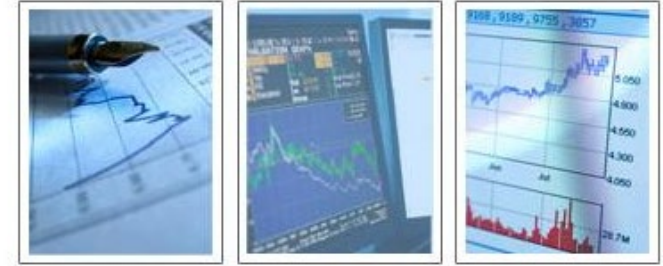


P O R T F O L I O
E V A L U A T I O N
L I M I T E D



Specialists in Investment Risk and Return Evaluation

Quarterly Risk and Return Analysis
Total Fund

Worcestershire County Council Pension Fund

Period ending 30th June 2023



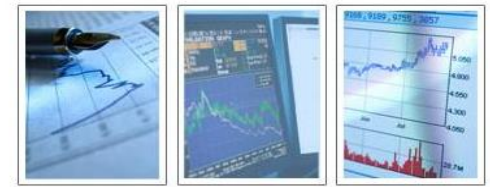
Specialists in Investment Risk and Return Evaluation



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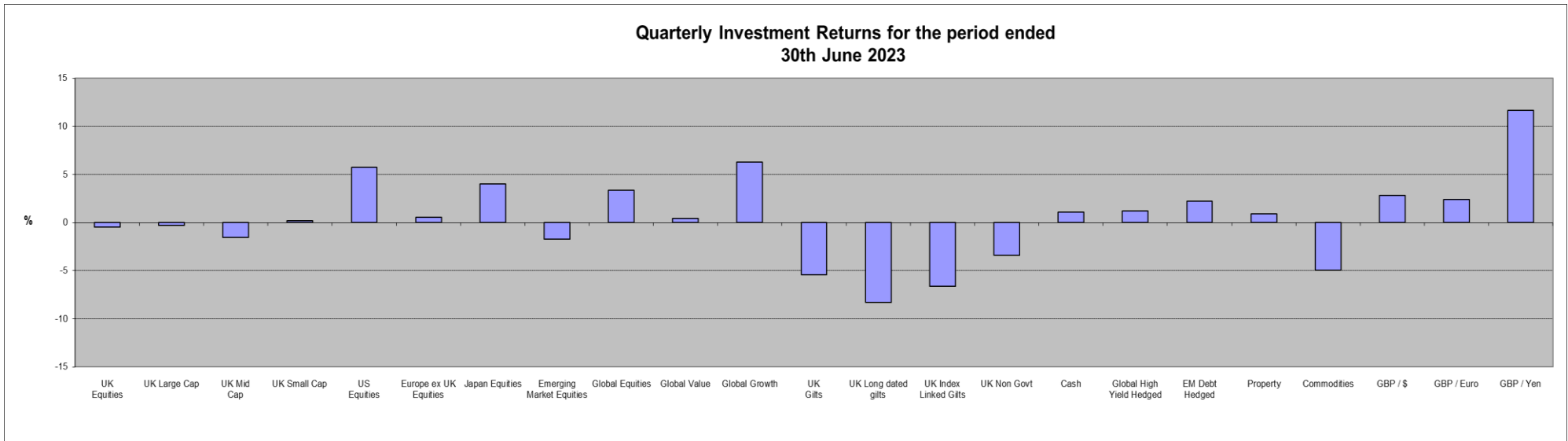
Portfolio Evaluation Ltd Market Commentary Q2 2023 (Sterling)

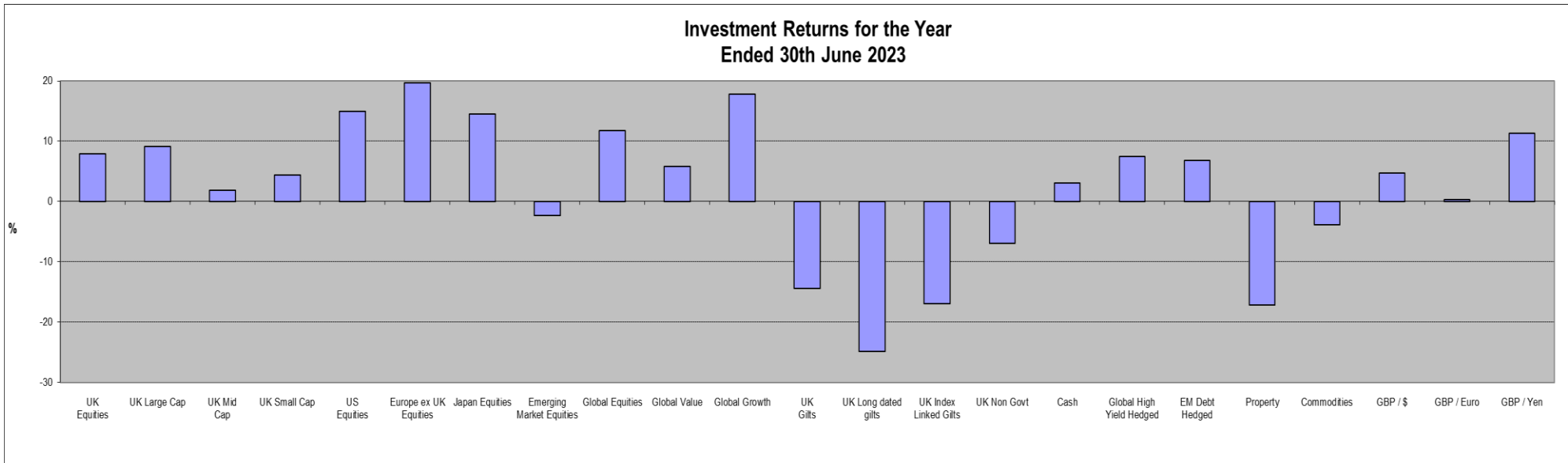
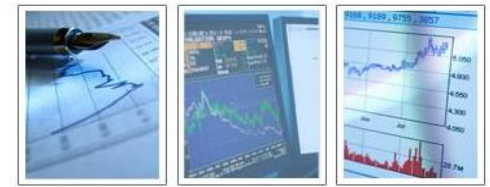
Q2 2023 witnessed key equity markets, with the exception of the US equities, having flat returns. The quarter also saw growth stocks outperforming value stocks. UK bonds and index linked bonds had significant negative returns. Commodities was also a key loser. Sterling continued to strengthen; however, since early 2022 the strong dollar / weak sterling and the weight of USD assets in the global indices has impacted GBP returns. The year ended June 2023 has seen mixed results with equities, except for Emerging Markets, having positive returns, whilst UK bond markets, index linked bonds, commodities and property had negative returns.

Although equities rallied towards the end of Q2 (led by technology stocks), the second quarter of 2023 has seen uncertainty continue as stubborn inflation has resulted in more interest rate increases. The fall in Chinese equities (partly due to US – China tensions) and Chinese economic data resulting in the Chinese Central Bank lowering interest rates did impact global equities. The results over the year reflect the struggles investors have had digesting high inflation, central bank tightening, on-going concerns about recessions, the war between Ukraine and Russia, energy supply problems, tightening labour markets and on-going COVID related issues.

It should also be noted that many of our clients are continuing to fund 'alternative' asset portfolios including funds focusing on climate and other environmental issues. We saw some clients 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.

Quarterly Investment Returns for the period ended
30th June 2023





It appears that the outlook for 2023 is that many investors are apprehensive but are seeing some opportunities. Although many investors feel that the era of low interest rates, that fuelled markets, has ended they are seeing inflation rates beginning to reduce and the pressure on interest rates abating. Investors are beginning to reassess their risk appetites. Their expected outlook for global growth remains low and their optimism remains fragile.

Risk within asset classes and correlations has increased over the year but has started to level off. However, the outlook for market risk remains 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 31st March 2023

QUARTERLY SUMMARY: **Worcestershire County Council Pension Fund Return: 0.4%** **Benchmark Return: 1.5%** **Excess Return: -1.1%**

- This quarter has been quiet as regards new fund investments and significant investments this quarter.
- The Fund and its benchmark have both generated positive returns, but the Fund has underperformed its benchmark by -1.1% excess.
- Over the quarter nearly all portfolios underperformed their benchmarks. The exceptions were The Climate Factor Fund and Corporate Bonds.
- Within the primary asset classes, equity assets were the highest returning generators over the quarter at 1.1%. Fixed Income Assets had a return of -0.7%. Infrastructure assets had a return of 0.5% whilst Property assets generated the lowest return of -3.9%. Within equities, the Alts Pool had the highest return of 5.0%, the Passive Pool had a return of 0.8% (the individual portfolios were approximately in line with their benchmarks), and the Active Pool had a return of -1.0%.
- The Fund remains underweight Total Fixed Income and is overweight equities primarily due to the overweight exposure to UK equities. Property and Infrastructure are in line with their strategic weights. The Fund underperformed the benchmark primarily due to Equities, Property, and Infrastructure. Total Fixed Income and Asset Allocation were neutral contributors to excess return. Equity assets were a positive influence on excess return.
- The benchmark structure continues to influence excess return as, although the weight to Fixed Income and some equity portfolios is fixed, it is necessary to neutralise the asset allocation weights of property and Infrastructure to be in line with their asset class weights within The Fund. Any residual is allocated to largely to the UK passive portfolio but the LGPSC Global Sustainable Equity Active Targeted Fund, the LGPSC Sustainable Equity Active Thematic Fund are also impacted by the rebalancing process.
- The latest valuation data supplied by Bridgepoint, Green Investment Bank, Gresham House, Hermes, Invesco – UK Property Fund, Stonepeak Partners III, VENN and Walton Street is lagged by three months and was for periods ending June 2022 whilst the Gresham House Forestry Funds and the Stonepeak Partners Fund IV have lags of 6 months.

YEAR SUMMARY: Worcestershire County Council Pension Fund Return: 6.7% Benchmark Return: 6.9% Excess Return: -0.2%

- The Fund and its benchmark have generated positive returns, but the Fund has underperformed its benchmark by -0.2% excess. The underperformance has been primarily generated by equity assets, and by the performance of the Fixed Income assets which underperformed. The Infrastructure Pool slightly underperformed whilst the Property Pool outperformed. 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.
- With the closure of the EPO strategy the Fund, due to the assets being invested in passive equities, has become overweight passive equities due to becoming overweight the UK Index Fund. This has been a ‘drag’ on excess return.
- The most significant drag on excess return was primarily generated by the Passive Equity Fund and Infrastructure. The highest positive contributors to excess return were the EPO, Corporate Bonds, and Property assets.
- Infrastructure assets generated the highest return of 9.3% followed by Equities with a return of 8.7%. Property was the next highest return generators over the year and generated a return of 2.9% whilst Fixed Income generated the lowest return with a return of -0.5%. Within equities the Alternative Equity Pool was the highest return generator followed by the Passive Pool and finally the Active Pool (generating returns of 15.3%, 11.4% and 8.7% respectively).

THREE YEAR SUMMARY: Worcestershire County Council Pension Fund Return: 6.1% p.a. Benchmark Return: 7.8% p.a. Excess Return: -1.8% p.a.

- Over the three-year period, the Fund has generated a positive return of 9.1% p.a. and has underperformed the benchmark by 1.8%p.a. It should be noted that there has been a considerable number of new mandates established in that timeline especially in the property, infrastructure, and bond asset classes. Additionally, the equities have been restructured.
- All primary asset classes, except for Total Fixed Income have generated positive returns.
- The equity protection overlay program has decreased the Fund return over the three-year period (by -0.3% p.a.). It should also be noted that the EPO strategy has lowered the volatility of the Fund as expected (this program has now been terminated).
- The Total Risk and Active risk are consistent with a typical multi asset class fund that uses both passive and active strategies.

Client: Worcestershire County Council Pension Fund
 Manager: Multi-manager
 Mandate: Total Fund
 Asset Class: Combined Assets
 Benchmark: Worcestershire Total Fund Index
 Inception: 31-Mar-1987
 Mkt Val: £3.6bn

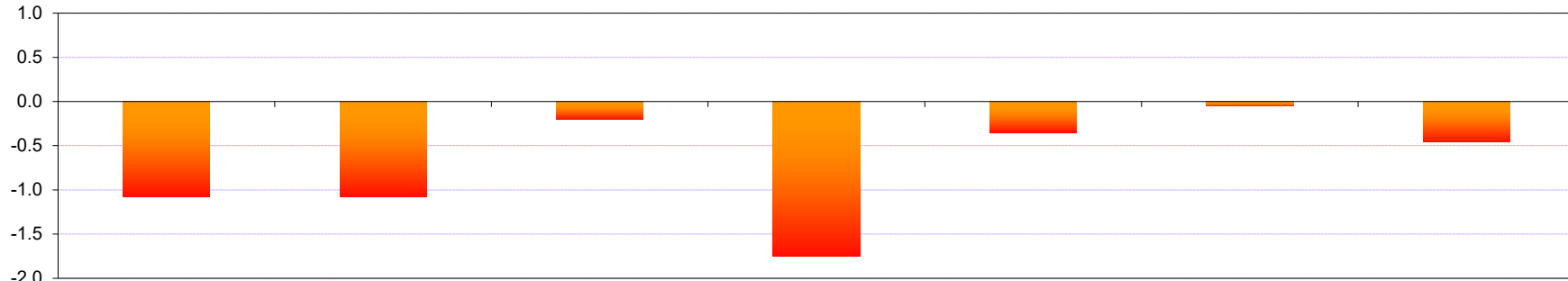
Total Fund Overview

Worcestershire CC Pension Fund

Report Period: Quarter Ending June 2023



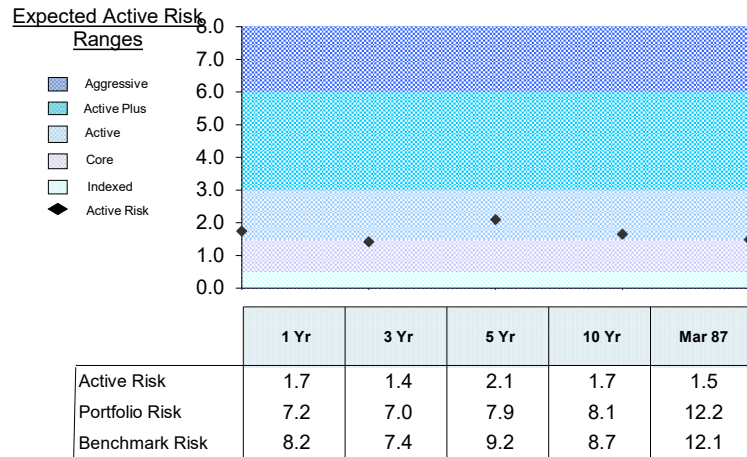
Excess Return Analysis (%)



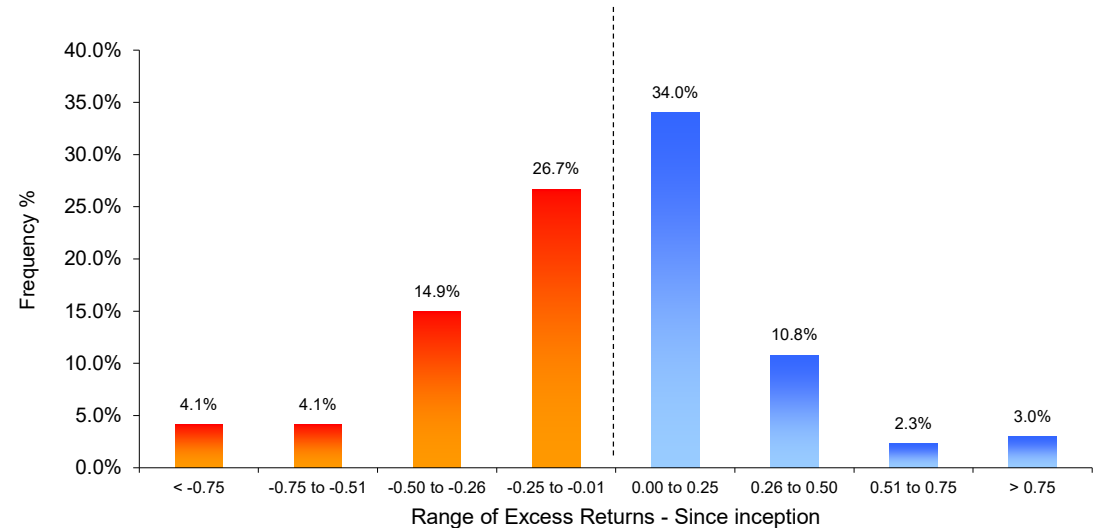
	QTR	Fin YTD	1 Yr	3 Yr	5 Yr	10Yr	Since Mar 87 (p.a.)
Excess Return	-1.1	-1.1	-0.2	-1.8	-0.4	-0.1	-0.5
Portfolio Return	0.4	0.4	6.7	6.1	5.3	7.7	7.8
Benchmark Return	1.5	1.5	6.9	7.8	5.7	7.8	8.2

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

Ex-Post Active Risk Analysis (%)



Excess Return Consistency Analysis

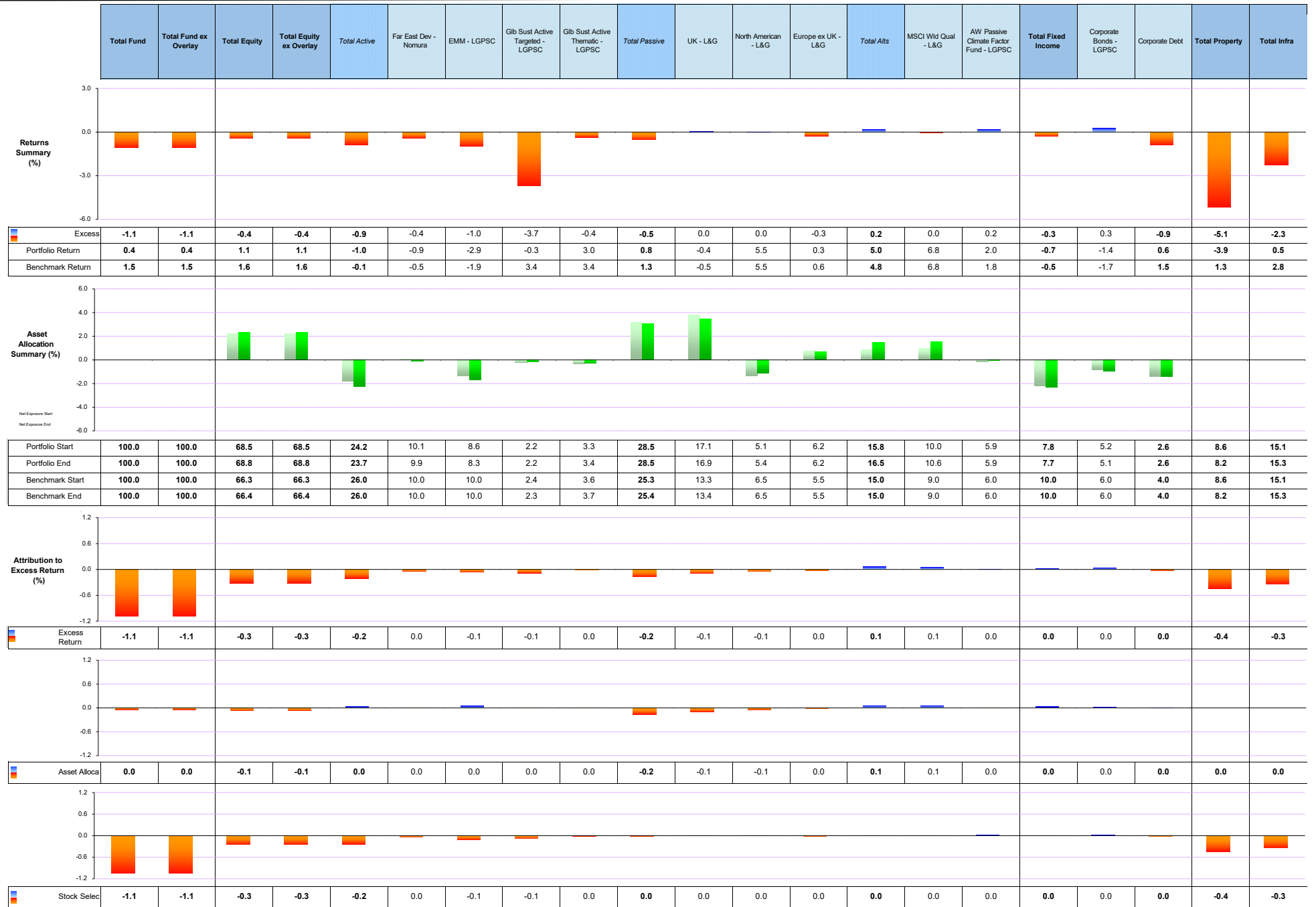


Ex-Post Active Risk measures the volatility of the actual excess returns achieved by the Portfolio/Fund.

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 Fund Excess Return Analysis Worcestershire County Council Pension Fund for Quarter Ended 30th June 2023

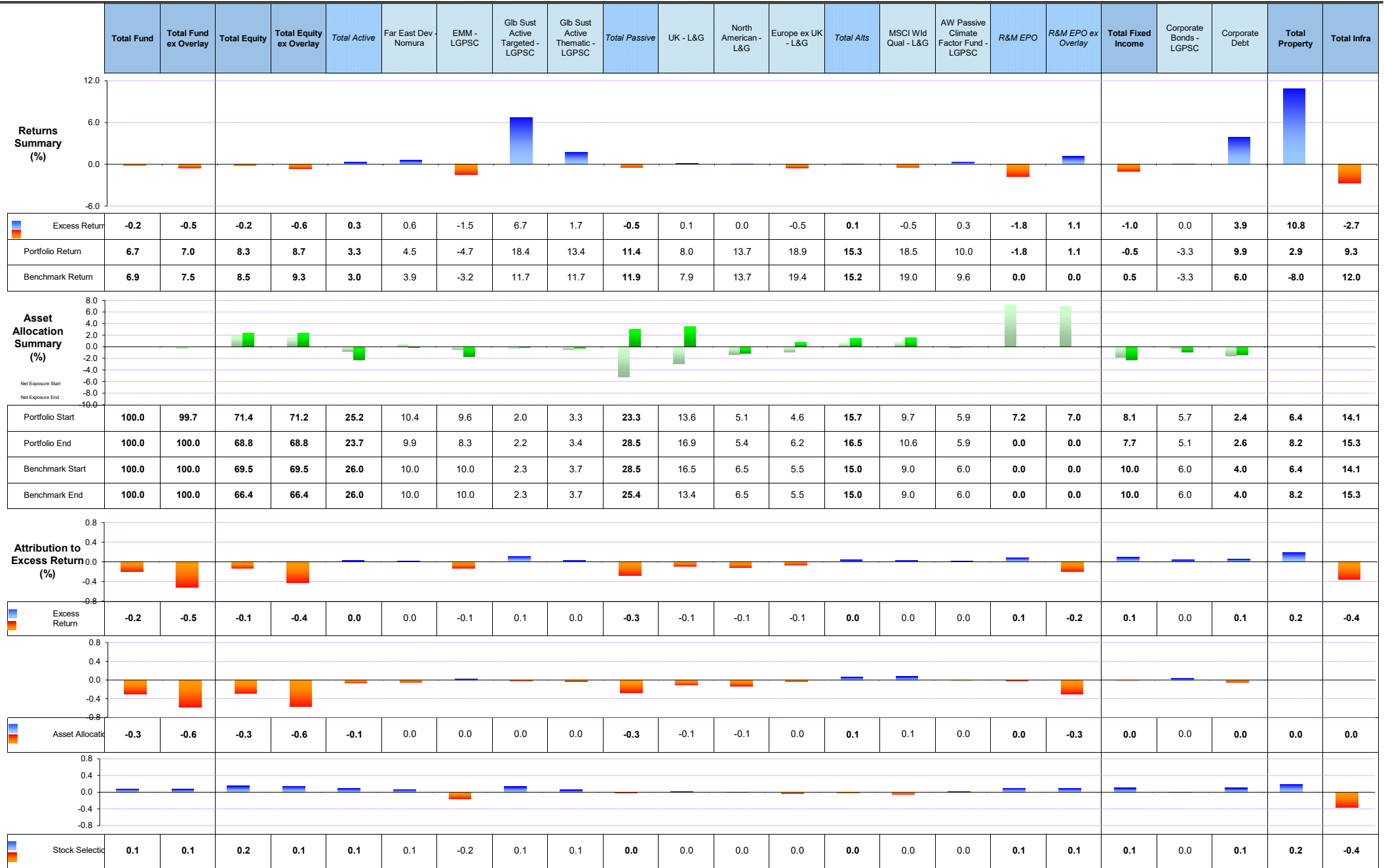
Market Value: £3.6bn



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 open 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 overweight 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 June 2023**

Market Value: £3.6bn



**Attribution to Total Fund Excess Return Analysis - Annualised
Worcestershire County Council Pension Fund
for 3 Year Period Ended 30th June 2023**

Market Value: £3.6bn

	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 Wld Min Vol - L&G	MSCI Wld 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	-1.8	-1.8	-2.1	-2.0	-2.8	-1.0	-3.2	-1.9	-0.3	-0.1	0.1	0.0	-0.3	-0.6	0.0	0.1	-0.2	0.2	-1.2	6.2	-3.3	-0.1	1.3	-2.3	-0.8	
Portfolio Return	6.1	6.1	6.7	6.7	1.5	3.5	-0.6	2.7	4.2	11.0	10.1	13.0	9.3	9.0	24.9	9.9	11.8	-0.1	-1.2	6.2	-5.1	-1.1	7.8	2.9	10.2	
Benchmark Return	7.8	7.9	8.8	8.8	4.3	4.5	2.6	4.6	4.6	11.0	10.0	13.0	9.7	9.6	24.9	9.8	12.0	-0.4	0.0	0.0	-1.8	-1.0	6.5	5.3	11.1	
Asset Allocation Summary (%)																										
Portfolio Start	100.0	100.0	77.4	77.3	24.6	13.1	11.5	0.0	0.0	30.0	11.7	11.9	6.3	15.4	5.3	4.5	5.6	0.0	7.4	7.4	6.6	5.4	1.2	5.5	10.5	
Portfolio End	100.0	100.0	68.8	68.8	23.7	9.9	8.3	2.2	3.4	28.5	16.9	5.4	6.2	16.5	0.0	0.0	10.6	5.9	0.0	0.0	7.7	5.1	2.6	8.2	15.3	
Benchmark Start	100.0	100.0	74.0	74.0	24.0	12.0	12.0	0.0	0.0	40.0	19.5	11.0	9.5	10.0	3.3	3.3	3.3	0.0	0.0	0.0	10.0	8.1	1.9	5.5	10.5	
Benchmark End	100.0	100.0	66.4	66.4	26.0	10.0	10.0	2.3	3.7	25.4	13.4	6.5	5.5	15.0	0.0	0.0	9.0	6.0	0.0	0.0	10.0	6.0	4.0	8.2	15.3	
Attribution to Excess Return (%)																										
Excess Return	-1.8	-1.8	-1.5	-1.5	-1.0	-0.2	-0.5	-0.1	-0.1	-0.3	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	0.1	0.1	0.0	-0.3	-0.1	
Asset Allocation	-0.7	-0.9	-0.8	-1.0	-0.2	-0.1	-0.1	0.0	0.0	-0.3	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.3	-0.5	0.1	0.1	0.0	0.0	0.0	
Stock Selection	-1.1	-0.9	-0.7	-0.5	-0.8	-0.1	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	-0.3	-0.1	

**Manager Return Analysis
Worcestershire County Council
Pension Fund for Period Ended
30th June 2023**

Market Value: £3.6bn

	Benchmark	Incep Date	Market Value (£m)	Weight	QTR			Year To Date			1 Year			3 Year			5 Year			10 Year			Since Inception		
					PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER	PF	BM	ER
Total Equity Fund	Client Specific Weighted Index	Mar-16	2,462.2	68.8	1.1	1.6	-0.4	1.1	1.6	-0.4	8.3	8.5	-0.2	6.7	8.8	-2.1	5.6	5.6	-0.1				8.9	8.9	0.0
Total Equity Fund ex Overlay	Client Specific Weighted Index	Mar-16	2,462.2	68.8	1.1	1.6	-0.4	1.1	1.6	-0.4	8.7	9.3	-0.6	6.7	8.8	-2.0	5.3	6.2	-0.9				8.7	9.3	-0.6
<i>Total Active Equity Fund</i>	Client Specific Weighted Index	Mar-16	850.4	23.7	-1.0	-0.1	-0.9	-1.0	-0.1	-0.9	3.3	3.0	0.3	1.5	4.3	-2.8	2.0	3.8	-1.8				7.4	8.0	-0.7
Nomura Far East Developed Fund	Worcs Nomura FT AW A P & FT AW J	Feb-03	354.7	9.9	-0.9	-0.5	-0.4	-0.9	-0.5	-0.4	4.5	3.9	0.6	3.5	4.5	-1.0	3.4	3.4	0.0	7.3	6.9	0.5	9.1	9.0	0.1
Nomura Far East Developed Fund - 01.08.21	Worcs Nomura FT AW A P & FT AW J	Aug-21	354.7	N/A	-0.9	-0.5	-0.4	-0.9	-0.5	-0.4	4.5	3.9	0.6										-2.7	-0.9	-1.8
LGPS Emerging Markets Fund	FTSE All World Emerging Market Index	Jul-19	298.0	8.3	-2.9	-1.9	-1.0	-2.9	-1.9	-1.0	-4.7	-3.2	-1.5	-0.6	2.6	-3.2							-1.3	1.2	-2.4
LGPS Global Sustainable Equity Active Targeted Fund	FTSE All World Index	May-22	77.1	2.2	-0.3	3.4	-3.7	-0.3	3.4	-3.7	18.4	11.7	6.7										2.7	4.6	-1.9
LGPS Global Sustainable Equity Active Thematic Fund	FTSE All World Index	May-22	120.6	3.4	3.0	3.4	-0.4	3.0	3.4	-0.4	13.4	11.7	1.7										4.2	4.6	-0.3
<i>Total Passive Equity Fund</i>	Client Specific Weighted Index	Mar-16	1,021.2	28.5	0.8	1.3	-0.5	0.8	1.3	-0.5	11.4	11.9	-0.5	11.0	11.0	-0.1	7.5	6.8	0.7				10.1	9.5	0.5
L&G UK Equity Fund	FTSE All Share Index	Dec-15	605.7	16.9	-0.4	-0.5	0.0	-0.4	-0.5	0.0	8.0	7.9	0.1	10.1	10.0	0.1	3.2	3.1	0.1				6.8	6.6	0.2
L&G North American Equity Fund	FTSE All World North American Index	Dec-15	192.9	5.4	5.5	5.5	0.0	5.5	5.5	0.0	13.7	13.7	0.0	13.0	13.0	0.0	12.8	12.8	0.0				15.3	15.3	0.0
L&G Europe Ex UK Equity Fund	FTSE Developed Europe Ex. UK Index	Dec-15	222.6	6.2	0.3	0.6	-0.3	0.3	0.6	-0.3	18.9	19.4	-0.5	9.3	9.7	-0.3	7.2	7.5	-0.3				9.8	10.0	-0.3
<i>Total Alternatives Fund</i>	20% RAFI/40% MSCI WL Min/40% MSCI WL Qual	Mar-16	590.6	16.5	5.0	4.8	0.2	5.0	4.8	0.2	15.3	15.2	0.1	9.0	9.6	-0.6	8.3	8.8	-0.5				10.7	11.2	-0.5
L&G MSCI World Quality Fund	MSCI World Quality Total Return Net Index	Dec-15	378.2	10.6	6.8	6.8	0.0	6.8	6.8	0.0	18.5	19.0	-0.5	11.8	12.0	-0.2	13.7	13.8	-0.1				15.5	15.6	-0.1
LGPS All World Passive Climate Factor Fund	FTSE AW Climate Bal Com Factor Net	Nov-21	212.3	5.9	2.0	1.8	0.2	2.0	1.8	0.2	10.0	9.6	0.3										-0.1	-0.4	0.2
Total Fixed Income Fund	60% LGPSC Corp Index & 40% Absolute Return +6%	Apr-21	275.1	7.7	-0.7	-0.5	-0.3	-0.7	-0.5	-0.3	-0.5	0.5	-1.0										-5.1	-1.8	-3.3
<i>Total Corporate Bond Fund</i>	LGPS Corporate Bond Index	Mar-20	181.4	5.1	-1.4	-1.7	0.3	-1.4	-1.7	0.3	-3.3	-3.3	0.0	-5.5	-5.0	-0.5							-1.1	-1.0	-0.1
LGPS Corporate Bond Fund	LGPS Corporate Bond Index	Mar-20	181.4	5.1	-1.4	-1.7	0.3	-1.4	-1.7	0.3	-3.3	-3.3	0.0	-5.5	-5.0	-0.5							-1.1	-1.0	-0.1
<i>Total Corporate Debt Fund</i>	Absolute Return +6%	May-18	93.7	2.6	0.6	1.5	-0.9	0.6	1.5	-0.9	9.9	6.0	3.9	7.6	6.0	1.6	8.8	6.0	2.8				9.0	6.1	2.9
Bridgepoint Direct Lending II GBP	Absolute Return + 6.5%	May-18	57.4	1.6	0.8	1.6	-0.8	0.8	1.6	-0.8	10.4	6.5	3.9	7.8	6.5	1.3	8.8	6.5	2.3				9.0	6.6	2.5
Bridgepoint Direct Lending II EURO	Absolute Return + 6.5%	May-18	65.4	N/A	1.7	1.6	0.2	1.7	1.6	0.2	6.2	6.5	-0.3	8.0	6.5	1.5	8.8	6.5	2.3				8.7	6.6	2.2
Bridgepoint Direct Lending III GBP	Absolute Return +6%	Jan-22	36.3	1.0	0.3	1.5	-1.2	0.3	1.5	-1.2	8.5	6.0	2.5										7.9	5.0	2.9
Bridgepoint Direct Lending III EURO	Absolute Return +6%	Jan-22	41.3	N/A	1.3	1.5	-0.2	1.3	1.5	-0.2	5.2	6.0	-0.8										5.2	5.0	0.2
Total Property Fund	60% MSCI UK & 40% Abs Ret +7.5%	Mar-16	294.4	8.2	-3.9	1.3	-5.1	-3.9	1.3	-5.1	2.9	-8.0	10.8	2.9	5.3	-2.3	3.1	6.1	-2.9				5.3	6.4	-1.1
<i>Total UK Property Fund</i>	Absolute Return +9%	Jul-18	52.9	1.5	-2.7	2.2	-4.8	-2.7	2.2	-4.8	5.4	9.0	-3.6	5.7	9.0	-3.3							5.7	9.0	-3.3
Invesco UK Property Fund	Absolute Return +9%	Oct-18	50.2	1.4	-2.6	2.2	-4.7	-2.6	2.2	-4.7	8.2	9.0	-0.8	5.7	9.0	-3.3							3.0	9.0	-6.0
Venn UK Property Fund	Absolute Return +9%	Jul-15	2.8	0.1	-3.5	2.2	-5.6	-3.5	2.2	-5.6	-5.8	9.0	-14.8	1.7	9.0	-7.3	4.5	9.0	-4.5				8.0	9.1	-1.1
Walton Street US Property Fund - GBP	Absolute Return +6.5%	Feb-16	1.4	0.0	-5.6	1.6	-7.2	-5.6	1.6	-7.2	6.6	6.5	0.1	4.8	6.5	-1.7	6.1	6.5	-0.4				9.5	6.4	3.2
Walton Street US Property Fund - USD	Absolute Return +6.5%	Feb-16	1.7	N/A	-2.9	1.6	-4.5	-2.9	1.6	-4.5	0.2	6.5	-6.3	4.8	6.5	-1.7	3.6	6.5	-2.9				6.7	6.4	0.4
Walton Street US Property Fund II - GBP	Absolute Return +7%	Jun-19	8.7	0.2	-7.2	1.7	-8.9	-7.2	1.7	-8.9	8.0	7.0	1.0	5.1	7.0	-1.9							6.6	7.0	-0.3
Walton Street US Property Fund II - USD	Absolute Return +7%	Jun-19	10.7	N/A	-4.5	1.7	-6.2	-4.5	1.7	-6.2	2.0	7.0	-5.0	5.3	7.0	-1.7							5.4	7.0	-1.6
Invesco European Property Fund - GBP	Absolute Return +6.5%	Feb-16	65.2	1.8	-1.1	1.6	-2.6	-1.1	1.6	-2.6	-2.4	6.5	-8.9	0.9	6.5	-5.6	1.3	6.5	-5.2				4.2	6.4	-2.2
Invesco European Property Fund - EURO	Absolute Return +6.5%	Feb-16	74.2	N/A	-1.1	1.6	-2.6	-1.1	1.6	-2.6	-4.5	6.5	-10.9	3.0	6.5	-3.4	2.2	6.5	-4.3				3.2	6.4	-3.2
Venn Property Debt Fund II - GBP	Absolute Return +6%	Aug-20	15.6	0.4	1.6	1.5	0.2	1.6	1.5	0.2	10.8	6.0	4.8										-58.5	5.7	-64.2
Venn Property Debt Fund II - EURO	Absolute Return +6%	Aug-20	17.8	N/A	2.6	1.5	1.1	2.6	1.5	1.1	7.3	6.0	1.3										-57.7	5.7	-63.4
Gresham House Forestry Growth & Sustainability Fund	Absolute Return +6%	Dec-21	56.8	0.5	0.0	1.5	-1.5	0.0	1.5	-1.5	-9.8	6.0	-15.8										-9.7	5.1	-14.8
Gresham House Forestry Fund VI	Absolute Return +5.5%	Oct-22	74.9	1.6	-11.3	1.3	-12.7	-11.3	1.3	-12.7													-11.7	4.1	-15.8
AEW Property Fund	UK RPI +4%	Oct-17	18.9	0.5	1.7	3.4	-1.7	1.7	3.4	-1.7	-6.6	14.7	-21.3	3.0	12.7	-9.7	2.7	10.0	-7.3				3.2	9.6	-6.4
Total Infrastructure Fund	70% UK CPI +5.5% & 30% Abs Return +10%	Mar-16	549.5	15.3	0.5	2.8	-2.3	0.5	2.8	-2.3	9.3	12.0	-2.7	10.2	11.1	-0.8	8.5	10.2	-1.6				8.5	9.5	-1.0
Green UK Infrastructure Fund	Absolute Return +7.6%	Apr-15	43.3	1.2	-7.0	1.8	-8.8	-7.0	1.8	-8.8	0.1	7.6	-7.5	11.0	7.6	3.4							6.7	7.6	-0.9
Gresham House BSIF Housing and Infrastructure	Absolute Return +8%	May-20	53.0	1.5	3.3	1.9	1.3	3.3	1.9	1.3	10.2	8.0	2.3	9.6	8.0	1.6							9.6	8.0	1.6
Gresham House BSIF II Infrastructure Fund	Absolute Return +9%	Jan-22	39.8	1.1	0.7	2.2	-1.5	0.7	2.2	-1.5	-5.6	9.0	-14.6										-3.8	5.9	-9.7
Hermes UK Infrastructure Core Fund	Absolute Return +8.4%	May-15	46.6	1.3	0.0	2.0	-2.0	0.0	2.0	-2.0	-6.1	8.4	-14.5	-1.3	8.4	-9.7	0.7	8.4	-7.7				3.9	8.4	-4.5
Hermes UK Infrastructure Fund II	Absolute Return +8.5%	Jun-18	45.0	1.3	-0.7	2.1	-2.8	-0.7	2.1	-2.8	-6.4	8.5	-14.9	-4.4	8.5	-12.9	-1.7	8.5	-10.2				-2.2	8.6	-10.8
Stonepeak Infrastructure Core Fund III - GBP	Absolute Return +12%	Jan-18	138.4	3.9	-1.0	2.9	-3.9	-1.0	2.9	-3.9	9.2	12.0	-2.8	15.3	12.0	3.3	19.8	12.0	7.9				14.0	12.0	2.0
Stonepeak Infrastructure Core Fund III - USD	Absolute Return +12%	Jan-18	171.1	N/A	1.7	2.9	-1.2	1.7	2.9	-1.2	3.3	12.0	-8.7	15.5	12.0	3.5	17.3	12.0	5.3				12.7	12.0	0.7

Stonepeak Infrastructure Core Fund IV - GBP	Absolute Return +12%	Jan-22	39.4	1.1	-2.4	2.9	-5.3	-2.4	2.9	-5.3	20.0	12.0	8.0						13.8	9.9	3.8				
Stonepeak Infrastructure Core Fund IV - USD	Absolute Return +12%	Jan-22	47.4	N/A	4.8	2.9	1.9	4.8	2.9	1.9	3.9	12.0	-8.1						3.6	9.9	-6.4				
First Sentier EDIF II GBP	Absolute Return +9%	Jun-18	136.4	3.8	5.0	2.2	2.8	5.0	2.2	2.8	18.3	9.0	9.3	15.9	9.0	6.9	11.5	9.0	2.5	11.7	9.1	2.7			
First Sentier EDIF II EURO	Absolute Return +9%	Jun-18	159.0	N/A	7.3	2.2	5.1	7.3	2.2	5.1	18.9	9.0	9.9	18.0	9.0	9.0	12.1	9.0	3.1	12.0	9.1	2.9			
First Sentier EDIF III GBP	Absolute Return +8%	Nov-22	7.5	0.2	1.0	1.9	-0.9	1.0	1.9	-0.9									4.8	5.3	-0.4				
First Sentier EDIF III EURO	Absolute Return +8%	Nov-22	8.7	N/A	3.5	1.9	1.5	3.5	1.9	1.5									7.0	5.3	1.7				
Worcestershire CC Total Fund ex Overlay		Mar-87	3,581.2	100.0	0.4	1.5	-1.1	0.4	1.5	-1.1	7.0	7.5	-0.5	6.1	7.9	-1.8	5.1	6.1	-1.0	7.6	8.0	-0.4	7.7	8.3	-0.6
Worcestershire CC Total Fund		Mar-87	3,581.2	100.0	0.4	1.5	-1.1	0.4	1.5	-1.1	6.7	6.9	-0.2	6.1	7.8	-1.8	5.3	5.7	-0.4	7.7	7.8	-0.1	7.8	8.2	-0.5

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>Q4 2022: Disinvested from River & Mercantile Equity Protection Fund from 10th November 2022. Invested into First Sentier EDIF III from 15th November 2022.</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 June 2023**

Market Value: £3.6bn

	31st March 2023		Net Investment (£000s)	Total Income (£000s)	Total Gain/Loss (£000s)	30th June 2023	
	Market Val (£000s)	Exposure (%)				Market Val (£000s)	Exposure (%)
Total Equity Fund	2,434,723	68.5	0	0	27,471	2,462,194	68.8
Total Equity Fund ex Overlay	2,434,723	68.5	0	0	27,471	2,462,194	68.8
<i>Total Active Equity Fund</i>	859,178	24.2	0	0	-8,732	850,446	23.7
Nomura Far East Developed Equity Fund	357,834	10.1	0	0	-3,094	354,741	9.9
LGPSC Emerging Markets Fund	77,356	2.2	0	0	-266	77,090	2.2
LGPSC Global Sustainable Equity Active Targeted Fund LGPSC Global	117,113	3.3	0	0	3,527	120,639	3.4
Sustainable Equity Active Thematic Fund <i>Total Passive Equity Fund</i>	306,876	8.6	0	0	-8,899	297,976	8.3
L&G UK Equity Fund	1,013,056	28.5	0	0	8,127	1,021,183	28.5
L&G North American Equity Fund	608,367	17.1	0	0	-2,690	605,677	16.9
L&G Europe Ex UK Equity Fund	182,786	5.1	0	0	10,110	192,896	5.4
<i>Total Alternatives Fund</i>	221,903	6.2	0	0	707	222,610	6.2
L&G MSCI World Quality Fund	562,488	15.8	0	0	28,076	590,564	16.5
	354,263	10.0	0	0	23,975	378,238	10.6
LGPSC All World Passive Climate Factor Fund	208,225	5.9	0	0	4,102	212,327	5.9
<i>River & Mercantile Equity Protection Fund</i>	0	0.0	0	0	0	0	0.0
<i>River & Mercantile Equity Protection Fund ex Overlay Total Fixed</i>	0	0.0	0	0	0	0	0.0
Income Fund	277,166	7.8	0	0	-2,076	275,090	7.7
<i>Total Corporate Bond Fund</i>	183,980	5.2	0	0	-2,614	181,366	5.1
LGPSC Corporate Bond Fund <i>Total</i>	183,980	5.2	0	0	-2,614	181,366	5.1
<i>Corporate Debt Fund</i>	93,186	2.6	0	0	538,429	93,723	2.6
Bridgepoint Direct Lending II Bridgepoint Direct Lending	56,995	1.6	0	0	109	57,424	1.6
III	36,191	1.0	0	0		36,299	1.0
Total Property Fund	305,291	8.6	2,395	1,456	-13,281	294,406	8.2
<i>Total UK Property Fund</i>	51,578	1.5	0	0	1,364	52,941	1.5
Invesco UK Property Fund	46,585	1.3	5,000	214	-1,412	50,172	1.4
Venn UK Property Fund	4,993	0.1	-2,051	0	-172	2,769	0.1
Walton US Property Fund	1,444	0.0	0	0	-79	1,364	0.0
Walton US Property Fund II	9,792	0.3	0	437	-1,132	8,660	0.2
Invesco European Property Fund	66,385	1.9		534	-1,228	65,156	1.8
Venn Property Debt Fund II	15,940	0.4	-553	0	258	15,644	0.4
Gresham House Forestry Growth & Sustainability Fund Gresham House	56,802	1.6	0	0	0	56,802	1.6
Forestry Fund VI	84,492	2.4	0	0	-9,565	74,927	2.1
AEW Property Fund	18,860	0.5		271	51,169	18,911	0.5
Total Infrastructure Fund	539,523	15.2		406		549,474	15.3
Green UK Infrastructure Fund	48,624	1.4	-1,888	0	-3,392	43,343	1.2
Gresham House BSIF Housing and Infrastructure Gresham House BSIF II	51,020	1.4	277	0	1,666	52,963	1.5
Infrastructure Fund	39,526	1.1	0	0	272	39,798	1.1
Hermes UK Infrastructure Core Fund	46,586	1.3	0	0	0	46,586	1.3
Hermes UK Infrastructure Fund II	45,358	1.3	6,197	0	-326	45,032	1.3
Stonepeak Infrastructure Core Fund III	134,854	3.8		406	-1,868	138,418	3.9
Stonepeak Infrastructure Core Fund IV	34,153	1.0		0	-937	39,413	1.1
First Sentier EDIF II	131,908	3.7	-1,670	0	6,209	136,447	3.8
First Sentier EDIF III	7,495	0.2	-94	0	72	7,472	0.2
Cash Fund	0	0.0		0	0	0	0.0
Worcestershire CC Total Fund ex Overlay	3,556,703	100.0	10,651	1,862	13,809	3,581,163	100.0
Worcestershire CC Total Fund	3,556,703	100.0	10,651	1,862	13,809	3,581,163	100.0

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