



Comparative Asset Allocation and Total Return

UK Foundations and Endowments

30 June 2017

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Geoffrey Bollier | Meredith Wyse

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Data Collection

Included in this analysis for the quarter ended 30 June 2017 are 31 UK-based foundations and endowments. The average market value of participating UK foundations and endowments was £248.1 million and the median market value was £117.8 million for the quarter ended 30 June 2017.

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

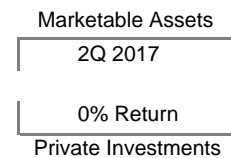
In Exhibits 1–3, global equity includes global ex UK equities (developed and emerging); hedge funds include long/short hedge funds and absolute return (ex distressed securities); private equity and venture capital include non-venture private equity, venture capital, and other private investments; real assets and inflation-linked bonds include public and private real estate, commodities, global inflation-linked bonds, private oil & gas/natural resources, timber, and public energy/natural resources; and bonds includes UK bonds, global ex UK bonds, and high-yield bonds. In Exhibit 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 global multi-asset class strategy.

Private Investment Performance Reporting Methodologies

Of the 21 foundations and endowments in this analysis with an allocation to private investments (approximately 1% of the total

investment pool or greater), all 21 report private investment performance using a flat basis methodology, described below.

Flat Basis: Total investment pool return for second quarter 2017 includes marketable asset performance for 1 April 2017 to 30 June 2017. Private investment portion of the investment pool is represented by a flat return (0%) for 1 April 2017 to 30 June 2017.



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:

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

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. ■

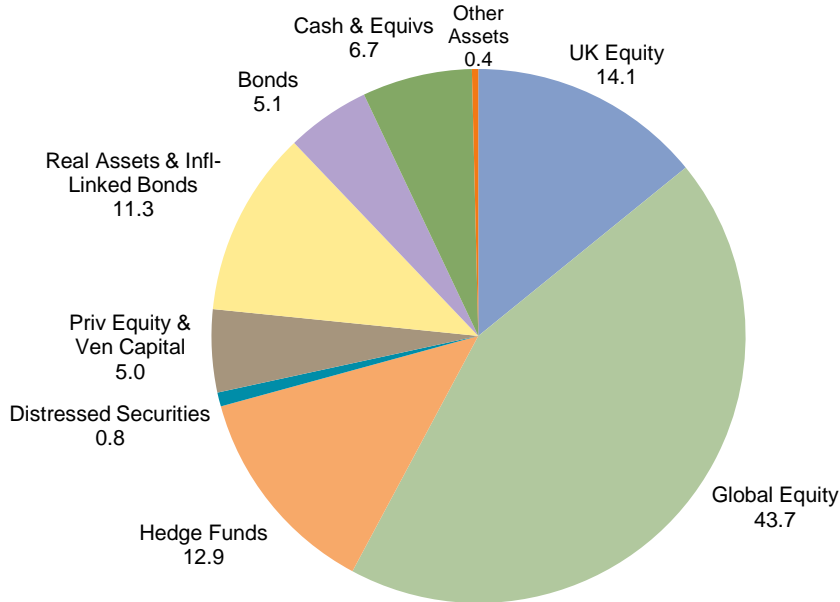


Asset Allocation

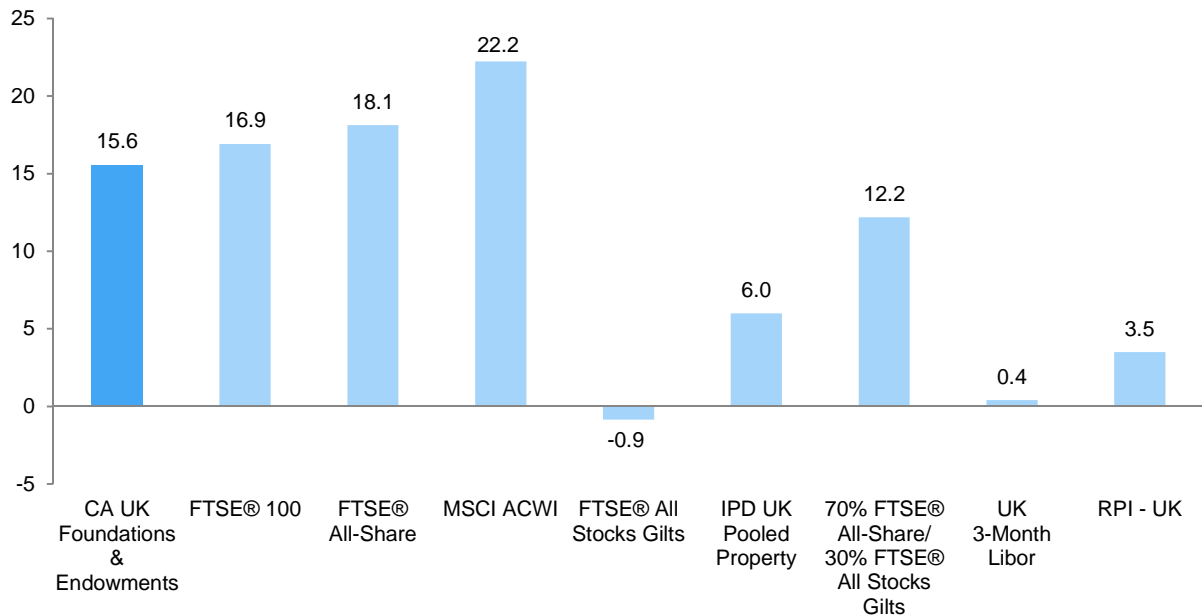


Exhibit 1
Investment Pool Mean Asset Allocation and Total Return: UK Foundations and Endowments
 Period Ended 30 June 2017 • Percent (%)

Mean Asset Allocation (n = 31)

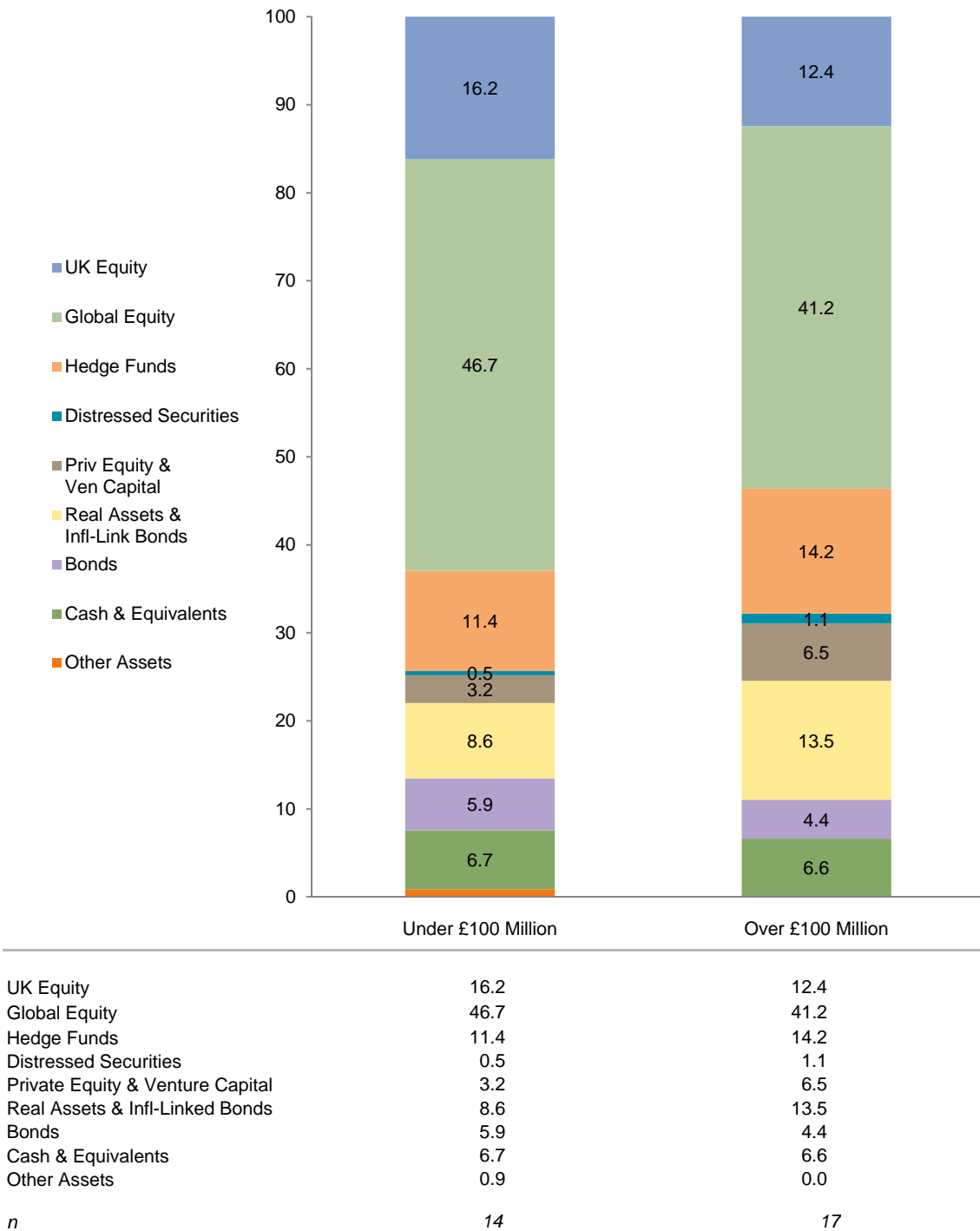


One-Year Nominal Mean Return and Relevant Benchmarks (n = 30)



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.

Exhibit 2
Investment Pool Mean Asset Allocation by Asset Size: UK Foundations and Endowments
 As at 30 June 2017 • Percent (%)



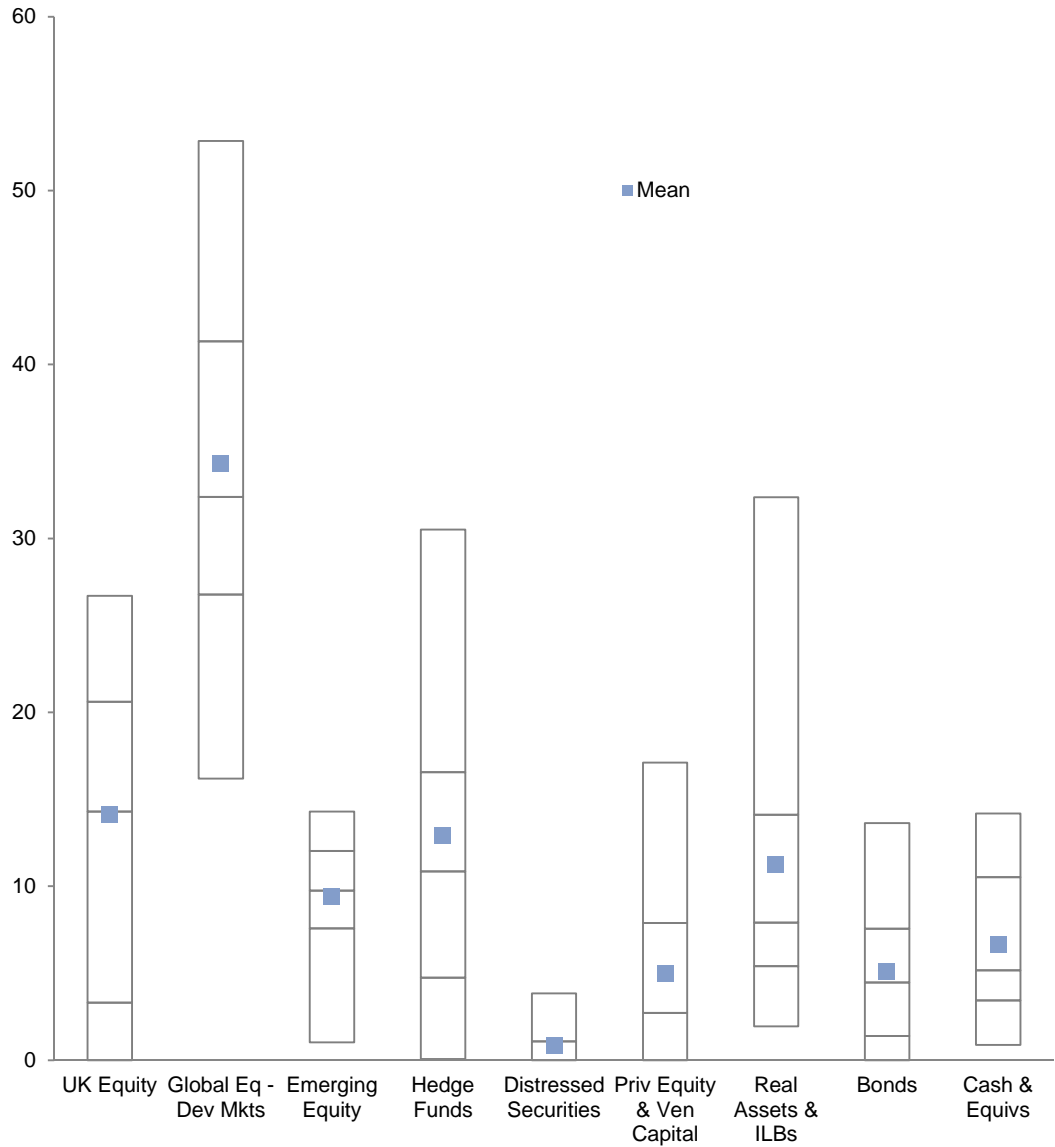
Source: UK foundation and endowment data as reported to Cambridge Associates LLC.

Exhibit 3
Detailed Asset Allocation by Asset Size: UK Foundations and Endowments
 As at 30 June 2017 • Percent (%)

Asset Class	CA UK Foundations & Endowments (n = 31)		Under £100 Million (n = 14)		Over £100 Million (n = 17)	
	Mean	Median	Mean	Median	Mean	Median
UK Equity	14.1	14.3	16.2	18.6	12.4	6.5
Global Equity	43.7	45.4	46.7	47.4	41.2	41.8
Developed Markets	34.3	32.4	36.3	35.9	32.6	31.2
Emerging Markets	9.4	9.8	10.4	10.5	8.6	9.7
Hedge Funds	12.9	10.8	11.4	11.7	14.2	10.8
Long/Short Hedge Funds	2.8	0.0	1.6	0.0	3.7	2.3
Absolute Return (ex Distressed)	10.2	9.3	9.8	10.5	10.5	8.7
Distressed Securities	0.8	0.0	0.5	0.0	1.1	0.9
Hedge Fund Structure	0.6	0.0	0.4	0.0	0.7	0.0
Private Equity Structure	0.3	0.0	0.0	0.0	0.5	0.0
Private Equity & Venture Capital	5.0	2.7	3.2	1.4	6.5	2.5
Non-Venture Private Equity	2.9	1.0	2.7	0.0	3.1	1.5
Venture Capital	1.3	0.0	0.0	0.0	2.3	0.3
Other Private Investments	0.8	0.0	0.4	0.0	1.1	0.6
Real Assets & Inflation-Linked Bonds	11.3	7.9	8.6	8.1	13.5	7.3
Private Real Estate	4.2	0.0	1.6	0.0	6.4	0.2
<i>Private Partnerships</i>	0.6	0.0	0.7	0.0	0.5	0.0
<i>Direct Property Holdings</i>	3.7	0.0	0.9	0.0	5.9	0.0
Public Real Estate	3.8	0.0	2.8	0.0	4.7	0.0
Commodities	0.6	0.0	1.0	0.1	0.3	0.0
Inflation-Linked Bonds (UK)	0.2	0.0	0.3	0.0	0.0	0.0
Inflation-Linked Bonds (ex UK)	1.8	1.3	2.0	0.0	1.6	1.5
Private Oil & Gas/Natural Resources	0.0	0.0	0.0	0.0	0.1	0.0
Timber	0.2	0.0	0.2	0.0	0.3	0.0
Public Energy/Natural Resources	0.4	0.0	0.6	0.0	0.2	0.0
Bonds	5.1	4.5	5.9	5.1	4.4	3.2
UK Bonds	0.9	0.0	0.8	0.0	1.0	0.0
Global Bonds	3.9	3.3	4.7	4.6	3.2	2.8
<i>Developed Markets</i>	3.0	2.5	3.6	2.8	2.6	2.0
<i>Emerging Markets</i>	0.9	0.3	1.1	0.7	0.6	0.1
High-Yield Bonds	0.3	0.0	0.4	0.0	0.2	0.0
Cash & Equivalents	6.7	5.2	6.7	6.0	6.6	4.4
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.

Exhibit 4
Asset Allocation Distribution: UK Foundations and Endowments
 As at 30 June 2017 • Percent (%)



CA UK Foundations & Endowments

5th Percentile	26.7	52.9	14.3	30.5	3.8	17.1	32.4	13.6	14.2
25th Percentile	20.6	41.3	12.0	16.6	1.1	7.9	14.1	7.6	10.5
Median	14.3	32.4	9.8	10.8	0.0	2.7	7.9	4.5	5.2
75th Percentile	3.3	26.8	7.6	4.7	0.0	0.0	5.4	1.4	3.4
95th Percentile	0.0	16.2	1.0	0.1	0.0	0.0	2.0	0.0	0.9
Mean	14.1	34.3	9.4	12.9	0.8	5.0	11.3	5.1	6.7
<i>n = 31</i>									

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



Total Return



Exhibit 5

Summary of Investment Pool Returns: UK Foundations and Endowments

Periods Ended 30 June 2017 • Percent (%)

Nominal Total Returns

	Latest Quarter	CYTD	Average Annual Compound Nominal Return			
			One Year	Three Years	Five Years	Ten Years
CA UK Foundations & Endowments						
Mean	1.3	5.5	15.6	10.1	10.5	6.5
Median	1.2	5.4	15.5	9.6	10.3	6.2
High	4.2	9.5	20.8	14.2	14.5	9.4
5th Percentile	3.1	7.1	19.7	13.2	13.2	8.5
25th Percentile	1.5	5.9	16.8	11.1	10.7	7.1
75th Percentile	0.9	4.8	13.9	9.0	9.8	5.5
95th Percentile	0.1	3.8	12.4	8.2	8.9	5.0
Low	-0.2	3.6	12.1	8.1	8.7	5.0
<i>n</i>	31	31	30	28	26	19
Benchmarks						
FTSE® 100	1.0	4.7	16.9	6.7	9.6	4.9
FTSE® All-Share	1.4	5.5	18.1	7.4	10.6	5.4
MSCI ACWI	0.4	6.0	22.2	14.9	14.8	8.3
FTSE® All Stocks Gilts	-1.3	0.3	-0.9	7.0	4.1	6.5
IPD UK Pooled Property	2.3	4.4	6.0	9.5	9.0	2.2
UK 3-Month Libor	0.1	0.2	0.4	0.5	0.5	1.5
RPI - UK	1.1	1.9	3.5	2.0	2.4	2.8

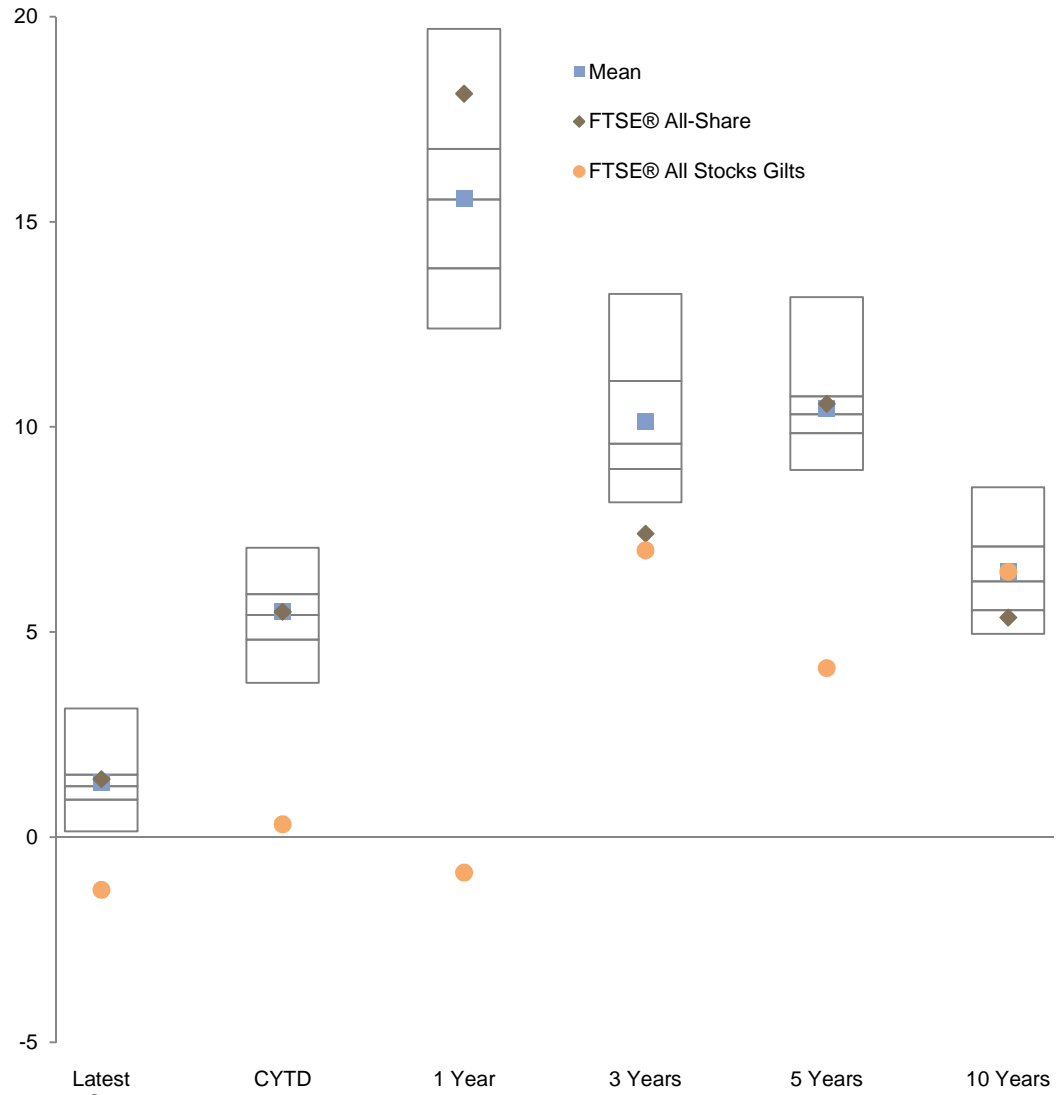
Real Total Returns

	Latest Quarter	CYTD	Average Annual Compound Real Return			
			One Year	Three Years	Five Years	Ten Years
CA UK Foundations & Endowments						
Mean	0.2	3.5	11.7	7.9	7.9	3.6
Median	0.1	3.4	11.6	7.4	7.7	3.4
High	3.1	7.5	16.7	12.0	11.8	6.5
5th Percentile	2.0	5.0	15.7	11.0	10.5	5.6
25th Percentile	0.4	3.9	12.8	8.9	8.1	4.2
75th Percentile	-0.2	2.8	10.0	6.8	7.3	2.7
95th Percentile	-1.0	1.8	8.6	6.0	6.4	2.1
Low	-1.3	1.6	8.3	5.9	6.1	2.1
<i>n</i>	31	31	30	28	26	19
Benchmarks						
FTSE® 100	-0.1	2.7	13.0	4.6	7.0	2.1
FTSE® All-Share	0.3	3.5	14.1	5.3	8.0	2.5
MSCI ACWI	-0.7	4.0	18.1	12.6	12.1	5.4
FTSE® All Stocks Gilts	-2.4	-1.6	-4.2	4.9	1.7	3.6
IPD UK Pooled Property	1.2	2.4	2.4	7.3	6.4	-0.6
UK 3-Month Libor	-1.0	-1.7	-3.0	-1.5	-1.8	-1.2

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.

Exhibit 6
Investment Pool Nominal Return Percentiles: UK Foundations and Endowments
 Periods Ended 30 June 2017 • Percent (%)



	Latest Qtr	CYTD	1 Year	3 Years	5 Years	10 Years
5th Percentile	3.1	7.1	19.7	13.2	13.2	8.5
25th Percentile	1.5	5.9	16.8	11.1	10.7	7.1
Median	1.2	5.4	15.5	9.6	10.3	6.2
75th Percentile	0.9	4.8	13.9	9.0	9.8	5.5
95th Percentile	0.1	3.8	12.4	8.2	8.9	5.0
Mean	1.3	5.5	15.6	10.1	10.5	6.5
<i>n</i>	31	31	30	28	26	19
FTSE® All-Share	1.4	5.5	18.1	7.4	10.6	5.4
FTSE® All Stocks Gilts	-1.3	0.3	-0.9	7.0	4.1	6.5

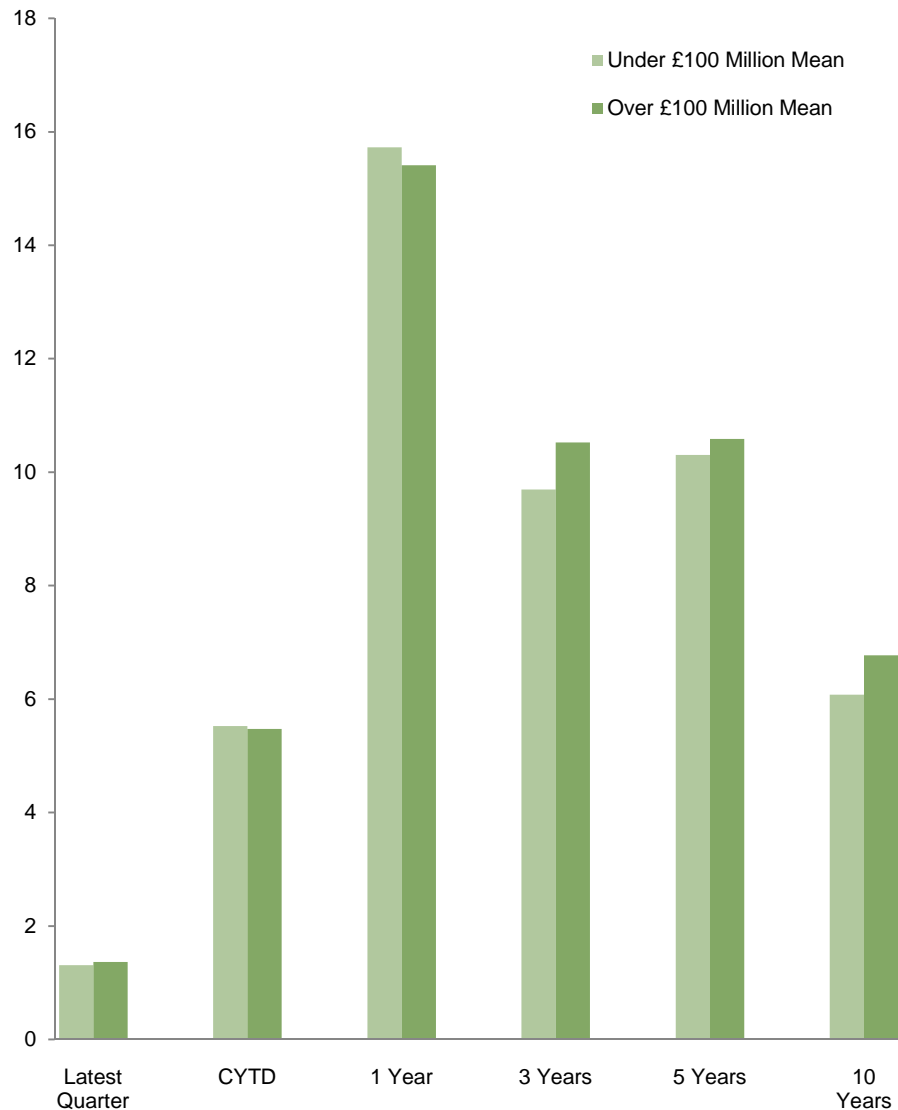
Sources: UK foundation and endowment data as reported to Cambridge Associates LLC. Index data are provided by FTSE International Limited.

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

Exhibit 7

Nominal Total Return Summary by Asset Size: UK Foundations and Endowments

Periods Ended 30 June 2017 • Percent (%)

**Under £100 Million**

Mean	1.3	5.5	15.7	9.7	10.3	6.1
Median	1.3	5.5	15.5	9.2	10.3	6.0
<i>n</i>	14	14	14	13	12	8

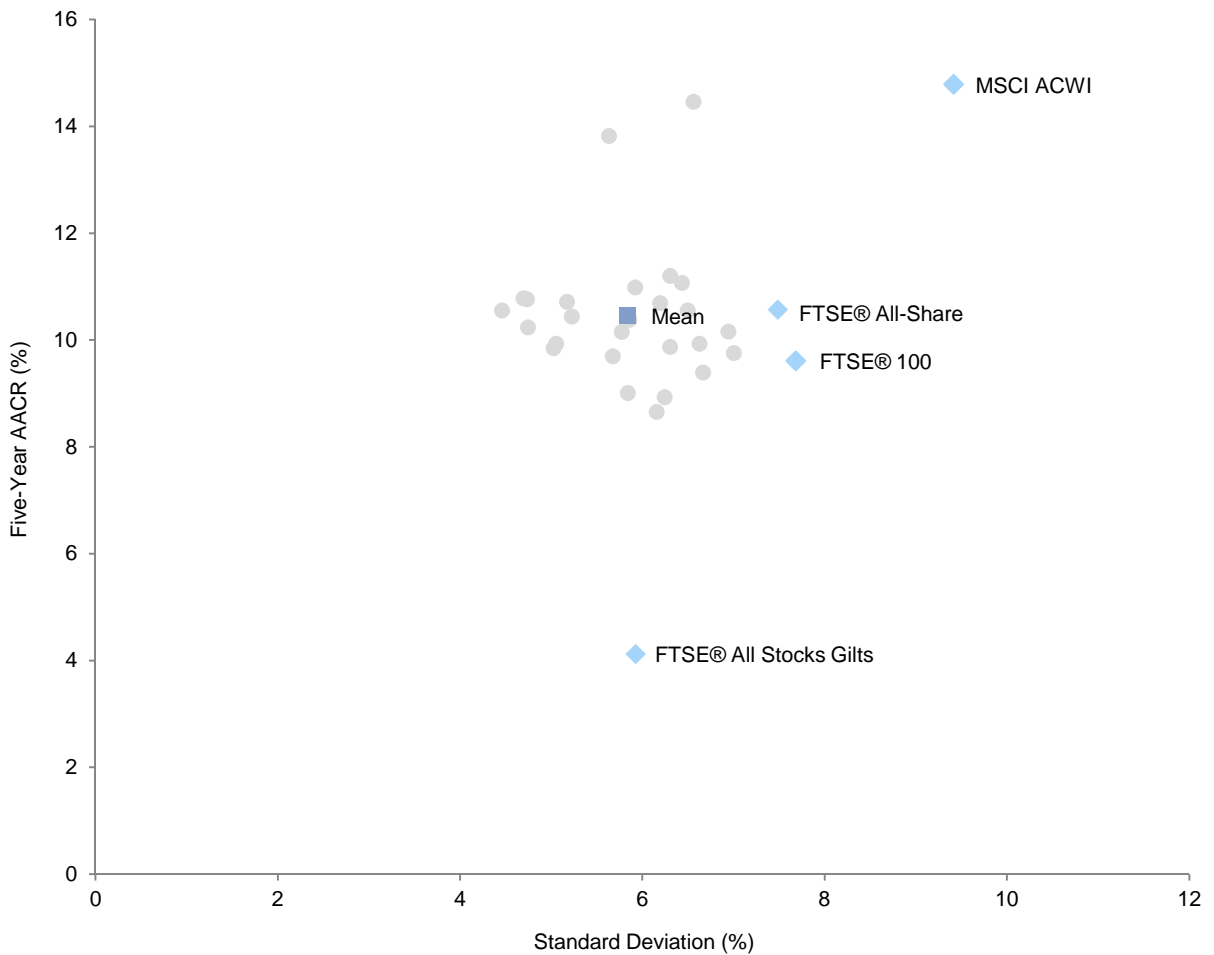
Over £100 Million

Mean	1.4	5.5	15.4	10.5	10.6	6.8
Median	1.2	5.4	15.6	9.7	10.3	6.5
<i>n</i>	17	17	16	15	14	11

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

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

Exhibit 8
Standard Deviation and Sharpe Ratio: UK Foundations and Endowments
 Five Years Ended 30 June 2017



	Five-Year AACR ¹	Standard Deviation ²	Sharpe Ratio ³
Mean <i>n</i> = 26	10.5	5.8	1.69
FTSE® 100	9.6	7.7	1.17
FTSE® All-Share	10.6	7.5	1.32
MSCI ACWI	14.8	9.4	1.48
FTSE® All Stocks Gilts	4.1	5.9	0.62

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.

¹ Five-year geometric average annual compound returns.

² Annualised standard deviations are based on last five years of quarterly returns.

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

The 29th May 1961 Charitable Trust
Aberystwyth University
The Art Fund
Barts Charity
Brasenose College
The Burdett Trust
Chelsea and Westminster Health Charity
Comic Relief
Corpus Christi College, Oxford
Council for World Mission
Courtauld Institute of Art
The Drapers' Group
Esmée Fairbairn Foundation
The Foyle Foundation
Guardian Media Group
The Health Foundation
The Henry Smith Charity
Jesus College, Oxford
King's College London
The Legal Education Foundation
Marie Curie Cancer Care
Medlock Charitable Trust
The Nuffield Foundation
Paul Hamlyn Foundation
The Pilgrim Trust
Royal Literary Fund
The Society of Merchant Venturers
St. Edmund Hall, Oxford
Winchester College

Note: Two participating institutions wish to remain anonymous.