2ND QUARTER • 2018

UK FOUNDATIONS AND ENDOWMENTS

COMPARATIVE ASSET ALLOCATION AND TOTAL RETURN

NOTES ON THE DATA

DATA COLLECTION. Included in this analysis for the quarter ended 30 June 2018 are 29 UK-based foundations and endowments. The average market value of participating UK foundations and endowments was £270.7 million and the median market value was £115.5 million for the quarter ended 30 June 2018.

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 in which a client is invested 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 1–3, global equity includes global ex UK equities (developed and emerging); hedge funds include long/short hedge funds and absolute return (ex distressed securities); private equity and venture capital include nonventure 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, timber, and public energy/natural resources; and bonds includes UK bonds, global ex UK bonds, and high-yield bonds. In Figure 3, global bonds includes global ex UK bonds (developed and emerging). One institution reported an allocation to 'other', which represents an allocation to investment managers with a balanced funds strategy.

PRIVATE INVESTMENT PERFORMANCE REPORTING METHODOLOGIES. Of the 18 foundations and endowments in this analysis with an allocation to private investments (approximately 1% of the total investment pool or greater), all 18 report private investment performance using a flat basis methodology: total investment pool return for second quarter 2018 includes marketable asset performance for 1 April 2018 to 30 June 2018. Private investment portion of the investment pool is represented by a flat return (0%) for 1 April 2018 to 30 June 2018.



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. The most common approach to measuring risk is by the Sharpe ratio, which 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:

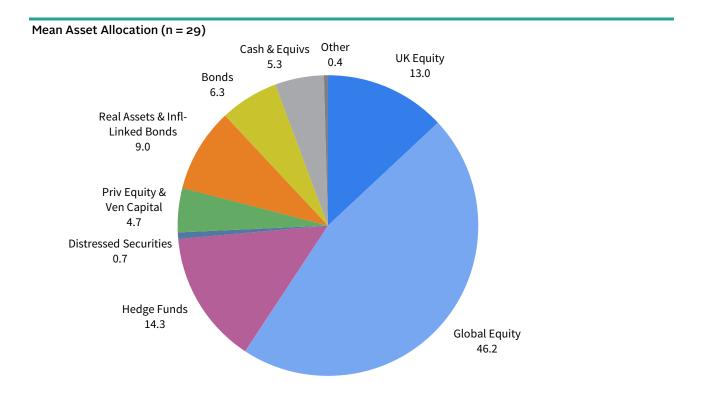
$$\frac{R_p - R_f}{S_p} = Sharpe Ratio$$

Where:

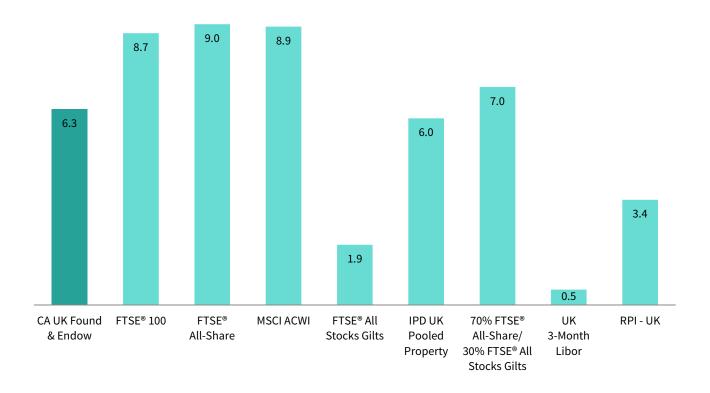
- $\boldsymbol{R}_{_{\boldsymbol{p}}}$ is the arithmetic average of composite quarterly returns;
- $R_{\rm f}$ is the arithmetic average of UK three-month Libor (risk-free) quarterly returns; and
- S_p is the quarterly standard deviation of composite quarterly returns.

FIGURE 1. INVESTMENT POOL MEAN ASSET ALLOCATION AND TOTAL RETURN

Period Ended 30 June 2018 • Percent (%)



One-Year Nominal Mean Return and Relevant Benchmarks (n = 28)

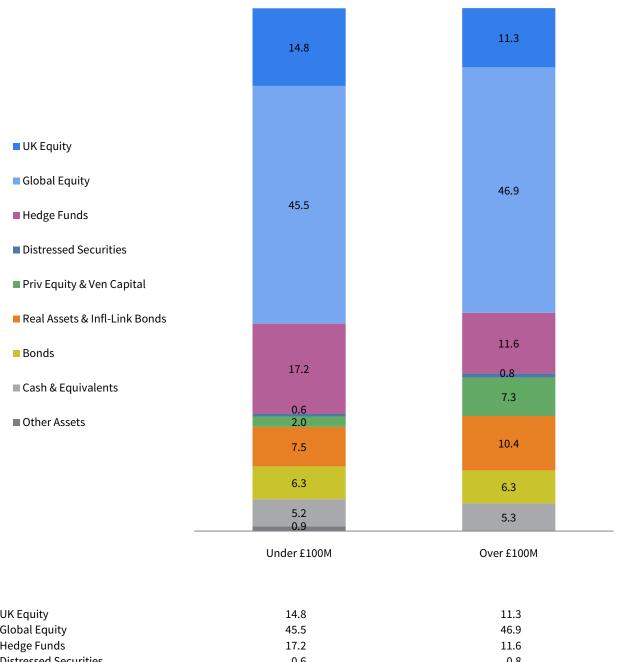


Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited, Investment Property Databank (IPD), MSCI Inc., Thomson Reuters Datastream, and UK Office for National Statistics. IPD data provided 'as is' without any express or 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 30 June 2018 • Percent (%)



UK Equity	14.8	11.3
Global Equity	45.5	46.9
Hedge Funds	17.2	11.6
Distressed Securities	0.6	0.8
Private Equity & Venture Capital	2.0	7.3
Real Assets & Infl-Linked Bonds	7.5	10.4
Bonds	6.3	6.3
Cash & Equivalents	5.2	5.3
Other Assets	0.9	0.0
n	14	15

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



FIGURE 3. DETAILED ASSET ALLOCATION BY ASSET SIZE

As at 30 June 2018 • Percent (%)

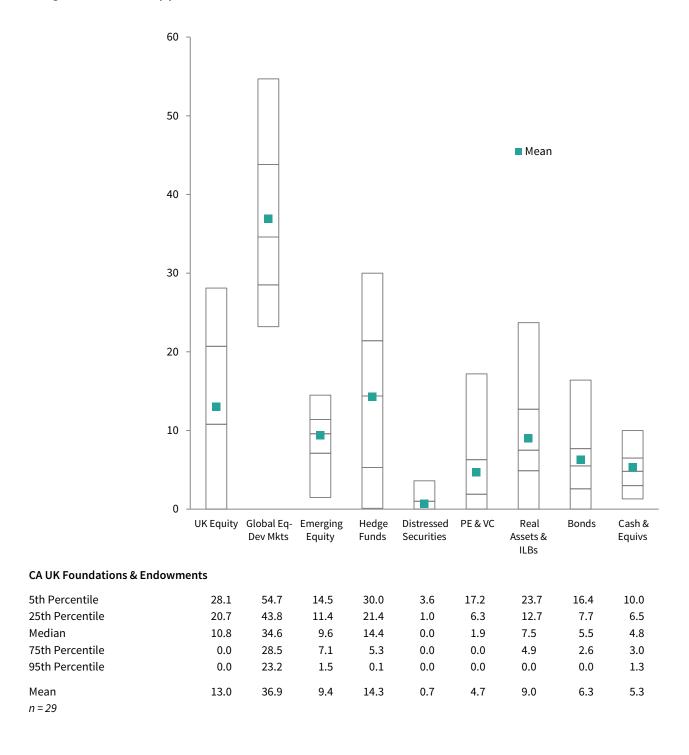
	CA UK Foundations & Endowments (n = 29)		Under £100M		Over £100M	
	· .	,		= 14)		= 15)
Asset Class	Mean	Median	Mean	Median	Mean	Median
UK Equity	13.0	10.8	14.8	17.9	11.3	4.2
Global Equity	46.2	46.6	45.5	46.3	46.9	47.0
Developed Markets	36.9	34.6	35.6	35.4	38.1	33.6
Emerging Markets	9.4	9.6	9.9	9.7	8.9	9.2
Hedge Funds	14.3	14.4	17.2	16.9	11.6	11.0
Long/Short Hedge Funds	4.2	1.8	4.3	0.0	4.1	2.0
Absolute Return (ex Distressed)	10.1	11.0	13.0	15.2	7.5	5.4
Distressed Securities	0.7	0.0	0.6	0.0	0.8	0.0
Hedge Fund Structure	0.5	0.0	0.4	0.0	0.5	0.0
Private Equity Structure	0.2	0.0	0.1	0.0	0.3	0.0
Private Equity & Venture Capital	4.7	1.9	2.0	0.7	7.3	4.4
Non-Venture Private Equity	2.8	0.9	1.6	0.0	4.0	2.4
Venture Capital	1.4	0.0	0.1	0.0	2.6	0.0
Other Private Investments	0.5	0.0	0.3	0.0	0.7	0.2
Real Assets & Inflation-Linked Bonds	9.0	7.5	7.5	7.5	10.4	7.2
Private Real Estate	1.9	0.0	0.4	0.0	3.3	0.0
Private Partnerships	0.4	0.0	0.4	0.0	0.3	0.0
Direct Property Holdings	1.5	0.0	0.0	0.0	3.0	0.0
Public Real Estate	3.9	0.0	3.1	0.0	4.7	0.0
Commodities	0.7	0.0	1.0	0.3	0.4	0.0
Inflation-Linked Bonds (UK)	0.2	0.0	0.3	0.0	0.2	0.0
Inflation-Linked Bonds (ex UK)	1.9	1.2	2.3	1.0	1.5	1.2
Private Oil & Gas/Natural Resources	0.0	0.0	0.0	0.0	0.0	0.0
Timber	0.2	0.0	0.2	0.0	0.1	0.0
Public Energy/Natural Resources	0.2	0.0	0.2	0.0	0.2	0.0
Bonds	6.3	5.5	6.3	6.7	6.3	4.6
UK Bonds	1.5	0.0	1.0	0.0	1.9	0.0
Global Bonds	4.5	3.8	5.0	4.6	4.1	3.8
Developed Markets	3.7	3.0	3.9	3.3	3.5	3.0
Emerging Markets	0.8	0.2	1.1	0.0	0.6	0.4
High-Yield Bonds	0.3	0.0	0.3	0.0	0.3	0.0
Cash & Equivalents	5.3	4.8	5.2	5.2	5.3	4.5
Other Assets	0.4	0.0	0.9	0.0	0.0	0.0

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



FIGURE 4. ASSET ALLOCATION DISTRIBUTION

As at 30 June 2018 • Percent (%)



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



FIGURE 5. SUMMARY OF INVESTMENT POOL RETURNS

Periods Ended 30 June 2018 • Percent (%)

Nominal Total Returns

	Latest		Average Annual Compound Nominal Return			
	Quarter	CYTD	1 Year	3 Years	5 Years	10 Years
CA UK Foundations & Endowments						
Mean	4.7	1.8	6.3	9.9	9.0	7.8
Median	4.6	1.5	6.0	9.4	8.8	7.8
High	8.0	6.5	12.5	15.1	12.0	10.5
5th Percentile	7.6	4.4	9.1	12.6	11.2	10.5
25th Percentile	5.3	2.5	7.1	10.5	9.6	8.2
75th Percentile	3.3	0.6	5.4	8.9	8.1	6.8
95th Percentile	3.1	0.0	3.6	8.1	7.5	6.2
Low	2.7	-0.4	2.7	7.9	7.4	6.1
n	29	29	28	25	25	20
Benchmarks						
FTSE® 100	9.6	1.7	8.7	9.7	8.2	7.1
FTSE® All-Share	9.2	1.7	9.0	9.6	8.8	7.8
MSCI ACWI	6.8	2.0	8.9	14.7	12.5	10.2
FTSE® All Stocks Gilts	0.2	0.4	1.9	4.7	5.0	6.0
IPD UK Pooled Property	2.3	4.4	6.0	9.5	9.0	2.2
UK 3-Month Libor	0.2	0.3	0.5	0.5	0.5	1.0
RPI - UK	1.1	1.2	3.4	2.8	2.4	2.6

Real Total Returns

	Latest		Average Annual Compound Real Return			
	Quarter	CYTD	1 Year	3 Years	5 Years	10 Years
CA UK Foundations & Endowments						
Mean	3.5	0.5	2.8	6.9	6.4	5.1
Median	3.4	0.3	2.5	6.4	6.2	5.0
High	6.8	5.2	8.8	11.9	9.3	7.6
5th Percentile	6.4	3.2	5.6	9.5	8.6	7.6
25th Percentile	4.1	1.3	3.6	7.5	7.0	5.4
75th Percentile	2.1	-0.6	1.9	5.9	5.5	4.0
95th Percentile	1.9	-1.2	0.2	5.1	4.9	3.5
Low	1.5	-1.6	-0.6	4.9	4.8	3.4
n	29	29	28	25	25	20
Benchmarks						
FTSE® 100	8.3	0.4	5.2	6.7	5.7	4.3
FTSE® All-Share	8.0	0.5	5.5	6.6	6.3	5.0
MSCI ACWI	5.6	0.8	5.4	11.5	9.8	7.4
FTSE® All Stocks Gilts	-1.0	-0.8	-1.4	1.8	2.5	3.3
IPD UK Pooled Property	1.1	3.1	2.5	6.5	6.4	-0.5
UK 3-Month Libor	-1.0	-0.9	-2.8	-2.3	-1.9	-1.6

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.

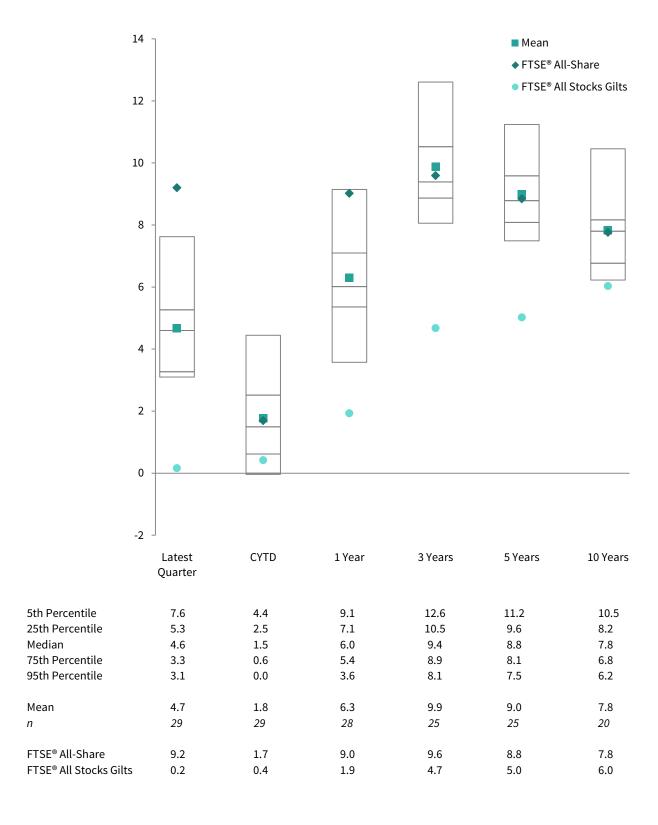
MSCI data provided 'as is' without any express or implied warranties.

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



FIGURE 6. INVESTMENT POOL NOMINAL RETURN PERCENTILES

Periods Ended 30 June 2018 • Percent (%)

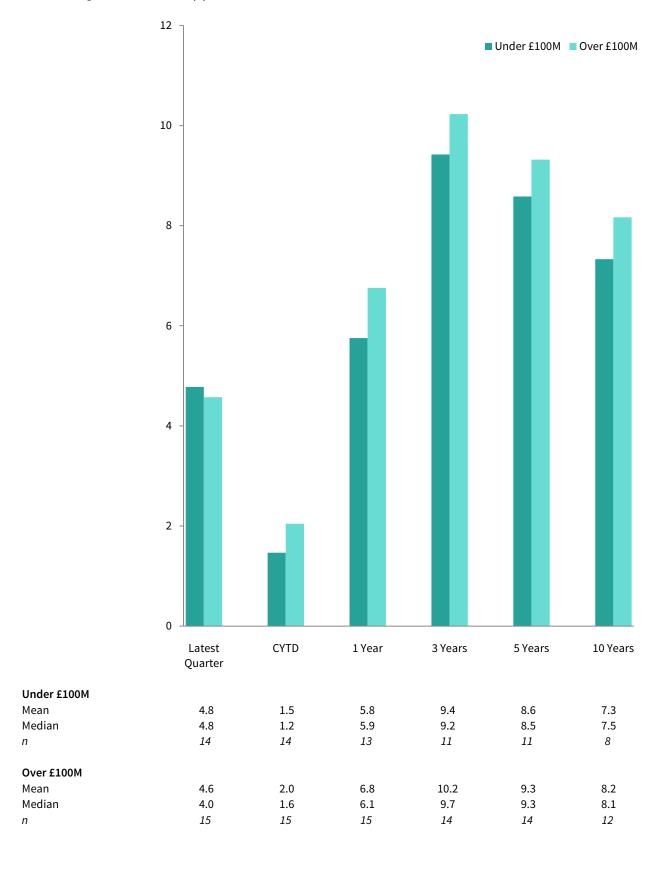


Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited. Note: Three-, five-, and ten-year returns are annualised.



FIGURE 7. NOMINAL TOTAL RETURN MEAN BY ASSET SIZE

Periods Ended 30 June 2018 • Percent (%)

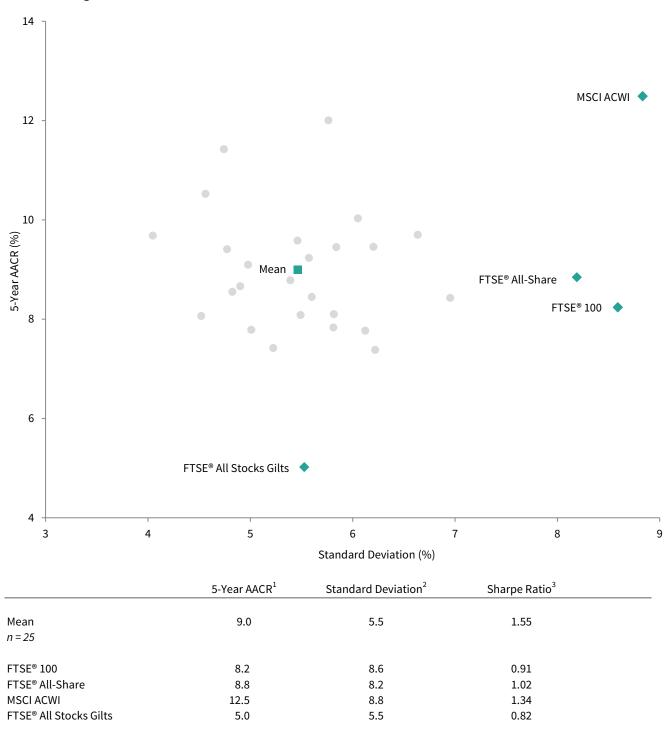


 $Source: UK\ foundation\ and\ endowment\ data\ as\ reported\ to\ Cambridge\ Associates\ LLC.$



FIGURE 8. STANDARD DEVIATION AND SHARPE RATIO

Five Years Ended 30 June 2018



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.

 $^{^3}$ Sharpe Ratio = (Composite Performance - Risk-Free Rate) \div Annualised Standard Deviation. The risk-free rate is the UK three-month Libor.



 $^{^{\}rm 1}\,{\rm Five}\text{-year}$ geometric average annual compound returns.

 $^{^{\}rm 2}$ Annualised standard deviations are based on last five years of quarterly returns.

PARTICIPANTS

The 29 May 1961 Charitable Trust Aberystwyth University The Art Fund **Barts Charity** Big Win Philanthropy UK The Burdett Trust Chelsea and Westminster Health Charity The Clothworkers' Company Comic Relief Council for World Mission Courtauld Institute of Art Esmée Fairbairn Foundation The Foyle Foundation Guardian Media Group The Health Foundation The Henry Smith Charity International Tennis Federation Jesus College, Oxford King's College London The Legal Education Foundation Marie Curie Cancer Care The Nuffield Foundation Paul Hamlyn Foundation The Pilgrim Trust Royal Literary Fund The Society of Merchant Venturers Winchester College

Note: Two participating institutions wish to remain anonymous.

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