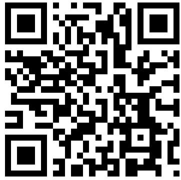

Leicestershire County Council

Meeting: **Investment Subcommittee**

Date/Time: **Wednesday, 26 July 2023 at 10.00 am**

Location: **Sparkenhoe Committee Room, County Hall, Glenfield**

Contact: **Mrs A. Smith (Tel. 0116 305 2583)**

Email: **angie.smith@leics.gov.uk**

Membership

Mr. T. Barkley (Chairman)

Mr. D. J Grimley CC
Mr. D. C. Bill MBE CC
Mr. R. Denney
Mr. Z. Limbada
Mr. C. Pitt

AGENDA

Item		Report by	
1.	Minutes of the meeting held on 19 April 2023		(Pages 3 - 10)
2.	Question Time.		
3.	Questions asked by members under Standing Order 7(3) and 7(5).		
4.	To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.		
5.	Declarations of interest in respect of items on the agenda.		
6.	Aegon Asset Management - Index Linked Bonds Update	Director of Corporate Resources	(Pages 11 - 34)
7.	Cash Update and Amendment of Previous Recommendation to Private Credit	Director of Corporate	(Pages 35 - 48)

	Investments	Resources	
8.	Recommended Changes to the Protection Assets Group of Investments for the Leicestershire LGPS	Director of Corporate Resources	(Pages 49 - 90)
9.	Date of Next Meeting - 11 October 2023 at 1.30pm		
10.	Any other items which the Chairman has decided to take as urgent.		

Exclusion of the Press and Public.
The public are likely to be excluded during consideration of the following items in accordance with Section 100(A)(4) of the Local Government Act 1972 (Exempt Information):

11.	Investment Management Fee Savings	Director of Corporate Resources	(Pages 91 - 96)

Agenda Item 1

Minutes of a meeting of the Investment Subcommittee held at County Hall, Glenfield on Wednesday, 19 April 2023.

PRESENT:

Leicestershire County Council

Mr. T. Barkley CC (Chairman)
Mr. D. Grimley CC

District Council Representative

Cllr. M. Graham MBE

Staff Representative

Mr. C. Pitt

University Representative

Mr. Z. Limbada

Independent Advisers and Managers

Hymans Robertson
Mr. Abhishek Srivastav
Mr. Philip Pearson

Fulcrum
Mr. J. Davidson
Mr. N. Abdoula

55. Minutes of the previous meeting

The minutes of the meeting held on 12 October 2022 were taken as read, confirmed and signed.

56. Question Time.

The Chief Executive reported that no questions had been received under Standing Order 35.

57. Questions asked by members under Standing Order 7(3) and 7(5).

The Chief Executive reported that no questions had been received under Standing Order 7(3) and 7(5).

58. To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.

There were no urgent items for consideration.

59. Declarations of interest in respect of items on the agenda.

The Chairman invited members who wished to do so to declare any interest in respect of items on the agenda for the meeting. No declarations were made.

60. Cash Deployment, Strategic Asset Allocation Update and Infrastructure Investment Top Ups

The Sub-Committee considered a report of the Director of Corporate Resources which provided an update on the cash holding of the Leicestershire County Council Pension Fund (Fund) and the plans for its deployment against the strategic asset allocation (SAA). The report provide background regarding commitments to three infrastructure investments. A copy of the report is filed with these minutes marked 'Agenda Item 9'.

The Director reported on the positive cashflow nature of the Fund, the new SAA approved at the Local Pension Committee meeting in January 2023 and its comparison to the SAA of 2022, and three primary areas to address to align the Fund to the SAA.

Under Plans for 2023/24, it was reported there were not many ISC changes as there had not been any approvals to date, but in 'commitments approved' changes were reported at infrastructure (£239million), global credit (£300million) and property (£120million), to close the underweight position of the income class.

The proposed Hymans Robertson framework had assisted in the decision making of fund investing, based on risk and geography. In considering the framework and following discussions with managers, a list of three commitments had been proposed, as outlined in the report, totalling £100million. £30million would be held back until further reassessment later in 2023/24.

Arising from queries, the following points were noted:

i. Cash balances were collected each night and held within money market funds. It had at one time not been useful to hold cash as there was no allocation to cash within the SAA and rates had been near to zero, which was no longer the case as rates had risen.

ii. When considering Hyman's targets by geography, Members queried that the targets did not total 100% (total 95% based on mid points used from the Hymans framework). Members were informed it was acceptable to be within the ranges of the targets, and that actual allocations could change within the UK, overseas and advanced emerging geographies but would be managed within the ranges from the framework.

iii. It was acknowledged that every decision made took into account all risks to be considered, including climate and the Fund’s Net Zero Climate Strategy.

iv. A Member queried the SAA in relation to the Net Zero Climate Strategy, the latter of which was approved after the SAA. It was reported the SAA had been written with the assumption that the NZCS would be approved, and Hymans had built in as many options within the SAA as possible. Hymans went on further to state that the way in which each of the individual asset classes was implemented had a bigger impact on climate risk than the SAA itself, and listed in the equity review was a proposed reduction in emerging markets as agreed at the SAA which was helpful in terms of climate risk, and there would, over time, be examples of the way the NZCS was implemented.

v. In response to a query about £5million of investment management expenses being paid directly by the Fund, if there was information on how those investments were divested. It was reported that they were not divested as such, but some fees were billed by the Manager (to the pension Fund), and for others fees were deducted (directly) from the Fund.

vi. In response to a query as to how the balance of fees was funded, it was noted that some were funded from £5million as outlined, and some were paid by the manager within the fund, without the need to divest assets to pay fees.

RESOLVED:

That the Investment Sub-Committee approve:

a. An additional £35m commitment to the LGPS Central Core / core plus infrastructure fund bringing the total commitment to £135m

b. A $24m commitment to the JPM IIF fund

c. A $54m commitment to the Quinbrook Net Zero Power Fund split equally between the main fund and co-investment fund

The infrastructure commitments would be funded from existing cash as they were called by the managers, and if additional cash was needed, divestments from overweight areas versus the SAA would be considered alongside other changes to the portfolio which were planned.

61. Date of Next Meeting - 26 July 2023 at 10.00am.

It was noted that the next meeting would be held on 26 July 2023.

62. Exclusion of the Press and Public

RESOLVED:

That under Section 100(A) of the Local Government Act 1972 the public be excluded from the meeting for the remaining items of business on the grounds that they involve the likely disclosure of exempt information as defined in Part 1 of Schedule 12(A) of the Act.

63. Recommended Changes to Targeted Return Investments

The Chairman informed the meeting of a change to the running order of the agenda, with Agenda Item 10 to be taken as the next substantive item.

The Sub-Committee considered a report by the Director of Corporate Resources which provided Members with information in respect of the targeted return investments and proposed changes. The paper was supported by a presentation from Hymans Robertson (Hymans) the Fund's investment advisor and Fulcrum Asset Management. A copy of the report is filed with these minutes marked 'Agenda Item 10'. The report was not for publication by virtue of Paragraphs 3 and 10 of Part 1 of Schedule 12(A) of the Local Government Act 1972.

Representatives from Hymans set out the purpose of the review which was undertaken as a result of recommendations approved at the 20 January 2023 Local Pension Committee, where three asset class reviews were proposed alongside other recommendations which included the update to the strategic asset allocation (SAA) that moved the targeted return target allocation to 5% of total fund assets.

Hymans presented the scope of the review, which compared three options for the targeted return allocation for the Fund, and options comparison qualitative results. The options were outlined as:

- Option 1, continue with the current managers, and associated strategies;
- Option 2, modify the current bench of managers/strategies which would improve the robustness of the current allocation, but could have significant governance implications;
- Option 3, replace the current managers with the LGPS Central fund, as currently specified.

In presenting their findings, Hymans concluded when comparing Options 2 and 3, both options were better placed to meet investment objectives of the portfolio compared to Option 1. Hymans summarised Option 2 as being more attractive in terms of improved complexity, transparency and liquidity risk, as well as RI credentials compared to other options, and provided recommendations from their findings.

In response to a question on the costs of investment if trying to exit from (current targeted return managers) them, it was acknowledged that the Fund would always look to minimise exit levies.

[At this point representatives from Fulcrum joined the meeting]

Fulcrum representatives delivered a presentation which provided an introduction to Fulcrum Diversified Core Absolute Return (DCAR), the focus of which was to provide an alternative return stream, providing genuine diversification at times when traditional portfolios were failing. The company had adopted a macro approach that helped long-term investors sustainably build wealth, and to build robust portfolios that could stand the test of various macro environments.

The Sub-Committee heard of the objectives of an Absolute Return Strategy to generate returns, provide downside protection and which were complementary to client portfolios. The Sub-Committee questioned Fulcrum on the fund feature to target inflation + 3-5% per annum over five-year periods, investing with an absolute return mindset, and how it could be controlled. Members were assured it could be controlled over shorter terms, but that over longer-term the intrinsic risk would not alter if inflation were high.

The Sub-Committee were assured that Fulcrum took its stewardship responsibilities seriously and had a strong level of support for environmental and social resolutions, and had supported more proposals than many of the world's largest asset managers. It was further noted that the RI policy aligned with the objectives of DCAR.

[At this point representatives from Fulcrum left the meeting]

The Sub-Committee discussed the recommendation to the report. They sought further clarity the fee rates and asked for an amendment to recommendation c) in the report.

[At this point representatives from Fulcrum re-joined the meeting]

Fulcrum representatives were informed of, and agreed the suggested amendment to recommendation c) to the report that fees would be negotiated via the Director of Corporate Resources.

RESOLVED:

That the Investment Sub-Committee approve:

a. The Director of Corporate Resources be authorised to take the necessary action in order for the Fund to disinvest the targeted return investments during 2023/24, as outlined in preferred Option 2 in the report.

b. That an investment increasing to 3% of total fund assets be made to the existing Ruffer mandate over 2023/24.

c. That an investment totalling 2% of total fund assets be made to the new Fulcrum diversified core absolute return fund over 2023/24, subject to negotiation of fees via the Director of Corporate Resources.

The meeting took a short break at 12:05pm and reconvened at 12:11pm.

64. Recommended Changes to Listed Equity Investments Covering Legal and General Investment Management and LGPS Central

The Sub-Committee considered a report by the Director of Corporate Resources which provided information in respect of the listed equity portfolio review and proposed changes to investments, and supporting presentation from Hymans Robertson (Hymans), which was followed by questions from Members. A copy of the report is filed with these minutes marked 'Agenda Item 9'. The report was not for publication by virtue of Paragraphs 3 and 10 of Part 1 of Schedule 12(A) of the Local Government Act 1972.

Representatives from Hymans set out the purpose of the review which was undertaken as a result of recommendations approved at the 20 January 2023 Local Pension Committee, where three asset class reviews were proposed alongside other recommendations which included an update of the strategic asset allocation (SAA) that moved the listed equity target allocation to 37.5% of total fund assets.

Hymans presented the scope of the review, which focused on six areas outlined as:

a. Geographical allocations, including to what extent a 'home' (UK) bias is sensible and if an overweight allocation to emerging markets is sensible.
b. If investing based on the market capitalisation is appropriate (i.e., holding more of a company the larger it becomes)
c. The allocation between active and passive management
d. How to employ factor-based strategies
e. Responsible investing considerations
f. How to implement any recommendations

Hymans reported that the main findings of the review showed the overall portfolio was well structured, with a decent alignment with investment objectives to deliver a return in excess of inflation over the long term. It was further noted that the proposed changes offered refinement and were not a radical change.

Hymans suggested the there was a strong case for the sub-portfolio to be restructured to provide a better balance of risk and return without materially impacting investment outcomes but would require further consideration. Hymans further recommended that detailed transition plans would be required, and suggested the transition be executed in stages.

Members welcomed the fact that underperformance of LGPS Central investment products was being managed by LGPS Central.

RESOLVED:

That the Investment Sub-Committee approve the following to the listed equity mandates and the Director of Corporate Resources be authorised to take the

necessary action for the Fund to manage the changes as outlined below:

a. Enact the reduction from 42.5% to 37.5% of listed equities per the SAA

b. Once the outcome of the Central Global Equity manager procurement is concluded and deemed satisfactory by Hymans Robertson continue with:

   i. appointing a transition advisor to make changes outlined in c, d and e below, to aid in formalising the timeline and strategy for the changes.

c. Collapse the regional passive LGIM portfolio including the single stock funds into three Funds with LGIM,

   i. L&G UK Equity Fund to 2% of total Fund assets
   ii. L&G All World Equity Fund to 8% of total Fund assets
   iii. L&G Low Carbon Transition Fund to 3.5% of total Fund assets

d. Decrease the allocation to the Central Climate Multi-Factor fund to 12% of total Fund assets.

e. Increase the allocation to the Central Global Equity Active multi manager fund to 12% of total Fund assets.

f. Divest from the Central Emerging Market Active multi manager fund.

Wednesday, 19 April 2023
10.00am – 12.54pm

CHAIRMAN

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Agenda Item 6

INVESTMENT SUB-COMMITTEE – 26 JULY 2023

REPORT OF THE DIRECTOR OF CORPORATE RESOURCES

AEGON ASSET MANAGEMENT – INDEX LINKED BONDS UPDATE

Purpose of the Report

1. The purpose of this report is to provide the Investment Sub Committee (ISC) with information on the Leicestershire Pension Fund (Fund) investments held with Aegon Asset Management ("Aegon") and the performance of the mandates held with them.

2. A PowerPoint presentation will be provided at the meeting by representatives from Aegon. A copy of the presentation slides is appended to this report.

Background

3. The Fund has a short dated investment grade credit (IGC) and index linked bonds (ILB) allocation with Aegon within the protection asset group part of the portfolio.

4. In addition, Aegon operate the Fund's foreign exchange (FX) hedging programme. This hedges around £2bn of FX exposure (mainly US dollar, Euro, and Japanese Yen) to dampen volatility and improve overall investment outcomes.

5. The current breakdown of the mandates operated by Aegon are best described by the makeup of the Fund's protection assets portfolio. Aegon operate three out of the 4 mandates shown below with LGPS Central (Central) operating the remaining investment grade credit mandate.

Asset group	Manager: Investment	2022 SAA target	2023 SAA target	£m 31.03.23	Actual weight 31.03.23
Protection	**Aegon: Inflation-linked bonds (ILB)**	**4.50%**	**4.50%**	**248**	**4.3%**
Protection	**Aegon: short dated climate transition fund**	**0.5%**	**0.5%**	**57**	**1.0%**
Protection	Central: Investment grade credit (IGC)	2.5%	2.25%	147	2.6%
Protection	**Aegon: Currency hedge**	**0.5%**	**0.75%**	**34**	**0.6%**
TOTAL		8.00%	8.00%	486	8.5%

6. The Fund has had an ILB allocation to Aegon (formally Kames) since 2014 and at present has £248m invested (31 March 2023) or 4.3% of total Fund assets.

7. The aim of this actively managed mandate is to outperform a benchmark, the FTSE UK index linked all stocks index by 0.3% pa over rolling three-year periods.

8. The presentation from Aegon will cover the following areas:

    a. An overview of the total relationship (ILB, IGC and FX hedging)
    b. How responsible investing (RI) is conducted at Aegon
    c. What are ILB's and summary of the ILB mandate and parameters
    d. Fund performance and 2022 ILB performance
    e. Market outlook, what is real yield and opportunities

Recommendation

9. The ISC is asked to note the report and presentation.

Environmental Implications

10. The Leicestershire County Council Pension Fund has agreed a Net Zero Climate Strategy (NZCS). This outlines the high-level approach the Fund is taking to its view on Climate Risk. This will align with the Fund's Responsible Investment approach as set out in the Principles for Responsible Investment. The Fund is committed to supporting a fair and just transition to net-zero. There are no changes to this approach as a result of this paper.

Equality Implications

11. There are no direct implications arising from the recommendations in this report. The Fund incorporates financially material Environmental, Social and Governance ("ESG") factors into investment processes. This has relevance both before and after the investment decision and is a core part of the Fund's fiduciary duty. The Fund will not appoint any manager unless they can show evidence that responsible investment considerations are an integral part of their decision-making processes. This is further supported by the Fund's approach to stewardship and voting, and its approach to engagement in support of a fair and just transition to net zero. There are no changes to this approach as a result of this paper.

Human Rights Implications

12. There are no direct implications arising from the recommendations in this report. The Fund incorporates financially material Environmental, Social and Governance ("ESG") factors into investment processes. This has relevance both before and after the investment decision and is a core part of the Fund's fiduciary duty. The Fund will not appoint any manager unless they can show evidence that responsible investment considerations are an integral part of their decision-making processes. This is further supported by the Fund's approach to stewardship and voting, and its approach to engagement in support of a fair and just transition to net zero. There are no changes to this approach as a result of this paper.

Background Papers

None

Appendix

Appendix – Aegon Asset Management Index Linked Portfolio – Presentation

Officers to Contact

Mr D Keegan, Director of Corporate Resources
Tel:0116 305 7668 Email: Declan.Keegan@leics.gov.uk

Mr B Kachra, Senior Finance Analyst - Investments
Tel: 0116 305 1449 Email: Bhulesh.Kachra@leics.gov.uk

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AEGON Asset Management

Index-Linked Portfolio

Leicestershire County Council Pension Fund

James Lynch, Investment Manager
Jordan Irvine, Client Director

26 July 2023

Overview of our relationship

Mandate	AUM	Objective
Index-linked gilts	£223.8m	• Provide modest outperformance relative to FTSE UK Index-Linked All Stocks index • A segregated solution
Short-dated credit	£57.0m	• Investment in global short-dated investment grade bonds • Generate steady cash stream due to high frequency of maturing bonds • Climate transition overlay supports journey to net zero
FX overlay*	On £1.9bn of overseas equity exposure	• Overarching aim is to protect capital and generate an excess return • Strategic target is to hedge 30% of the overseas equity exposure • Responsible for all aspects of implementation including execution and collateral management

As at 31 May 2023. *As at 30 November 2022.

AEGON Asset Management

Responsible investment at a glance

£96 billion invested in responsible investment solutions

Responsible investment approach

- **ESG integration** into bottom-up credit, equities, sovereign and structured research
- **Active ownership** to generate long-term economic value
- **Solutions** focused on responsible investment and ESG criteria

30+ years
of responsible investing history[1]

397 engagements
conducted by the RI team during 2022

20 professionals
in a dedicated RI team

10+ year commitment
PRI signatory since 2011

17

As at 31 March 2023. This is a general description of the firm's ESG process. It may not be applied to every holding in a given strategy. Assets under management/advisement excludes joint ventures. Personnel may be employed by any of the Aegon AM affiliates. [1]Aegon AM UK launched first ethical strategy in 1989. [2]Exclusions and ethical include assets primarily managed for Aegon AM affiliates subject to a global exclusion list. The impact of the exclusion list will vary depending on the asset class and may not materially affect the implementation of every strategy. Products vary regionally.

AEGON Asset Management

Overview of Index-Linked Gilt Mandate

Portfolio managers	James Lynch and Nick Chatters
Benchmark	FTSE UK Index-Linked All Stocks Index
Performance aim	The Fund aims to outperform the FTSE UK Index-Linked All Stocks index by 0.3% p.a. (gross of asset management fees) over rolling three-year periods.
Inception	31 December 2013
Fund size	£224m

James Lynch
Co-manager

Nick Chatters
Co-manager

As at 31 May 2023

AEGON Asset Management

What is the Index-Linked mandate?

- The UK government issue 2 types of debt for borrowing
  - Nominal bonds – fixed rate of interest
  - Inflation-linked bonds – issue debt that pays inflation (RPI) return, from when a bond is issued to maturity. Also referred to as 'linkers'
- There are 33 linkers in the benchmark
- The total returns of these 'linkers' make up the benchmark of the fund
- The purpose of the fund is to match the return of the benchmark plus an outperformance

AEGON Asset Management

Mandate Parameters

- Benchmark is FTSE Govt Securities UK Index Linked TR All Stocks (FTRFILA)
- Fund aims to outperform benchmark by 0.3% p.a gross fees over rolling 3y period
- The mandate is run in line with the following parameters

	Parameters
Duration Limit	+ /- 2 years
Cash Limit	<5%
Overseas Holdings	<20%
Unhedged Currency Risk	<1%

Fund performance

	1 year %	3 years % p.a.	5 years % p.a.
UK Index Linked Fund	**-22.8**	**-13.3**	**-4.9**
FTSE UK Index-linked All Stocks	-23.2	-13.4	-5.1
Relative return	0.4	0.1	0.1

As at 31 May 2023. All returns are gross. Relative performance is geometric. Periods over one year are annualised. Benchmark is FTSE UK Index-linked All Stocks.

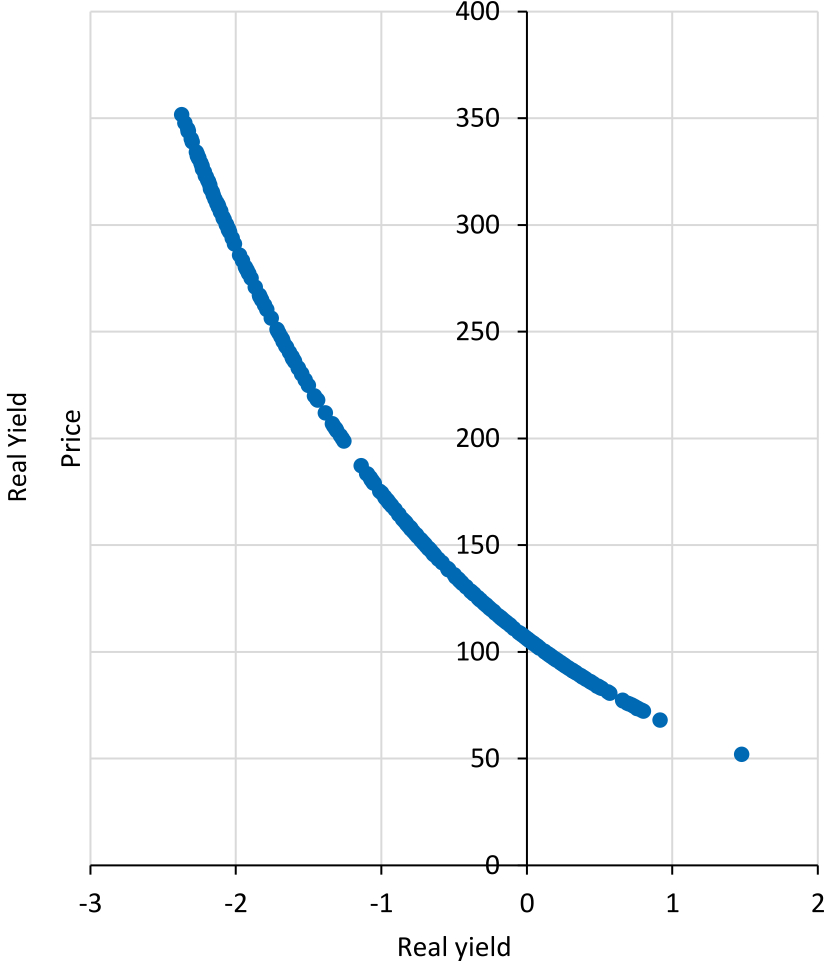
AEGON Asset Management

2022 performance of index-linked bonds

- The macro environment changed in 2022, higher inflation with low unemployment and a fiscal tailwind meant central banks globally significantly increased interest rates
- UK policy rate moved from 0.25% to 3.5%
- Higher inflation made fixed income less attractive
- Bonds had a very expensive starting point in 2022 given the low interest rates and previous quantitative easing (QE)
- 'Linkers' are very long in duration. They are long maturity dates with large end payments
- Average duration in the portfolio is 16 years. For every 1% move in interest rates the total return of the portfolio will move by 16%
- The market in 2022 did not expect that inflation would continue to be high for any material length of time
- This has significant effect on value of index-linked bonds when nominal interest rates are rising
- The mini-budget in September/October 2022 triggered the LDI crisis and resulted in BoE intervention, which did not help the linker market

AEGON Asset Management

Price versus yield



Source: Bloomberg as at 10 July 2023. Based on the 2073 index-linked bond

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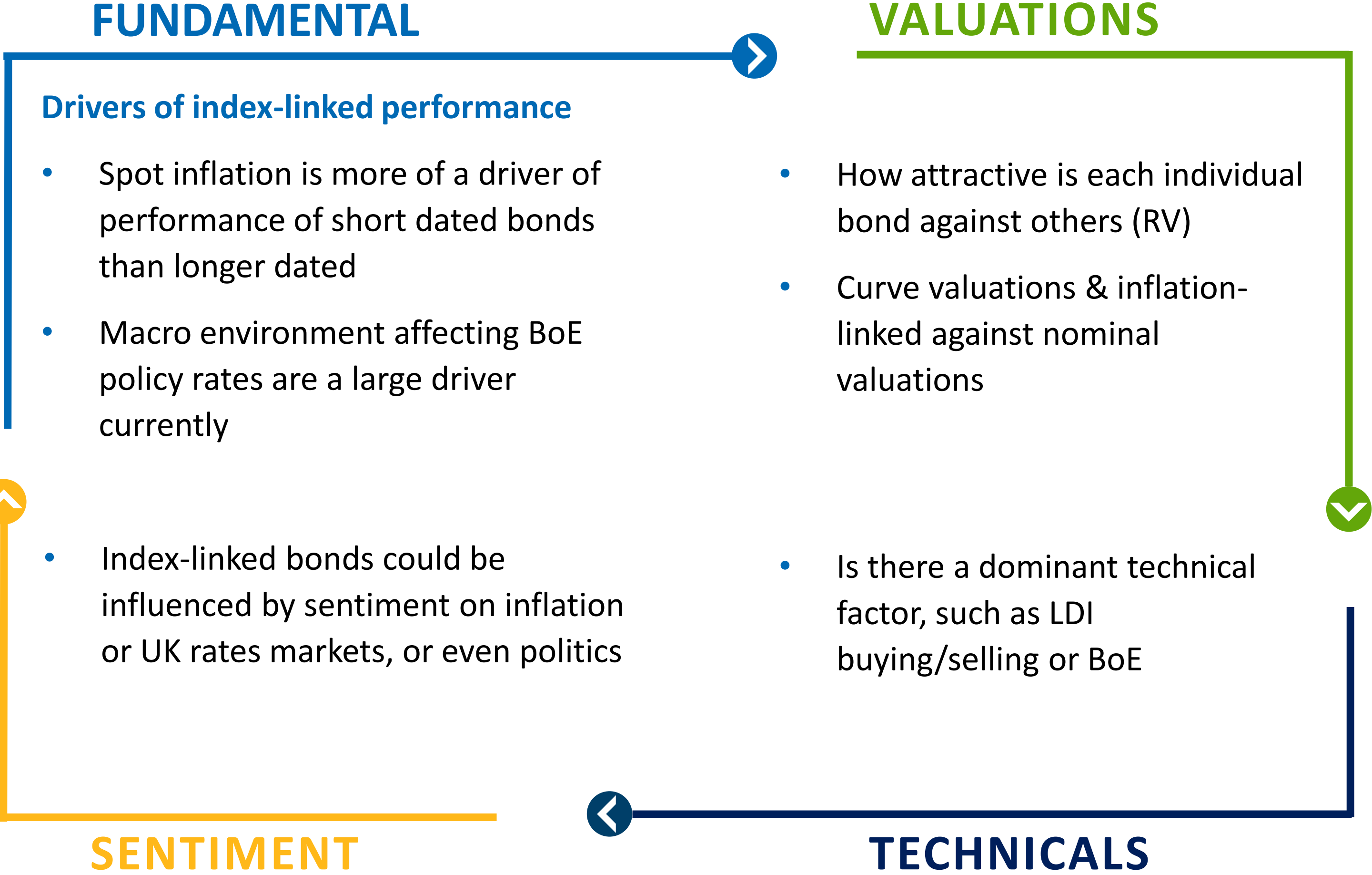
Opportunities in Index – Linked

AEGON Asset Management

Index-Linked Fund Investment Process



For illustrative purposes only.

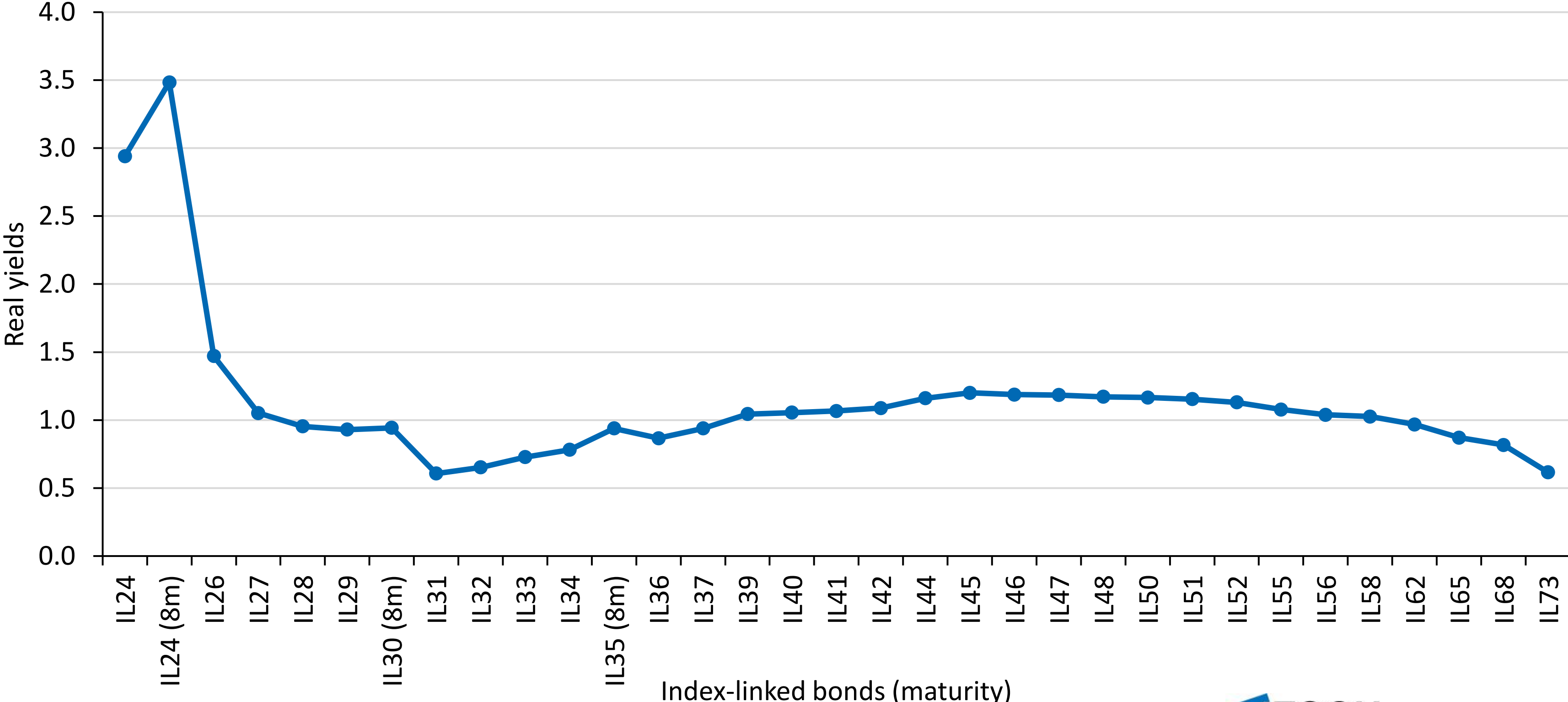
AEGON Asset Management

Alpha opportunities for active managers in Index-Linked

- Adjust fund duration – ability to go overweight / underweight the benchmark
- Ability to buy nominal UK Gilts (either breakeven, or outright, not allowed to be short)
- Active curve positions – flatteners and steepeners
- Relative Value stock selection – overweight/underweight individual bonds against each other

UK Government Index-Linked Bonds

- Below is the real yield of each linker across the maturity spectrum to give ‘the curve’
- Flexibility in mandate to construct portfolio to be underweight / overweight these bonds versus benchmark



Source: Bloomberg as at 13 July 2023

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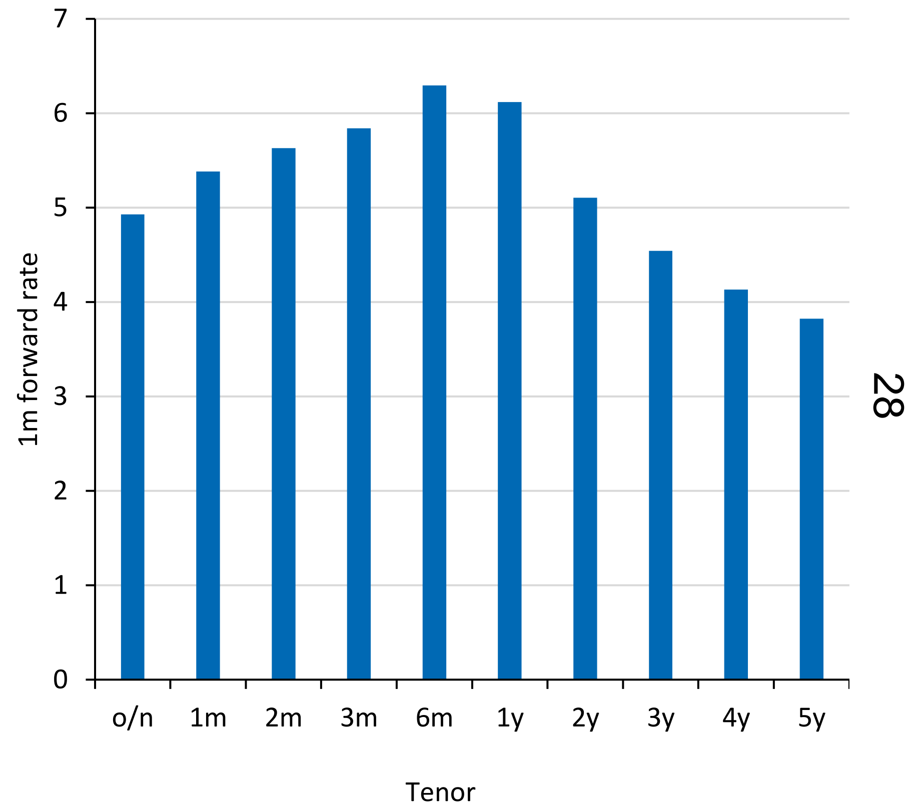
Market Outlook

- We see fixed income as very attractive proposition currently
- Market expectations of increases in interest rates are more than fully valued
- If BoE do not reach 6.25% the market will be disappointed
- We expect current valuations to be attractive for de-risking flow and macro investors
- Index-linked bonds are not expensive on an outright basis, and versus nominal bonds are middle of the past 1y range
- Supply is not as aggressive in index-linked bonds versus nominal bonds

Bank of England expectations



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Source: Bloomberg as at 10 July 2023

AEGON Asset Management

Appendix

AEGON Asset Management

Fixed income investment team

Experienced professionals, deep global resources

Stephen Jones, CIO Fixed Income, Equities and Multi-Asset & Solutions

Core Fixed Income
Adrian Hull

Multi Sector/Investment Grade
13 portfolio managers |22 years' experience
**See Credit Research for analyst information*

Emerging Markets Debt
1 portfolio managers | 29 years' experience
7 research analysts | 17 years' experience

Sovereign Credit, Rates & Currency
13 portfolio managers | 21 years' experience

Customized Solutions & Insurance Asset Management
5 portfolio managers | 13 years' experience

Leveraged Finance
Jim Schaeffer

High Yield
6 portfolio managers | 22 years' experience
**See Credit Research for analyst information*

Leveraged Loans
2 portfolio managers | 16 years' experience
3 research analysts | 12 years' experience

Special Situations and Distressed Credit[1]
2 portfolio managers | 18 years' experience
1 research analysts | 8 years' experience

Impact Venture Debt
3 professionals| 15 years' experience

Alternative/Structured Finance
Frank Meijer, PhD

EU ABS/Mortgages/Government Guaranteed Loans
12 investment managers | 11 years' experience

US Structured Finance
8 investment managers | 21 years' experience

Private Placements
4 professionals | 31 years' experience

Insured Credit & Trade Finance
6 professionals | 15 years' experience

EU SME & Midcap Lending
5 professionals | 18 years' experience

Credit Research[2]
Jennifer Moore, CFA

Investment Grade
17 research analysts
18 years' experience

High Yield
13 research analysts
12 years' experience

Additional resources

Macro Strategy[1]
6 professionals
19 years' experience

Portfolio Analysts
9 professionals
16 years' experience

Quantitative Solutions
9 professionals
13 years' experience

Trading
14 professionals
21 years' experience

Responsible Investment
20 professionals
12 years' experience

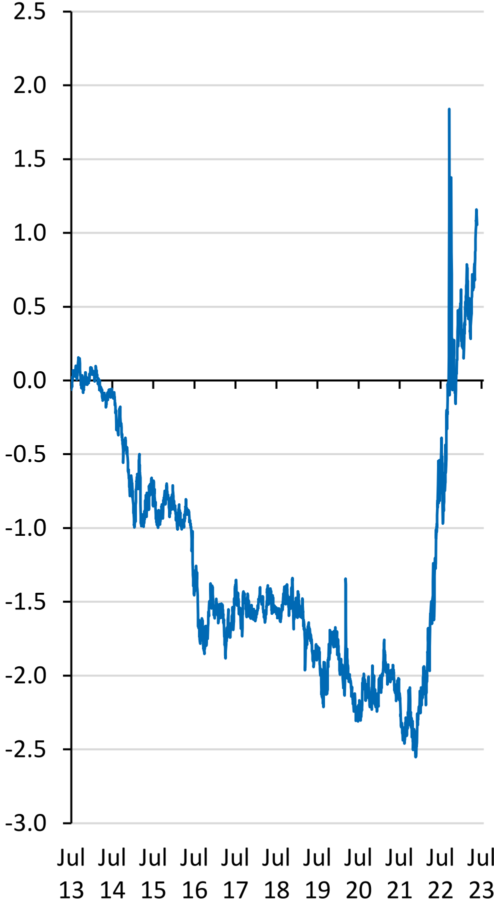
As at 31 March 2023. Personnel may be employed by any of the Aegon Asset Management affiliates. Additional resources includes some teams that may support multiple platforms. [1]Includes individuals with dual roles. [2]The credit research team covers public, developed market issuers globally, including public leveraged loan issuers.

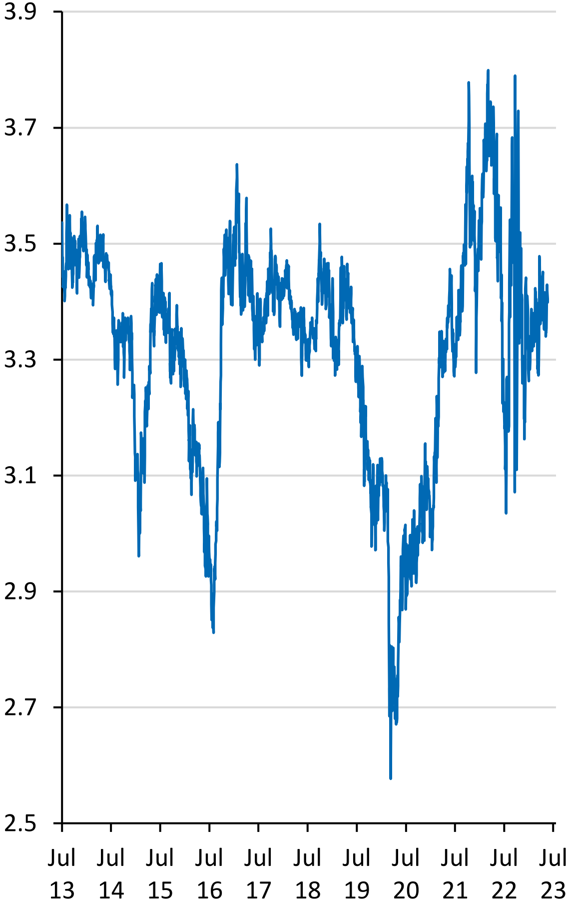
AEGON Asset Management

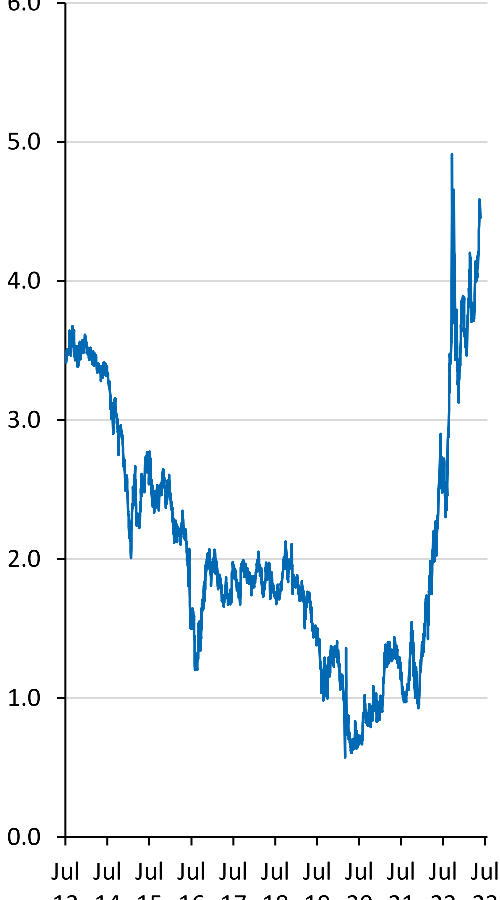
Index-linked bond - return explanation

- The total return of an index-linked bond is the real yield the bond was bought at plus inflation
- At 0% the real yield for a 30y index-linked bond plus inflation expectation (breakeven) at 3.5% means a total return expected (but not guaranteed) of 3.5% nominal. If inflation over the 30y is 2%, the total return would be 2% etc.
- The final RPI fixing before a bond matures is the most sensitive point for total return. Bonds that mature in the next year for example are more sensitive to current inflation than those that mature in 30 years' time

Price versus yield







Source: Bloomberg as at 10 July 2023

AEGON Asset Management

Important information

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Agenda Item 7

INVESTMENT SUB-COMMITTEE – 26 JULY 2023

REPORT OF THE DIRECTOR OF CORPORATE RESOURCES

CASH UPDATE AND AMENDNMENT OF PREVIOUS RECOMMENDATION TO PRIVATE CREDIT INVESTMENTS

Purpose of the Report

1. The purpose of this report is to update the Investment Sub-Committee (ISC) on the cash holding of the Leicestershire County Council Pension Fund (Fund) and the plans for its deployment against the Strategic Asset Allocation (SAA).

2. The paper also seeks approval to remove the limits previously approved by this Sub-Committee in October 2022 regarding commitments to LGPS Central in 2023/24.

Background

3. Hymans Robertson, the Fund's investment advisor, completed the 2023 Strategic Asset Allocation (SAA) as part of the Fund's annual investment review. The Strategy was reviewed by officers and was approved by the Local Pension Committee at its meeting on 20 January 2023.

4. Cash balances are reported to the Local Pension Committee alongside Fund investment values by investment managers each quarter. At the last update the cash balances totalled £69m with an additional £34m with the Fund's currency hedging manager, Aegon asset management (Aegon).

5. The Fund does not have a specific cash allocation as part of the SAA other than a 0.75% of total Fund assets to reflect the cash held at Aegon to act as collateral for the currency hedge.

6. The Fund, as a part owner of LGPS Central (Central), has an aim to transition investments to cost effective and relevant products at Central as and when they are made available.

7. At its meeting on 12 October 2022, the Investment Sub-Committee approved 2023/2024 commitments to LGPS Central's private credit fund subject to the Fund being no more than 20% of the total raised for each of the two funds.

   a. LGPS Central Low Return Sleeve. A £180m commitment subject to a minimum fund raise by Central of £900m. (equates to a maximum 20% of the total fund)

   b. LGPS Central Real Assets Sleeve. A £100m commitment subject to the Fund being a maximum of 20% of the total raised.

8. In some cases, owing to the complex nature of building products suitable for a variety of partner funds, delays have been experienced. As a result, the Fund has been conscious of making investments outside of Central in order to not stray further from the strategic allocation agreed by the Pension Committee whilst maintaining an interest in any potential Central product when it becomes available.

Cash holdings on 31 March 2023

9. The Fund, as of 31 March 2023 held £69million in cash, or 1.2% of total Fund assets (based on the £5.7billion valuation as of 30 March 2023). In addition, the Fund held £34million as collateral with Aegon for the active currency hedge mandate.

10. Owing to the positive cashflow nature of the Fund, due to payments to pensioners or dependants being lower than pension contributions and funds returning money, the cash balance grows without regular reinvestment to realign to the SAA.

11. The Fund has held a higher amount of cash during the past two years whilst awaiting to deploy funds into underweight areas of the asset allocation. These underweight areas have been within the income portion of the portfolio and mainly within the more illiquid investments, property, infrastructure and private credit. During 2022 the underweight positions were addressed with approvals at the April, July and October ISC meetings. Many of these commitments are yet to be called.

SAA 2023

12. An updated 2023 SAA was approved at the January Local Pension Committee meeting. The 2023 SAA is shown below with changes from the 2022 SAA shown in the final column.

Asset Group	Asset Class	2023 SAA	2022 SAA	Change
Growth	Listed equities	42.00% (40% - 44%)	37.50%	- 4.5%
Growth	Private equity	5.75%	7.50%	+ 1.75%
Growth	Targeted return	7.50%	5.00%	- 2.5%
Income	Infrastructure (incl. timber)	9.75%	12.50%	+ 2.75%
Income	Property	10.00%	10.00%	
Income	Emerging market debt	2.50%	0.00%	- 2.5%
Income	Global credit – liquid sub inv grade markets	4.00%	9.00%	+ 5%
Income	Global credit - private debt (inc M&G/CRC)	10.50%	10.50%	
Protection	Inflation-linked bonds	4.50%	4.50%	

Protection	Investment grade credit	3.00%	2.75%	-0.25%
Protection	Currency hedge	0.50%	0.75%	+0.25%
Protection	Cash / cash equivalent	0.00%	0.00%	

Current allocation versus SAA

13. The actual allocations to asset classes versus both the 2022 and 2023 SAA is shown in the table below. The main changes as approved by the Local Pension Committee in January 2023 were a reduction to listed equity, an increase to infrastructure and an increase to liquid global credit. These are highlighted in yellow. Large differences to the SAA target are as a result of the recent change in the SAA which will take time to enact given the slower nature of making investments into private markets.

	Benchmark SAA 2023	Actual Mar-23	Difference to SAA
Growth assets			
Listed Equity	37.5%	43.90%	6.40%
Private Equity	7.50%	7.56%	0.06%
Targeted Return	5.00%	7.51%	2.51%
Income assets			
Infrastructure	12.50%	9.90%	-2.60%
Global credit - private debt / CRC	10.50%	8.43%	-2.07%
Property	10.00%	7.29%	-2.71%
Global Credit - liquid MAC	9.00%	3.74%	-5.26%
Emerging market debt	0.00%	1.94%	1.94%
Protection			
Inflation linked bonds	4.50%	4.35%	-0.15%
Investment grade (IG) credit	2.50%	2.57%	0.07%
Short dated IG credit	0.25%	0.99%	0.74%
Active currency hedge collateral	0.75%	0.60%	-0.15%
Cash	0.00%	1.22%	1.22%

14. The direction of travel over the last couple of years has been to reduce allocation to the growth asset group and allocate to the income asset group. The most recent SAA review upheld this view.

15. The Fund made good in roads to closing the gaps to the previous year’s (2022) SAA by the end of 2022, with commitments to products within the income asset group. The overweight positions mainly reside within the equity portion of the Fund. Whilst the Fund is awaiting capital calls from managers and no requirement for the cash the overweight positions will remain.

16. There are at present over £0.5billion in outstanding calls which will need to be satisfied over the coming years. Around half is due to uncalled commitments to private credit vintages with the remainder combined mainly of infrastructure and private equity commitments.

17. The Fund now has three primary areas to address during 2023 versus the 2023 SAA:

    a. Reducing the growth assets weighting, particularly within listed equity and targeted return. An exempt report considered by the ISC on 19 April 2023 addressed this change. It is important to note that this is a significant change and as such will be carefully considered by officers. It is likely this work may not have been fully completed by the end of the current financial year. There are no significant issues to note in completing this work at this stage and the Local Pension Committee will be informed of progress at each quarterly meeting.

    b. The infrastructure increase to 12.5% of total Fund assets was highlighted in advance by Hymans when they were proposing the previous years (2022) SAA. As such, the move to 12.5% has been planned by officers and a recommendation was included as part of the report presented to the April 2023 ISC meeting where three commitments totalling around £100m were approved.

    c. An increase to the global credit, liquid credit and EMD (Emerging Market Debt) asset class from 6.5% to 9%. Officers are in discussions with LGPS Central (Central) and other partner funds regarding making changes to an existing Central mandate before the Fund will consider making additional allocations. This is progressing and outcomes will be discussed with the Fund's investment advisor before any decisions are made. Any actions taken will be reported to the next Local Pensions Committee meeting.

17. The existing underweight to private debt of circa 2% will continue to close during 2023 all else being equal due to calls from significant commitments already made. This paper includes a recommendation to commit a further £280m. Once the target allocation is reached a steady state of commitments will be needed, as such smaller commitments can be expected going forward.

18. A £60m commitment was made to the LGPS Central Direct Property Fund. This is yet to be called. DTZ, the investment manager for the fund, is assessing the market for opportunities. The total approved amount to the Central Direct Property Fund is £120 million which would almost close the underweight to this class.

20. Overall, the underweight to the income class is reducing in a controlled manner. The Fund does not want to overcommit in any given year in order to rapidly close the underweight position which could lead to poor returns in the event of economic conditions or investment manager selection proving to be unfavourable in hindsight. As such the increase to the income asset group has been a multiyear process.

Plans for 2023/24

24. The table below shows the expected changes the Fund is considering at this point in time in order to align to the SAA. Given the market value changes of asset classes throughout the year will affect the actual weightings considerably, these forecasts will change as the year progresses.

25. There are a couple of investments marked on the table below relating to global credit and private equity. It is still too early to note if additional commitments will be

required in these areas, in particular private equity, but if needed proposals will be presented to the ISC at its October 2023 meeting for consideration. The areas marked in yellow show current commitments approved and estimates at the time of writing for the in year (2023/2024) cashflow expected and potential future ISC approvals.

Growth	31/03/23 £m	2023 SAA	31/03/23 Actual weight %	Difference, actual to 2023 SAA	£m to target weight	Commitments approved	2023/24: other cashflow / divests	Future ISC changes	Diff to target weight post changes £m	% diff to SAA
Listed Equity - Active and Passive	2,507	37.50%	43.9%	6.4%	366		-366		0	0.0%
Targeted Return Funds	429	5.00%	7.5%	2.5%	143	110	-253		0	0.0%
Private Equity	432	7.50%	7.6%	0.1%	4	60	-35	25	54	0.9%

Income	31/03/23 £m	2023 SAA	31/03/23 Actual weight %	Difference, actual to 2023 SAA	£m to target weight	Commitments approved	2023/24: other cashflow / divests	Future ISC changes	Diff to target weight post changes £m	% diff to SAA
Infrastructure	565	12.50%	9.9%	-2.6%	-148	160	-20		-8	-0.1%
Global credit - private debt / CRC	482	10.50%	8.4%	-2.1%	-118	250	-50	280	362	6.3%
Property	416	10.00%	7.3%	-2.7%	-155	120	-15		-50	-0.9%
Global Credit - liquid MAC	213	9.00%	3.7%	-5.3%	-300	300			0	0.0%
Emerging market debt	111	0.00%	1.9%	1.9%	111		-111		0	0.0%

Protection	31/03/23 £m	2023 SAA	31/03/23 Actual weight %	Difference, actual to 2023 SAA	£m to target weight	Commitments approved	2023/24: other cashflow / divests	Future ISC changes	Diff to target weight post changes £m	% diff to SAA
Inflation linked bonds	248	4.50%	4.3%	-0.2%	-9				-9	-0.2%
Investment grade (IG) credit	147	2.50%	2.6%	0.1%	4				4	0.1%
Short dated IG credit	57	0.25%	1.0%	0.7%	42		-42		0	0.0%
Active currency hedge collateral	34	0.75%	0.6%	-0.2%	-9				-9	-0.2%
Cash	69	0.00%	1.2%	1.2%	69					

26. It is also worth noting for global credit that the commitments approved and future ISC changes will take a number of years to be fully called whilst in the meantime existing investments will continue to return capital. At present the £482m is invested via four managers with Partners group consisting of £243m, or roughly half of the amount invested, the majority of which will return to the Fund as the underlying vintages return capital. The oldest 2014 and 2016 vintages of the Partners funds total £33m and have been returning capital. The four more recent vintages will start to return more in the coming years.

Effect on cash to March 2024

27. When including the effect of commitments already made and any that may be called during 2023/24, the Fund will expect to have a relatively low cash holding at the end of March 2024. If cash is needed in advance of the changes being implemented to the growth assets part of the portfolio, officers will assess the areas that are most overweight to the approved SAA. Any changes will be reported at the next Local Pension Committee meeting.

28. With the size of the uncalled commitment rising (about £500m currently) and the unknown timing of calls from underlying managers (normally 5 workings days' notice is provided) officers are minded to keep a closer watch on cash levels. Divestments can in some cases take more than five working days to receive so there maybe times over the next year when cash balances might be higher than in recent times.

29. Unused pension fund cash is invested in secure money market funds when not invested and with higher interest rates now than over the recent past the drag on returns is not as pronounced.

30. The prudent estimate regarding private debt commitment capital calls has been made. Officers have assumed £150m of private debt commitments will be called prior to April 2024. The Fund has existing uncalled commitments totalling c£270m at July 2023 with Central and Partners group private debt products.

31. The table below illustrates the major changes through to the end of March 2024.

	£m	**Description**
6th April 2023 cash position	**74**	Excludes cash held as collateral for currency hedge and cash held by managers for reinvestment
Management expenses	-5	These are investment management expenses paid directly by the Fund. Majority of fees are paid from the investments held with the managers.
Investment income	30	Income distribution paid to the Fund, primarily from property and infrastructure investments
Currency Hedge	0	No cashflow forecast estimated given the inherent difficulty in doing so. The Fund currently has c£35m in collateral. This is deemed adequate and would provide enough collateral for a 10% adverse movement in the Fund's 3 major foreign currency exposures, US Dollar, Euro and Yen. No forecast cashflow effect given no strong view on whether the Pound will strengthen or weaken from current position
Non investment cashflow	55	Employer and employee contributions exceed the benefit payments made. Only moves gradually compared to the previous year.
Reduction to listed equity & short dated IG bonds	60	Listed equity is overweight to SAA (37.5% target) by c370m, some of this may be divested as needed by capital calls that have been made.
Targeted return reduction to 5% of all assets	140	Reducing the overweight in line with SAA when targeted return review is complete
Commitments drawn	-407	Represents existing commitments made forecast to be drawn to next March year end
Expected capital distribution	117	Forecast distributions expected from holdings
Forecast closing cash position 31st March 2024	**64**	Aim is to keep cash as low as possible and keep fully invested in line with the SAA approved at the start of each year.

Change in cash to year end	-10	

32. Overall, Officers expect closing cash to be of a similar level to the opening position at the start of the next financial year. Any large movements in the cash generated or lost by the hedge managed by Aegon will have an impact on the overall ending position. The two largest elements are timings of calls and distributions which could substantially change. However, the Fund has enough liquid overweight positions which could be divested if cash were to run low. Conversely if more distributions were received and fewer calls were made then Officers would in most circumstances leave overweight positions in place until the requirement for cash arose given there is a 0% target for cash.

Private Debt recommendations change

33. At its meeting on 12 October 2022, the Investment Sub-Committee approved 2023/2024 commitments to LGPS Central's private credit fund subject to the Fund being no more than 20% of the total raised for each of the two funds.

    a. LGPS Central Low Return Sleeve. A £180m commitment subject to a minimum fund raise by Central of £900m. (equates to a maximum 20% of the total fund)

    b. LGPS Central Real Assets sleeve. A £100m commitment subject to the Fund being a maximum of 20% of the total raised.

34. After the annual SAA if all partner funds were collated and shared with Central there would not be enough new capital flowing into the two sleeves the Fund is interested in. This would mean that the Fund could not invest a significant amount with LGPS Central and meet the conditions of the approved recommendations. An alternative approach would be needed.

35. This approach could be the use of legacy managers or employing new managers. Officers have discussed the risks associated including, actions needed taking into account, time and cost to run external due diligence, the additional governance burden and the desire to pool, to name a few.

36. Officers approached Hymans Robertson to review the 20% limit in light of the recommendation made in 2022 for multiyear commitments to the Central low return and real assets sleeves. Their paper is included as an appendix to this report.

37. Hymans paper notes the setting of limits for investment ownership limits to be common practice when investing in pooled funds. It is designed to protect from investing in sub scale products, in addition, the 20% limit proposed was for:

    a. Ensuring funds were large enough to invest efficiently, and enable Central to achieve portfolio and manager diversification

    b. Increasing the likelihood of securing fee savings, something first vintages have achieved at a level more than the Fund could have achieved alone.

    c. Ensuring the Fund would not be the largest investor in either sub fund (low return of real assets) and therefore be at risk of having to take responsibility for managing them if Central were unable to meet its obligations.

38. Central reviewed the private debt plans from Central based on the expected level of soft commitments from partner funds 2023 SAA plans. Based on those soft

commitments the Fund would become around 65-70% of each of the two sleeves, breaching the current 20% limits.

39. In order to satisfy the Fund's concerns, Central have proposed the following which Hymans have reviewed:

a. Keep both sub funds open for new investment until September 2024 thereby allowing partner funds to invest into both products based on revised SAA's that would be approved in the first half of 2024, as well as allowing for commitments from partner funds recycling distributions from existing investments.

b. Manage (loan) concentration risk by guiding the number of managers/strategies and number of underlying investments each strategy would employ (based on strategy guidance / previous vintages) based on the current level of soft commitments, as shown in the tables below.

Low return sleeve: loan concentration, 0.67% based on 150 underlying loans.

Total Commitments, £m		#Managers	#Underlying Loans	Ave. Loan Concentration, %
Lower	Upper			
>200	<400	3	150	0.67%
>400	<600	4	200	0.50%
>600	-	5	250	0.40%

Real assets sleeve: loan concentration, 5% based on 20 underlying loans

Total Commitments, £m		#Managers	#Underlying Loans	Ave. Loan Concentration, %
Lower	Upper			
>100	<200	2	20	5.00%
>200	<400	3	30	3.33%
>400	-	4	40	2.50%

Hymans comment that they are comfortable that these provisions will ensure adequate diversification for both sleeves and are comfortable with the higher concentration within real assets where loans are typically larger but lower risk due to interest in a tangible asset.

c. If more than the current level of soft commitments are received by Central then Central to improve diversification further per the tables above.

d. Where a key person event occurs (for example, the investment director leaves), Central will convene a meeting with the Advisory Committee to discuss.

40. Hymans have stated they are comfortable that these provisions will provide adequate diversification and as a partner fund and shareholder (of LGPS Central) the Fund would have significantly more influence over ongoing management arrangements than it would with a third-party manager.

41. Hymans also cite a further reason for proceeding in support of pooling. Hymans believe Central's ability to launch regular vintages is, in the long term, in the best interests of the Fund

Recommendation

42. That the Fund proceed to commit in 2023/24:

    i. £180m to the new LGPS Central Low Return Sleeve; and
    ii. £100m to the LGPS Central Real Assets Sleeve

    as approved by the ISC on 12 October 2022, but that the 20% limit on these commitments also previously agreed by the ISC no longer be applied for the reasons now outlined within the report.

Supplementary Information

43. None

Equality and Human Rights Implications

44. The cash update and infrastructure top up is a high-level document and there are no direct Equality and Human Rights implications. The Fund considers issues around Equality and Human Rights as part of responsible investment which incorporates environmental, social and governance factors in all investment decisions. The Fund will not appoint any manager unless they can show evidence that responsible investment considerations are an integral part of their decision-making processes. This is further supported by the Fund's approach to stewardship and voting, and its approach to engagement in support of a fair and just transition to net zero.

Appendix

45. Appendix 1: Private Debt commitments 2023 Hymans Robertson

Background Papers

None

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Private Debt Commitments 2023

Addressee and purpose

This paper is addressed to the Officers and Investment Sub-Committee ("ISC") of Leicestershire County Council Pension Fund ("the Fund"). The purpose of this paper is to update our recommendations on the Fund's private debt commitments for 2023.

This paper should not be used for any other purpose. It should not be released or otherwise disclosed to any third party except as required by law or with our prior written consent, in which case it should be released in its entirety. We accept no liability to any other party unless we have accepted such liability in writing. We provide comment from an investment but not a legal or tax perspective.

Please note that Hymans Robertson LLP and our group companies have a wide range of clients some of which are fund managers who may be included in and/or recommended to you as part of this exercise. We have a research team that advises on shortlisting fund managers in manager selection exercises, which is separate from our client and other relationships with fund managers and therefore we do not believe there will be a conflict that would influence the advice given. We would be happy to discuss this and provide further information if required.

Background

In 2022, we undertook a comprehensive review of the Fund's private debt portfolio, including proposed commitments to the asset class in 2023-24. In **2023**, we recommended that the Fund commit £180m to the next vintage of the LGPS Central Private Debt (Low Return) sub-fund and £100m to the Private Debt (Real Asset) sub-fund. We recommended further commitments of £280m in **2024**, ideally to the Fund's existing private debt managers, but with the allocation between them to be determined at the time. All commitments were subject to the Fund representing no more than 20% of total assets in each underlying fund.

Setting limits on ownership is common practice when investing in pooled funds and is designed to protect investors from investing in sub-scale funds. The 20% limit on the Fund's share of each LGPSC sub-fund was proposed for three specific reasons:

- It was intended to ensure that the sub-funds were large enough to invest effectively and, in particular, to enable LGPSC to achieve a greater level of portfolio/manager diversification than the Fund could achieve acting independently (thereby addressing concentration risk)[1];
- It would also increase the likelihood of securing savings on investment management fees;
- It meant that the Fund would likely not be the largest investor in either sub-fund and therefore less at risk of having to take responsibility for managing them, if LGPSC became unable to meets its obligations (so addressing operational risk).

It is important that the Fund continues to make regular commitments of similar size to the asset class, so that the target allocation is achieved and thereafter maintained in steady state. Regular commitments also ensure good diversification across the different vintages of each underlying fund series. It is possible to adjust the level of commitments in any one year to reflect the short-term outlook for private lending, but we recommend this is done only when the outlook is particularly strong (or weak).

Our outlook for private debt at the end of Q2 2023 was neutral. We considered the increased risk of default as economic growth decelerates in developed markets to be largely offset by the expectations that most major

[1] We acknowledge that the 20% limit could have unintended consequences if the Fund applied the limit and reduced the size of its investment as this could reduce the level of portfolio/manager diversification and cost savings achievable by LGPSC.

economies would escape recession and the significant higher yields being generated on private debt today. We therefore see no argument for tactical changes to the planned level of commitments.

Please note that we have not revisited our commitment sizing calculations to confirm whether or not the level of commitments remains appropriate given changes in the size of the Fund and the pace of drawdowns and distributions by underlying managers. However, the size of the Fund has not changed materially since last year, and Officers have confirmed with the Fund's private debt managers that net cashflows (drawdowns minus distributions) are broadly unchanged. This would suggest the planned commitment amounts remain appropriate.

LGPSC Private Debt funds – 2023 vintage

LGPSC has indicated that it plans new vintages of both the Low Return and Real Asset sub-funds in Q3 2023. Soft commitments at first close from partner funds (including the Fund) are currently £265m and £150m for the Low Return and Real Asset sub-funds respectively[2]. This means the Fund's initial share of the two sub-funds would be 68% and 67% respectively.

Both sub-funds will remain open until September 2024, giving all partner funds the opportunity to make additional commitments in 2024. Both are therefore expected to be larger than indicated above by final close.

For the Fund to commit to these sub-funds, at the planned levels or anywhere close to them, the 20% limit would need to waived on this occasion. Discussions have taken place with LGPSC regarding the provisions that are, or could be, put in place to protect the Fund to allow this to happen. These are detailed below.

Managing concentration risk

To address our concerns, LGPSC has proposed the following minimum levels of portfolio/manager diversification:

- Low Return sub-fund (in the event that total commitments are £200-400m): at least 3 underlying managers will be appointed, and each will be expected to make at least 50 loans
- Real Assets sub-fund (in the event that total commitments are £100-200m): at least 2 underlying managers will be appointed, and each will be expected to make at least 10 loans.

Higher minimum levels will apply if total commitments exceed these bands, as it is hoped they will by the final close of each sub-fund. LGPSC provided the following guidance on the impact of higher commitments on the average size of each loan made (the "loan concentration")[3].

Loan concentration of Low Return sub-fund

Total Commitments, £m		#Managers	#Underlying Loans	Ave. Loan Concentration, %
Lower	Upper			
>200	<400	3	150	0.67%
>400	<600	4	200	0.50%
>600	-	5	250	0.40%

[2] Source: LGPSC
[3] Source: LGPSC

Loan concentration of Real Assets sub-fund

Total Commitments, £m		#Managers	#Underlying Loans	Ave. Loan Concentration, %
Lower	Upper			
>100	<200	2	20	5.00%
>200	<400	3	30	3.33%
>400	-	4	40	2.50%

We are comfortable that these provisions will ensure adequate diversification of both the Low Return and Real Asset sub-funds. The different threshold number of loans reflects the nature of each asset class; loans secured against real assets tend to be significantly larger, but typically lower risk due to their security interest in tangible assets, than those made to mid-market corporate borrowers which is the focus of the Low Return sub-fund.

LGPSC has indicated that the commitments to be made to underlying managers will be sufficiently large to secure meaningful fee savings (relative to what the Fund could achieve acting independently). We are reassured by this guidance.

Addressing operational risk

Mitigating operational risk is a significant issue for funds handled by a single third-party manager. In this case, we believe the risk is limited for three reasons:

- These are multi-manager funds; if for any reason LGPSC became unable to manage them, responsibility for management of the underlying loan portfolios and any credit issues that had arisen within them would remain with the underlying managers.
- LGPSC and partner funds have agreed key person provisions whereby if they experience changes in staffing which in LGPSC's view could have a material impact on the management of the sub-funds, LGPSC are required to consult the Advisory Committee on the actions to be taken. The Fund is represented on the Advisory Committee which provides an opportunity to influence, though not to direct, the actions taken by LGPSC in response to the staffing issues. These are significantly weaker than the key person provisions offered by third-party managers, which typically include the suspension of new investments pending the replacement of the key persons. But given the nature of the relationship between the Fund and LGPSC, we are fairly comfortable with the arrangements in place.
- As a LGPSC partner fund and shareholder, the Fund would have significantly more influence over ongoing management arrangements than it would with a third-party manager.

Support for pooling

We believe there is one further argument for proceeding with the commitments as planned. It is likely they are necessary for LGPSC to launch the next vintages of both sub-funds in a timely manner, each with sufficient capital to build effective portfolios. We believe it is in the long-term best interests of the Fund for LGPSC to make available a regular series of new sub-funds given the importance of making regular commitments to closed-end, private markets funds.

Recommendation

Given the arguments outlined above, we recommend the Fund drops the 20% limit and proceeds with the planned commitments. Limits on commitments to future LGPSC products should be considered on a case-by-case basis, taking into account the provisions in place to mitigate concentration and operational risks. We recommend the 20% limit is retained for commitment to third-party managed products.

Prepared by:-

Philip Pearson, Partner

July 2023

For and on behalf of Hymans Robertson LLP

Agenda Item 8

INVESTMENT SUB-COMMITTEE – 26 JULY 2023

REPORT OF THE DIRECTOR OF CORPORATE RESOURCES

RECOMMENDED CHANGES TO THE PROCTECTION ASSETS GROUP OF INVESTMENTS FOR THE LEICESTERSHIRE LGPS

Purpose of report

1. The purpose of this report is to provide information to the Investment Sub-Committee (ISC) in respect of the protection assets group portfolio review and proposed changes to investments.

2. This paper will be supported by a presentation from Hymans Robertson (Hymans), the Fund's investment advisor.

Policy Framework and Previous Decisions

3. There have been a number of changes to the protection assets group of investments over the past years. A summary of previous decisions is provided below.

4. At the meeting of the Local Pension Committee 20 January 2023 the following changes were proposed and approved:

    a. Increase in the strategic asset allocation to the currency hedge from 0.5% to 0.75% of total fund assets.

    b. Decrease in the strategic asset allocation to investment grade credit from 3.00% to 2.75% of total fund assets.

5. There were no changes proposed for protection assets at the meeting of the Local Pension Committee 21 January 2022 when the strategic asset allocation was reviewed.

6. At the meeting of the Local Pension Committee 21 January 2021 where the strategic asset allocation was discussed the following changes were proposed and approved:

    a. Moving the benchmark hedge of foreign currency exposure from 50% to 30%.

    b. Decrease in the strategic asset allocation to index linked bonds from 5.0% to 4.5% of total of fund assets.

    c. Introduction of 0.5% of total fund assets to be invested into a short dated corporate bond fund pending satisfactory due diligence. Due diligence was completed, and a 0.5% allocation was initiated in 2021.

Background

7. This review is being undertaken following the approval of the Local Pension Committee at its meeting on 20 January 2023 to conduct three asset class reviews post the changes in the Strategic Asset Allocation (SAA) review. A full summary of the 2022 to 2023 SAA is shown below. Reviews for Listed equity, targeted return and protection assets were proposed.

Asset Group	Asset Class	2022 SAA	2023 SAA	Change
Growth	Listed equities	42.00% (40%-44%)	37.50%	- 4.5%
Growth	Private equity	5.75%	7.50%	+ 1.75%
Growth	Targeted return	7.50%	5.00%	- 2.5%
Income	Infrastructure (incl. timber)	9.75%	12.50%	+ 2.75%
Income	Property	10.00%	10.00%	
Income	Emerging market debt	2.50%	0.00%	- 2.5%
Income	Global credit – liquid sub investment grade markets	4.00%	9.00%	+ 5%
Income	Global credit - private debt (incl. M&G/CRC)	10.50%	10.50%	
Protection	**Inflation-linked bonds**	**4.50%**	**4.50%**	
Protection	**Investment grade credit**	**3.00%**	**2.75%**	**-0.25%**
Protection	**Currency hedge**	**0.50%**	**0.75%**	**+0.25%**
Protection	Cash / cash equivalent	0.00%	0.00%	

8. The listed equity review, targeted return review and protection assets review have been undertaken by the Fund's investment advisor Hymans Robertson. Hymans presented the outcome of the first two of the three planned reviews to the Investment Sub Committee (ISC) on 26 April 2023.This paper now sets out the outcome of the last of the three planned reviews.

9. Although the whole portfolio's SAA gets reviewed each year, officers and Hymans have been reviewing asset classes within the portfolio in more detail over the last couple of years. As such, protection assets, which has not had a formally distinct review before, is now being so reviewed.

10. The current protection assets groups portfolio as of 31 March 2023 is compromised of the following holdings:

Asset group	Manager: Investment	2022 SAA target	2023 SAA target	£m 31.03.23	Actual weight 31.03.23
Protection	Aegon: Inflation-linked bonds (ILB)	4.50%	4.50%	248	4.3%
Protection	Aegon: short dated climate transition fund	0.5%	0.5%	57	1.0%
Protection	Central: Investment grade credit (IGC)	2.5%	2.25%	147	2.6%
Protection	Aegon: Currency hedge	0.5%	0.75%	34	0.6%
TOTAL		**8.00%**	**8.00%**	**486**	**8.5%**

Scope of the review

11. The scope of the protection assets group review includes the following:

    1. Define the investment objective
    2. Review the current portfolio of protection assets including performance
    3. Review of the structure of the protection portfolio
    4. Implementation

12. Hymans make reference to changes to the target allocation being out of scope given this is investigated annually as part of the portfolio SAA review. They go on to state increases in interest rates and government bond yields have changed the attractiveness of protection assets relative to other asset classes.

13. They have also deferred consideration of alternative protection assets such as asset backed securities, private debt secured against real assets and gold until the annual SAA review.

Key Findings

14. Hymans confirm that the Fund invests in protection assets in order to protect its funding position by reducing investment risk and mitigating the impact of fluctuations in the value of the liabilities. They do also note that protection against a range of key risks is also provided by other asset classes in the Fund's diversified portfolio.

15. Hymans summarise that the Fund's protection assets are generally appropriate, benefitting from very competitive fee arrangements and deliver performance (where track records are long enough) in line with expectations and see no pressing requirement to materially change the mandates or divest from them.

16. They do, however, make a case for improving investment outcomes by changing the allocation between ILB and IGC and this will be covered in more detail during the presentation by Hymans.

17. Hymans are also comfortable with the policy and structure of the foreign exchange (FX) hedging arrangements which includes both the Aegon FX programme, and any hedging performed by the managers of individual mandates. They do note, however, that there is scope to improve the application of the hedging policy which again will picked up in more detail by Hymans in their presentation and is covered in more detail in the report below.

Investment Objective

18. Hymans note the rationale for investing in protection assets. They note the poor returns experienced by both ILB and IGC over the past 18 months and explain the rationale for both asset classes with respect to meeting liabilities.

19. In summary, higher long-term inflation increases the future cost of benefits, but the effect of increased costs is offset by the increase in interest rates and government bond yields (which increases the investment returns assumption). This increase, when applied to the Fund's liabilities via a higher discount rate drives down the present value of the Fund's liabilities. As a result, the Fund's funding position can improve, if going forward investment returns are realised.

20. Hymans point out that since the global financial crisis (GFC) interest rates have remained low which increased the value of the Fund's liabilities (lower discount rate applied to the Fund's liabilities). However, this also improved the value of the assets within the protection assets portfolio.

21. They also reduce the overall level of investment risk, although they are impacted by short term market volatility (see the last 12-18 months). They are lower risk given the very high likelihood that investors will receive all the interest and principal repayments. This is especially so for government bonds.

22. Hymans will cover in their presentation the other areas the portfolio invests in and their effect on protecting the portfolio from macroeconomic and financial risks, which would eventually be reflected on the value of liabilities and assets.

Review of the current mandates

23. The protection assets mandates are described below including benchmarks and targets.

Manager	LGPSC	Aegon	Aegon	Cash Funds
Fund	Investment Grade Credit	Index-linked Fund	Short Dated Climate Transition Fund	Pooled cash funds Aegon collateral account
Active/Passive	Active	Active	Active	Active
Benchmark	LGPSC Corp Index + 0.8%	FTSE All Stocks Index Linked Index	SONIA 3 Month +1.25% (GBP)	SONIA 3 Month
Target outperformance	0.80% (rolling 3 year period, net of fees)	0.30% (rolling 3 year period, gross of fees)	1.25% (rolling 3 year period, gross of fees)	0.00%
Target allocation	2.25%	4.5%	0.5%	0.75%
Inception date	Apr 20	Dec 13	Mar 21	Mar 16

24. Hymans have reviewed each of the mandates and will be covering this in more detail during their presentation. Of note, on review of the IGC mandate managed by Central they point out the consideration of a third manager (the Central IGC mandate has two underlying managers) but point out they do not believe this is necessary for a fund which focuses on corporate bonds. The Central product is diversified with both managers holding in excess of 350 securities each covering multiple sectors, location of issue and of varying credit ratings.

25. Hymans in reviewing the performance of the three investment mandates note the poorer performance of the Central IGC mandate relative to the benchmark, but also note that within nearly three years of operation, the last 18 months has seen an extraordinary level of volatility in bond markets especially given the speed of interest rate increases which has an inverse effect on bond prices in general. Central note that it is too early to take action on the basis of performance alone.

26. Of the two Aegon products, the index linked bond fund has performed in line with expectations and the short dated climate transition fund has had a tough comparison versus its cash plus benchmark but has performed in line with its peer group. It is worth noting that again this fund has just two years of history and so it is too early to draw performance related conclusions.

27. The FX programme has performed well since inception (January 2014). The comparison to the benchmark position shows a 0.9% pa return. Hymans state that this is a good result for an active FX programme with fairly tight exposure and low turnover of position, (i.e., the programme does not trade heavily.)

Alternative protection assets

28. Hymans summarise a number of alternative protection assets that may provide further diversification. They explain the rationale and potential applicability within their paper. In summary the six alternative assets listed will be further explored as part of the 2024 SAA review. There may be other assets that are considered as part of the 2024 SAA review but at present Hymans note the following which will be explained as part of the presentation given by Hymans:

    a. Green bonds
    b. Real asset backed investment grade senior debt
    c. Senior tranches of asset backed securities
    d. Gold
    e. Absolute return bond strategies
    f. Equity protection strategies

29. The applicability of any of these alongside the investment requirements and drive to simplify the operation of the Fund will be analysed later in the year. Adding any would undoubtedly increase portfolio complexity but may improve risk adjusted returns which will need to be considered further.

Proposed change to IGC and ILB

30. Hymans propose a change to the allocation between these two asset classes following this review but deferred to later in the year. The change will effectively reduce the ILB allocation by 1% and add that to the IGC allocation. The lack of overlap between holdings means Hymans recommend a sale of ILB and subscription to IGC with Aegon coordinating sales with ongoing portfolio management to minimis transaction costs.

31. The rationale is underpinned by deciding upon the balance between proving protection against higher-than-expected long term inflation provided by ILB, and the higher yield achieved by IGC. Hymans believe an increased IGC allocation will lead to improved longer term funding outcomes.

32. In arriving at their conclusion Hymans have considered the following which they will presented during the meeting:

    a. Geographic allocation – is allocation spread optimally and looks at both country of issue and currency of issue.

    b. Portfolio efficiency – does investment performance improve as the percentage of bonds allocated to non-sterling bonds increases using January 1997 to June 2023 as the historical dataset.

    c. Will increasing allocation to overseas bonds improve portfolio efficiency (i.e., improve returns per unit of risk taken)

    d. Is the split between active management and passive management optimal – Hymans review the pros and cons of each for both IGC and ILB including the buy and hold strategy.

    e. Climate change implications of the protection portfolio with respect to achievement of the Fund's net zero objectives.

33. When analysing the Fund's corporate bonds (Central's IGC and Aegon's short dated climate transition fund) the result shows an overall allocation of 56% to overseas bonds which is well diversified by issuer. LGPSC allocates 50% to sterling bonds, 50% to overseas bonds but the underlying managers have the flexibility to vary geographic allocations within their respective mandates. Aegon has the flexibility to allocate globally without restriction, but currently allocates 70% to overseas bonds.

34. When analysing the ILB market, Hymans note that it is large, liquid, and efficient which lends itself to passive management overactive given the lack of opportunities. The Fund's ILB mandate is however an active mandate however the Fund's returns have been similar to the benchmark and the level of risk taken is low. The Fund also benefits from a favourable fee deal. As such Hymans recommend the Fund retains the current approach.

Climate change implications

35. This is an area that is under review post the approval of the net zero climate strategy (NZCS). Carbon foot printing calculations for credit have lagged equity markets but inclusion into the Fund's annual climate risk reporting is invariably easier where the bond in question has equity that is also measured. As such the Fund's expects to be able to measure both the IGC and short dated climate transition fund climate metrics in the near future. At present the short dated climate fund provides weighted average carbon intensity numbers and the IGC fund should soon follow.

36. Hymans make a number of recommendations to improve the carbon reporting of the protection portfolio which officers will work through and include:

    a. Work with LGPSC to include corporate bonds in its 2023 climate risk report and the index-linked sovereign bonds in the 2024 report, taking into account the new guidance from the Assessing Sovereign Climate-Related Opportunities and Risks initiative (ASCOR) on accounting for sovereign greenhouse gas (GHG) emissions;

b. Determine an appropriate approach for carbon accounting for the Fund's cash investments and FX hedging programme;

c. Further engage with investment managers to ensure they are taking appropriate action on capital reallocation to reduce portfolio emissions, and are engaging with underlying issuers to achieve real-world emissions reductions, drawing where appropriate on new guidance on stewardship provided by the Institutional Investors Group on Climate Change;

d. Consider what further changes (if any) should be made to the protection portfolio in order to deliver the agreed targets.

FX hedging programme

37. As set out above, the benchmark FX hedge position for the Fund moved from 50% of foreign currency exposure to 30% in 2021 when the Local Pension Committee approved the change at its January 2021 meeting. Aegon who manage the Fund's FX programme enacted the change from 50% to 30% in the first half of 2021. The change was based on analysis illustrating a 30% hedge providing improved overall investment outcomes.

38. It is important to note that the programme is intended to protect the Fund's position from FX movements of foreign currency investments when converted to the Fund's base currency of GBP. It is also important to note that Aegon operate an active hedge, with managers at Aegon applying their skill and knowledge to outperform the benchmark hedge position of 30% where possible.

39. Officers for the Fund speak to the mangers operating the hedge regularly (at least once a month) to understand the market dynamics, changes in hedging positions and collateral requirements.

40. Hymans have reviewed the hedging currently in place which covers around £1.9bn in FX exposure. There are 18 foreign currencies hedged with the three main currencies (USD, Euros, and the Japanese Yen the largest exposures). Given the programme is an active programme, Aegon have the ability to fully hedge (100% of FX exposure for a particular currency), apply a fully unhedged position and any anywhere in between, with 30% being the benchmark position. Only where there is a strong case do they position at either end of the spectrum bearing in mind this is a hedging programme and not a currency trading strategy.

41. Hymans make a number of recommendations which they will more fully present at the meeting. In summary they present a table by mandate where each mandate has a recommendation to either use a hedged share class or use the hedging facility from Aegon at either the target hedge ratio of 30% or 100% for specific asset classes.

42. Where it is deemed inexpensive and relatively easy to do, Hymans recommend the Fund use hedged share classes from the investment managers. There are two managers in particular that Hymans recommend officers enter into dialogue with and then consult with the investment advisor. Quinbrook, with whom the Fund has invested around $114m to see if there is a possibility to switch to a GBP share class, and Central with respect to the climate factor fund, infrastructure fund and private debt mandates to discuss how best to operationally hedge the underlying FX exposures and the level of the hedge to be implemented.

43. Other mandates are specifically noted within the appendix which have underlying FX exposure and Hymans advise that the main currency exposures should also be hedged at the benchmark level of 30%. Hymans are recommending that officers employ a GBP hedged share class, or where this is deemed inappropriate, for example, due to time and cost required to make this change, use the Aegon FX hedging programme to hedge the FX exposure.

44. Hymans have reviewed the requirement to hold collateral at Aegon to support the FX programme. They conclude that the cash held with Aegon, plus the investments in the short dated product and index linked bonds mandates provide sufficient capital if the FX programme is expanded and implemented.

Consultation

45. This paper refers to several documents that have been approved or consulted upon. A summary is shown below:

    a. Strategic Asset Allocation (SAA) 2023 – approved at the 20 January 2023 Local Pension Committee meeting.

    b. Strategic Asset Allocation (SAA) 2022 – approved at the 21 January 2022 Local Pension Committee meeting.

    c. Strategic Asset Allocation (SAA) 2021 – approved at the 22 January 2021 Local Pension Committee meeting.

    d. Climate Risk Report (CRR) 2022 – approved at the 18 November 2022 Local Pension Committee meeting.

    e. Net Zero Climate Strategy (NZCS) – approved at the 3 March 2023 Local Pension Committee meeting. This strategy had previously held a public engagement exercise in Summer 2022 which gathered over 1000 responses and a public consultation which received over 700 responses.

Resource Implications

46. The Director of Corporate Resources has been consulted. There are no additional resource implications.

Recommendations

47. It is recommended the Investment Sub-Committee approve the following changes to protection assets and other impacted mandates and that the Director of Corporate Resources be authorised to take the necessary action for the Fund to manage the changes as outlined below:

    a. Implement a change to the ILB allocation to 3.25% and for IGC 3.75% of total Fund assets. However, to defer the reallocation of capital between ILB and IGC until Hymans have concluded their outlook on both asset classes.

    b. Engage with Aegon regarding the ILB mandate and their ability to enhance and protect returns by investing in overseas bonds at the appropriate times.

c. Consider the changes to the FX hedging arrangements as described at points 37-44 of this paper.

d. At the next SAA review (planned for January 2024) the Fund reviews the target allocation to protection assets and explore further the inclusion of alternative protection assets.

Background papers

48. Local Pension Committee Meeting, 3 March 2023 – Net Zero Climate Strategy - https://politics.leics.gov.uk/ieListDocuments.aspx?CId=740&MId=7202&Ver=4

49. Local Pension Committee Meeting, 20 January 2023 – Strategic Asset Allocation – https://politics.leics.gov.uk/ieListDocuments.aspx?CId=740&MId=7201&Ver=4

50. Local Pension Committee Meeting, 21 January 2022 – Strategic Asset Allocation – http://cexmodgov01/ieListDocuments.aspx?CId=740&MId=6757&Ver=4

51. Local Pension Committee Meeting, 22 January 2021 – Strategic Asset Allocation – http://cexmodgov01/ieListDocuments.aspx?CId=740&MId=6522&Ver=4

52. Local Pension Committee Meeting, 18 November 2022 – Climate Risk Report - https://politics.leics.gov.uk/ieListDocuments.aspx?CId=740&MId=6761&Ver=4

Circulation under the Local Issues Alert Procedure

None.

Equality Implications/Other Impact Assessments

53. The listed equity review is a high-level strategic document and there are no direct Equality and Human Rights implications. The Fund considers issues around Equality and Human Rights as part of responsible investment which incorporates environmental, social and governance factors in all investment decisions. The Fund will not appoint any manager unless they can show evidence that responsible investment considerations are an integral part of their decision-making processes. This is further supported by the Fund's approach to stewardship and voting, and its approach to engagement in support of a fair and just transition to net zero.

Human Rights Implications

54. This paper outlines the approach the Fund is taking with its listed equity. This will align with the Fund's Responsible Investment approach as set out in the Principles for Responsible Investment.

Appendices

Appendix – Hymans Robertson Protection Assets Review

Officer(s) to Contact

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HYMANS ROBERTSON

Leicestershire County Council Pension Fund

Protection portfolio review

July 2023

Philip Pearson, Partner
Michael Salem, Senior Investment Analyst

For and on behalf of Hymans Robertson LLP

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1 Summary

Addressee and purpose

This paper is addressed to the Investment Sub-Committee ("ISC") of Leicestershire County Council Pension Fund ("the Fund"). The purpose of this paper is to present the findings of our review of the structure of the Fund's protection asset portfolio which includes index-linked bonds ("ILB"), investment grade corporate bonds ("IGC"), cash and a currency ("FX") hedging programme.

This paper should not be used for any other purpose. It should not be released or otherwise disclosed to any third party except as required by law or with our prior written consent, in which case it should be released in its entirety. We accept no liability to any other party unless we have accepted such liability in writing. We provide comment from an investment but not a legal or tax perspective. This report complies with Technical Actuarial Standard 100: Principles for Technical Actuarial Work.

Please note that Hymans Robertson LLP and our group companies have a wide range of clients some of which are fund managers who may be included in and/or recommended to you as part of this exercise. We have a research team that advises on shortlisting fund managers in manager selection exercises, which is separate from our client and other relationships with fund managers and therefore we do not believe there will be a conflict that would influence the advice given. We would be happy to discuss this and provide further information if required.

Background and scope

At its January 20th meeting, the Local Pension Committee agreed the recommendations of the 2023 review of investment strategy. There were no changes to the target allocation to protection assets, but it was recommended that a review of the structure of the portfolio be undertaken.

The scope of the review includes:

- Mix of protection assets employed
- Regional allocation of capital
- Balance between active and passive management
- Changes required to support climate strategy (high-level considerations only)
- Opportunities to further simplify the portfolio.

Consideration of changes to the target allocation to protection assets was out of scope at this stage. There have been further increases in interest rates and government bond yields since the beginning of the year which may change the attractiveness of protection assets relative to other asset classes, and therefore the optimal portfolio mix. In our experience, the case for material changes in allocation for typical LGPS funds is relatively weak even with protection assets trading at current market levels. But if there are further, sustained increases in interest rates and government bond yields the investment case, will become stronger. We recommend the position on this issue is monitored over the coming months and reviewed fully at the 2024 strategy review. Consideration of alternative protection assets such as asset-backed securities, private debt secured against real assets, gold etc was likewise deferred.

Key findings

The Fund invests in protection assets in order to protect its funding position by reducing investment risk and mitigating the impact of fluctuations in the value of the liabilities. Protection against a range of key risks is also provided by other asset classes in the Fund's diversified portfolio.

We have tested the level of protection provided and conclude that the Fund's overall asset portfolio affords a high-level of protection in most macroeconomic scenarios. A prolonged period of very low yields (real yield below -1.5%) or negative returns on risk assets such as equities would be of concern; we consider the former possible but the latter unlikely.

We believe the Fund's protection assets are generally appropriate, benefit from very competitive fee arrangements, and deliver performance (where the track records are sufficiently long to form definitive conclusions) largely in line with expectations. We see no pressing requirement to materially change the mandates or divest from them.

We found that funding outcomes are relatively insensitive to the specific mix of protection assets employed, but believe there is scope to improve outcomes by allocating equal amounts to ILB and IGC (currently 60% ILB: 40% IGC excluding cash).

The Fund's ILB portfolio consists almost entirely of index-linked gilts, although the mandate allows Aegon to allocate up to 20% in overseas government and corporate bonds. We remain comfortable with this approach, providing the manager uses this flexibility where appropriate to add value and/or provide downside protection, and to confirm that the limits in the mandate provides sufficient flexibility to do so effectively.

The Fund's managers can invest in IGC denominated in sterling and other currencies; the current mix is 44% sterling: 56% other currencies. We are comfortable with the Fund allocating a material proportion of its IGC exposure to overseas bonds.

All the Fund's protection assets are managed actively. We considered alternatives but remain comfortable with the current arrangements.

We remain comfortable with the policy and structure of the Fund's FX hedging arrangements, including both the Aegon FX hedging programme and the hedging performed by underlying managers. But we believe there is scope to apply the policy more consistently across the Fund's portfolio.

Recommendations

In relation to the existing protection assets, we recommend the Fund:

- Adopts a balanced exposure to ILB and IGC, with the former allocated 3.25% and of total Fund assets and the latter 3.75%;
- Defers the reallocation of capital between ILB and IGC until the short-term outlook for the latter improves[1];
- Engages with Aegon regarding its index-linked bond mandate to ensure that the flexibility to invest in overseas bonds is being used to enhance returns and/or improve downside protection at times of market stress;
- Gives further consideration to an appropriate level of FX hedging for the Fund's high yield debt investments, in conjunction with its currency manager and investment advisor, with the final decision on hedging ratio being delegated to Officers and reported back to the Committee at a future meeting.

Considers the proposed changes to FX hedging arrangements detailed in Section 3 which are designed to ensure a more consistent application of the Fund's FX hedging policy. In some cases, the proposed changes could be implemented in several different ways. We therefore recommend the Fund further investigates the available FX hedging options, in conjunction with its currency manager and investment advisor, with the final

[1] Our short-term outlook, as at the end of June 2023, is positive on ILB and neutral on IGC.

decision on which option to adopt being delegated to Officers and reported back to the Committee at a future meeting.

At the next strategy review, we recommend the Fund:

- Reviews the target allocation to protection assets in light of the path of interest rates and government bond yields over the remainder of 2023;
- Considers the case for introducing alternative protection assets to improve the efficiency of the protection portfolio and the level of downside protection it provides.

Decarbonisation of the Fund's protection portfolio may also require focus during 2024. We recommend the Fund considers taking the following actions, which are further explained in Section 4:

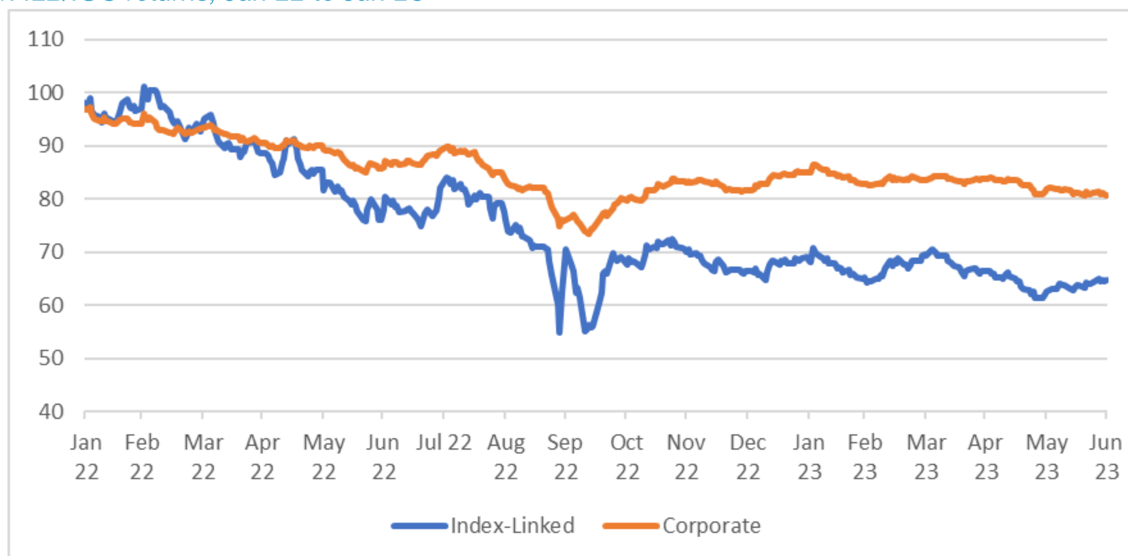
- Work with LGPSC to include corporate bonds in its 2023 climate risk report and index-linked sovereign bonds in the 2024 report;
- Determine an appropriate approach for carbon accounting for the Fund's cash investments and FX hedging programme;
- Further engage with investment managers to ensure they are taking appropriate action on capital reallocation and stewardship to reduce emissions;
- Model the prospective emissions and exposure to climate opportunities of the Fund's protection assets;
- Develop short-/medium-term decarbonisation targets which are consistent with the Fund's long-term Net Zero goal but also realistic given the Fund's baseline position and available investment solutions;
- Consider what further changes (if any) should be made to the protection portfolio in order to deliver the agreed targets.

2 Investment objective

The Fund invests in protection assets in order to protect its funding position by reducing investment risk and mitigating the impact of fluctuations in the value of the liabilities. Current investments include investment grade ("IG") government bonds, corporate bonds, cash and currency derivatives.

Index-linked bonds ("ILB") and investment grade corporate bonds ("IGC") were amongst the worst performing assets during 2022, as Figure 1 below demonstrates. The value of these assets has fallen dramatically as interest rates, inflation and credit spreads have increased.

Figure 1: ILB/IGC returns, Jan-22 to Jun-23[2]



Why are they considered to provide protection? They do so by matching the fluctuations in the value of the Fund's liabilities as inflation expectations and interest rates change. In 2022, higher long-term inflation increased the future cost of benefits but the effect was more than offset by the increase in interest rates and government bond yields. Increases in government bond yields, and the expected return of many asset classes, increases the discount rate applied to the Fund's liabilities, driving down their present value. As a result, it is likely that the Fund's funding position actually improved.

For most of the time since the global financial crisis, however, interest rates fell and remained low, driving up the value of the Fund's liabilities, but also the value of the protection portfolio, thus protecting the funding position.

Protection assets also reduce the overall level of investment risk. They are affected by market volatility in the short-term, but over the long-term they are lower risk because there is a very high likelihood that investors will receive all the interest and principal repayments due.

It should be remembered that it is not only the protection assets which protect the funding position. All the asset classes in the portfolio play a part in mitigating macroeconomic and financial risks to the Fund, such as those illustrated in the diagram below.

[2] Source: DataStream

Macroeconomic risk factors

Financial Risk Factors

Funding impacts

Financial risk factors are grouped into two categories: (1) market risk factors (highlighted in green above) which primarily influence the market value of the Fund's assets and (2) fundamental risk factors (highlighted in blue above) which cause actual economic loss such as credit default. As a long-term investor, the Fund is well placed to "look through" market risk factors though they do influence the price at which assets are bought and sold and can cause actual economic loss if the Fund's investment managers are forced to sell the assets during a market down-turn. Fundamental risk factors are of more concern.

The table overleaf summarises the protection provided **to the funding position** over the long-term by each asset class the Fund invests in (green=strong protection, yellow=moderate protection, blue=some protection, but limited). Points to note:

- All the asset classes in the portfolio play a part in mitigating macroeconomic and financial risks to the Fund.
- Assets with index-linked cashflows, such as certain property and infrastructure assets, provide protection against inflation.
- The equity of companies with market pricing power also benefits from moderate levels of inflation over the long-term.
- Assets paying floating rates of interest, such as private debt and some multi-asset credit strategies, benefit from the higher rates that typically accompany higher inflation.
- Assets denominated in foreign currencies (unhedged) offer further protection because sterling typically devalues during periods of high domestic inflation, thus increasing the local value of overseas assets.
- Equity and real assets benefit from larger populations, producing "excess" returns which may offset the impact of increased longevity.

	Cash[3]	Index-linked Gilts	£ Corporate Bonds	Multi-Asset Credit	Private Debt	Infrastructure	Property	Fundamental risk factors	Listed Equity	Targeted return
Higher Inflation										
Lower asset income										
Credit default										
Increased longevity										
Market risk factors										
Lower interest rates										
Lower valuation multiples										
Wider credit spreads										
Target Allocation (%)	0.75%	4.5%	2.75%	9%	10.5%	12.5%	10%	7.5%	37.5%	5%

Below we use the results of the asset-liability modelling work undertaken to support the 2022 valuation to assess how well protected the Fund is against three key risks: inflation, interest rates and equity returns (which reflect fluctuations in dividend income and valuation multiples). We do so by projecting long-term funding outcomes and the associated metrics for the current strategy: likelihood of success and downside funding level. The likelihood of success is defined as the probability of being fully funded (100% funding position) in 20 years. The downside funding level is defined as the average funding position in 3 years time in 5% of the 5,000 different macroeconomic scenarios considered in our asset-liability modelling, which is a measure of downside risk. Macroeconomic conditions have changed dramatically since the original analysis was undertaken, but we believe the results remain valid. The results are shown in Table 1, 2 and 3[4].

[3] Includes cash held as collateral in the FX hedging programme

[4] Source: Hymans Robertson. The results above are estimated likelihoods of success in 20 years and downside funding levels in 3 years. The modelling above is based on the ALM results that were considered as part of the 2022 strategy work,

Table 1: Sensitivity of funding outcomes to long-term inflation (Headline RPI) rate

Inflation band RPI (%)	All	1	2	3	4	5	6
Greater than	n/a	7.5	4.0	3.0	2.25	1.5	n/a
But less than	n/a	n/a	7.5	4.0	3.0	2.25	1.5
Likelihood of success, 20y[5]	86.5	91.4	86.5	85.1	87.8	87.9	85.4
Downside funding level, 3y[6]	48.8	44.6	47.8	48.5	49.8	49.7	49.0

Table 2: Sensitivity of funding outcomes to long-term real yield

Real yield band (%)	All	1	2	3	4	5	6
Greater than	n/a	2.5	1.5	0.5	-0.5	-2.0	n/a
But less than	n/a	n/a	2.5	1.5	0.5	-0.5	-2.0
Likelihood of success, 20y	86.5	97.7	94.6	89.0	79.6	72.9	44.3

Table 3: Sensitivity of funding outcomes to long-term equity returns

Overseas equity return band (%)	All	1	2	3	4	5	6
Greater than	n/a	9.5	7.0	5.0	2.5	0.0	n/a
But less than	n/a	n/a	9.5	7.0	5.0	2.5	0.0
Likelihood of success, 20y	86.5	99.9	98.5	94.3	85.8	68.1	37.4
Downside funding level, 3y	48.8	58.4	54.1	50.8	48.5	44.9	42.6

The above results demonstrate that the Fund is well protected against long-term inflation rates, although inflation spikes such as the one we are currently experienced, may have a material short-term impact on the funding and cashflow position.

Funding outcomes are more sensitive to long-term real yields, which reflect the market's expectations of interest rates minus inflation over the long-term. This is largely because they directly affect the value of the liabilities (via the discount rate) and are less well hedged by Fund's asset portfolio. However, real yields would only become a material concern if they fell back below -c0.5%. Our latest estimate (March 2023) of neutral, sterling real yields is +c0.5%, but yields could fall well below this if the UK economy reverts to the low growth, moderate inflation and ultra-loose monetary policy state experienced after the Global Financial Crisis.

Funding outcomes are also more sensitive to long-term returns on risk assets such as equities. This is because the Fund relies on them to generate the positive real returns needed to fund its liabilities whilst maintaining an affordable level of contributions. But the results above demonstrate that the Fund is well protected, partly by diversification, unless realised returns are below 2% for an extended period. We consider this possible, given the Japanese experience over the last 30 years, but unlikely.

combining the "current strategy" and "10% de-risk (growth to income)" 50/50 in order to align the modelling closer to the actual current strategy.

[5] The probability of being fully funded in year 2043
[6] The funding level risk in year 2026 (the average of the worst 5% of outcomes)

In summary, we conclude that the Fund’s overall asset portfolio affords a high-level of protection in most macroeconomic scenarios. A prolonged period of very low yields (real yield below -0.5%) or very low returns on risk assets such as equities would be of concern; both are possible but we consider the former more likely than the latter.

3 Current portfolio

Current investments

The protection portfolio comprises index-linked bonds ("ILB"), investment grade corporate bonds ("IGC"), cash and currency ("FX") derivatives used to hedge currency exposure, as shown in Table 4 below:

Table 4: Current investments[7]

Manager	LGPSC	Aegon	Aegon	Cash Funds
Fund	Investment Grade Credit	Index-linked Fund	Short Dated Climate Transition Fund	Pooled cash funds Aegon collateral account
Active/Passive	Active	Active	Active	Active
Benchmark	LGPSC Corp Index + 0.8%	FTSE All Stocks Index Linked Index	SONIA 3 Month +1.25% (GBP)	SONIA 3 Month
Target outperformance	0.80% (rolling 3 year period, net of fees)	0.30% (rolling 3 year period, gross of fees)	1.25% (rolling 3 year period, gross of fees)	0.00%
Target allocation	2.25%	4.5%	0.5%	0.75%
Inception date	Apr 20	Dec 13	Mar 21	Mar 16

Fund currency hedging programme is run by Aegon and is described in more detail below.

The Aegon ILB programme invests in index-linked bonds and aims to out-perform its benchmark by 0.30% p.a. (gross of fees). The manager has the ability to invest in sovereign and corporate issuance globally but the programme is benchmarked against UK index-linked gilts and that is the primary focus. Value is added through duration management, yield curve positioning and issue selection based on relative value, subject to a range of portfolio constraints.

The Aegon Global Short-Dated Climate Transition fund invests in short-dated corporate bonds and commercial paper and aims to out-perform its benchmark (SONIA) by 1.25% p.a. (gross of fees). This benchmark reflects the primary purpose of the fund which is to generate cash plus returns. The manager also aims to achieve a portfolio carbon intensity 30% lower than a specified market index (BoAML Global Large Cap Corporate 1-5y). The investment is held to enhance the returns on capital that would otherwise be held in cash to collateralise the currency hedging programme. Value is added through duration management, currency and issue selection.

Most of the fund's investments are fixed income assets which means it is likely to suffer structural under-performance relative to its floating rate benchmark during a period of rising interest rates (albeit less so than longer duration strategies would). Some asset owners address this issue by introducing a secondary benchmark, often a market index, but this can reduce the clarity of the investment objective and introduce additional complexity in performance reporting. We prefer the simpler approach of a single floating rate benchmark which reflects the primary purpose of the fund and focusing on relative performance over the longer-term.

The LGPSC Investment Grade Credit fund invests in global, investment-grade corporate bonds (Developed Markets only), split approximately 50% Sterling:50% non-Sterling issuance. The aim is to out-perform its benchmark by 0.80% p.a. (net of fees) on a rolling 3 year basis. Capital is split equally between Fidelity and Neuberger Berman, both of which are large, well-resourced and well-regarded fixed income managers. We remain comfortable with the process LGPSC employed to select these managers.

[7] Source: Q1 2023 manager reports; investment managers

A multi-manager approach can improve the resilience of returns, across different market environments, providing the underlying managers pursue differentiated and complementary investment strategies. That appears to be the case here:

- Fidelity's approach combines top-down (macro economic) and bottom-up (fundamental credit and relative value analysis) inputs and seeks to add value through country/currency, sector, issuer/capital structure selection as well as duration management and yield curve positioning;
- Neuberger Berman is a value manager. It avoids introducing macro-economic tilts into the portfolio and focuses instead on stock selection based on value, absolute and relative, and fundamental credit analysis.

Both managers run well diversified portfolios: Fidelity held 388 securities as at 31 March 2023, Neuberger Berman 462. Both managers integrate ESG factors into their investment processes. The differences in approach are reflected in the different composition of each sub-portfolio as shown in Table 5 below:

Table 5 Portfolio composition by manager, as at 31 March 2023[8]

		Fidelity	Neuberger Berman
Asset type	ABS	0.00	0.00
	Sovereign	10.00	0.00
	Supra-national	0.00	0.00
	Corporate	86.30	95.50
	Other/cash	3.70	4.50
Issuer location	North America	27.20	42.50
	Europe (ex UK)	37.40	22.90
	UK	31.60	28.00
	Japan	0.70	1.10
	Asia Pacific (ex Japan)	3.40	0.90
	EM	0.00	0.00
	Other/cash	-0.30	4.60
Credit rating	AAA	4.20	1.30
	AA	6.20	7.00
	A	23.10	43.40
	BBB	62.10	45.70
	BB<	0.20	0.00
	Unrated	0.50	0.00
	Other/Cash	3.70	2.60
Sector split	Basic Materials	0.70	2.70
	Communications	3.50	10.30
	Consumer Cyclical	7.50	5.40
	Consumer Non-cyclical	7.60	8.70
	Diversified	0.00	0.00
	Energy	0.50	4.10
	Financial	54.30	46.10
	Funds	0.00	0.00
	Governments	8.60	0.00
	Industrial	1.70	1.00
	MBS	0.00	0.00

[8] Source: LGPS Central

	Technology	0.90	5.20
	Utilities	10.90	12.00
	Cash	3.70	4.50[9]

We considered the case for adding a third manager to further diversify strategy risk. We do not believe this is necessary for a fund which focuses on corporate bonds. There is potentially a case for adding a specialist manager or lower risk multi-asset credit manager to provide exposure to alternative protection assets such as ABS or investment grade loans, but we recommend the Fund reviews its appetite for such assets before asking LGPSC to extend its mandate and/or considering third party solutions.

In summary, we believe the Fund's ILB and IGC investments are generally appropriate and benefit from very competitive fee arrangements, although it should be noted that these mandates are customised to the Fund's requirements which makes cost benchmarking inherently challenging.

FX hedging programme

The Fund invests globally and therefore has FX exposure in many of its investments. We understand current policy is to:

- Fully hedge FX exposure on debt investments, in both public and private markets;
- Hedge a proportion of FX exposure on equity and real asset investments;
- Currency exposure is not hedged if it is being actively managed as a source of added value (as is the case in some targeted return strategies for example);
- Rely on underlying managers to hedge FX exposure where possible, in order to reduce hedging costs and operational risks to the Fund
- Employ a specialist currency manager (Aegon) to run a standalone programme to hedge the remaining FX exposures where it is practical and cost effective to do so.

We are supportive of the above policy. We generally recommend fully hedging debt investments so as to avoid currency volatility swamping their returns and, in particular, the stable income streams they generate. Debt investments with contractual cashflows are also easier to hedge than equities. FX exposure can under certain circumstances diversify other risks, so some exposure via the Fund's equity and real asset investments can add value at a portfolio level. We recommend setting the target hedge ratio at 30% so as to minimise overall risk.

High yield debt investments such as multi-asset credit and private debt do not fit neatly into the above framework. They are debt investments and the Fund invests in them for the stable income streams they generate. But their returns are closer to those of equities, so can "tolerate" a degree of currency volatility. Deciding on an appropriate level of FX hedging is therefore more challenging and should take into account the Fund's beliefs and appetite for currency risk and existing hedging arrangements at underlying manager level. We recommend the Fund gives this further consideration, in conjunction with its currency manager and investment advisor, with the final decision on hedging ratio being delegated to Officers and reported back to the Committee at a future meeting.

[9] Source: Email from LGPSC 9 June 2023 and email from Aegon on 8 June 2023

FX hedging can be operationally complex and expensive so a pragmatic approach is essential. As a result, the Fund employs different arrangements across the portfolio, as shown in Table 6 below.

Table 6: FX hedging arrangements[10]

Mandate	FX exposure (Y/N)?	FX hedged (Y/N)?	Target hedge ratio	Hedging provider
L&G Passive Equity	✓	✓	30%	Aegon
LGPSC Global Eq Active Multi manager Fund	✓	✓	30%	Aegon
LGPSC EMM Eq Active Multi manager Fund	✓	✓	30%	Aegon
LGPSC AW Eq Climate Multi Factor Fund	✓	×	-	-
Aspect Capital Partners	✓	✓	c100%	BNY
Pictet	✓	✓	Set to deliver 80% £ exposure	Pictet
Ruffer	✓	FX actively managed	n/a	Ruffer
Adams Street	✓	USD only 72% AUM	30%	Aegon
LGPSC PE Fund 2018 & 2021	✓	×	-	-
Aberdeen Standard PE Fund	✓	USD only 41% AUM	30%	Aegon
JPM Infra Fund	✓	USD only 42% AUM	30%	Aegon
IFM Global Infra Fund	✓	USD only 47% AUM	30%	Aegon
KKR Global Infra Fund	✓	✓	30%	Aegon
Stafford Timberland Fund	✓	USD only 41% AUM	30%	Aegon
LGPSC Infra Core/Core +	✓	×	-	-
Quinbrook Net Zero Power Fund and Co-Investment Fund	✓	×	-	-
Colliers Pooled Fund	×	×	-	-
Colliers Direct property	×	×	-	-
La Salle Fund	✓	✓	100%	La Salle
Kames Capital II Fund	×	×	-	-
LGPSC Multi-Asset Credit Fund	✓	✓	90%-100%	LGPSC
LGPSC Global Active EMM Bond Multi manager Fund	✓	✓	90%-100%	LGPSC
CRC - CRF 3 and CRF 5	✓	✓	30%	Aegon
M&G DOF	✓	✓	100%	M&G
Partners Group Fund	✓	✓[11]	95% - 110%	Partners Group
LGPSC PD Low Return I	✓	×[12]	-	-
LGPSC PD High Return I	✓	×[12]	-	-
LGPSC PD Real Assets I	✓	×[12]	-	-
Aegon Index-linked	×	×	-	-
Aegon Global Short Dated Climate Transition Fund	✓	✓	100%	Aegon
LGPSC Inv Grade Credit Fund	✓	50% AUM non-sterling exposure	90%	LGPSC

[10] Source: LCCPF, Aegon, LGPS Central, other investment managers
[11] At managers discretion
[12] Some currency exposure is already hedged by the underlying managers appointed by LGPSC

The Aegon FX programme aims to hedge a proportion of FX exposure (the "hedge ratio") on a subset of the Fund's equity and real asset investments as shown in the table above. The programme currently covers £1.9bn of FX exposure, with 18 foreign currencies hedged, and the remainder to which the Fund has minimal exposure left unhedged.

The target hedge ratio was reduced from 50% to 30% in April 2021. The aim of the change was to improve investment outcomes, given that a degree of currency exposure can improve portfolio diversification, but too much can swamp the returns generated by the underlying investments.

The primary aim of the programme is downside protection, but the manager is mandated to vary the hedge ratio actively for each currency with the aim of adding value. The ratio can be varied between 0 and 100%. The manager employs a process which combines quantitative analysis and qualitative assessment of factors such as macroeconomic developments, currency risks and correlations with other asset classes, valuations, and technical factors to determine appropriate hedge ratios. The hedge ratio is likely to be reduced below 30% where the currency is cheap (relative to sterling), local monetary policy is easing, currency returns are negatively correlated with equities and/or hedging costs are excessive.

Although the manager has the flexibility to vary the hedge ratio, this remains a strategic hedging programme not a currency trading strategy, with positions typically being held for some time.

We remain comfortable with the policy and structure of the Fund's FX hedging arrangements, including both the Aegon FX hedging programme and the hedging performed by underlying managers. But we recommend the Fund considers the following changes which are designed to ensure a more consistent application of the Fund's hedging policy:

Mandate	Action	Possible hedging providers
LGPSC AW Eq Climate Multi Factor Fund	Request sterling hedged ("GBPh") share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio 30%)	Aegon or LGPSC*
Adams Street	Confirm no GBPh share class to be offered by the manager Extend Aegon FX programme to cover all main currencies	Aegon
LGPSC PE Fund 2018 & 2021	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio 30%)	Aegon or LGPSC*
Aberdeen Standard PE Fund	Confirm no GBPh share class to be offered by the manager Extend Aegon FX programme to cover all main currencies	Aegon
JPM Infra Fund	Confirm no GBPh share class to be offered by the manager Extend Aegon FX programme to cover all main currencies	Aegon
IFM Global Infra Fund	Confirm no GBPh share class to be offered by the manager Extend Aegon FX programme to cover all main currencies	Aegon
Stafford Timberland Fund	Confirm no GBPh share class to be offered by the manager Extend Aegon FX programme to cover all main currencies	Aegon
LGPSC Infra Core/Core +	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio 30%)	Aegon or LGPSC*
Quinbrook Net Zero Power Fund and Co-Investment Fund	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio 30%)	Quinbrook or Aegon*
LGPSC PD Low Return	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio TBD)	Aegon or LGPSC*
LGPSC PD High Return	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio TBD)	Aegon or LGPSC*
LGPSC PD Real Assets	Request GBPh share class from manager Otherwise extend Aegon FX programme to cover this investment (target hedge ratio TBD)	Aegon or LGPSC*

Aegon Index-linked	Extend Aegon FX programme to cover this investment if exposure to non-£ bonds increases	Aegon*

*Note: In the cases asterisked above, the Fund may have the option to implement FX hedging in several different ways. Our preference would be to use currency hedged share classes in the underlying funds, if the managers (LGPSC and Quinbrook) were willing to make these available, as this reduces costs and operational risks to the Fund If not, Aegon has indicated that they would in principle be able to extend their hedging programme to cover these exposures. The choice will depend on the availability of hedged share classes in the underlying funds, switching costs, ongoing fees legal and other considerations. We therefore recommend the Fund further investigates the available FX hedging options, in conjunction with its currency manager and investment advisor, with the final decision on which option to adopt being delegated to Officers and reported back to the Committee at a future meeting.

As manager of the FX hedging programme, Aegon will be required to post collateral from time to time. Aegon recommend holding collateral equal to 5% of gross exposure (for listed assets, potentially more for private markets assets) in the form of cash, cash equivalents or gilts. The Fund currently holds sufficient capital in the collateral account, Global Short-Dated Credit and Index-linked Bond funds managed by Aegon and its pooled cash funds to meet collateral requirements for the programme, both as it is currently scoped and even if all the changes suggested above were implemented.

The fees the Fund has negotiated in respect of the FX programme are competitive, although it should be noted that this programme is customised to the Fund's requirements which makes cost benchmarking inherently challenging.

Performance

Table 7: Performance, last 12m and since inception, as at 31 March 2023[13]

Manager		LGPSC	Aegon	Aegon
Fund details	Fund	Investment Grade Credit	Index-linked Fund	Short Dated Climate Transition Fund
	Benchmark	LGPSC Corp Index + 0.8%	FTSE All Stocks Index Linked Index	SONIA 3 Month +1.25% (GBP)
	Target outperformance	0.80%	0.30%	1.25%
	Inception date	Apr 20	Dec 13	Mar 21
Performance (% p.a.)	Absolute performance 12m	-10.8	-26.1	-1.1
	Absolute performance SI	-3.5	4.6	-1.1
	Relative performance 12m	-1.8	0.6	-5.1
	Relative performance SI	-1.6[14]	0.4[15]	-3.9[16]
	Performance vs peer group 12m	n/a[17]	3.5 (4th quartile)	-0.1 (2nd quartile)
	Performance vs peer group SI	n/a	1.8 (outperformed peer group)	0.1 (3rd quartile)
Risk(%p.a.)	Tracking error SI	n/a[18]	2.3	2.7

Note: as previously, we have identified discrepancies between manager and Portfolio Evaluation performance reporting. We have used the PEL report for all the managers and added the discrepancies in a footnote.

The performance of the LGPSC Investment Grade Credit fund since inception, relative to benchmark, has been somewhat disappointing but the fund is relatively young and the last 18 months have been a period of extraordinary volatility in bond markets. We believe it is still too early to take action on the basis of performance to date. The Aegon Index-linked Fund has performed in line with expectations. The Aegon Global Short-Dated Climate Transition fund has performed poorly relative to its benchmark, for the reasons outlined above, but in line with its peer group.

Looking at the returns generated by the FX hedging programme on a standalone basis provides a rather misleading view on performance. For example, when sterling weakens significantly, as it has in recent years, material losses will be reported for the programme. However, these will be offset by material gains in the sterling value of assets denominated in foreign currencies. A better measure of performance is the profit (or loss) generated by the manager as a result of varying the hedge ratios for each currency away from the target 30%. A profit shows that the manager has correctly decided to over (under) hedge a currency which subsequently fell

[13] Source: Absolute and relative performance, Portfolio Evaluation report. Performance vs peer group: eVestment. Both as at 31 March 2023.

[14] LGPSC report relative performance of -0.3% p.a. since inception

[15] Aegon report relative performance of +0.8% in the last 12m and -0.1% p.a. since inception

[16] Aegon report relative performance of -3.3% in the last 12m and -2.2% p.a. since inception

[17] Custom benchmark, so no comparable peer group exists

[18] Source: Aegon. LGPS Central do not publish tracking error for the overall fund

(increased) in value and that overall currency risk has been managed appropriately. Performance on this basis is shown in Table 7 below.

Table 8: Profit and loss relative to neutral hedging position, as at 31 March 2023[19]

Return, %p.a. as at 31 March 2023	Last 12m	Since Inception
FX hedging programme	+0.02	+0.91

The table shows that the manager has added value of 0.91% p.a. since inception (January 2014). This is a good result for an active FX programme with fairly tight exposure limits and low turnover.

Conclusions

In summary, we believe the Fund's protection assets are generally appropriate, benefit from very competitive fee arrangements, and deliver performance (where the track records are sufficiently long to form definitive conclusions) largely in line with expectations. We see no pressing requirement to materially change the mandates or divest from them.

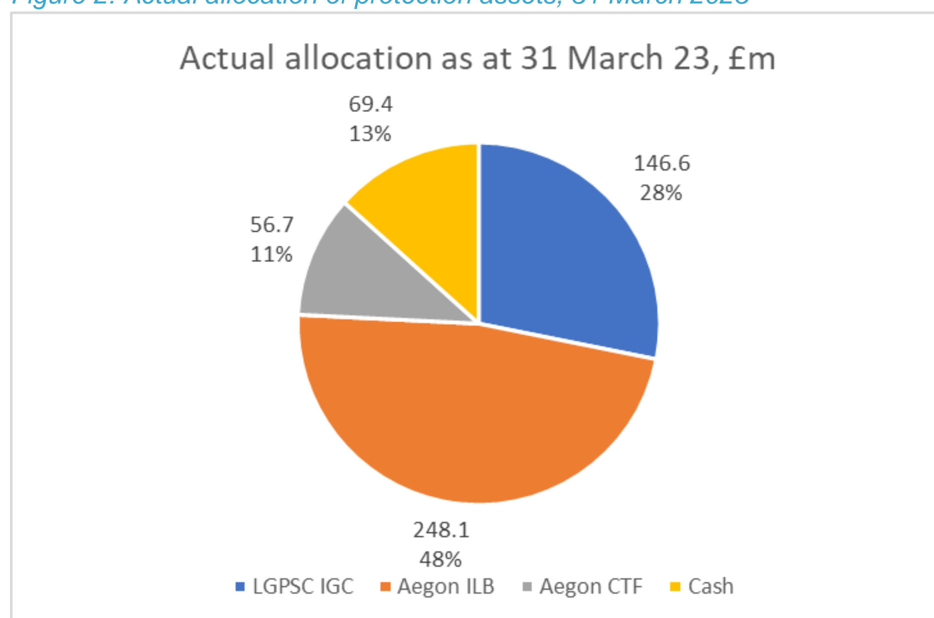
[19] Source: Aegon Q1 2023 investment report

4 Review of structure

Asset mix

The protection assets portfolio currently comprises index-linked bonds (predominantly UK sovereign issuance), investment grade corporate bonds and cash, split as shown in Figure 2. Derivatives are also held for FX hedging.

Figure 2: Actual allocation of protection assets, 31 March 2023[20]



The optimal mix of ILB (and nominal government bonds), IGC and cash is sensitive to the interaction between the Fund's asset portfolio and liabilities and can best be determined by asset-liability modelling. In Q4 2022, we conducted such modelling to determine the optimal mix for an LGPS fund with an asset allocation similar to the Fund. The modelling projects long-term funding outcomes over 5,000 different macroeconomic scenarios. We found that funding outcomes are relatively insensitive to the specific mix of typical protection assets but a portfolio of two-thirds IGC, one-third ILB (sovereign issuance) offers the best prospective outcomes.

The target allocation of the Fund's protection assets (excluding cash) is currently 62% ILB: 38% IGC. We therefore believe the proportion allocated to IGC should be increased. We note that Aegon has the ability to invest in index-linked corporate bonds, although Aegon confirms that exposure to date has been limited. Furthermore, our current tactical view (see Appendix 2) is more positive on ILB than IGC, largely due to the inflation protection the former offers especially at a time of elevated inflation risk. We therefore recommend increasing the IGC exposure to only 50%, with the remainder allocated to ILB. We consider the timing of the reallocation in Section 5.

Alternative protection assets

The Fund could also consider alternative protection assets that would provide further diversification, such as:

- Green bonds issued by large corporates, governments and supranational bodies to finance specific sustainability projects. The credit risk is typically the same because interest and principal repayments are funded from the issuers' general operating cashflow, and the yield is often but not always marginally lower than for conventional bonds;

[20] Source; Portfolio Evaluation report, Q1 23

- Real Asset-backed IG Senior Debt comprises loans which finance major capital assets such as commercial property and infrastructure and are structured to achieve a risk profile equivalent to investment grade. The Fund has existing exposure to such debt via the LGPS Central Credit Partnership programme but the assets in the programme will typically be sub-investment grade and therefore riskier;
- Asset-backed securities are issued by financial institutions to finance a pool of underlying assets, e.g. residential mortgages or consumer loans. The securities pay a coupon (fixed or floating rate) funded from the income generated by the asset pool and are secured against it. The securities are typically tranched and the senior tranches will usually be rated investment grade.
- Gold has traditionally been seen as the ultimate protection asset and can now be readily accessed by institutional investors;
- Absolute return bond strategies are active investment strategies which seek to generate cash + 2-3% returns by taking long and short positions in global fixed income markets. The Fund may at times already have exposure via its Targeted Return mandates;
- Equity protection strategies use derivatives to protect against a significant fall in equity markets over a specific period. Typically structured to protect against falls in the range 10-30% and are funded by foregoing a proportion of any rise in equity markets (e.g. above 7%). Ongoing protection can be provided by “rolling” the underlying derivatives but the costs and complexity of maintaining such programmes can be significant.

The rationale for investing in such assets, and the potential applicability to the Fund are summarised in the table below:

Alternative Protection Assets	Investment Rationale	Potential Applicability to LCCPF
Green Bonds	Increased exposure to projects which improve the sustainability of the global economy. Comparable risk to conventional bonds, but small yield discount. The case for investing in such assets therefore depends on short-term relative value opportunities and/or greater environmental/social impact	Low/moderate – would support the Net Zero goal; adds portfolio complexity.
Real Asset-Backed IG Senior Debt	Exposed to somewhat different income streams than corporate bonds, so may diversify credit risk. Typically provide a yield pickup. Security over tangible assets typically improves recovery rates in the event of default. Inflation-linked in some cases.	High – existing exposure to higher risk loans but a separate allocation to investment grade debt (both via the LGPS Central Credit Partnership) is potentially worth considering in the future.

Asset-backed securities (Senior Tranches)[1]	Exposed to somewhat different income streams than corporate bonds, so may diversify credit risk. Typically provide a yield pickup. Floating rate in some cases, which affords some inflation protection.	Moderate – LGPS Central Corporate Bond may at times provide some exposure, but a separate allocation is potentially worth considering.
Gold	Hedges inflation over the long-term, but the costs of maintaining the position (carry) and opportunity costs (generates no income) are significant. Can experience prolonged periods of under-performance and volatility..	Low/moderate – but likely to offer protection against certain tail risks such as a complete loss of confidence in sterling or collapse in financial markets.
Absolute return bond strategies	Returns are in theory uncorrelated with fixed income markets, therefore offer potential diversification.	Low – perform better when markets are volatile, but are hard to execute well, have significant tail risks and require strong oversight.
Equity protection strategies	Protects against a significant fall in equity values, but at the expense of foregoing a proportion of the equity upside.	Low – offers protection over the short-term (up to 2 years) providing derivative market pricing is conducive. Not recommended for long-term investors.

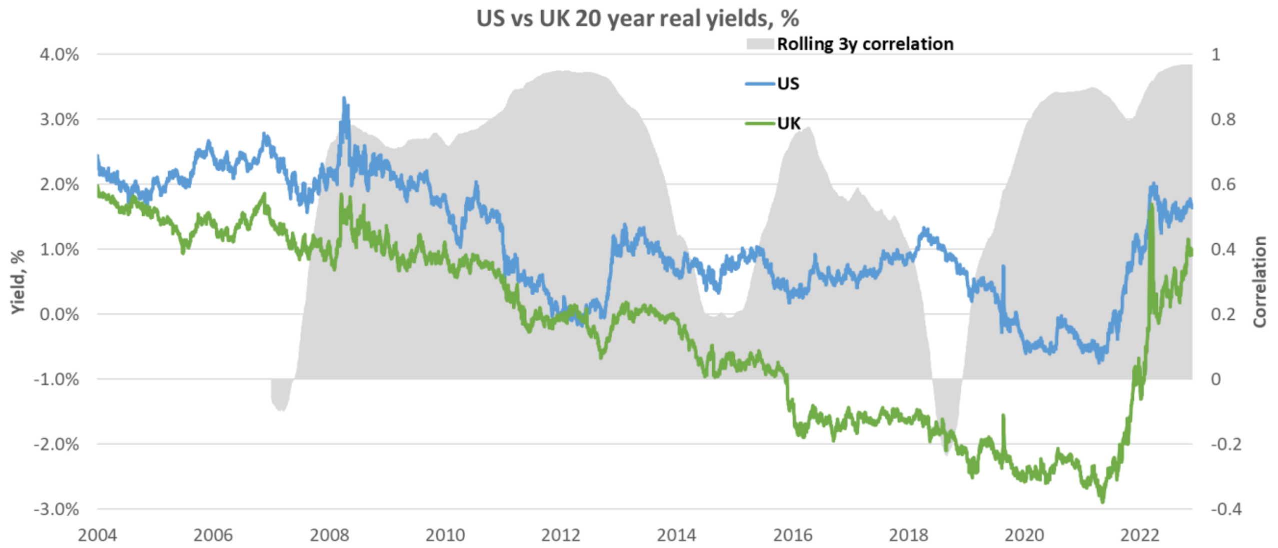
Introducing some of asset classes, where appropriate, would further diversify the portfolio and potentially improve risk-adjusted returns. However, it would also increase portfolio complexity and so we do not recommend an allocation at this stage. These are opportunities that would require further consideration, perhaps at a future strategy review.

Geographic allocation

LGPS funds have traditionally focused their sovereign bond portfolios on the UK, and for good reasons. They provide a better match with funds' sterling liabilities and returns are usually highly correlated with bonds issued by other Developed Market sovereigns (see Figure 3), especially once currency risk is hedged. However, correlations can fall at times of market stress, and it can then be helpful to have some exposure to overseas bonds.

The Fund's index-linked bond programme is benchmarked against an index-linked gilt index (FTSE Index-Linked Gilts All Stocks), but the mandate allows Aegon to allocate up to 20% in overseas bonds and the manager has the capability to do so. In practice, the manager has focused on index-linked gilts. We recommend the Fund engages with the manager to ensure overseas bonds are being used where appropriate to add value and/or provide downside protection, and to confirm that the limit in the mandate provides sufficient flexibility to do so effectively.

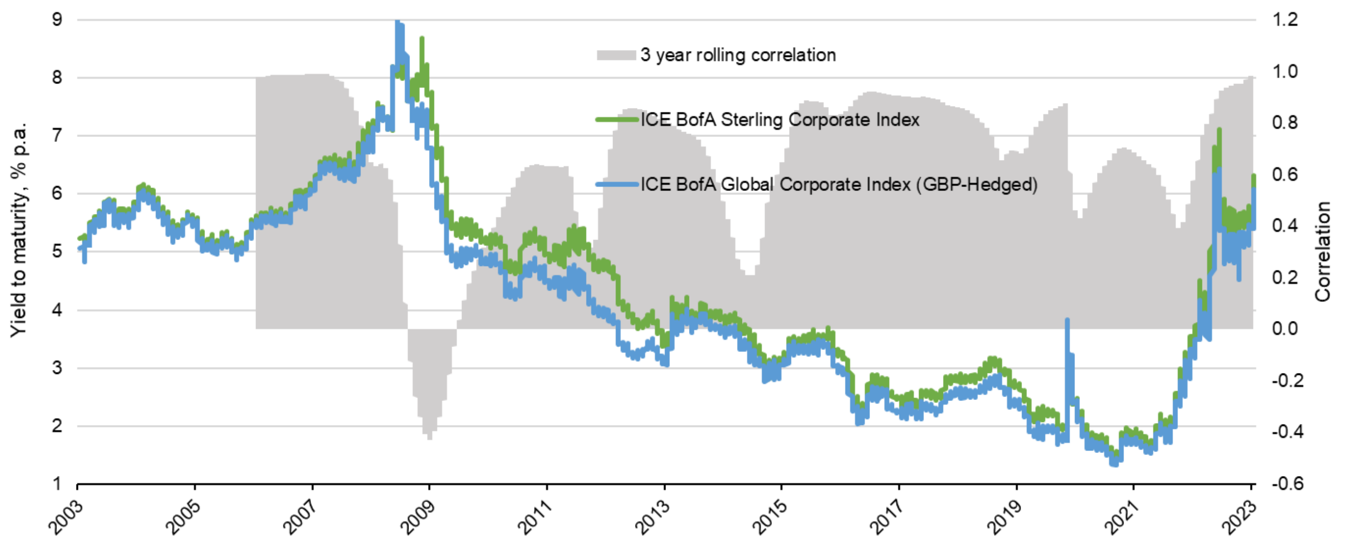
Figure 3: US vs UK real yields[21]



Geographic diversification in IGC has two dimensions: currency of issue and issuer domicile/geographic reach. Both are important as multi-national companies (such as International Airlines Group) typically have operations in many countries and issue bonds in multiple currencies. Credit markets are usually segmented by currency of issue and we consider the case for diversification on this basis too.

Like government bonds, sterling and overseas corporate bond yields are usually highly correlated, but correlations can fall during periods of economic/market stress (see Figure 4).

Figure 4: Sterling vs Global (hedged) IG corporate bond yields [22]



[21] Source: Bloomberg
[22] Source: ICE

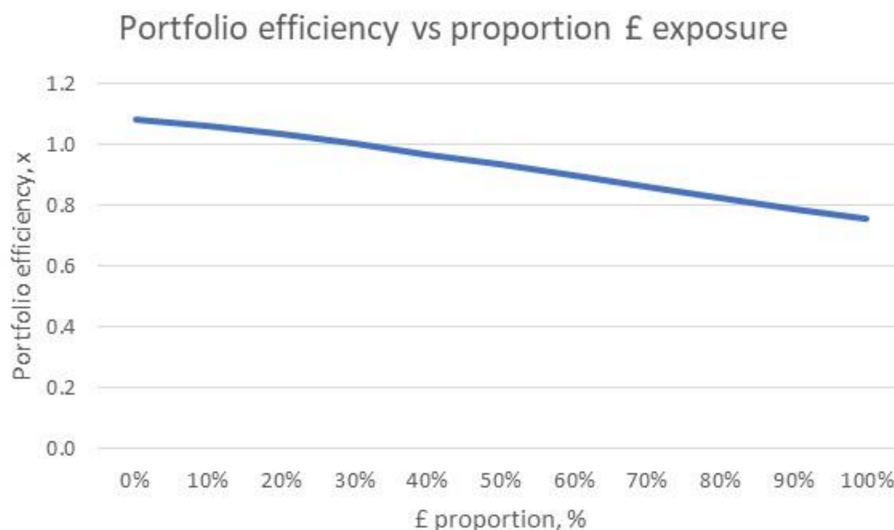
At such time the ability to invest in overseas credit can diversify risk. It also:

- Substantially increases the size of the opportunity set;
- May also improve liquidity;
- Enables active managers to exploit relative value opportunities such as credit spread differentials on bonds from the same issuer.

The net result can be to improve portfolio efficiency. Portfolio efficiency is defined as the return generated per unit of risk taken, and is a measure of risk-adjusted returns. The higher the efficiency the better.

We have tested the impact of varying the proportion of credit allocated to Sterling vs overseas issuance on portfolio efficiency. The results are shown in Figure 5 below for the period 01/01/97 to 31/05/23 but are insensitive to the observation period chosen. Past performance is an imperfect guide to future investment outcomes, but the results suggest that portfolio efficiency increases as the proportion of credit allocated to non-sterling bonds increases. We therefore recommend that the Fund does allocate a material proportion of its IGC exposure to overseas bonds, noting however that the analysis undertaken is insufficient to set a particular percentage.

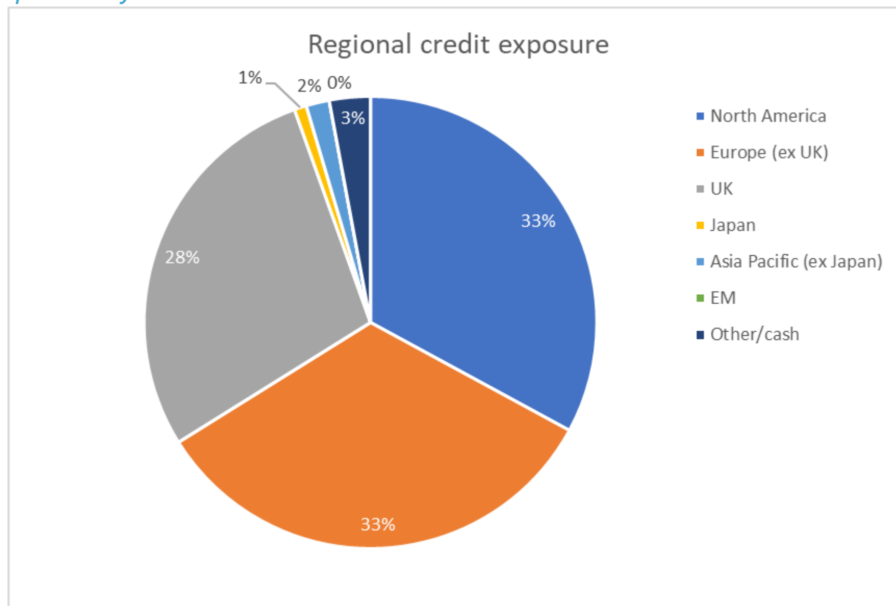
Figure 5: Portfolio efficiency vs the proportion allocated to sterling credit, 01/01/97 – 31/05/23[23]



The Fund invests in IGC via the LGPSC Investment Grade Credit and Aegon Global Short-Dated Climate Transition funds. LGPSC allocates 50% to sterling credit, 50% to overseas credit but the underlying managers have the flexibility to vary geographic allocations within their respective mandates. Aegon has the flexibility to allocate globally without restriction, but currently allocates 70% to overseas credit. The combined exposure to overseas credit is 56% and the portfolio is also well diversified by issuer domicile as shown in Figure 6 below. This allocation seems reasonable. A larger allocation to overseas credit could be justified, but we see not pressing need to change the current structure.

[23]Source: ICE monthly index returns from Jan 1996 to May 2023 and Hymans Robertson calculations

Figure 6: Credit exposure by issuer domicile[24]



Active vs passive management

Credit. Like listed equities, IGC mandates can be managed actively or passively. We believe the case for active management in IGC is stronger than it is in listed equities, for the following reasons:

- There are wide range of ways to add value through active management in corporate credit. The most important is by avoiding issuers which default. Losses are realised when issuers default, whereas in listed equity markets, there is a chance that underperforming stocks will bounce back.
- Active management also allows ESG considerations to be taken into account in security selection.
- Conventional corporate bond indices have intrinsic flaws. They give more weight to the most indebted companies which all other things being equal are more likely to default. Active managers can reduce this risk.
- It is fairly common for issuers to be ejected from the relevant index following a rating downgrade which means passive investors are forced to sell at the wrong time and forego returns if the issuers' ratings improve. It has been estimated that this costs passive investors 30bps p.a. in returns[25].
- Most corporate bond indices have multiple bonds from the same issuer which means it is very hard for passive investors to fully replicate the indices. As a result, their portfolios may not be fully representative of the index they are tracking.
- Tracking indices with large numbers of bonds requires more trading, particularly when tracking short-duration bond indices. Lower liquidity means each trade is more expensive than in listed equity markets. Together, these factors mean higher transaction costs for passive funds.

Passive management strategies do have some benefits, such as lower fees and less manager risk, and buy-and-maintain credit strategies now exist, which combine some of the advantages of both fully active and passive management approaches.

In a buy-and-maintain strategy, the manager invests in high-quality bonds with the focus on issuers who have a very high likelihood of meeting all interest and principal repayment obligations in full, and bonds with highly

[24] Source: manager reports
[25] "Leaving Money on the Table", Kiesel and Dragesic, PIMCO Global Credit Perspectives, May 2017

predictable payment profiles (ie no optionality). The manager continues to monitor credit quality but the bonds are usually held to maturity, unless the credit quality of the issuer deteriorates sharply, which means transaction costs and management fees are lower than for fully active strategies. Buy-and-maintain funds can be managed to a defined term or on a rolling maturity ("evergreen") basis, although the latter requires continual re-investment which increases costs. The strategies are typically benchmark-agnostic which provides the flexibility to vary geographic and sector allocation so as to minimise credit risk.

The advantages of the buy-and-maintain approach are:

- Highly predictable cashflows which allows solutions to be designed with cashflow profiles that match liabilities;
- Allows investors to "lock in" current yields which are high relative to recent history;
- Strong downside protection – minimises the default risk inherent in passive strategies, and reduces the manager risk associated with fully active strategies;
- Lower turnover than fully active or passive strategies, so transaction costs are lower too;
- Lower management fees than fully active strategies (typically 10-15 bps p.a. for institutional size commitments).

Buy-and-maintain strategies are popular with investors following a cashflow-driven investment style who typically invest via segregated accounts. Pooled funds are also available for investors who are less concerned with meeting immediate cash needs, but value the other benefits of the approach.

Both the LGPSC Investment Grade Credit and Aegon Global Short-Dated Climate Transition funds employ fully active strategies. Given the above arguments, we are comfortable with this approach. We considered an allocation to an evergreen buy-and-maintain strategy for say 25% of total IGC exposure but would not recommend it at this stage, for the following reasons:

- The Fund's liquidity position remains strong so there is no pressing need to adopt a cashflow-driven investment style;
- There is nothing stopping LGPSC and its underlying managers locking in current high yields, although we accept that this would involve the managers taking significant duration risk which is not the main focus of their investment strategies (especially for Neuberger Berman);
- We remain comfortable with the investment strategies and managers of both existing credit funds;
- Performance since the Fund invested has been somewhat disappointing, but the outlook for both funds is more positive for the reasons outlined in Section 3 above;
- We have no concerns about the level of active risk being taken by the two managers;
- Management fees on existing funds are already comparable with those typically charged by buy-and-maintain credit managers;
- A 25% allocation would represent less than 2% of total Fund assets so the potential impact on overall investment outcomes is unlikely to be sufficient to justify the additional complexity.

Index-linked bonds. The ILB market is generally considered to be large, liquid and efficient and therefore unsuitable for active management. However, the market is dominated by insurers and corporate pension funds which tend to buy and hold assets, thereby reducing liquidity, and invest to match liabilities rather than maximise returns. We also note that the primary issuance market is not completely efficient, particularly when the UK

government is issuing large volumes of debt. These features create opportunities for active managers. Active managers can also exploit off-benchmark opportunities such as overseas sovereign and corporate index-linked bonds.

The Fund's ILB programme is actively managed. Performance since inception has been similar to the benchmark since inception (relative return +0.4%% p.a.[26]) is in line with expectations and the level of active risk being taken has been fairly low too (tracking error 2.3% p.a.). Subject to the observations made in Section 3, we remain comfortable with the investment strategy employed by the manager. On that basis, we recommend the Fund retains the current approach.

Climate change implications

Full consideration of the implications of climate change on the Fund's protection portfolio, and the actions that may need to be taken to achieve the Fund's Net Zero objectives, was outside the scope of this review. However, we outline below some of the issues the Fund may need to consider.

The climate risk profile of listed IGC can be quite different from large cap listed equities, largely due to differences in sector composition of the related market indices, see Table 9. The climate risk of the Fund's ILB investments reflects GHG emissions in the wider UK economy; there is nothing the Fund can do unilaterally to decarbonise this part of its portfolio.

Table 9: Climate metrics for selected asset classes[27]

Asset class	£ credit	UK equities	Global credit	Global equities
WACI, tC02e	81.2	103.2	240.0	149.7
Green revenues, %	5.1	2.7	3.4	5.3

It follows therefore that decarbonisation of the protection portfolio, though it accounts for only 8% of total Fund assets, will require focus during 2024 .

Carbon footprinting of listed credit has historically lagged listed equity despite the issuers being largely the same. Aegon reports emissions and emissions intensity for the Global Short-Dated Climate Transition fund, but the LGPSC Investment Grade Credit fund has not yet been benchmarked.

The availability of investment solutions which accelerate decarbonisation has likewise been more limited in listed credit than listed equity. This is changing and we are aware of managers offering products in the following categories:

- ESG-tilted passive strategies tracking indices in which capital is tilted away from high emissions companies and/or towards those with significant involvement in sustainable products and services.
- ESG-integrated active strategies in which managers are required to take ESG factors into consideration in their investment processes. Both LGPSC and Aegon's IGC strategies fall into this category.
- ESG-thematic active strategies in which managers use sustainability themes including climate change to guide their search for investment opportunities. In this category, delivering financial returns remains the primary objective.

[26] Source: Portfolio Evaluation, 1Q23. Note: the manager reports a relative return since inception of -0.13% p.a.

[27] Source: MSCI, 2023 except global credit (2022). Indices used are FTSE All Share, MSCI All World, Barclays Global Aggregate, ICE BoA Sterling non-gilt

- ESG-impact funds which pursue strategies with dual objectives of delivering financial returns and achieving sustainability impacts. Some strategies in this category require a trade-off between financial returns and sustainability impact: this may be because of an over-supply of capital or because the impacts targeted are inadequately rewarded (more common in social impact strategies).

The potential impact on ESG/climate metrics increases across this spectrum, with ESG-tilted passive typically offering the lowest impact and ESG-impact strategies the greatest. All are potentially applicable to the Fund, although the trade-off between financial returns and sustainability impact inherent in some ESG-impact strategies can be challenging for LGPS funds given the fiduciary obligations to ensure financial returns are sufficient to meet benefit payment obligations at all times.

Given the above, we recommend the Fund considers taking the following actions regarding the decarbonisation of its protection portfolio:

- Work with LGPSC to include corporate bonds in its 2023 climate risk report and the index-linked sovereign bonds in the 2024 report, taking into account the new guidance from the Assessing Sovereign Climate-Related Opportunities and Risks initiative (ASCOR) on accounting for sovereign GHG emissions;
- Determine an appropriate approach for carbon accounting for the Fund's cash investments and FX hedging programme;
- Further engage with investment managers to ensure they are taking appropriate action on capital reallocation to reduce portfolio emissions, and are engaging with underlying issuers to achieve real-world emissions reductions, drawing where appropriate on new guidance on stewardship provided by the Institutional Investors Group on Climate Change;
- Model the prospective emissions and exposure to climate opportunities of the Fund's protection assets taking into account the changes proposed by this review and the "organic" decarbonisation rate of the markets in which the Fund invests;
- Develop short-/medium-term decarbonisation targets which are consistent with the Fund's long-term Net Zero goal but also realistic given the Fund's baseline position and available investment solutions
- Consider what further changes (if any) should be made to the protection portfolio in order to deliver the agreed targets.

5 Implementation

Summary of proposed changes

Table 10 below summarises revised target allocations for the Fund's protection portfolio. At this stage, only one change is being recommended: a reallocation of capital of 1% of total Fund assets from the Aegon Index-linked Bond programme to the LGPSC Investment Grade Credit fund.

The change fine-tunes the balance between the protection against higher than expected long-term inflation provided by the former and the higher yield generated by the latter, and is expected to improve long-term funding outcomes. It is also supportive at the margin of the Fund's pooling objective.

In addition, a number of potential changes to the Fund's currency hedging arrangements have been identified, but these require further investigation with the Fund's managers before they can be confirmed and scheduled.

Table 10: Current and proposed target allocations

Manager	Fund	Current target	Proposed target	Difference
LGPSC	Investment Grade Credit	2.25%	3.25%	+1%
Aegon	Index-linked Fund	4.5%	3.5%	-1%
Aegon	Short Dated Climate Transition Fund	0.5%	0.5%	-
Cash	Cash (including FX hedging collateral)	0.75%	0.75%	-

Implementation next steps

The switch from the Aegon Index-linked Bond programme to the LGPSC Investment Grade Credit fund should be a straightforward transaction. We would not expect there to be any material overlap in holdings, so assets in the former will need to be sold by Aegon to fund the subscription to the latter. Aegon should coordinate asset sales with any ongoing portfolio management activity in order to minimise transaction costs. We assume the process will be managed by the Fund.

The timing of the transaction requires further consideration. Our current short-term outlook for index-linked bonds is more positive than it is for investment grade credit. We therefore recommend that the switch is delayed until the relative attractiveness of the latter improves. We recommend the position is reviewed quarterly.

Regarding the potential changes to currency hedging arrangements, the next steps are to:

- Confirm with the managers of underlying funds whether or not they would be prepared to offer sterling hedged share classes to facilitate the proposed changes;
- Discuss with Aegon the practical implications of extending their programme to cover the proposed changes.

Appendix 1 – Portfolio Analytics

The table below summarises portfolio characteristics referred to at various points in this paper. All data are as at 31 March 2023.

Manager[28]		LGPSC	Aegon	Aegon	Total
Fund details	Fund	Investment Grade Credit	Index-linked Fund	Short Dated Climate Transition Fund	n/a
	Active/Passive	Active	Active	Active	n/a
	Benchmark	LGPSC Corp Index + 0.8%	FTSE All Stocks Index Linked Index	SONIA 3 Month +1.25% (GBP)	n/a
	Target outperformance	0.80%	0.00%	1.25%	n/a
	Target allocation	4.5%	2.5%	0.5%	n/a
	Inception date	Apr 20	Dec 13	Mar 21	n/a
Performance (%)	Absolute performance 12m	-10.8	-26.1	-1.1	n/a
	Absolute performance SI	-3.5	4.6	-1.1	n/a
	Relative performance 12m	-1.8	0.6	-5.1	n/a
	Relative performance SI	-1.6	0.4	-3.9	n/a
	Performance vs peer group 12m	n/ a[3]	3.5 (4th quartile)	-0.1 (2nd quartile)	n/a
	Performance vs peer group SI	n/a	1.8 (outperformed peer group)	0.1 (3rd quartile)	n/a
	Tracking error SI	n/a	2.3	2.7	n/a
Asset type (%)	ABS	0	0	0.9	0.1
	Sovereign	5	98.3	0	55.7
	Supra-national	0	0	2	0.3
	Corporate	90.9	0	92.3	41.1
	Other/cash	4.1	1.7	4.8	2.9
Issuer location (%)	North America	34.9	0%	27.8	14.8
	Europe (ex UK)	30.1	0.00	41.2	15.0
	UK	29.8	98.3	24.9	66.8
	Japan	0.9	0.00	0.8	0.4
	Asia Pacific (ex Japan)	2.1	0.00	0.5	0.7
	EM	0	0.00	0	0.0
	Other/cash	2.2	1.7	4.8	2.3
Credit rating (%)	AAA	2.7	0.00	0.9	1.0
	AA	6.6	98.3	6.7	57.0
	A	33.3	0.00	37.7	15.6

[28] Source: Q1 2023 manager reports, Q1 2023 PEL and emails from the managers on 8 and 9 June 2023

	BBB	53.9	0.00	47.3	23.4
	BB<	0.1	0.00	2	0.3
	Unrated	0.2	0.00	0.6	0.1
	Other/Cash	3.1	1.7	4.8	2.5
Modified duration		6.67	17.3	2.4	n/a

Appendix 2 – Asset Class Views

Our current tactical views of asset class returns over the next 12-24 months (as at June 2023) are summarised below for different classes of protection assets:

- **Investment Grade Credit.** Corporate balance sheets are strong, but earnings forecasts remain vulnerable to further downgrades as global economic activity slows and profit margins shrink. The full impact of previous interest rate hikes is yet to be felt, which could put further pressure on debt affordability. However, the impact will be less severe and take longer to materialise in investment-grade markets than in speculative-grade markets. The BoE has now concluded its corporate bond sales programme; however, the ongoing sale of gilt holdings poses a technical headwind to the underlying rates market.**Outlook: neutral**
- **Fixed Interest Gilts.** Even allowing for elevated near-term inflation, slightly higher inflation over the medium term, and the uncertainty associated with that outlook, 10-year nominal gilt yields of 4.6% pa look attractive versus our assessment of fair value of around 3.5% pa. We see the best value in gilt yields at maturities out to 20 years, given a sharp fall in longer-term forward real and nominal yields beyond. However, quantitative tightening and heavy issuance make for a very fragile technical backdrop.**Outlook: neutral-positive**
- **Index-linked Gilts.** Ten-year index-linked gilt yields have also risen to reasonably attractive levels of 1.1% pa. Very weak real growth forecasts and sticky inflation should help keep a lid on real yields. Gilt-implied inflation, as measured by the difference between nominal and index-linked yields of the same maturity, indicates short-dated index-linked gilts offer decent value but suggests a relative preference for nominal gilts at medium-to-longer terms. **Outlook: positive**

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