing investments, which would tend to reduce the %-age exposures shown in the table).

Committed 3/20	End-2020	End-2021	End-2022	End-2023
£100m	8.3%	9.1 %	10.2%	11.2%
£ 80m	8.3%	9.0 %	9.9%	10.8%

Table 3– Effect of Private Equity Commitments

22. It is clear that new commitments in 2020 will have very little effect on the overall exposure at the end of 2021, because of the delays described above. They will, however, increase the PE weighting in subsequent years. I estimate that £100m committed now will translate into an investment equal to 1.5% of the overall fund at end-2022, and 2.2% of the fund at end-2023. As the current target allocation to PE is 9%, with an upper limit of 11%, **I recommend that Oxfordshire commits a further £100m to Brunel in March 2020**. It appears unlikely that the 11% ceiling will be reached before March 2022, when the decision on committing to Round 3 of the Brunel PE programme will be made, but new projections can be run at that time to review progress.

Infrastructure

23. Of the commitments made to date by Brunel, two-thirds have been into Renewables Funds, the remainder into a General Fund. Oxfordshire’s target weighting in Infrastructure is 3% (£82m at present values). Existing commitments to Infrastructure total £72m, of which some £20m has been invested with very few distributions to date. In order to increase the Infrastructure exposure towards its target level more rapidly, **I am recommending a commitment of £40m to Brunel’s Infrastructure programme in March 2020**.

Secured Income

24. Oxfordshire's target weighting to Secured Income is 5% (£136m at present values). As detailed in para 16, the whole of Oxfordshire's £60m commitment to Brunel has been allocated by Brunel, but only £10.7m has been drawn down to date because of investor queues at the two long-lease property funds. In order to move Oxfordshire's Secured Income exposure towards its target level, **I am recommending an £80m commitment to Brunel's Secured Income programme in March 2020.**

Strategic Asset Allocation Review

25. As detailed in the **Appendix**, the review analyses the expected long-term annual return and the associated volatility of a number of variants of Oxfordshire's existing Strategic Asset Allocation ('SAA'). The first comparison to be studied here is the difference between Oxfordshire's current portfolio at end-2019 ('CP') and the SAA. As the CP is below its target allocation in Private Equity, Infrastructure and Secured Income because of the delay in investing commitments (see preceding paragraphs) it is overweight in lower-returning classes (notably Fixed Interest and Cash). This results in a lower expected return and higher volatility, as shown in the following table:

	Current portfolio	Strategic AA
Expected annual return	**4.60%**	**4.84%**
Expected annual volatility	**9.33%**	**9.05%**
Sharpe Ratio (Risk-free rate = 1.80%)	**0.30**	**0.34**

Table 4– Risk/return comparison (1)

26. As explained above, it will take several years for the current portfolio to reach its target allocations in the Alternative asset classes. Meanwhile, the Strategic Review analyses two portfolios which are expected to deliver annual returns above 5.2% with slightly less volatility than the SAA portfolio. The first of these – the **Targeted Return** - makes these changes to the existing SAA:
- 5% allocated to Multi-Asset Credit
- 5% allocated to Private Debt
- 4% more in Infrastructure
- 1% more in Private Equity

These are funded by:

- 4% reduction in Listed Equity (but with 2% more in Emerging Markets)
- 6% reduction in Fixed Interest
- 5% reduction (to nil) in DGF

The enhanced risk-return characteristics of Targeted Return compared with CP and SAA are shown in the following table:

	Current portfolio	Strategic AA	Targeted Return
Expected annual return	**4.60%**	**4.84%**	**5.24%**
Expected annual volatility	**9.33%**	**9.05%**	**9.00%**
Sharpe Ratio (Risk-free rate: 1.80%)	**0.30**	**0.34**	**0.38**

Table 4– Risk/return comparison (2)

27. A Private Debt product (PPD) is now being offered by Brunel, with initial commitments due by end-March 2020. As this appears from the portfolio modelling to be an attractive asset class, **I recommend that Oxfordshire makes an initial commitment of £80m (or 3%) to Private Debt via Brunel**. Multi-Asset Credit is due to be one of the suite of Fixed Interest funds from Brunel (labelled BMA), and will be dealt with as part of the re-allocation of Fixed Interest mentioned in para 11. The increased allocations to Infrastructure and Private Equity would have to be made via Brunel, and would be additional to the new commitments recommended in paras 22 and 23.

28. My one reservation about the Targeted Return portfolio is its heavy concentration of 40% in illiquid assets. If the Fund needed to realise assets at a time when global markets were stressed (as in 2008), it would have a thin layer of just 10% in Fixed Interest to draw on before being forced to sell equities or to seek a buyer for some of its illiquid assets. Neither of these would be an attractive scenario.

Investment Structure

Active or Passive management?

29. The basic distinction here is that an active manager will attempt to run a portfolio to produce a return which *exceeds* the return on a relevant index of that asset class (e.g. the FTSE All Share Index for a UK Equity portfolio) whereas a passive manager will aim to produce a return *equal to* the index return. The active manager may use a number of different techniques to select stocks for his portfolio, while the passive manager will normally operate a system of index-replication which generates a portfolio as close as possible to the notional portfolio underlying the relevant index. The passive manager will utilise very little discretion in managing his 'tracker' fund, as computer programs will be used to ensure the holdings continue to match the index constituents closely. There are significant economies of scale for a passive manager, as a larger fund can replicate more of the smaller constituents in an index, while the overheads remain relatively constant. As a result of all these

factors, the fee charged to the investor under a passive mandate is far smaller than for an active one.

30. One of the considerations for the Pension Fund is whether the active manager can generate sufficient performance (gross of fees) in excess of the index to compensate for the lower fee charged by the passive manager. There are also, however, other considerations. By its nature, a market index is always fully-invested, whereas an active manager has the freedom to hold a certain amount of cash if he expects a general fall in the market. If the active manager uses this freedom at the right time, he can cushion the impact of a general market decline. Similarly, the active manager can – and should – hold a lower weight than the index in sectors he expects to be relatively weak, whereas the passive manager is obliged to maintain the index weight in every sector at all times.

31. The recent focus on fees charged by active managers – without delivering out-performance of their benchmark index – has caused a worldwide shift from active to passive equity funds. The need for passive funds to deploy new money immediately according to the market weights of the index components brings with it the danger that the prices of large stocks on expensive ratings will be inflated even further as the new money floods in.

32. At present some **29%** of the Fund's UK Equities, and **32%** of the Overseas Equities, are managed passively. These equate to **7.6%** and **9.8%** of the overall Fund respectively. This has reduced the management fees payable, and reduced the risk of overall under-performance. The current passive holdings are:

    £195m - UK Equities (EPU) tracking the FTSE All Share Index
    £283m - Global Developed Equities (EPD) tracking the FTSE World Developed Index.

33. Another passive sub-fund offered by Brunel is **Passive Low Carbon Equities (EPL)**. This is based on the **MSCI ACWI Low Carbon Target Index**, which in turn aims to track the MSCI ACWI Index with a tracking error of 0.30% while minimising the carbon exposure. It does this 'by overweighting companies with low carbon emissions (relative to sales) and those with low potential carbon emissions (per dollar of market capitalisation)'. The only significant difference in factor exposures relative to the MSCI ACWI Index is that the Low Carbon Index is underweight in smaller companies.

34. At present EPL is the only passive sub-fund within Brunel which specifically addresses the climate change issue in its choice of benchmark index. It merits inclusion in Oxfordshire's portfolio as an initial move to reduce the carbon footprint of the Fund. With new indices being established at a rapid rate, it is quite possible that in time other 'climate change aware' indices will be included in Brunel's range of sub-funds. I am therefore recommending an <u>initial</u> investment of 5% of the Oxfordshire Fund (£135m) in EPL, with the intention of examining other suitable passive vehicles as they become available.

Separate Allocation to UK equities?

35. Over the past 21 years, allocations to UK equities by LGPS Funds as a proportion of overall equities has reduced steadily, from 73% in 1998 to just 25% in 2019 [State Street/PIRC Local Authority Annual League Tables, March 2019]. Even 25% vastly overstates the size of the UK equity market (some 5% of World Equities by market value) and it is worth asking whether a specific allocation to UK equities is still necessary, rather than a single Global Equity allocation.

36. A number of arguments are advanced in favour of retaining a UK allocation:

- Historically, up to 2013, UK equities had performed well relative to other world markets, although in the three years 2014-16 Global Equities' return was some 8% p.a. ahead of UK Equities – partly due to the weakness of sterling in 2016. This trend continued in 2017-19, when Global Equities returned 4% p.a. more than UK Equities.
- Holding £-denominated assets matches the currency of the liabilities for a UK Pension Fund, thereby removing one source of mismatch risk
- UK equities give an investor exposure to global businesses, and are not solely linked to the fortunes of the UK economy*
- Active managers of UK equity portfolios have a greater knowledge of, and access to, UK- based companies, and are therefore in a better position to out-perform than managers of global equity portfolios
- Global Equity managers tend to focus on the large-cap stocks, whereas a UK-only manager can delve into the mid- and small-cap stocks in search of value.
- UK-listed companies are better regulated than those listed on many foreign exchanges

* Although this 'global exposure' point is frequently made, it masks the fact that the <u>sectoral</u> choices available to a UK investor are very different from those for a global investor. As the following table shows, the UK has higher exposure to Oil & Gas, Financials and Basic Materials, but is massively underweight in Technology relative to the All-World Index.

Industry	All-Share weight (%)	All-World weight (%)	Difference
Oil & Gas	**11.8**	**5.3**	**+6.5**
Financials	**27.1**	**21.2**	**+5.9**
Basic Materials	**7.6**	**4.1**	**+3.5**
Consumer Goods	**14.0**	**10.9**	**+3.1**
Consumer Services	**12.0**	**11.5**	**+0.5**
Industrials	**11.6**	**12.8**	**-1.2**
Telecommunications	**2.5**	**2.7**	**-0.2**
Utilities	**3.0**	**3.3**	**-0.3**
Health Care	**9.3**	**11.1**	**-1.8**

Technology	1.1	17.1	-16.0

Table 5. UK and Global sector weightings

[Source: FTSE Russell All-Share, All-World Reports, December 2019]

37. Although there are still valid reasons to retain investments in active UK Equity funds, my recommendation from this analysis is to reduce the Oxfordshire Fund's weighting in **passive** UK Equities, and switch into **passive** Global Equities. This gives the portfolio greater exposure to growth sectors and reduces the weighting in extractive industries. This switch could be most effectively achieved by moving money from the FTSE All-Share tracker (EPU) into the Passive Low Carbon Equities tracker (EPL) (see para 33); this would satisfy the dual objectives of reducing the UK Equity weight and at the same time reducing the carbon exposure of the portfolio.

Responsible investment

38. As one of the members of the Brunel Pension Partnership, the Oxfordshire Fund is fully committed to Brunel's policies as set out in:
    - 'Responsible Stewardship Policy Statement' (October 2018)
    - 'Responsible Investment Policy Statement' (June 2019)
    - 'Climate Change Policy' (January 2020)

    The text of the Fund's Climate Change Policy – to be included in the Investment Strategy Statement – is currently under discussion following the Climate Change workshop held in November 2019 and the Climate Change Working Group which started work in December.

Recommendations
Immediate

39. To reduce the UK Equity target by 5% to 21%, and to increase the Overseas Equity target by 5% to 33%.

40. To implement this change by switching 5% of the Fund (c. £135m) from the FTSE All-Share Tracker (EPU) to the Passive Low Carbon Equities Tracker (EPL), and to examine other 'climate change aware' tracker funds for potential future investment.

41. To commit a further £100m to Brunel for investment in Private Equity.

42. To commit a further £40m to Brunel for investment in Infrastructure.

43. To commit a further £80m to Brunel for investment in Secured Income.

44. To commit £80m to Brunel for investment in Private Debt.

Medium-term

45. To seriously consider investing 5% of the Fund into Multi-Asset Credit when the vehicle for this class becomes available from Brunel.

Peter Davies
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