

LCCPF – annual review of investment strategy

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Agenda

Asset classes overview

- Listed equities
- Private equity
- Infrastructure
- Timberland
- Multi-Asset Credit
- Bank Risk Transfer
- Investment Grade Corporate Bonds
- Index-linked Gilts

SAA review

- Market update and historic investment returns
- Current strategy and funding position
- Projected returns
- Main findings of the review growth assets
- Main findings of the review income assets
- Main findings of the review protection assets
- Summary decisions required

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Asset classes overview

- Listed equities
- Private equity
- Infrastructure
- Timberland
- Multi-Asset Credit
- Bank Risk Transfer
- Investment Grade Corporate Bonds
- Index-linked Gilts



Listed equities (Growth)

Focus – ownership interests in larger companies listed on stock exchanges worldwide

Current exposure:

- Target allocation 37.5%
- Split LGPSC (active equities)/LGIM (passive equities)

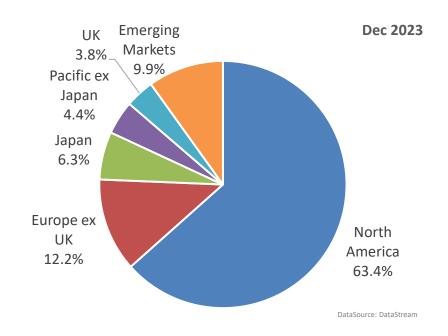
Investment rationale:

- Generate positive, real return over the long-term
- Blend of income and capital gain
- Return premium vs government bonds

Expected, long-term return – 8.4% p.a.

Risks/issues to consider:

- Business failure (first loss)
- Market risk/valuation



FTSE All World index statistics:

- Combined market capitalisation: USD67.8 tn (98% global total)
- 4296 companies
- Top 10 companies: 17.9% index market capitalisation

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Private equity (Growth)

Focus – equity investment in high growth, private companies which are not listed on the stock exchange Current exposure:

- Target allocation 7.5%
- At target, but invested via closed-end funds, so further £80m commitments planned this year

Investment rationale:

- Generate positive, real return over the long-term, mostly capital gain
- Return premium vs listed equities
- Potential diversification different sector focus
- Clearer economic and social impact stronger focus on business growth

Expected, long-term return – 12.0% p.a.

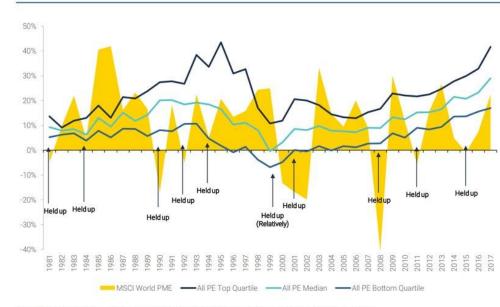
Risks/issues to consider:

- Higher risk of business failure
- Illiquid assets
- Exit/valuation risk

Cambridge Associates Global Private Equity IRRs¹ vs MSCI World Returns²

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PE returns have held up during periods of significant market decline



Infrastructure (Income)

Focus

- Equity investment in infrastructure assets, operating companies
- Definition "the facilities and services required for the effective functioning of modern economies"

Current exposure:

- Target allocation 12.5%
- Invested via both open-ended funds (JPM, IFM, LGPSC) and closed-end funds (KKR, Infracap), so further commitments required

Investment rationale:

- Generate positive, real return over the long-term with income accounting for a high proportion of returns
- Income may be contractually linked to inflation

Investment rationale:

- Diversification vs equities
- Strong downside protection provision of essential services, regulated monopolies, contracted revenues
- Positive economic and social impacts and critical to the decarbonisation process

Expected, long-term return – 8.5% p.a. (core/core plus infrastructure)

Risks/issues to consider:

- Counterparty/credit risk
- Demand/pricing risk
- Development/construction risk (greenfield assets)
- Jurisdictional risk
- Illiquid assets

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Infrastructure – a diverse asset class

Transport	Energy	Utilities	Telecommunications	Social
Road	Coal, gas, oil, nuclear generation	Water supply	Fixed network	Health
Rail	Wind, solar, hydro, biomass, geothermal	Sewerage	Mobile network	Education
Urban transportation	Transmission/distribution	Waste	Broadband	Leisure and support
Ports	Storage – power, gas, oil		Satellite	Public administration
Canals	District heating			Defence
Airports	Energy efficiency programmes			Justice
Air traffic control				









Timberland (Income)

Focus – equity investment in forests, forestry operating companies

Current exposure:

- Target allocation 2.5% (subset of infrastructure)
- Invested via closed-end funds managed by Stafford Timberland, so further commitments required

Investment rationale:

- Generate positive, real return over the long-term with income accounting for a high proportion of returns
- Also capital gain biological growth, afforestation/ reforestation, forestry management
- Diversification vs equities
- Carbon sequestration

Expected, long-term return – 8.5% (similar to core/core plus infrastructure)

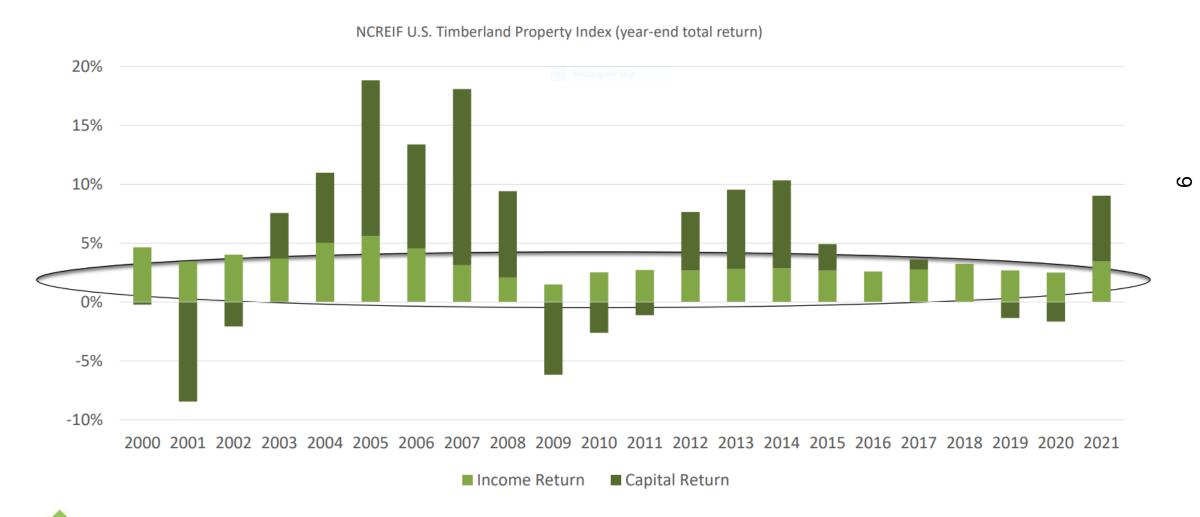
Risks/issues to consider:

- Natural disasters disease, wind, fire etc
- Timber pricing
- Jurisdictional risks
- Illiquid assets

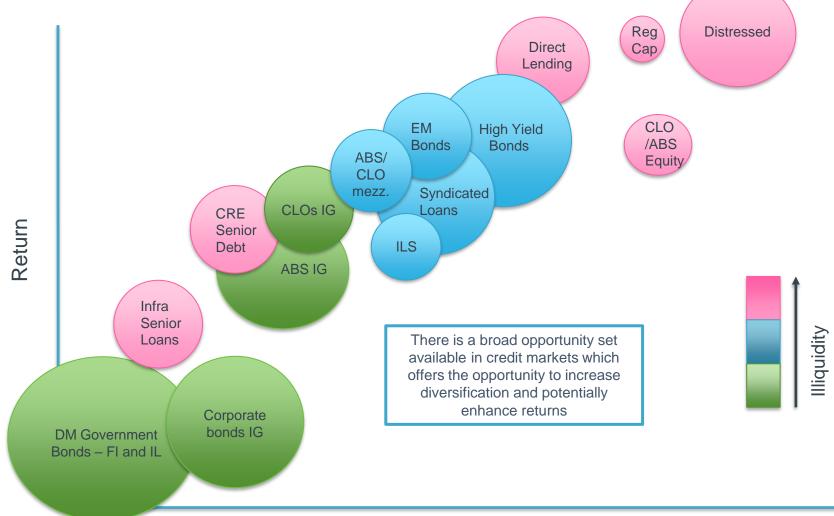
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Timberland



Multi-asset credit (Income)



Multi-asset credit

Focus:

- Higher yield debt issued by corporates, asset holding companies and sovereigns worldwide
- Debt is usually securitised and listed on a stock exchange

Current exposure:

- Target allocation 9%
- Current exposure is 4% (managed by LGPSC), so further commitment required to reach target

Investment rationale:

- Generate a high-income yield
- Return premium vs investment grade credit
- Diversification vs equities
- Added value through tactical asset allocation

- Downside protection ability to allocate in/out of IG debt
- Low governance burden manager deals with allocation across different types of debt

Expected, long-term return – 6.7% p.a.

Risks/issues to consider:

- Credit default risk sub-investment grade equivalent
- Interest rate risk though typically less than investment grade credit
- Limited liquidity

Bank Risk Transfer (Income)

Focus – insuring first (or second) losses on bank loan portfolios, thereby allowing counterparty banks to secure regulatory capital relief

Current exposure:

- Target allocation part of 1% allocation to special situations credit
- Invested by closed-end funds managed by CRC, so further commitments will be required

Investment rationale:

- · Generate a high-income yield
- Return premium vs listed credit markets
- Diversification vs equities

Expected, long-term return – 10.0% p.a.

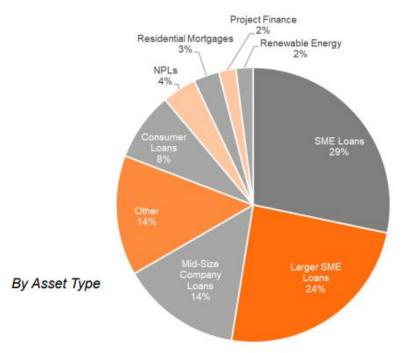
Risks/issues to consider:

- Credit default risk sub-investment grade equivalent
- Adverse selection risk

Risks/issues to consider:

- Structural subordination risk profile equivalent to junior debt
- · Illiquid assets

Composition of CRC product used by the Fund. Source: CRC



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Investment grade corporate bonds (Protection)

Focus - listed debt issued by the largest, mostly creditworthy companies worldwide

Current exposure:

- Target allocation 3.75%
- Currently invested via open-ended funds managed by LGPSC and Aegon

Investment rationale:

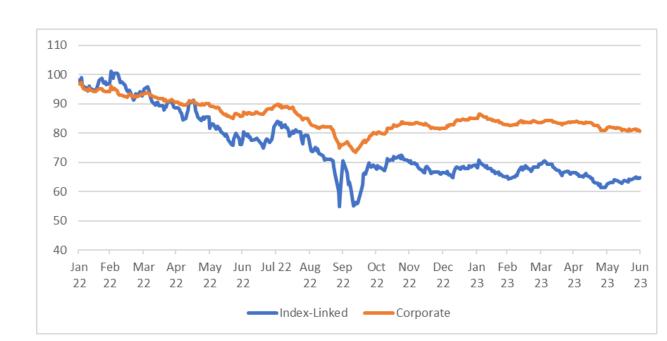
- Reduce investment risk low likelihood of principal loss
- Market values can be volatile, but tend to match fluctuations in the value of the Fund's liabilities, thereby protecting the funding position

Real estate/infrastructure-backed senior debt being considered to provide additional protection

Expected, long-term return – 5.6% p.a.

Risks/issues to consider:

- Limited default risk investment grade equivalent
- Rating downgrade risk
- Interest rate risk debt is fixed interest



Index-linked gilts (Protection)

Focus – debt issued by the UK government whose principal value is linked to the rate of inflation (RPI)

Current exposure – 3.5%, invested via open-ended fund managed by Aegon

Investment rationale:

- Reduce investment risk very low likelihood of principal loss
- Historically gilts were seen as a safe haven asset
- Market values can be volatile, but tend to match fluctuations in the value of the Fund's liabilities, thereby protecting the funding position
- Provides protection against unexpected inflation, ie the difference between reported inflation and the level of inflation expected by the market at the point of investment

Gold being considered to provide additional protection against inflation and tail risks

Expected, long-term return – 4.1% p.a.

Risks/issues to consider:

- Very limited default risk debt issued in GBP
- Interest rate risk

1.5%

Increasingly concentrated investor base

UK Retail Price Index (RPI) inflation – market implied spot rate curves
Rate (%)

3.5%

2.5%

2.0%

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Inflation Gilts Spot 2020-12-31 Inflation Gilts Spot 2023-12-31

Source: Bank of England



Maturity (Years)



SAA review

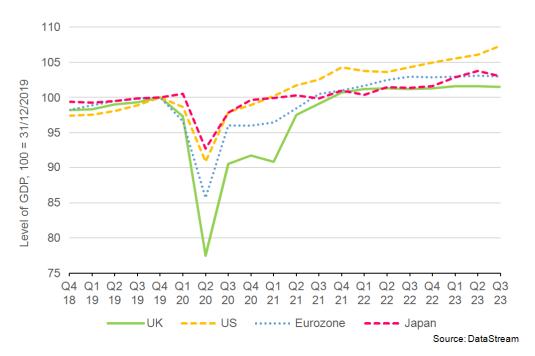
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Market update

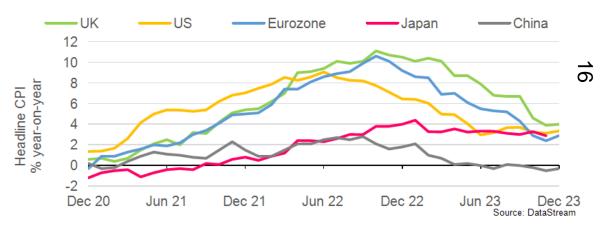
 Global growth in 2023 outperformed the downbeat forecasts made at the start of the year, but its pace has been subdued and we think it's likely to slow further.

Gross Domestic Product level, 100 = 31/12/2019



Inflation trended downwards, falling more than expected in Q4

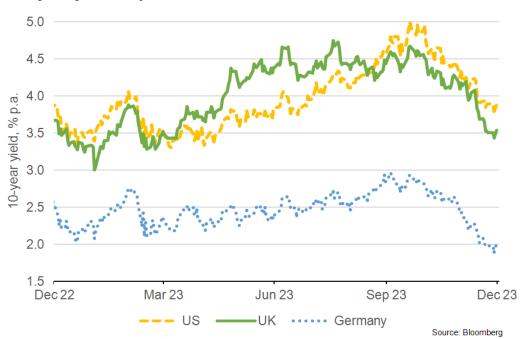
Consumer Price Inflation, % change yoy



Market update

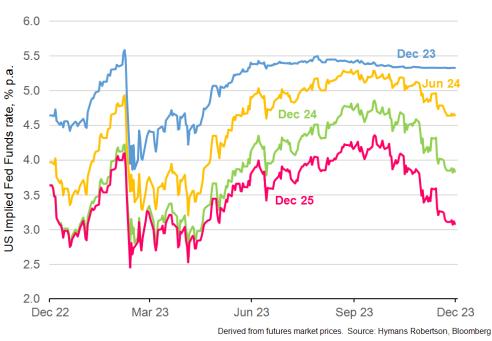
 Sovereign bond yields rose for much of 2023, but fell towards the end of the year as expectations of looser monetary policy improved sentiment

10-year yield, % p.a.



 Market-implied expectations of the number of interest rate cuts in 2024 fell for most of the year as a 'higher for longer' rhetoric prevailed, but then increased sharply in Q4

US Implied Fed Funds rate, % p.a.



Market update

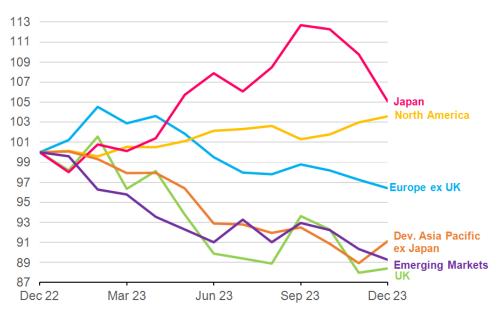
 Global equities rose as lower-than-expected inflation and a decline in sovereign bond yields lent support Japan / North America outperformed

Total return, p.a.



Total returns 31 Dec 2022 to 31 Dec 2023, Source: DataStream

Equity regional performance relative to FTSE All World (local currency terms)



FTSE regional indices cumulative monthly returns relative to the FTSE All World cumulative monthly returns, in local currencies, rebased to 100. Dec 2022 - Dec 2023. Source: DataStream



Investment returns

Market Index Returns (£)	9 months to 31/12/2022 (%)	6 months to 30/06/2023 (%)	15 months to 30/06/2023 (%)
UK equities	-0.15	2.61	1.96
Global equities	-5.01	7.85	1.96
Emerging market equities	-5.61	-0.56	-4.94
Property	-14.87	1.23	-11.22
Emerging market debt	0.01	-1.52	-1.20
Inflation-linked gilts	-29.73	-2.59	-27.74
IG corporate bonds	-12.30	-1.08	-10.74
Fund (net return)	-2.9	1.0	-1.9

- The realised return since the 2022 valuation has fallen short of the required return set in 2022 (4.4% p.a.)
- The increase in government bond yields has had an adverse impact on the value of most asset classes, particularly during 2022
- The impact on the Fund's returns have been mitigated by its well diversified portfolio and by the devaluation of sterling which has boosted the returns on assets denominated in foreign currencies (where not fully hedged).





Current strategy

2023 Strategic Asset Allocation	Target (%)	Actual (%)	Overweight (+) Underweight (-)
Growth	50.0	59.4	
Listed equity	37.5	44.4	++
Private equity	7.5	7.4	-
Targeted return	5.0	7.6	++
Income	42.0	31.3	
Infrastructure (inc timberland)	12.5	10.2	
Property	10.0	7.3	
Emerging market debt	-	2.0	+
Global credit – public debt (sub-IG)	9.0	3.7	
Global credit - private debt (sub-IG)	10.5	8.1	
Protection	8.0	9.3	
Inflation-linked bonds	3.5	4.0	+
Investment grade (IG) credit	3.75	3.5	-
Currency hedge	0.75	0.9	+
Cash	-	0.9	+
Total	100.0	100.0	

The current strategy focuses on asset classes expected to deliver the required return over the long-term including:

- Growth assets delivering a positive real return
- Income assets delivering real returns predominantly in the format of income, and diversifying growth assets
- Protection assets controlling the level of investment risk, and matching the Fund's liabilities

A range of asset classes are employed to diversify risk, but the benefits of diversification are balanced against the costs of additional complexity and the start of the additional complexity and the dangers of over-diversification

The strategy includes allocations to private markets where the Fund can earn a premium for taking illiquidity risk

In summary we are recommending no changes to the Strategic Asset Allocation at this stage

We recommend that material overweights/underweights vs the target allocation are addressed through regular rebalancing and further commitments. We note the Fund is taking action to address the current variances in line with its rebalancing policy and new commitments, and the advice provided in 2022





Projected returns

Projected median return, 20 years, % p.a.	As at 31 March 2021	As at 31 October 2022	As at 30 September 2023
Listed equities	5.9	7.8	8.4
Private equity	6.8	11.4	12.0
Targeted return	4.5	5.3	5.9
Infrastructure (incl. timber)	5.9	7.9	8.5
Property	4.2	6.4	7.0
Emerging market debt	3.7	5.4	6.7
Global credit – public debt (sub-IG)	4.6	6.7	6.7
Global credit - private debt (sub-IG)	4.9	9.3	8.7
Inflation-linked bonds	-1.4	2.1	4.1
Investment grade credit	2.7	5.1	5.6
Cash	2.0	3.7	4.3
Overall Fund	6.5	8.2 (2023 stratogy)	8.7

(2022 strategy)

(2023 strategy)

- Projected returns for most asset classes are set by reference to government bond yields which increased further to 30 September 2023, accounting for most of the increase in projected returns tabulated above
- The required return set in 2022 (4.4% p.a.) is now well covered by the projected returns

(2023 strategy)

Main findings – growth assets

Listed equities

- Listed equity has continued to perform strongly despite recession concerns
- We recommend the target allocation is maintained at 37.5% and that work continues to implement the
 previously agreed restructuring

Private equity

- Although we don't expect a repeat of the strong performance of 2009-2021, a material liquidity premium is still expected
- We recommend the target allocation is maintained at 7.5%
- Further commitments have been agreed to maintain the level of exposure and vintage year diversification

Targeted return

- Recent performance of current holdings has been mixed, however such strategies tend to perform well at times
 of elevated market volatility
- We recommend that the target allocation is maintained at 5%, and that work continues to progress the changes agreed



Main findings – income assets

Infrastructure

- The Fund has a well-diversified infrastructure portfolio which has delivered a strong positive return with a high income yield
- We recommend the Fund should maintain the allocation to Infrastructure at 12.5%
- However new commitments are required in order to achieve this. We recommend consideration is given as
 to what additional commitments are needed over the next 3 years in order to reach the target allocation,
 and maintain the desired risk and geography profile.
- We also recommend consideration is given to the new open-ended (evergreen) timberland fund from Stafford Capital

Property

- The Fund has a well-established portfolio focused on UK assets
- We recommend the Fund should maintain the target allocation to Property at 10%, and remain comfortable with the structure agreed in the 2022 review.
- The restructuring is currently underway and should provide benefits including increased geographic diversification. We recommend that some of the money due to be returned from the Aegon funds is reinvested with La Salle, as per the previously agreed changes.



Main findings – income assets

Higher Yielding Credit

• The Fund has a well-diversified, but relatively complex portfolio comprising both sub-investment grade public bonds and private debt

Liquid markets

- The public bond portfolio includes an allocation to Multi-Asset Credit (MAC) and emerging market debt (albeit the latter is due to be divested)
- Our review found:
 - The Target allocation to MAC of 9% remained appropriate
 - The LGPS Central MAC product is a suitable investment (despite underperformance vs benchmark to date, which is largely due to the mismatch between strategy and benchmark)
 - Our short-term view on High Yield Credit remains cautious
- We recommend the Fund should proceed with the previously agreed increase in multi-asset credit allocation with LGPS Central
- We propose this is implemented in four equal phases to be completed by December 2024 (thereby mitigating market timing risk)



Main findings – income assets

Higher Yielding Credit

Private markets

- We recommend the Fund maintain the private debt allocation at 10.5%
- We have considered the case for whether distressed debt should still form part of the portfolio. We recommend that the current allocation is allowed to wind down, but opportunities are explored to gain access the asset class as part of a wider credit opportunities proposition
- The bank risk transfer investments with CRC are due to return capital in 2024. We recommend that a review be undertaken in 2024 to compare the CRC proposition with alternatives we have identified.



Main findings – protection assets

Protection assets – target allocation

- Invested in to control overall investment risk / mitigate the impact of fluctuations in the value of liabilities
- Current protection assets have not performed well over the last 2 years, due to rises in interest rate expectations...but liabilities have fallen further, leading to a material improvement in funding position.
- Protection assets now represent better value than they have for many years. Should the Fund increase its allocation?
- Initial analysis indicates an increase may be justifiable, but the full impact on both assets and liabilities should be considered.
 - The projected improvement in funding outcomes were fairly marginal
 - There are limitations around the modelling carried out; in particular we were unable to consider the interaction between assets and liabilities
 - The Fund needs to maintain material exposure to Growth / Income assets to fund future service liabilities
 - Current exposure to Growth / Income assets is approaching levels expected of a LGPS which is fully funded (but with no large surplus)
- We recommend this is validated by updating the full ALM analysis of the Fund's portfolio in Q1 2024.



Main findings – protection assets

Protection assets – alternatives

- We also considered whether any other alternative protection assets could be introduced to improve the resilience of the portfolio particularly with respect to tail risks
- We recommend that the Fund undertakes further investigation of the case for the following in 2024:

Gold

- Linkage to inflation over the long-term
- Strong protection in past adverse market conditions

Investment grade, real asset backed senior debt

- Downside protection (ongoing volatility / diversification)
- Returns premium over corporate bonds



Main findings – benchmarks

- Benchmarks serve various purposes including the calibration of risk/return expectations when setting strategic asset allocations, and setting a standard against which manager performance can be assessed.
- We carried out an initial review of the current benchmarks to highlight whether any of these should be reviewed further.
- We recommend the Fund undertakes a review of the benchmarks being used for some mandates, as alternatives exist which may facilitate more effective monitoring of manager performance.
- This is to be progressed by the director of corporate resources with support from Hymans as necessary, with the expectation that this will be phased throughout 2024 (dealing with the highest priority items first).



Summary – decisions required

- Approve the maintenance of the target SAA allocation
- The Director of Corporate Resources be authorised to make benchmark changes as per slide 28, with such
 changes to be delivered quarterly through the year, commencing for the June Local Pension Committee meeting
- A protection assets review as per slides 26 and 27, with the final detailed scope of the review to be agreed between officers and Hymans Robertson
- A review to maintain exposure to two asset classes which will be returning capital over the coming years (bank risk share investments and Timberland, as per slide 23), with the final scope of the review to be agreed between officers and Hymans Robertson



Reliances, limitations and risk warning

Reliances and limitations

- The actuarial profession introduced Technical Actuarial Standard (TAS) 100 with effect from 1 July 2017. As part of our internal compliance regime, Hymans Robertson has chosen to apply the principles of TAS100 in the delivery of investment advice. TAS100 applies to work where actuarial principles and/or techniques are central to the work and which involves the exercise of judgement.
- The Fund's asset allocation and performance as at 30 June 2023 has been sourced from Portfolio Evaluation reporting.
- In this report we have provided our estimate of expected asset class returns. The expected returns are based upon 20-year median returns derived from our proprietary economic scenario generator (ESS) asset model. As with all modelling, the results are dependent on the model itself, the calibration of the model and the various approximations and estimations used. These processes involve an element of subjectivity. This model uses probability distributions to project a range of possible outcomes for the future behaviour of asset returns and economic variables. Some of the parameters of the model are dependent on the current state of the financial markets and are updated to reflect metrics that can be measured in markets, such as yields, while other more subjective parameters do not change with different calibrations of the model.

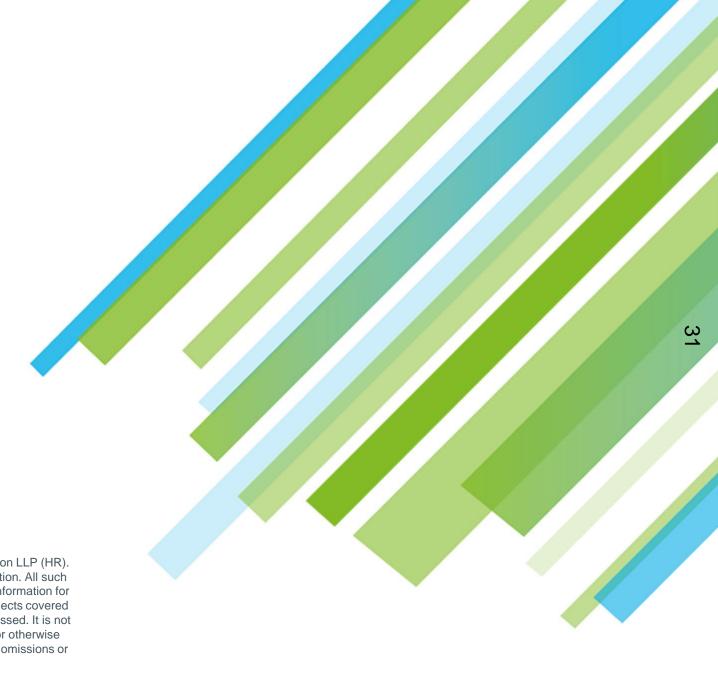
Risk warning

• Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, and property, whether held directly or in a pooled or collective investment vehicle. Further, investments in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of an investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.



Thank you

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