

4TH QUARTER • 2022

# UK FOUNDATIONS AND ENDOWMENTS

COMPARATIVE ASSET ALLOCATION AND TOTAL RETURN

## DATA COLLECTION

Included in this analysis for the quarter ended 31 December 2022 are 20 UK-based foundations and endowments. The average market value of participating UK foundations and endowments was £286.9 million, and the median market value was £105.2 million for the quarter ended 31 December 2022.

The notation of n denotes the number of foundations and endowments included in each analysis. Returns are denominated in pounds sterling.

Asset allocation is generated using the investment manager structure for each client. Every investment product, fund, and vehicle that a client is invested in is assigned an asset class. Asset classes for a given investment product, fund, or vehicle are maintained across all clients to ensure comparability. The statistics throughout this analysis are calculated on an equal-weighted basis.

## ASSET CLASSES

In Figures 1 and 2, public equity includes all long-only public equity assets; hedge funds include long/short hedge funds, absolute return, and distressed securities invested through a hedge fund structure; private equity and venture capital include non-venture private equity, venture capital, and other private investments; real assets and inflation-linked bonds include public and private real estate, commodities, global inflation-linked bonds, private oil & gas/natural resources, and public energy/natural resources; and bonds includes UK bonds, global ex UK bonds, and high-yield bonds. In Figures 3 and 4, UK equity includes funds/managers that have a majority of their exposure to the United Kingdom; emerging markets equity includes funds that invest solely in emerging market regions; and global equity includes all other public equity funds. Nine institutions reported an allocation to 'other', which represents a fund that invests across multiple asset classes/strategies.

## PRIVATE INVESTMENT PERFORMANCE REPORTING METHODOLOGIES

Of the 13 foundations and endowments in this analysis with an allocation to private investments (approximately 1% of the total investment pool or greater), all report private investment performance using a flat basis methodology. Total investment pool returns for fourth quarter 2022 include marketable asset performance for 1 October 2022 to 31 December 2022. The private investment portion of the investment pool is represented by a flat return (0%) for 1 October 2022 to 31 December 2022.



## CALCULATION OF THE SHARPE RATIO

The Sharpe ratio is defined as the excess return, or the return over the risk-free rate, on a portfolio divided by the total volatility as measured by the standard deviation of the portfolio. It is the most common approach to measuring risk, and it shows how much return above the risk-free rate (UK three-month Libor) the investor has earned per unit of risk (defined as standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken. The ratio is a measure of reward relative to total volatility. The formula is:

$$\frac{R_p - R_f}{S_p} = \text{Sharpe Ratio}$$

Where:

$R_p$  is the arithmetic average of composite quarterly returns,

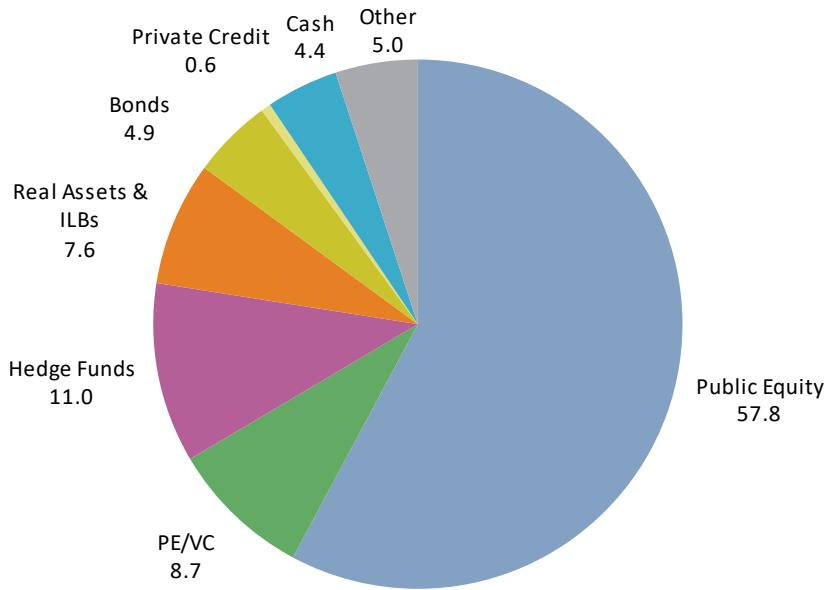
$R_f$  is the arithmetic average of UK three-month Libor (risk-free) quarterly returns,  
and

$S_p$  is the quarterly standard deviation of composite quarterly returns. ■

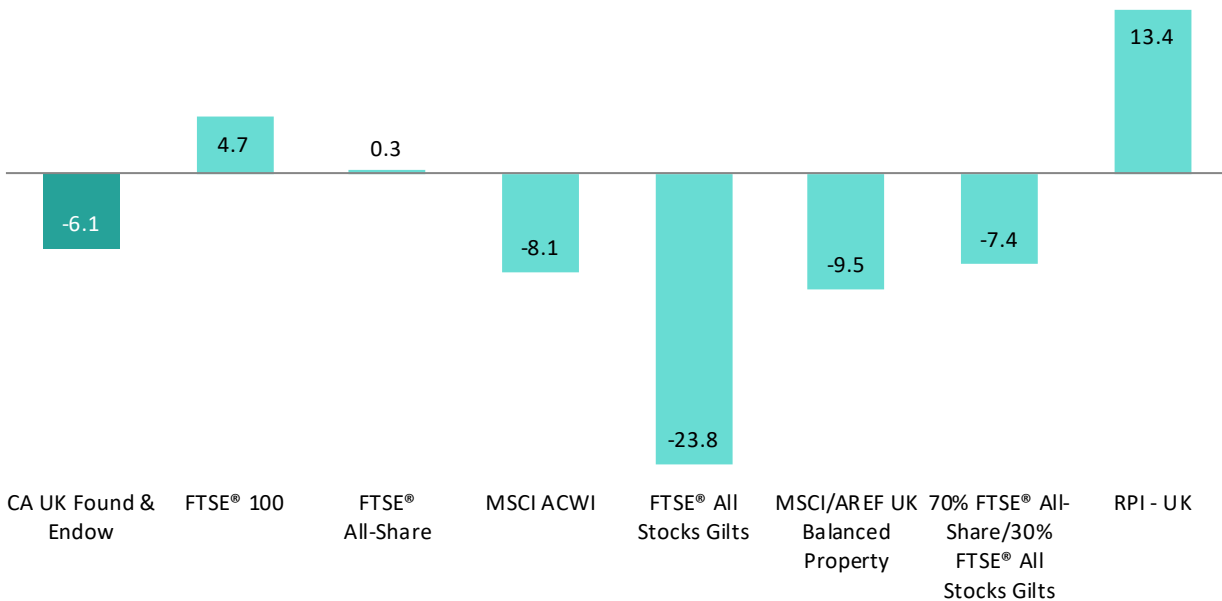
**FIGURE 1 INVESTMENT POOL MEAN ASSET ALLOCATION AND TOTAL RETURN**

Period Ended 31 December 2022 • Percent (%)

**Mean Asset Allocation (n = 20)**



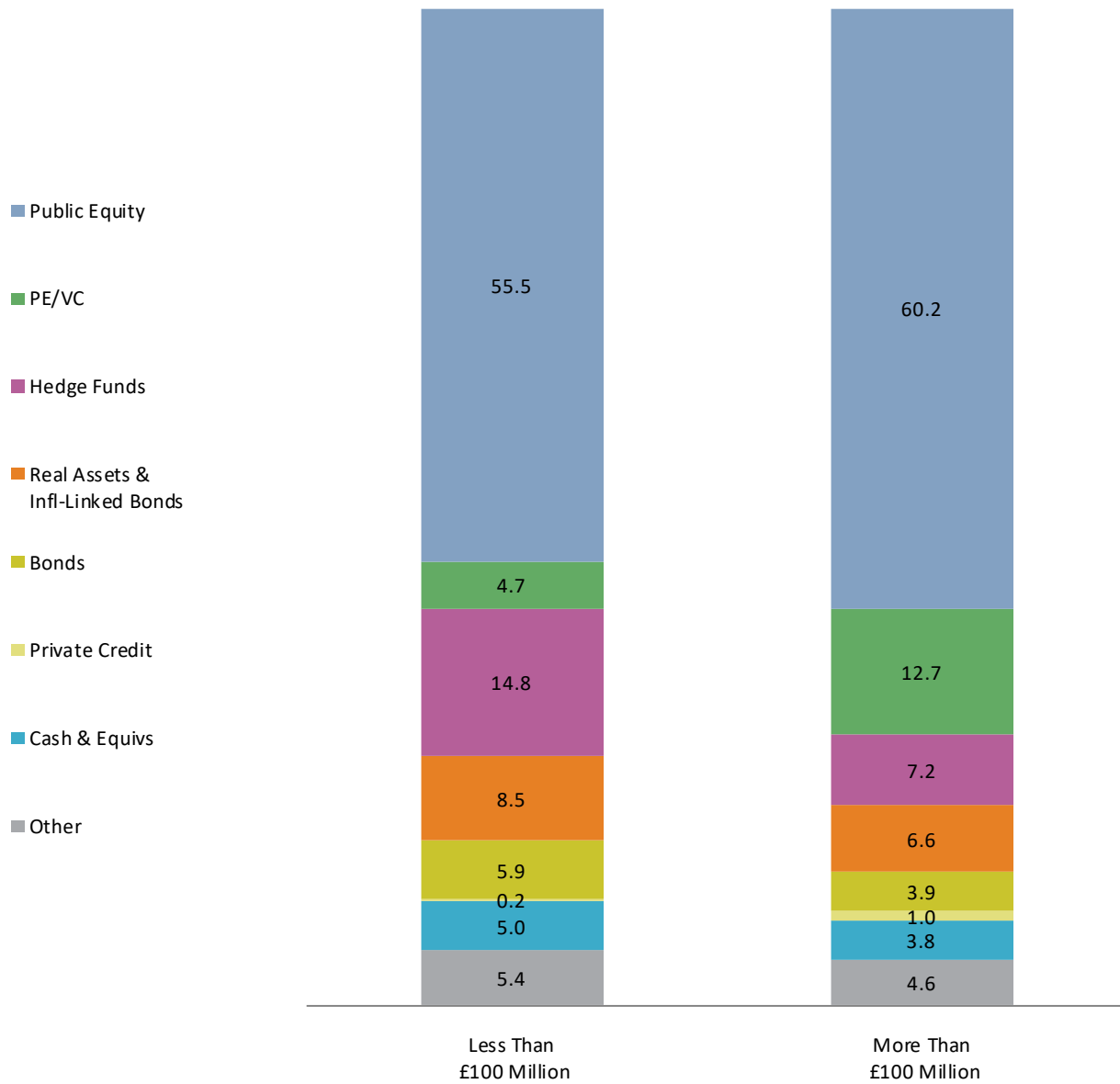
**One-Year Nominal Mean Return and Relevant Benchmarks (n = 20)**



Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited, Investment Property Databank (IPD), MSCI Inc., Thomson Reuters Datastream, and UK Office for National Statistics. IPD data provided "as is" without any express or implied warranties. MSCI data provided "as is" without any express or implied warranties.

**FIGURE 2 INVESTMENT POOL MEAN ASSET ALLOCATION BY ASSET SIZE**

As at 31 December 2022 • Percent (%)



Public Equity	55.5	60.2
Private Equity/Venture Capital	4.7	12.7
Hedge Funds	14.8	7.2
Real Assets & Inflation-Linked Bonds	8.5	6.6
Bonds	5.9	3.9
Private Credit	0.2	1.0
Cash & Equivs	5.0	3.8
Other Assets	5.4	4.6
<i>n</i>	10	10

Source: UK foundation and endowment data as reported to Cambridge Associates LLC.

**FIGURE 3 DETAILED ASSET ALLOCATION BY ASSET SIZE**

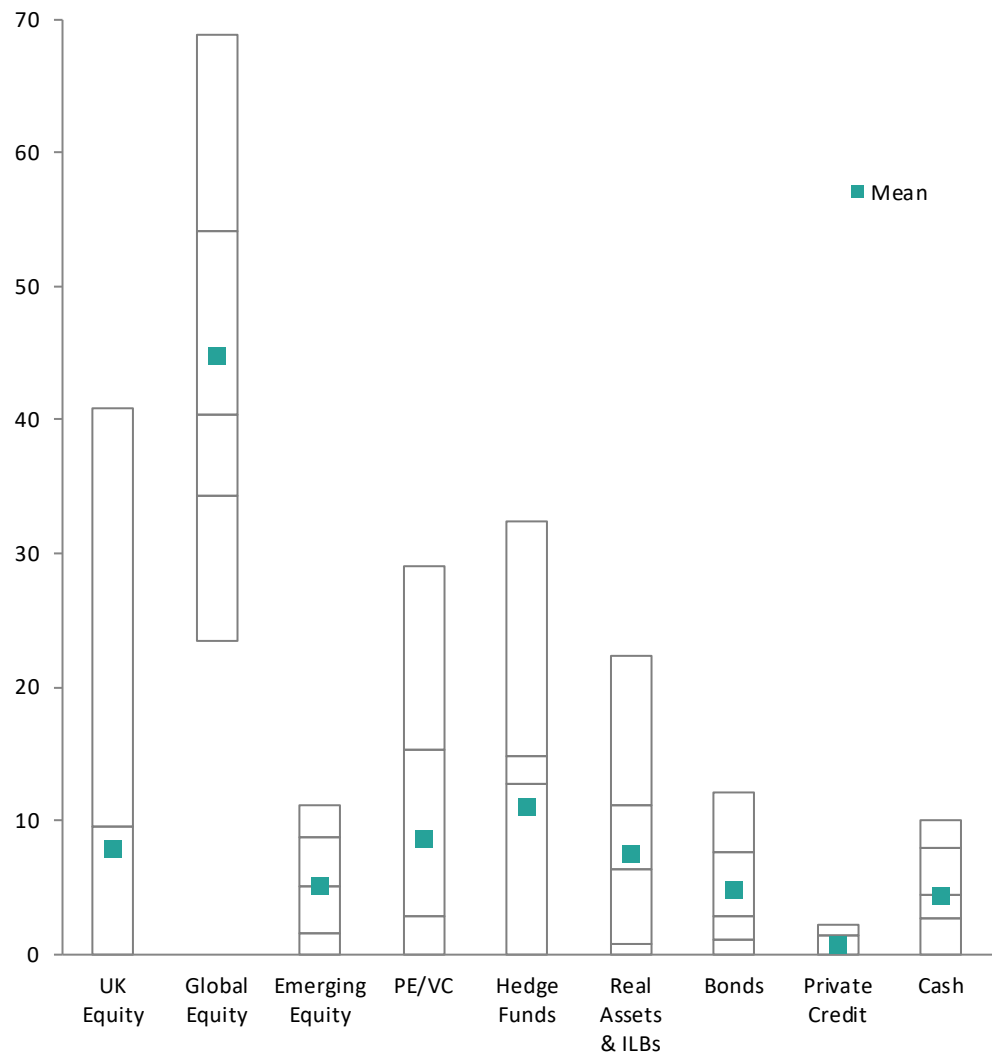
As at 31 December 2022 • Percent (%)

Asset Class	CA UK Foundations & Endowments (n = 20)		Less Than £100 Million (n = 10)		More Than £100 Million (n = 10)	
	Mean	Median	Mean	Median	Mean	Median
<b>Public Equity</b>	<b>57.8</b>	<b>61.5</b>	<b>55.5</b>	<b>58.7</b>	<b>60.2</b>	<b>61.9</b>
UK Equity	7.8	0.0	5.8	4.5	9.9	0.0
Global Equity	44.9	40.5	44.4	40.5	45.3	38.2
Emerging Markets Equity	5.1	5.1	5.3	5.2	4.9	3.8
<b>Private Equity/Venture Capital</b>	<b>8.7</b>	<b>2.9</b>	<b>4.7</b>	<b>0.7</b>	<b>12.7</b>	<b>5.6</b>
Non-Venture Private Equity	3.2	0.3	2.6	0.0	3.9	3.8
Venture Capital	4.5	0.0	1.5	0.0	7.5	0.3
Other Private Investments	1.0	0.1	0.7	0.0	1.3	0.6
<b>Hedge Funds</b>	<b>11.0</b>	<b>12.7</b>	<b>14.8</b>	<b>14.2</b>	<b>7.2</b>	<b>0.0</b>
Long/Short Hedge Funds	4.0	0.0	4.2	0.0	3.8	2.5
Absolute Return	6.6	6.5	10.0	12.9	3.2	1.2
Distressed Securities	0.4	0.0	0.6	0.0	0.1	0.0
<b>Real Assets &amp; Inflation-Linked Bonds</b>	<b>7.6</b>	<b>6.4</b>	<b>8.5</b>	<b>7.5</b>	<b>6.6</b>	<b>5.1</b>
Private Real Estate	1.0	0.0	0.3	0.0	1.8	0.0
<i>Private Partnerships</i>	<i>0.2</i>	<i>0.0</i>	<i>0.3</i>	<i>0.0</i>	<i>0.2</i>	<i>0.0</i>
<i>Direct Property Holdings</i>	<i>0.8</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>1.5</i>	<i>0.0</i>
Public Real Estate	2.6	0.0	3.2	0.0	1.9	0.0
Commodities	0.8	0.0	1.7	0.0	0.0	0.0
Inflation-Linked Bonds (UK)	0.2	0.0	0.3	0.0	0.1	0.0
Inflation-Linked Bonds (ex UK)	1.3	0.0	1.2	0.0	1.3	0.8
Private Oil & Gas/Natural Resources	0.2	0.0	0.4	0.0	0.1	0.0
Public Energy/Natural Resources	1.5	0.0	1.5	0.0	1.4	0.0
<b>Bonds</b>	<b>4.9</b>	<b>2.9</b>	<b>5.9</b>	<b>4.4</b>	<b>3.9</b>	<b>2.0</b>
UK Bonds	0.3	0.0	0.0	0.0	0.6	0.0
Global Bonds	4.3	2.7	5.5	4.4	3.1	1.9
High-Yield Bonds	0.3	0.0	0.4	0.0	0.2	0.0
<b>Private Credit</b>	<b>0.6</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>1.0</b>	<b>0.7</b>
<b>Cash &amp; Equivalents</b>	<b>4.4</b>	<b>4.0</b>	<b>5.0</b>	<b>7.1</b>	<b>3.8</b>	<b>3.5</b>
<b>Other Assets</b>	<b>5.0</b>	<b>0.0</b>	<b>5.4</b>	<b>0.0</b>	<b>4.6</b>	<b>0.0</b>

Source: UK foundation and endowment data as reported to Cambridge Associates LLC.

## FIGURE 4 ASSET ALLOCATION DISTRIBUTION

As at 31 December 2022 • Percent (%)



5th Percentile	40.8	68.8	11.1	29.1	32.4	22.3	12.1	2.1	9.6
25th Percentile	9.6	54.1	8.7	15.2	14.8	11.1	7.6	1.3	7.6
Median	0.0	40.5	5.1	2.9	12.7	6.4	2.9	0.0	4.0
75th Percentile	0.0	34.3	1.5	0.0	0.0	0.7	1.1	0.0	2.2
95th Percentile	0.0	23.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.4
Mean	7.8	44.9	5.1	8.7	11.0	7.6	4.9	0.6	4.4

*n* = 20

Source: UK foundation and endowment data as reported to Cambridge Associates LLC.

## FIGURE 5 SUMMARY OF INVESTMENT POOL RETURNS

Periods Ended 31 December 2022 • Percent (%)

### Nominal Total Returns

	Latest Quarter	FYTD	Average Annual Compound Nominal Return			
			One Year	Three Years	Five Years	Ten Years
<b>CA UK Foundations &amp; Endowments</b>						
Mean	0.9	2.0	-6.1	5.4	5.4	8.0
Median	1.2	1.8	-5.9	5.1	4.9	7.5
High	5.3	5.2	0.2	11.2	10.0	10.6
5th Percentile	4.2	4.8	-1.1	9.8	9.2	10.4
25th Percentile	2.6	3.3	-3.2	7.8	6.9	9.4
75th Percentile	-0.6	0.8	-8.8	3.1	3.9	7.0
95th Percentile	-3.3	-0.6	-11.8	2.0	2.5	5.8
Low	-3.7	-0.7	-12.2	1.2	2.2	5.6
<i>n</i>	20	20	20	20	19	16
<b>Benchmarks</b>						
FTSE® 100	8.7	5.7	4.7	3.1	3.3	6.3
FTSE® All-Share	8.9	5.1	0.3	2.3	2.9	6.5
MSCI ACWI	1.9	3.3	-8.1	7.4	7.7	11.3
FTSE® All Stocks Gilts	1.7	-11.4	-23.8	-7.9	-3.4	0.4
IPD UK Pooled Property	-14.1	-17.5	-9.5	2.2	2.9	6.5
RPI - UK	3.7	6.0	13.4	7.3	5.3	3.9

### Real Total Returns

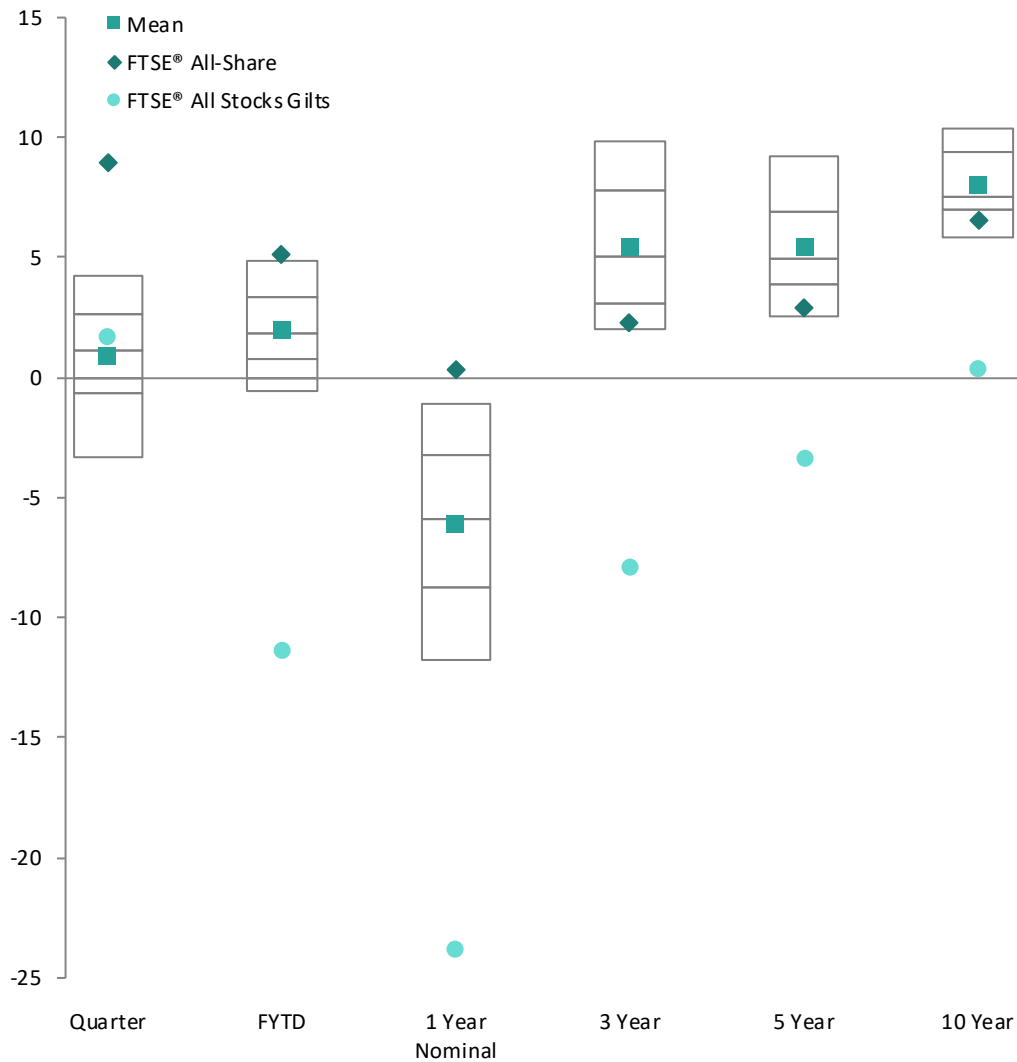
	Latest Quarter	FYTD	Average Annual Compound Real Return			
			One Year	Three Years	Five Years	Ten Years
<b>CA UK Foundations &amp; Endowments</b>						
Mean	-2.7	-3.8	-17.2	-1.7	0.1	4.0
Median	-2.4	-3.9	-17.0	-2.1	-0.4	3.5
High	1.6	-0.7	-11.7	3.7	4.5	6.5
5th Percentile	0.5	-1.1	-12.8	2.4	3.7	6.3
25th Percentile	-1.0	-2.5	-14.7	0.5	1.5	5.3
75th Percentile	-4.2	-4.9	-19.6	-3.9	-1.4	3.0
95th Percentile	-6.7	-6.2	-22.2	-4.9	-2.6	1.9
Low	-7.2	-6.4	-22.6	-5.7	-3.0	1.7
<i>n</i>	20	20	20	20	19	16
<b>Benchmarks</b>						
FTSE® 100	4.8	-0.3	-7.7	-3.9	-1.9	2.4
FTSE® All-Share	5.0	-0.8	-11.6	-4.6	-2.3	2.6
MSCI ACWI	-1.8	-2.6	-19.0	0.1	2.3	7.1
FTSE® All Stocks Gilts	-1.9	-16.4	-32.9	-14.1	-8.3	-3.4
IPD UK Pooled Property	-17.2	-22.2	-20.2	-4.7	-2.3	2.6

Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited, Investment Property Databank (IPD), MSCI Inc., Thomson Reuters Datastream, and UK Office for National Statistics. IPD data provided "as is" without any express or implied warranties. MSCI data provided "as is" without any express or implied warranties.

Note: Real returns are adjusted for inflation as measured by the UK Retail Price Index.

**FIGURE 6 INVESTMENT POOL NOMINAL RETURN PERCENTILES**

Periods Ended 31 December 2022 • Percent (%)



	Quarter	FYTD	1 Year Nominal	3 Year	5 Year	10 Year
5th Percentile	4.2	4.8	-1.1	9.8	9.2	10.4
25th Percentile	2.6	3.3	-3.2	7.8	6.9	9.4
Median	1.2	1.8	-5.9	5.1	4.9	7.5
75th Percentile	-0.6	0.8	-8.8	3.1	3.9	7.0
95th Percentile	-3.3	-0.6	-11.8	2.0	2.5	5.8
Mean	0.9	2.0	-6.1	5.4	5.4	8.0
<i>n</i>	20	20	20	20	19	16
FTSE® All-Share	8.9	5.1	0.3	2.3	2.9	6.5
FTSE® All Stocks Gilts	1.7	-11.4	-23.8	-7.9	-3.4	0.4

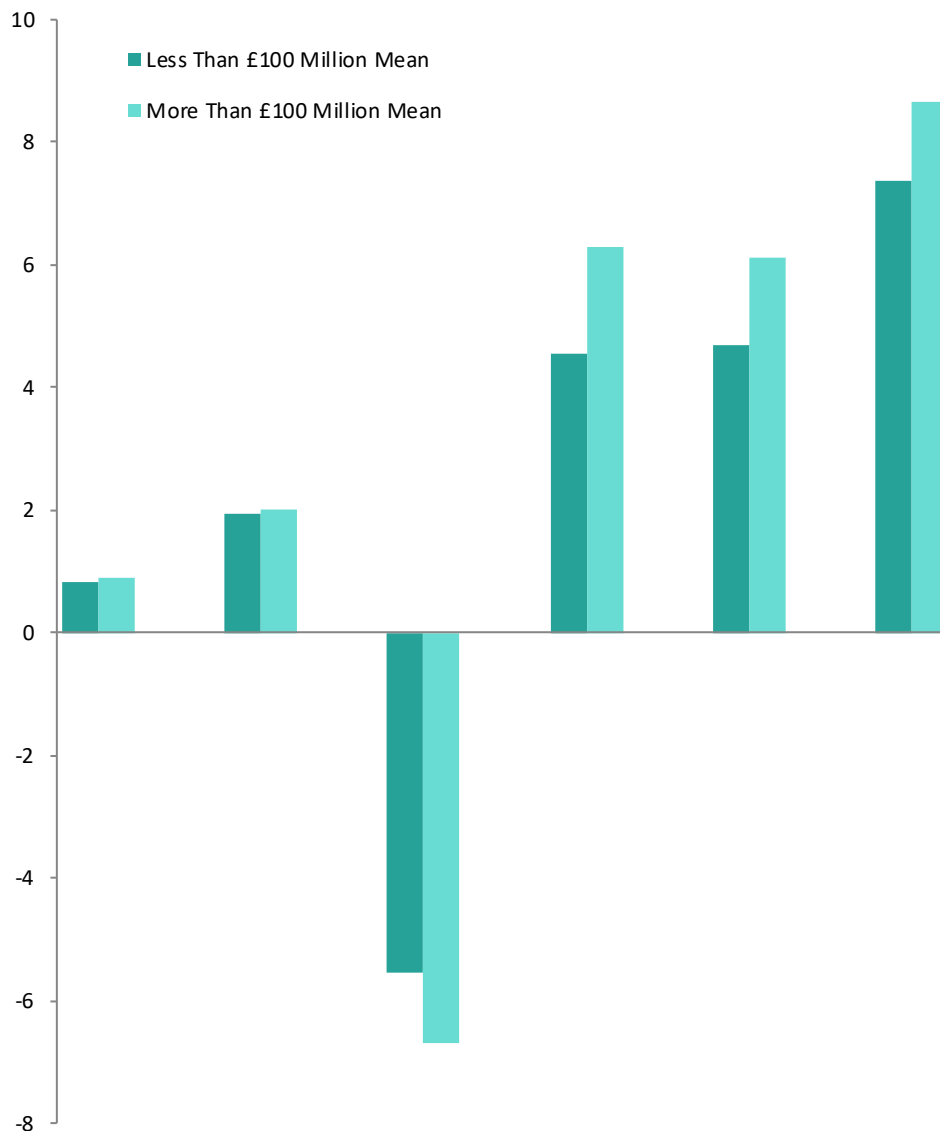
Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited.

Note: Three-, five-, and ten-year returns are annualised.



**FIGURE 7 NOMINAL TOTAL RETURN SUMMARY BY ASSET SIZE**

Periods Ended 31 December 2022 • Percent (%)



**Less Than £100 Million**

Mean	0.8	1.9	-5.6	4.5	4.7	7.3
Median	1.0	2.1	-5.6	3.9	4.1	7.0
<i>n</i>	10	10	10	10	9	8

**More Than £100 Million**

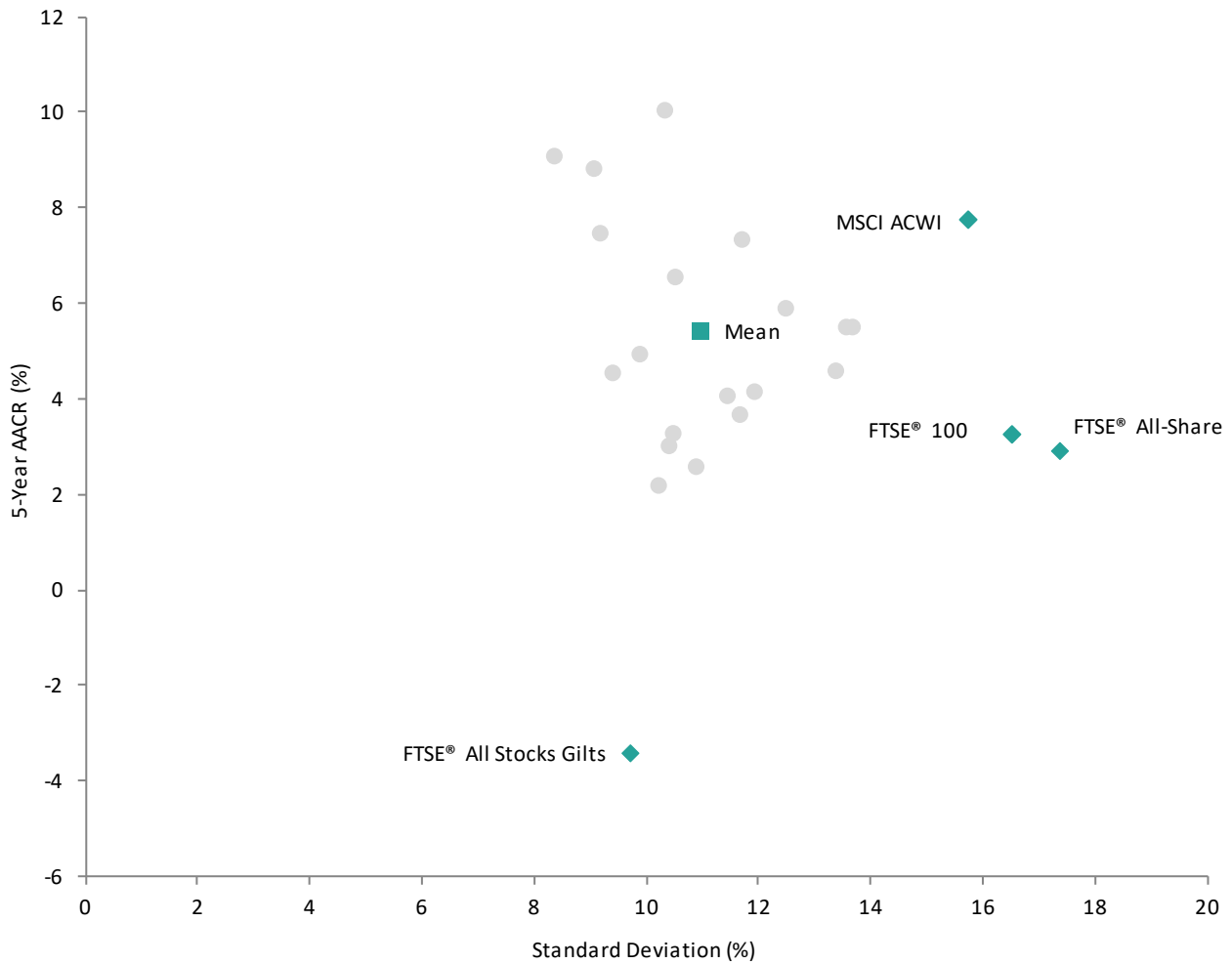
Mean	0.9	2.0	-6.7	6.3	6.1	8.6
Median	0.7	1.2	-5.3	5.6	5.5	8.1
<i>n</i>	10	10	10	10	10	8

Source: UK foundation and endowment data as reported to Cambridge Associates LLC.

Note: Three-, five-, and ten-year returns are annualised.

## FIGURE 8 STANDARD DEVIATION AND SHARPE RATIO

Five Years Ended 31 December 2022



	5-Year AACR <sup>1</sup>	Standard Deviation <sup>2</sup>	Sharpe Ratio <sup>3</sup>
Mean <i>n</i> = 19	5.4	11.0	0.50
FTSE® 100	3.3	16.5	0.25
FTSE® All-Share	2.9	17.4	0.22
MSCI ACWI	7.7	15.7	0.52
FTSE® All Stocks Gilts	-3.4	9.7	-0.36

<sup>1</sup> Five-year geometric average annual compound returns.

<sup>2</sup> Annualised standard deviations are based on last five years of quarterly returns.

<sup>3</sup> Sharpe Ratio = (Composite Performance - Risk-Free Rate) ÷ Annualised Standard Deviation. The risk-free rate is the UK three-month Libor.

Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

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