

Agenda

Pension Investment Sub-Committee

Thursday, 24 November 2022, 10.00 am
County Hall, Worcester

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DISCLOSING INTERESTS

There are now 2 types of interests:
'Disclosable pecuniary interests' and **'other disclosable interests'**

WHAT IS A 'DISCLOSABLE PECUNIARY INTEREST' (DPI)?

- Any **employment**, office, trade or vocation carried on for profit or gain
- **Sponsorship** by a 3rd party of your member or election expenses
- Any **contract** for goods, services or works between the Council and you, a firm where you are a partner/director, or company in which you hold shares
- Interests in **land** in Worcestershire (including licence to occupy for a month or longer)
- **Shares** etc (with either a total nominal value above £25,000 or 1% of the total issued share capital) in companies with a place of business or land in Worcestershire.

NB Your DPIs include the interests of your spouse/partner as well as you

WHAT MUST I DO WITH A DPI?

- **Register** it within 28 days and
- **Declare** it where you have a DPI in a matter at a particular meeting
 - you must **not participate** and you **must withdraw**.

NB It is a criminal offence to participate in matters in which you have a DPI

WHAT ABOUT 'OTHER DISCLOSABLE INTERESTS'?

- No need to register them but
- You must **declare** them at a particular meeting where:
You/your family/person or body with whom you are associated have a **pecuniary interest** in or **close connection** with the matter under discussion.

WHAT ABOUT MEMBERSHIP OF ANOTHER AUTHORITY OR PUBLIC BODY?

You will not normally even need to declare this as an interest. The only exception is where the conflict of interest is so significant it is seen as likely to prejudice your judgement of the public interest.

DO I HAVE TO WITHDRAW IF I HAVE A DISCLOSABLE INTEREST WHICH ISN'T A DPI?

Not normally. You must withdraw only if it:

- affects your **pecuniary interests** **OR** relates to a **planning or regulatory** matter
- **AND** it is seen as likely to **prejudice your judgement** of the public interest.

DON'T FORGET

- If you have a disclosable interest at a meeting you must **disclose both its existence and nature** – 'as noted/recorded' is insufficient
- **Declarations must relate to specific business** on the agenda
 - General scattergun declarations are not needed and achieve little
- Breaches of most of the **DPI provisions** are now **criminal offences** which may be referred to the police which can on conviction by a court lead to fines up to £5,000 and disqualification up to 5 years
- Formal **dispensation** in respect of interests can be sought in appropriate cases.

Pension Investment Sub-Committee

Thursday, 24 November 2022, 10.00 am, County Hall, Worcester

Membership: Cllr Adrian Hardman (Chairman), Cllr Elizabeth Eyre, Cllr Karen Hanks

Co-opted Members

Cllr Trish Marsh (voting) Herefordshire Council
Vacancy (non-voting) Employee Representative

Agenda

Item No	Subject	Page No
1	Apologies/Named Substitutes	
2	Declaration of Interests	
3	Public Participation Members of the public wishing to take part should notify the Assistant Director for Legal and Governance in writing or by e-mail indicating both the nature and content of their proposed participation no later than 9.00am on the working day before the meeting (in this case, 23 November 2022). Enquiries about this can be made through the telephone number/e-mail address listed in this agenda and on the website.	
4	Confirmation of Minutes To confirm the Minutes of the meetings held on 29 September 2022 (previously circulated).	
5	Nomura Far East Developed Equities and Emerging Markets Active Manager Worcestershire Pension Fund Performance Review	1 - 26
6	Hermes Infrastructure Fund I and II Performance and Project Orion Update	27 - 46
7	Gresham House Forestry Performance Update	47 - 74
8	Pensions Independent Investment Advisor Update	75 - 108
9	Strategic Asset Allocation Update at 30 September 2022	109 - 114

Agenda produced and published by Sheena Jones, Democratic Governance and Scrutiny Manager, County Hall, Spetchley Road, Worcester WR5 2NP

To obtain further information or a copy of this agenda contact Simon Lewis, Committee Officer on 01905 846621, slewis@worcestershire.gov.uk

All the above reports and supporting information can be accessed via the Council's website

Date of Issue: Wednesday, 16 November 2022

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PENSIONS INVESTMENT SUB COMMITTEE

24 NOVEMBER 2022

HERMES INFRASTRUCTURE FUND I & II PERFORMANCE AND PROJECT ORION UPDATE

Recommendation

- 1. The Chief Financial Officer recommends that the Pensions Investment Sub Committee note and comment on Hermes Infrastructure Fund I & II performance as at the end of June 2022 and Project Orion update.**
2. The Hermes Infrastructure update presentation attached as an Appendix provides:

Performance Update

- a. HIF I Core Update as at 30 June 2022
- b. HIF I Core Asset investment performance Dec 2021 to June 2022
- c. HIF I Core update 30 September 2022 and expectations re 31 December Valuations.
- d. HIF II Core update 30 September 2022 and expectations re 31 December Valuations

Strategy Update - Project Orion

- e. Recap of proposals to date
- f. Orion Portfolio
- g. What's Changed since Committee meeting March 2022
- h. Limited Partner Feedback
- i. Current Focus
- j. Timeline

3. The Pensions Investment Sub is asked to note and comment on the presentation provided by Hermes Infrastructure as at the end of June 2022 for performance and Orion update as at November 2022.
- 4. Please note that the Appendix contains exempt information (on salmon pages) and should members wish to discuss the information included in these Appendices they would need to consider passing the appropriate resolution and moving into exempt session.**

Supporting Information

Appendix (**Exempt Information – Salmon pages**) – Hermes Infrastructure performance as at the end of June 2022 and project Orion update.

Specific Contact Points for this report

Rob Wilson

Pensions Investment, Treasury Management & Capital strategy manager

Tel: 01905 846908

Email: RWilson2@worcestershire.gov.uk

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) there are no background papers relating to the subject matter of this report:

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A
of the Local Government Act 1972.

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24 NOVEMBER 2022

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PENSIONS INVESTMENT SUB COMMITTEE

24 NOVEMBER 2022

GRESHAM HOUSE FORESTRY PERFORMANCE UPDATE

Recommendation

1. **The Chief Financial Officer recommends that the Pensions Investment Sub Committee note and comment on the presentation provided by Gresham House (specialist asset management) on the UK Forestry Performance update attached as an Appendix.**

Purpose and Background

2. This report provides details of the performance update as at the end of September 2022 relating to our UK Forestry investments with Gresham House. The Committee agreed a Commitment of £150m in total on the 24 November 2021.
3. We have committed £85m to Forestry Fund VI and £65m to the Forest Growth & Sustainability for the Fund. As at the end of September 2022 all but £19m had been drawn.

Gresham House Forestry

4. The attached presentation Appendix 1 details the following:-
 - a. The Funds UK Forestry exposure and current market
 - b. Value creation and Forest Charter
 - c. Forest Growth & Sustainability (Deployment, analysis, case study)
 - d. Forest Fund VI (analysis, case study)
 - e. Conclusion
 - f. Appendices
5. The Pensions Investment Sub-Committee is asked to note and comment on the presentation provided by Gresham House on our Forestry investments as at the end of September 2022.
6. **Please note that the Appendix contains exempt information (on salmon pages) and should members wish to discuss the information included in these Appendices they would need to consider passing the appropriate resolution and moving into exempt session.**

Supporting Information

Appendix – Gresham House Forestry Performance update. (**Exempt Information – Salmon pages**)

Contact Points

Specific Contact Points for this report
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Pensions Investment, Treasury Management manager
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Email: RWilson2@worcestershire.gov.uk

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PENSIONS INVESTMENT SUB COMMITTEE

24 NOVEMBER 2022

PENSIONS INDEPENDENT INVESTMENT ADVISOR UPDATE

Recommendation

1. **The Chief Financial Officer recommends that the Pensions Investment Sub Committee note and comment on the Pensions Independent Investment Advisor's update attached as Appendix 1 together with the associated investment performance information attached as Appendix 2.**
2. The Pensions Independent Investment Advisors update provides: -
 - a) A global overview;
 - b) A summary and market background to Worcestershire Pensions Investments as at the quarter ended the 30 September 2022; and
 - c) Brief performance details of the individual pension investments.
3. Also attached as Appendix 2 detailing Portfolio Evaluation Ltd quarterly investment performance update for Worcestershire Pension Fund as at the end of September 2022.
4. The Pensions Investment Sub-Committee is asked to comment on the Pensions Independent Investment Advisors update and associated appendices.
5. **Please note that Appendix 1 contains exempt information (on salmon pages) and should members wish to discuss the information included in this Appendix they would need to consider passing the appropriate resolution and moving into exempt session.**

Supporting Information

Appendix 1 – Pensions Independent Investment Advisors update (**Exempt Information – Salmon pages**)

Appendix 2 - details Portfolio Evaluation Ltd quarterly investment performance update for Worcestershire Pension Fund

Contact Points

Rob Wilson

Pensions Investment, Treasury Management & Capital strategy manager

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Email: RWilson2@worcestershire.gov.uk

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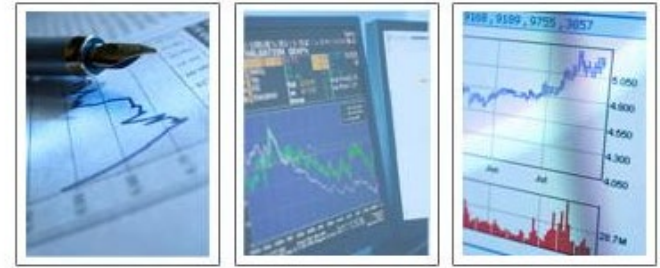
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P O R T F O L I O
E V A L U A T I O N
L I M I T E D

Quarterly Risk and Return Analysis
Total Fund

Worcestershire County Council Pension Fund



Specialists in Investment Risk and Return Evaluation

Period ending 30th September 2022



Specialists in Investment Risk and Return Evaluation

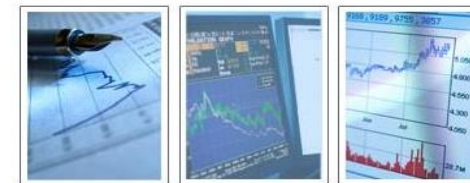


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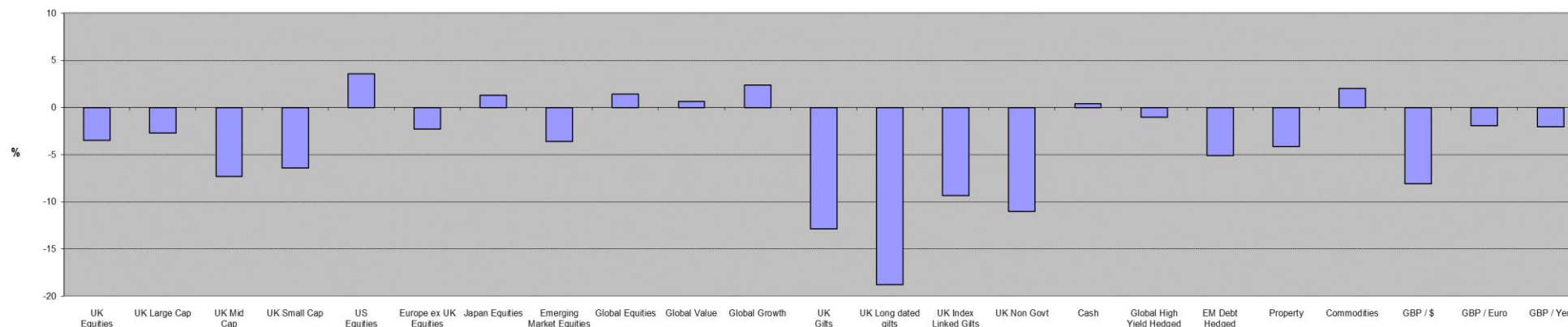
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Portfolio Evaluation Ltd Market Commentary Q3 2022 (Sterling)

Quarter three has witnessed primary market indices performing negatively for the third consecutive quarter; in fact, except for commodities all primary listed asset classes (in local currencies) have had negative returns this quarter. Please note that the charts below are in GBP terms and therefore the positive returns in US and global equities reflect the strong dollar / weak sterling and the weight of USD assets in the global indices. It should also be noted that bond yields rose across the world resulting in negative returns for bond markets, negative returns were particularly notable for longer maturity bonds. This negative return run has now extended to all primary indices (in local terms) excluding the UK large cap and global value (due to dollar strength) indices for the year results. Within global sectors the majority have had negative returns except for commodities. One of the primary trends has been the strength of the dollar (although this may have peaked now) over the year especially versus sterling which has been weak; however, against a wider basket of currencies sterling has not depreciated as much. It should be noted that in the early part of October that markets have worsened especially in the UK which has been exacerbated by a weak government pushing unfunded tax cuts (much of which has been reversed by mid-October) and the BoE that has been cautious about raising interest rates i.e. we have had a government trying to introduce a looser fiscal policy whilst the BoE has been tightening monetary policy.

Quarterly Investment Returns for the period ended
30th September 2022



It should be noted that many of our institutional clients have benefitted from high returns in 'alternative' asset classes such as Private Equities, Infrastructure, Private Debt and Property but it should be noted that much of the data is lagged and returns may soften as valuations are updated (we have seen some data from the US that would indicate this). It should also be noted that many of our clients are continuing to fund 'alternative' asset portfolios.



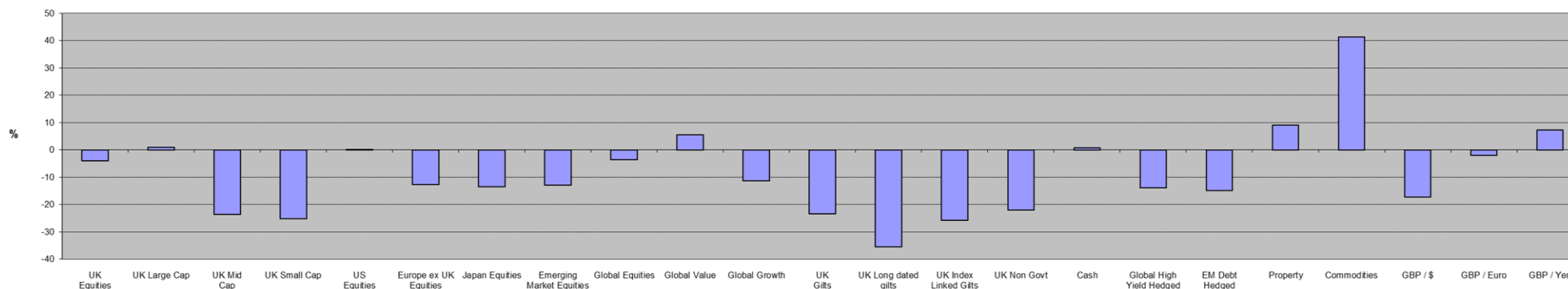
Some clients are being impacted by increasing yields requiring LDI portfolio margin accounts to require significant funding; this in some instances is requiring selling other portfolio assets and it should be noted that the BoFE had to assist this part of the market in early October.

Although we continue to face problems from the war in Russia and Ukraine and the linked fuel and gas problems and have continued to see high commodity prices and supply problems, we are also seeing some old problems impact on the global economy such as aging demographics and high levels of debt. One of the problems is also declining real disposable income, this will worsen as interest rates increase as central banks raise rates to lower inflation. It is looking increasingly likely that there will be a global recession and a soft landing in 2023 may be hard to achieve.

From an investor perspective it all depends on how much of this uncertainty is already priced into the market. Market commentators do not seem to have any consensus view apart from many of them retaining a neutral exposure to equities (albeit this is lower than the collective position on equities as at the beginning of the year). The only common theme is that many investors expect the situation to worsen in Q4.

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Investment Returns for the Year
Ended 30th September 2022



Risk within asset classes and correlations has increased over the year. The outlook for market risk is uncertain.

For further information If you would like further information about the topics contained in this newsletter or would like to discuss your investment performance requirements please contact Nick Kent or Deborah Barlow (e-mail: nick.kent@portfolioevaluation.net) or visit our website at www.portfolioevaluation.net. Please note that all numbers, comments and ideas contained in this document are for information purposes only and as such are not investment advice in any form. Please remember that past performance is not a guide to future performance.

Worcestershire County Council Pension Fund - Commentary

Period ending 30th September 2022

QUARTERLY SUMMARY: **Worcestershire County Council Pension Fund Return: -0.4%** **Benchmark Return: -1.0%** **Excess Return: 0.6%**

- This quarter saw the R&M EPO strategy overlay fund largely liquidated in September pending review; whilst the derivatives have been unwound the cash and collateral bonds remain in place during the review process. This quarter there was a significant drawdown from the L&G North American Equity Index Fund. This and other cash were used to Fund investments in the Bridgepoint III Private Debt Fund, BSIF Infrastructure II Fund, Stonepeak IV Infrastructure Core Fund, Venn II Euro Property and the BSIF Forestry Growth Sustainability Fund. Given the transition activity and the funding of a number of new alternative asset funds it would not be unreasonable to expect there to be a negative drag on the return of the Fund.
- The Fund and its benchmark have both generated negative returns, and the Fund has outperformed its benchmark by 0.6% excess. The EPO over this period has had a negative influence on the Total Fund (and therefore the capital value of the Fund) and benchmark return; this is as would be expected in volatile markets and because of the removal of the strategy in September (September was a negative performing market).
- Equity returns have been broadly in line with the benchmark as the Nomura Far East portfolio and the new LGPSC Global Sustainable Equity Active Targeted Fund and the LGPSC Sustainable Equity Active Thematic Fund, unfortunately the LGPSC EMM underperformed. The primary areas of outperformance have been generated by Property, Corporate Debt Fund and Infrastructure (nearly all Funds). It should be noted that the negative depreciation of sterling has been a positive contributor to the Fund, especially as many of the Alternative Asset Fund are non-GBP.
- Within the primary asset classes, infrastructure assets were the highest returning generators over the quarter at 5.1, %. Property assets had a return of 1.7%. Equity assets (inc EPO) generated a return of -1.0% whilst equities ex EPO the return was a higher -0.7%. Within equities, the Alts pool was the highest return generator at 1.0% (underperforming its benchmark by -0.2%) whilst the Active Pool had a return of -1.1% (approximately in line with the benchmark) and the Passive Pool a return of -1.8% (approximately in line with the benchmark).
- The recently established Total Fixed Income asset class has underperformed and is underweight its strategic asset allocation (note that equities remain overweight their strategic asset allocation).
- The latest valuation data supplied by Bridgepoint, Green Investment Bank, Gresham House, Hermes, Invesco – UK Property Fund, Stonepeak Partners, VENN and Walton Street is lagged by three months and was for periods ending June 2022 whilst the Gresham House Forestry Fund has a lag of 6 months.

YEAR SUMMARY: **Worcestershire County Council Pension Fund Return: -3.8%** **Benchmark Return: -2.3%** **Excess Return: -1.5%**

- The Fund and its benchmark have generated negative returns and the Fund has underperformed its benchmark by -1.5% excess. The underperformance has been primarily generated by equity assets, and partly by the performance of the Property assets and Fixed Income assets which significantly underperformed their benchmarks. With the exception of the Infrastructure pool all other primary asset classes have underperformed. It should be noted that many of the Alternative asset pools are investing in new portfolios; these types of portfolios often underperform initially due to the expenses of these funds 'investing' and that it takes time for many of these vehicles to generate positive significant returns from their investments.

- The Fund remains underweight UK equities as this has provided the collateral for the EPO strategy (this is held in short dated bonds) therefore reducing the exposure to this asset group. In effect, the Fund may appear to have a negative excess return contribution due to benchmark mismatch as the benchmark has not been adjusted to reflect the collateral programme. However please note that the structure and objective of the EPO (including the collateral) is expected to counterbalance this underweight UK position and return expectations; it has generally achieved this. The options overlay programme has increased the Fund return over the year and has performed as expected (it should be noted that the bond collateral part of the strategy did perform in line with a short, dated bond index; however, within the structure of the Fund no benchmark is assigned to these assets). Much of the EPO derivative programme was unwound in September.
- The most significant drag on excess return was generated by the LGPSC EMM Fund and the transition portfolio in the quarter ended June 2022. The highest positive contributor to excess return was Infrastructure assets.
- Infrastructure assets generated the highest return of 20.3% followed by Property with a return of 7.1%. Equity assets were the next highest return generators over the year and excluding the overlay generated a return of -7.9%. Within equities the Passive Pool was the highest return generator followed by the Alternatives Pool and finally the Active Pool (generating returns of -5.1%, -6.2% and -16.4% respectively), all of them underperformed their benchmarks. Fixed Income assets had a return of -17.6% underperforming by -6.6%.

THREE YEAR SUMMARY: Worcestershire County Council Pension Fund Return: 3.8% p.a. Benchmark Return: 3.9% p.a. Excess Return: -0.0% p.a.

- Over the three-year period, the Fund has generated a positive return of 3.8% p.a. and has performed in line with the benchmark. It should be noted that there has been a significant number of new mandates established in that timeline especially in the property, infrastructure and bond asset classes. Additionally, the equities have been restructured.
- The equity protection overlay program has increased the Fund return over the three-year period (by 0.4% p.a.) but given the volatility and variation of returns in markets this is liable to fluctuate (relative to benchmark). It should also be noted that the EPO strategy has lowered the volatility of the Fund as expected.
- The Total Risk and Active risk are consistent with a typical multi asset class fund that uses both passive and active strategies.

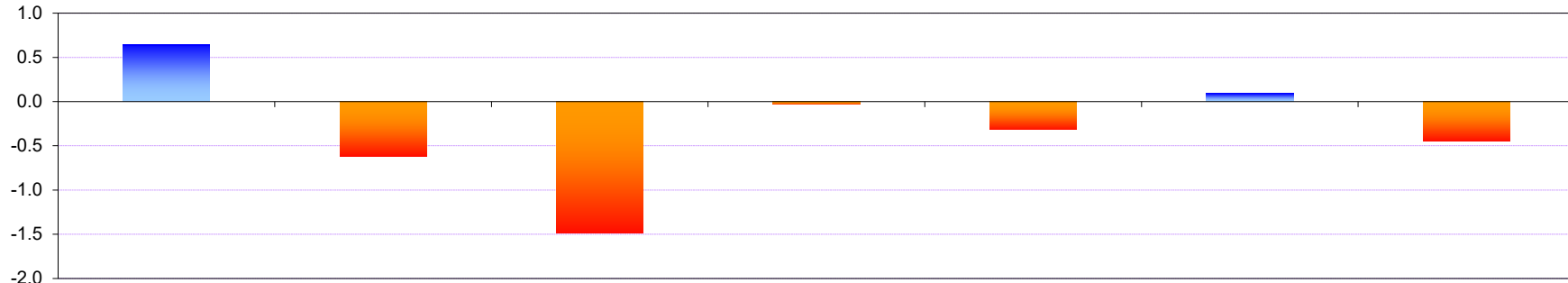
Total Fund Overview

Worcestershire CC Pension Fund

Report Period: Quarter Ending September 2022



Excess Return Analysis (%)



	QTR	Fin YTD	1 Yr	3 Yr	5 Yr	10Yr	Since Mar 87 (p.a.)
Excess Return	0.6	-0.6	-1.5	0.0	-0.3	0.1	-0.4
Portfolio Return	-0.4	-5.1	-3.8	3.8	4.7	8.3	7.7
Benchmark Return	-1.0	-4.4	-2.3	3.9	5.1	8.2	8.2

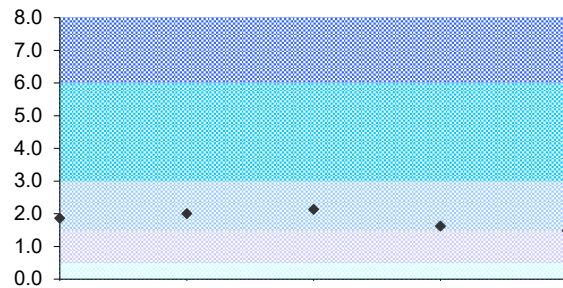
All returns for periods in excess of 1 year are annualised. The portfolio return is net.

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Ex-Post Active Risk Analysis (%)

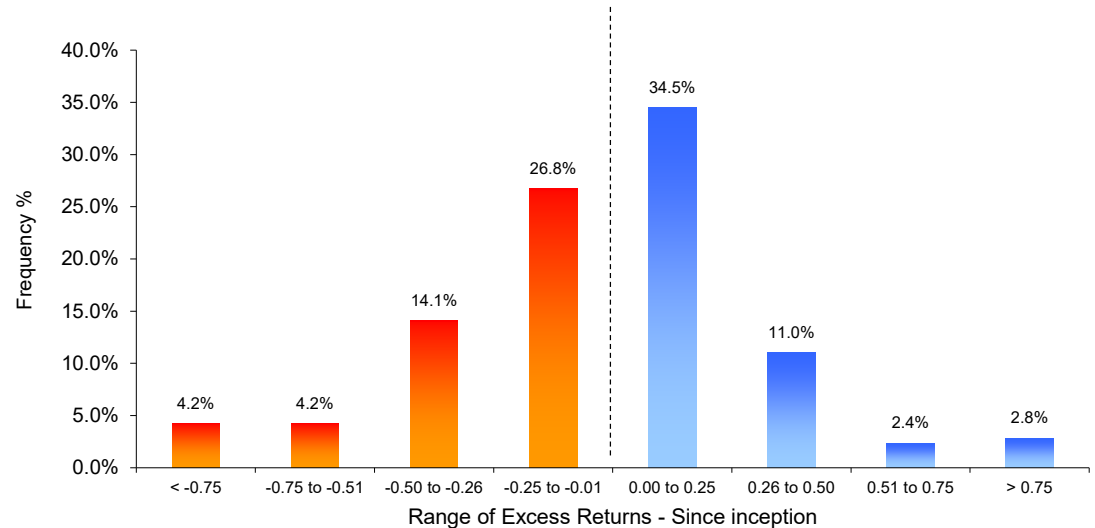
Expected Active Risk Ranges

- Aggressive
- Active Plus
- Active
- Core
- Indexed
- ◆ Active Risk



	1 Yr	3 Yr	5 Yr	10 Yr	Mar 87
Active Risk	1.9	2.0	2.1	1.6	1.5
Portfolio Risk	7.0	8.7	7.9	8.3	12.3
Benchmark Risk	7.4	9.9	9.2	8.8	12.2

Excess Return Consistency Analysis



Ex-Post Active Risk measures the volatility of the actual excess returns achieved by the Portfolio/Fund.

Excess Return Consistency Analysis measures the frequency of the Portfolio/Fund's outperformance (Blue) and underperformance (Red) versus its benchmark, calculated using monthly (or quarterly if indicated) returns since inception.

**Attribution to Total Excess Return Analysis
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2022**

Market Value: £3.3bn



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The Returns Summary details the Portfolio, Benchmark and Excess Returns. The Excess Returns are plotted, the Asset Allocation Summary details the weights held by the portfolio and benchmark in each asset class/manager. The green plots are the over/underweight exposures of the Fund (v Fund benchmark) at the beginning and end of the period. The Attribution to Excess Return, identifies how each asset class/manager has contributed to the overall excess return of the Total Fund. It is broken down into Asset Allocation (how successful the decision to over/underweight each asset class was) and then into Stock Selection (how well each manager's decisions have performed). The Asset Allocation plus the Stock Selection excess returns are all additive and equal the Total Excess Return of the Fund.

**Attribution to Total Fund Excess Return Analysis
Worcestershire County Council Pension Fund
for Year Ended 30th September 2022**



Market Value: £3.3bn

	Total Fund	Total Fund ex Overlay	Total Equity	Total Equity ex Overlay	Total Active	Far East Dev - Nomura	EMM - LGPSC	Glb Sust Active Targeted - LGPSC	Glb Sust Active Thematic - LGPSC	Total Passive	UK - L&G	North American - L&G	Europe ex UK - L&G	Total Alts	RAFI Fdmntl Dev (inc Korea) Red Carbon Pathway Index - L&G	MSCI Wid Min Vol - L&G	MSCI Wid Qual - L&G	AW Passive Climate Factor Fund - LGPSC	R&M EPO	R&M EPO ex Overlay	Total Fixed Income	Corporate Bonds - LGPSC	Corporate Debt	Total Property	Total Infra
Returns Summary (%)																									
Excess Return	-1.5	-1.2	-2.3	-1.9	-6.6	-1.7	-7.5	-4.9	-0.6	-0.9	0.1	0.0	-0.2	-0.9	0.0	0.0	-0.2	0.2	14.2	19.9	-6.6	-1.6	-3.1	-3.8	7.3
Portfolio Return	-3.8	-4.6	-6.9	-7.9	-16.4	-13.3	-16.0	-9.3	-5.0	-5.1	-3.9	0.4	-13.1	-6.2	1.2	2.0	-5.9	-8.2	14.2	19.9	-17.6	-22.7	2.9	7.1	20.3
Benchmark Return	-2.3	-3.4	-4.6	-6.0	-9.8	-11.7	-8.5	-4.4	-4.4	-4.2	-4.0	0.4	-12.9	-5.3	1.2	2.0	-5.6	-8.3	0.0	0.0	-11.0	-21.0	6.0	10.8	13.0
Asset Allocation Summary (%)																									
Portfolio Start	100.0	99.7	76.7	76.4	22.7	11.2	11.5	0.0	0.0	32.3	15.8	9.9	6.6	15.8	3.5	5.9	6.4	0.0	5.8	5.5	7.9	6.4	1.5	4.7	10.7
Portfolio End	100.0	100.0	69.8	69.8	25.0	10.3	9.2	2.1	3.4	21.9	13.2	4.3	4.5	15.9	0.0	0.0	9.9	6.0	7.0	7.0	8.1	5.3	2.8	6.7	15.4
Benchmark Start	100.0	100.0	74.7	74.7	20.0	10.0	10.0	0.0	0.0	39.7	25.2	8.0	6.5	15.0	3.0	6.0	6.0	0.0	0.0	0.0	10.0	6.0	4.0	4.7	10.7
Benchmark End	100.0	100.0	67.8	67.8	26.0	10.0	10.0	2.3	3.7	26.8	14.8	6.5	5.5	15.0	0.0	0.0	9.0	6.0	0.0	0.0	10.0	6.0	4.0	6.7	15.4
Attribution to Excess Return (%)																									
Excess Return	-1.5	-1.2	-1.8	-1.5	-2.4	-0.2	-0.8	-0.2	-0.2	-0.3	-0.1	-0.1	0.0	0.2	0.0	0.1	-0.1	0.1	0.7	1.0	-0.4	-0.1	-0.3	-0.1	0.8
Asset Allocation	0.0	-0.2	0.3	0.0	-0.1	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.2	0.0	0.2	0.0	0.1	0.0	0.1	0.5	0.2	-0.2	0.0	-0.2	0.0	0.0
Stock Selection	-1.5	-1.0	-2.1	-1.5	-2.3	-0.2	-0.8	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	-0.2	-0.1	0.0	-0.1	0.8

**Attribution to Total Fund Excess Return Analysis - Annualised
Worcestershire County Council Pension Fund
for 3 Year Period Ended 30th September 2022**

Market Value: £3.3bn

	Total Fund	Total Fund ex Overlay	Total Equity	Total Equity ex Overlay	Total Active	Far East Dev - Nomura	EMM - LGPSC	Glb Sust Active Targeted - LGPSC	Glb Sust Active Thematic - LGPSC	Total Passive	UK - L&G	North American - L&G	Europe ex UK - L&G	Total Alts	RAFI Fdmntl Dev (inc Korea) Red Carbon Pathway Index - L&G	MSCI Wid Min Vol - L&G	MSCI Wid Qual - L&G	AW Passive Climate Factor Fund - LGPSC	R&M EPO	R&M EPO ex Overlay	Total Fixed Income	Corporate Bonds - LGPSC	Corporate Debt	JP Morgan Corp Bond	Total Property	Total Infra
Returns Summary (%)																										
Excess Return	0.0	-1.1	0.2	-1.1	-2.4	0.0	-3.1	-4.9	-0.6	0.7	0.1	0.1	-0.2	-0.7	0.0	0.1	-0.1	0.2	-9.3	3.9	-4.8	-0.1	0.0	0.2	-6.6	0.1
Portfolio Return	3.8	3.4	3.5	3.0	0.3	2.0	-0.1	-9.3	-5.0	5.0	0.9	11.6	2.1	3.6	9.4	3.2	10.0	-8.2	-9.3	3.9	-10.9	-3.6	6.5	1.4	2.9	10.7
Benchmark Return	3.9	4.5	3.3	4.1	2.7	2.0	3.0	-4.4	-4.4	4.3	0.8	11.5	2.3	4.3	9.3	3.1	10.1	-8.3	0.0	0.0	-6.1	-3.5	6.5	1.2	9.5	10.6
Asset Allocation Summary (%)																										
Portfolio Start	100.0	99.5	80.0	79.5	25.9	14.4	11.5	0.0	0.0	30.7	12.7	11.5	6.5	15.5	5.8	4.7	5.0	0.0	7.8	7.4	0.5	0.0	0.5	5.3	6.0	8.3
Portfolio End	100.0	100.0	69.8	69.8	25.0	10.3	9.2	2.1	3.4	21.9	13.2	4.3	4.5	15.9	0.0	0.0	9.9	6.0	7.0	7.0	8.1	5.3	2.8	0.0	6.7	15.4
Benchmark Start	100.0	100.0	75.7	75.7	24.0	12.0	12.0	0.0	0.0	41.7	21.2	11.0	9.5	10.0	3.3	3.3	3.3	0.0	0.0	0.0	0.8	0.0	0.8	9.2	6.0	8.3
Benchmark End	100.0	100.0	67.8	67.8	26.0	10.0	10.0	2.3	3.7	26.8	14.8	6.5	5.5	15.0	0.0	0.0	9.0	6.0	0.0	0.0	10.0	6.0	4.0	0.0	6.7	15.4
Attribution to Excess Return (%)																										
Excess Return	0.0	-1.1	0.2	-0.9	-1.0	0.0	-0.4	-0.1	-0.1	0.1	0.1	0.1	-0.1	0.1	0.0	0.0	0.1	0.0	1.0	-0.1	0.0	0.1	-0.1	-0.1	-0.3	0.1
Asset Allocation																										
Asset Allocation	-0.1	-0.3	-0.1	-0.3	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.1	0.1	-0.1	0.0	-0.1	0.0	0.1	0.0	0.0	-0.2	0.0	0.1	-0.1	-0.1	0.0	0.0
Stock Selection																										
Stock Selection	0.1	-0.9	0.3	-0.6	-0.8	0.0	-0.3	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.1	0.2	-0.1	0.0	0.0	0.0	-0.3	0.1

Stonepeak Infrastructure Core Fund III - GBP	Absolute Return +12%	Jan-18	133.1	4.1	9.0	2.9	6.1	18.9	5.8	13.1	21.8	12.0	9.8	19.8	12.0	7.9					16.4	12.0	4.4		
Stonepeak Infrastructure Core Fund III - USD	Absolute Return +12%	Jan-18	160.4	N/A	0.5	2.9	-2.3	6.6	5.8	0.8	7.2	12.0	-4.7	18.2	12.0	6.2					14.2	12.0	2.3		
Stonepeak Infrastructure Core Fund IV - GBP	Absolute Return +12%	Jan-22	28.4	0.9	7.3	2.9	4.4	12.0	5.8	6.1											12.0	5.8	6.1		
Stonepeak Infrastructure Core Fund IV - USD	Absolute Return +12%	Jan-22	27.6	N/A	-1.1	2.9	-4.0	0.3	5.8	-5.5											0.3	5.8	-5.5		
First Sentier EDIF II GBP	Absolute Return +9%	Jun-18	123.5	3.8	4.9	2.2	2.7	8.1	4.4	3.7	25.0	9.0	16.0	12.9	9.0	3.9					10.8	9.1	1.7		
First Sentier EDIF II EURO	Absolute Return +9%	Jun-18	136.8	N/A	2.9	2.2	0.7	4.1	4.4	-0.3	22.1	9.0	13.1	13.0	9.0	4.0					10.4	9.1	1.4		
First Sentier EDIF III	Absolute Return +8%																								
First Sentier EDIF III EURO	Absolute Return +8%																								
Worcestershire CC Total Fund ex Overlay		Mar-87	3,259.5	100.0	-0.1	-0.7	0.6	-5.2	-4.9	-0.4	-4.6	-3.4	-1.2	3.4	4.5	-1.1	4.5	5.4	-0.9	8.2	8.4	-0.2	7.7	8.2	-0.5
Worcestershire CC Total Fund		Mar-87	3,259.5	100.0	-0.4	-1.0	0.6	-5.1	-4.4	-0.6	-3.8	-2.3	-1.5	3.8	3.9	0.0	4.7	5.1	-0.3	8.3	8.2	0.1	7.7	8.2	-0.4

PF = Portfolio Return BM = Benchmark Return ER = Excess Return

Total Fund Benchmark	CLIENT SPECIFIC BENCHMARK:	Notes:
	<p>17% FTSE All Share - % Dependant upon actual drawdowns of Infra & Prop</p> <p>5.5% FTSE Developed Europe Ex UK</p> <p>10% FTSE All World Emerging Markets</p> <p>15% 60% MSCI World Quality Total Return NET & 40% LGPSC All World Climate Index</p> <p>6.5% FTSE All World North America</p> <p>6% FTSE All World</p> <p>10% 5.5% FTSE All World Asia Pacific ex Japan & 4.5% FTSE All World Japan</p> <p>6% Corp Bonds: LGPS Central Specific Index</p> <p>4% Corporate Private Debt @ Absolute Return +10%</p> <p>Infrastructure: 70% UK CPI +5.5%, 30% Absolute Return 10%</p> <p>Property: 60% MSCI UK Monthly Property Index, 40% Absolute Return +7.5%</p>	<p>Q2 2022: Investment into LGPSC Global Sustainable Equity Active Targeted Fund and LGPSC Global Sustainable Equity Active Thematic Fund from 04.05.2022. Total Fund Benchmark updated. The attribution for Total Active/Total Equity/Total Fund will not add up due to the transition.</p> <p>Q4 2021: Total Fund Benchmark updated and backdated from 01.04.2021. Total Fixed Income Fund created from 01.04.21. New investments were made on 24.11.2021 into LGPSC All World Passive Climate Factor Fund, and Stonepeak Fund IV Infrastructure Core Fund (data is 'lagged'). A new investment was also made with Gresham House Forestry Growth & Sustainability Fund from 10.12.2021 (data is produced annually in February). Full disinvestments were made from L&G RAFI Fundamental Developed Reduced Carbon Pathway Index Fund on 22.10.2021 and from L&G MSCI World Minimum Volatility Fund on 24.11.2021.</p> <p>Historic data up to and including 31.03.2016 has been provided by the WM Co and L&G.</p>

Total Fund Reconciliation Analysis
Worcestershire County Council Pension Fund
for Quarter Ended 30th September 2022

Market Value: £3.3bn

	30th June 2022		Net Investment (£000s)	Total Income (£000s)	Total Gain/Loss (£000s)	30th September 2022	
	Market Val (£000s)	Exposure (%)				Market Val (£000s)	Exposure (%)
Total Equity Fund	2,332,030	71.4	-35,000	0	-22,208	2,274,821	69.8
Total Equity Fund ex Overlay	2,323,396	71.2	-35,000	0	-13,601	2,274,795	69.8
<i>Total Active Equity Fund</i>	823,399	25.2	0	0	-9,366	814,033	25.0
Nomura Far East Developed Equity Fund	339,443	10.4	0	0	-3,533	335,910	10.3
LGPSC Emerging Markets Fund	312,539	9.6	0	0	-244,716	67,823	2.1
LGPSC Global Sustainable Equity Active Targeted Fund	65,102	2.0	0	0	44,173	109,274	3.4
LGPSC Global Sustainable Equity Active Thematic Fund	106,316	3.3	0	0	194,710	301,026	9.2
<i>Total Passive Equity Fund</i>	760,825	23.3	-35,000	0	-11,832	713,993	21.9
L&G UK Equity Fund	444,757	13.6	0	0	-15,308	429,450	13.2
L&G North American Equity Fund	166,920	5.1	-35,000	0	7,033	138,953	4.3
L&G Europe Ex UK Equity Fund	149,148	4.6	0	0	-3,558	145,590	4.5
<i>Total Alternatives Fund</i>	511,253	15.7	0	0	5,942	517,195	15.9
L&G MSCI World Quality Fund	318,196	9.7	0	0	3,559	321,755	9.9
LGPSC All World Passive Climate Factor Fund	193,057	5.9	0	0	2,384	195,440	6.0
<i>River & Mercantile Equity Protection Fund</i>	236,553	7.2	0	0	-6,953	229,600	7.0
<i>River & Mercantile Equity Protection Fund ex Overlay</i>	227,920	7.0	0	0	1,654	229,574	7.0
Total Fixed Income Fund	265,382	8.1	-2,707	0	-157	262,518	8.1
<i>Total Corporate Bond Fund</i>	187,566	5.7	0	0	-16,266	171,300	5.3
LGPSC Corporate Bond Fund	187,566	5.7	0	0	-16,266	171,300	5.3
<i>Total Corporate Debt Fund</i>	77,816	2.4	-2,707	0	16,109	91,218	2.8
Bridgepoint Direct Lending II	56,584	1.7	-2,707	0	2,646	56,524	1.7
Bridgepoint Direct Lending III	21,232	0.7	12,111	0	1,352	34,694	1.1
Total Property Fund	209,012	6.4	0	0	10,401	219,412	6.7
<i>Total UK Property Fund</i>	56,407	1.7	0	0	3,055	59,462	1.8
Invesco UK Property Fund	44,665	1.4	0	528	3,017	47,682	1.5
Venn UK Property Fund	11,742	0.4	0	0	37	11,779	0.4
Walton US Property Fund	1,284	0.0	0	0	124	1,409	0.0
Walton US Property Fund II	8,858	0.3	0	694	236	9,094	0.3
Invesco European Property Fund	69,032	2.1	0	0	-1,419	67,613	2.1
Venn Property Debt Fund II	13,514	0.4	3,838	0	412	17,765	0.5
Gresham House Forestry Growth & Sustainability Fund	38,956	1.2	4,229	0	-216	42,969	1.3
Gresham House Forestry Fund VI	0	0.0	0	0	0	0	0.0
AEW Property Fund	20,960	0.6	0	0	140	21,100	0.6
Total Infrastructure Fund	458,866	14.1	21,822	871	22,039	502,727	15.4
Green UK Infrastructure Fund	48,424	1.5	-1,470	0	1,072	48,027	1.5
Gresham House BSIF Housing and Infrastructure	45,730	1.4	-1,175	0	2,350	46,906	1.4
Gresham House BSIF II Infrastructure Fund	-924	0.0	22,580	0	99	21,754	0.7
Hermes UK Infrastructure Core Fund	56,421	1.7	-5,189	0	-1,589	49,644	1.5
Hermes UK Infrastructure Fund II	48,754	1.5	0	0	2,724	51,479	1.6
Stonepeak Infrastructure Core Fund III	121,800	3.7	1,178	871	10,100	133,077	4.1
Stonepeak Infrastructure Core Fund IV	20,942	0.6	5,899	0	1,512	28,353	0.9
First Sentier EDIF II	117,719	3.6	0	0	5,770	123,488	3.8
First Sentier EDIF III	0	0.0	0	0	0	0	0.0
Cash Fund	0	0.0	0	0	0	0	0.0
Worcestershire CC Total Fund ex Overlay	3,256,656	99.7	-15,884	871	18,681	3,259,452	98.9
Worcestershire CC Total Fund	3,265,289	100.0	-15,884	871	10,074	3,259,479	98.9

Note: Cashflow into cash reflects sum of portfolio contributions minus net investments. It is assumed that cash for the Fund is held outside of the invested assets and is therefore withdrawn from the Total Fund

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PENSIONS INVESTMENT SUB COMMITTEE
24 NOVEMBER 2022

STRATEGIC ASSET ALLOCATION UPDATE AT 30
SEPTEMBER 2022

Recommendation

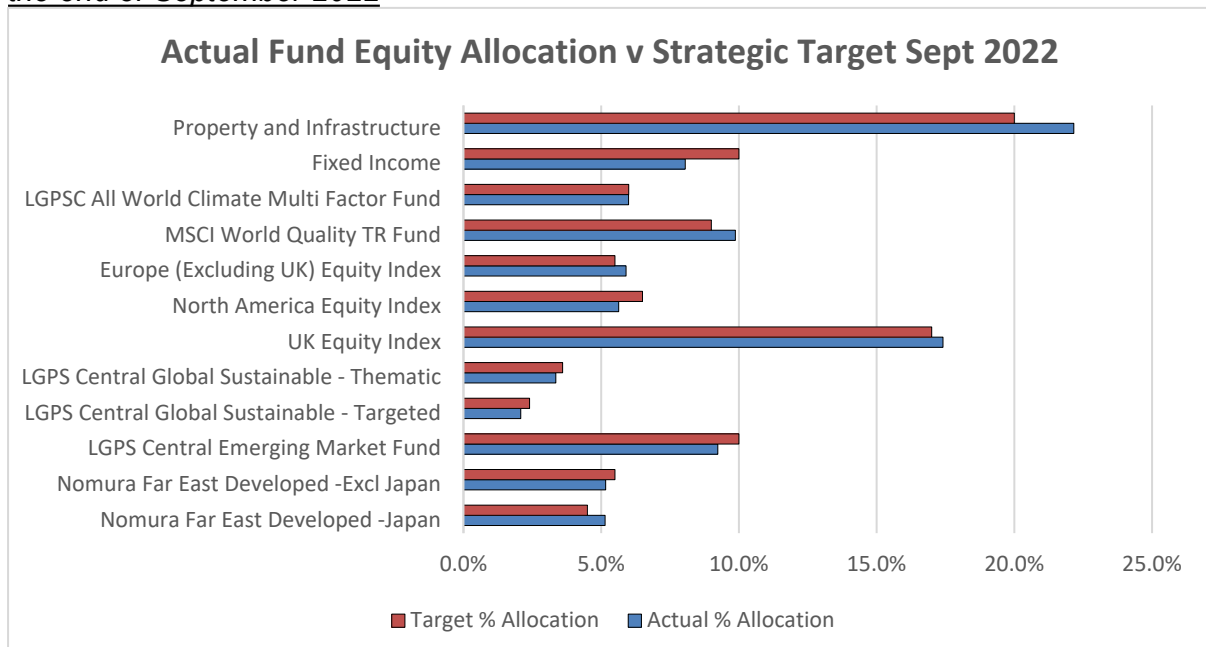
- The Chief Financial Officer recommends that the Pensions Investment Sub Committee (PISC) note and comment on the Fund Strategic Asset Allocation update**

Background and purpose

- The purpose of this report is to provide members with an update on the Funds strategic asset allocation at the end of September 2022.
- The following paragraphs provide PISC with an update as to how the assets are performing against the Funds 3 to 5 year strategic asset allocation targets set from the 1 April 2020.

Current Equity Performance and actual allocation versus target allocation as at the end of September 2022.

Table 1 Current Equity Performance and actual allocation versus target allocation as at the end of September 2022



- Table 1 above shows the current actual Fund allocation of assets compared to the revised strategic asset allocation targets of 70% Equities, 20% Property & Infrastructure and 10% Fixed income with effect from the 1 April 2020. The fund is currently overweight Property & Infrastructure, underweight Fixed Income, and broadly on target in total equities.

5. The overall allocation to equities, including equity protection, as detailed in table 2 is 69.8% (71.4% June 2022) compared to a target of 70%. This has reduced since June mainly due to a reduction in the equity markets caused by the impact of inflation, cost of living increases, growing inflation and the Ukraine / Russia conflict. Additionally the fund has incurred some property & infrastructure capital calls which were in part funded via withdrawals from passive market cap equities.

6. Table 2 below shows the overall Equity performance of the Fund over the past 3 years and since inception up to the end of September 2022. The table highlights that over these timeframes the Passive Equities have outperformed their benchmark whilst both Alternative Factors and Active Equities have underperformed their benchmark.

Table 2 Equity Performance as at the end of September 2022

Asset Class	Fund Value £'M	3 Year Actual	3 Year BM	Since Inception Actual	Since Inception BM	Target Allocation	Actual Allocation	Variance under (-) over target
		Return	Return	Return	Return			
	£	% p.a.	% p.a.	% p.a.	% p.a.	%	%	%
Passive								
UK Equity Fund	429.4	0.9	0.8	5.8	5.6	17.0	17.4	0.4
North America Equity Fund	139.0	11.6	11.5	15.5	15.5	6.5	5.6	-0.9
Europe Equity Fund	145.6	2.1	2.3	7.7	7.9	5.5	5.9	0.4
Equity Protection strategy	229.6							
Total Passive Equity	943.6	5.0	4.3	9.2	8.5	29.0	28.9	-0.1
Alternatives Factors								
All World Climate Multi Factor Fund	195.4	0.0	0.0	-8.2	-8.3	6.0	6.0	0.0
Quality	321.8	10.0	10.1	14.5	14.7	9.0	9.9	0.9
Total Alternatives	517.2	3.6	4.3	9.7	10.3	15.0	15.9	0.9
Total Active Equities	814.0	0.3	2.7	7.5	8.3	26.0	25.0	-1.0
TOTAL FUND All Equities	2,274.8	4.6	4.5	9.0	9.0	70.0	69.8	-0.2

Passive Market Cap

7. From a passive point of view the North America fund (includes Canada allocation of just over 4%) has performed better than the European Fund which in turn has performed well against the UK FTSE Market cap Fund since inception. The previous larger underweight position in asset allocation in the UK compared to the US overweight before rebalancing back in September 2021 has helped cushion the low performance return of the UK FTSE for the Fund.

8. The Total Passive Equity actual allocation is 0.1% under target once the Equity Protection has been pro-rated over the existing passive market cap indices. This is likely to fluctuate in line with equity performance and as property and infrastructure drawdowns are paid out.

9. The performance of the market caps relative to each other may be explained by market sectors as the US has a substantial investment in the technology sector compared to the UK and European markets as shown in Table 3 below.

Table 3: % Passive Market Cap Sector allocation September 2022

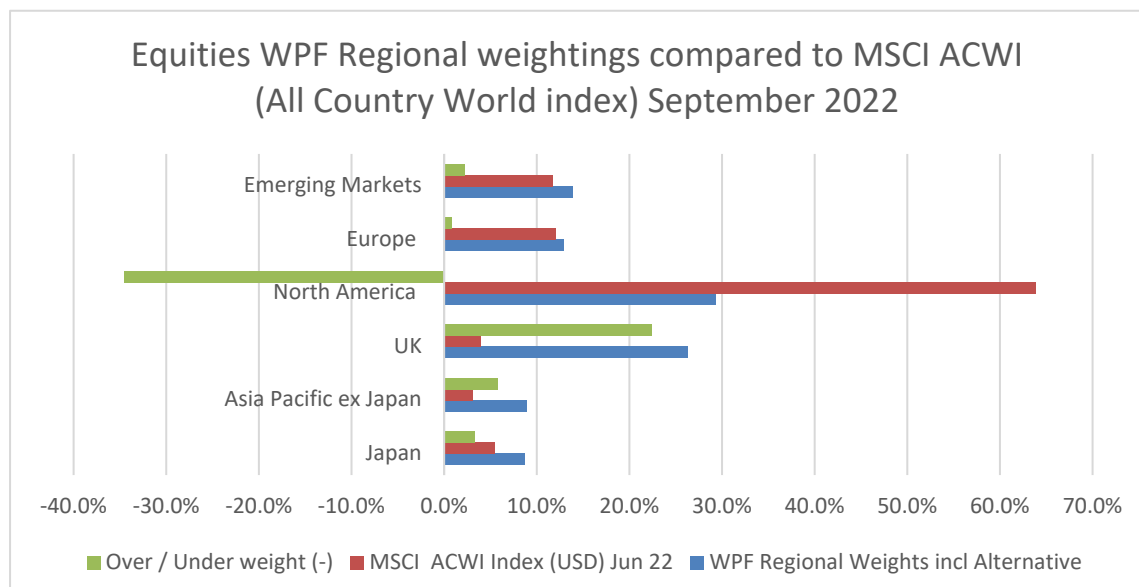


Review of Regional weights compared to global index

10. The Funds equity positions are split between those invested on a regional geographic basis (Nomura, LGPSC Emerging Markets, LGIM Passive market cap funds) or those investing on a global basis.

11. It is worth pointing out that these regional equity asset allocations lead to variances verses the MSCI All Country World Index as shown in table 4 below. Members need to be mindful of this and remain comfortable with the position.

Table 4 sets out the Fund's equity exposure via regional portfolios relative to the MSCI All Country World Index (ACWI) as of September 2022.

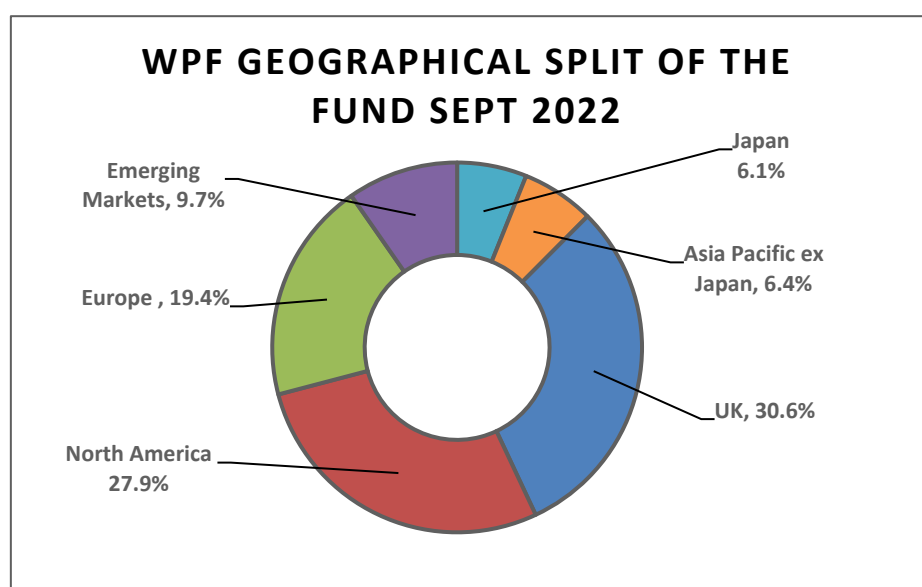


12. Compared to the MSCI All Country World Index the Fund has a large underweight to North America, and a large overweight to the UK. Over the long term the process of determining regional weights is likely to be a major driver of the Fund's equity allocations performance.

13. Performance of regional vs. global allocations will fluctuate over time but investing via a series of regional weightings does offer the Fund better opportunities to fully tailor regional weights and provides the option of dynamic asset allocation by the Pension Fund.

Overall Geographical Split of the Funds Total Assets under Management Sept 2022

14. Table 5 below shows the overall Geographical Split of the Fund's Total Assets under Management at 30 September 2022 taking on board its allocations to Equities, Fixed Income & Property and Infrastructure. This demonstrates the diversification of the assets in the Fund.



Contact Points

Rob Wilson

Pensions Investment, Treasury Management & Capital strategy manager

Tel: 01905 846908 Email: RWilson2@worcestershire.gov.uk

Background Papers

In the opinion of the proper officer (in this case the Chief Financial Officer) there are no background papers relating to the subject matter of this report.

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