



## Endowments Quarterly

A Look at Asset Allocation and Total Returns  
for US Endowments and Foundations

Fourth Quarter 2014

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William Prout | Geoffrey Bollier

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The Cambridge Associates US endowment and foundation universe includes colleges and universities, cultural and environmental institutions, health care institutions, independent schools, and other endowed nonprofit institutions as well as foundations. This report provides asset allocation and return analyses for 436 US endowments and foundations that participated in our quarterly survey. The average market value of participating long-term investment portfolios was \$1.1 billion. The median value was \$250 million.

### Examining Returns

The average return of the US endowment and foundation universe was flat (0.0%) for the quarter ended December 31, 2014. Trailing one-year returns averaged 4.4%. Returns are reported on a net-of-fees basis for 99% of the universe.

Per the Consumer Price Index, inflation was negative (-1.4%) for fourth quarter 2014. For the entire calendar year 2014 period, the rate of inflation was just 0.8%. Adjusting nominal returns to reflect inflation, the average real return for US endowments and foundations rises to 1.4% for the fourth quarter but falls to 3.6% for the trailing one-year period.

**Risk-Adjusted Performance.** Investors spend much time and effort analyzing the returns of their portfolios. Measuring risk is just as important, as investors should only take risks for which they are compensated and should recognize whether any incremental return they have earned is simply the result of their having taken more risk.

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*Other contributors to this report include Grant Steele and Jonathan Morris-Eppolito.*

Risk-adjusted performance, as measured by the Sharpe ratio,<sup>1</sup> averaged 1.03 for the trailing five-year period, ranging from 0.69 to 1.69 after removing outliers that make up the top and bottom 5% of the universe. Relative to a pair of simple 70/30 portfolio benchmarks,<sup>2</sup> the average Sharpe ratio of respondents exceeded the portfolio containing a global benchmark for the equity component (0.85), but was lower than the portfolio containing a US benchmark for the equity component (1.26).

### Performance Attribution

When looking at investment returns for the calendar year 2014 period, divergence in asset allocation between the top and bottom performers was largest within private investment asset classes. Allocations to public real assets, bonds, and global ex US equities also varied considerably between top and bottom performers.

**Private Investments.** Endowments and foundations that posted a trailing one-year return in the top quartile entered the year with the highest average PE/VC allocation (12.7%) and the highest average private real assets allocation (9.5%). In contrast, the average beginning PE/VC and private real asset allocation for those in the bottom-performing quartile was 2.8% and 1.2%, respectively. The degree of divergence is especially meaningful given the recent strong returns in private markets.

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<sup>1</sup> The Sharpe ratio is the most common approach to measuring risk-adjusted performance. It shows how much return above the risk-free rate (T-bills) the investor has earned per unit of risk (defined as the standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken.

<sup>2</sup> The global equity benchmark is the MSCI All Country World Index (ACWI) and the US equity benchmark is the Wilshire 5000 Index. Bonds are represented by the Barclays Government/Credit Bond Index.

## Summary and Observations

### Index Returns

As of December 31, 2014

Index	One-Year Return (%)
US PE/VC (Lagged)	19.3
Wilshire 5000	12.7
US PE/VC (Partial Year)	10.3
Barclays Govt/Credit Bond	6.0
HFRI FOF Diversified	3.4
MSCI ACWI ex US	-4.3

Sources: Barclays, Cambridge Associates LLC, Hedge Fund Research, Inc., MSCI, Inc., and Wilshire Associates. MSCI data provided "as is" without any express or implied warranties.

Notes: US PE/VC return calculated as IRR. Partial Year return represents the period 1/1/14–9/30/14 and aligns with endowments and foundations using the flat methodology to report private investment performance. Lagged return represents the period 10/1/13–9/30/14.

In addition to an asset mix that had higher allocations to private investments, endowments and foundations in the top performance quartile for the trailing one-year period also were more likely to use a performance reporting methodology that was more favorable for this reporting period. Approximately 23% of participants with private investment allocations report on a lagged basis (i.e., third quarter 2014 private return used in the fourth quarter 2014 total portfolio return). For these investors, four quarters of private performance were included in the trailing one-year return, including fourth quarter 2013 which had exceptionally strong private investment returns. Over 75% (59 of 77) of participants that use this lagged methodology were in the top performance quartile for the trailing one-year period.

Of the remaining participants that use some other methodology to account for private investments or have no private investment allocation, only 50 of 358 were in the top performance quartile. The vast majority of these remaining institutions reported fourth quarter 2014 private investment returns on a flat (0%) basis. At the time of this publication, only three quarters

### Cambridge Associates Private Investment Index Returns

	One Quarter End-to-End Pooled Return (%)				
	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
US Private Equity	6.7	3.1	5.7	1.7	NA
US Venture Capital	11.9	4.9	3.0	2.4	NA
Real Estate	5.9	2.6	3.7	1.9	NA
Natural Resources	3.7	0.8	8.7	-0.2	NA

Lagged Basis  Flat Basis

Source: Cambridge Associates LLC.

Note: NA indicates data were not available.

### Average Private Investments Allocation by Trailing One-Year Performance Quartile

As of December 31, 2014

	Return Methodology (n)		Average Allocation (%)
	Lagged	Non-Lagged*	
Top Quartile	59	50	24.2
2nd Quartile	14	95	12.3
3rd Quartile	2	106	8.7
Bottom Quartile	2	107	4.6

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

\*Includes institutions that don't have an allocation to private investments

of private returns are included in the trailing one-year total return for these investors. As valuations become available, returns will be restated to reflect actual private performance.

**Public Real Assets.** While US REITs were among the strongest performing asset classes in calendar year 2014, public real estate accounts for less than 1% of the average endowment and foundation portfolio. Commodities and natural resource equities, which make up the vast majority of the average allocation to public real assets, were dragged down considerably by collapsing oil prices in the second half of 2014. Endowments and foundations in the top performance quartile entered the year with the

lowest allocation to public real assets (3.3%), while those in the bottom performance quartile reported the highest average allocation (8.1%).

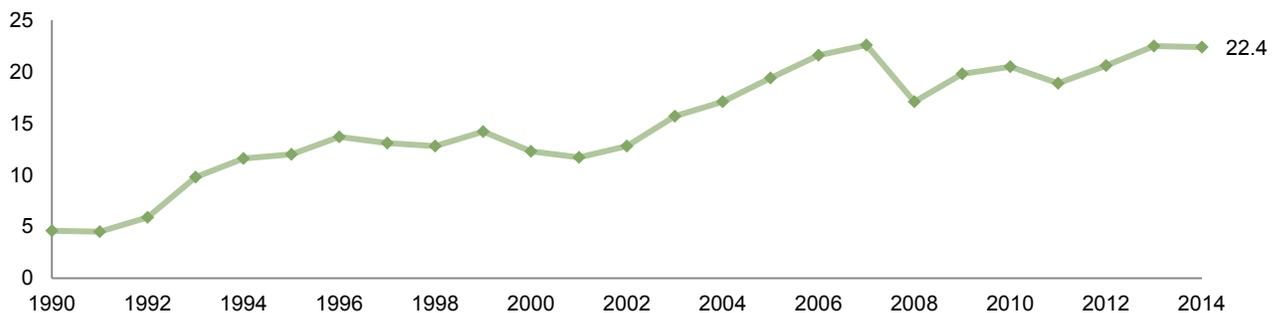
**Bonds.** The trailing one-year return for the Barclays Government/Credit Index (6.0%) was higher than the median total portfolio return (4.1%) for the participant group. However, endowments and foundations with higher allocation to the outperforming private investment asset classes also tend to have lower bond allocations. Therefore, those in the top performance quartile reported the lowest average allocations to bonds (7.4%), while those in the bottom performance quartile reported the highest average allocation (14.4%).

### A Strengthening US Dollar and the Impact on a Global Portfolio

An investor’s return on a foreign investment can be broken down into two main components. The first consists of the total return (i.e., capital appreciation and income) of the asset in the local country’s market and is the same component that determines the return of a domestic holding. The second component is unique to foreign investments and consists of the fluctuation of the asset’s local currency versus the investor’s domestic currency for the investment period.

#### Mean Allocations to Global ex US Equities

Calendar Year-Ends 1990–2014

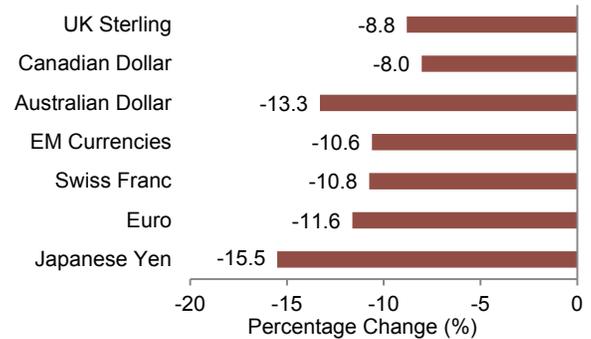


Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: Each data point represents the average of all endowments and foundations reporting for the respective time period. The number of reporting institutions ranges from 56 in 1990 to 436 in 2014.

#### Currency Performance Versus the US Dollar

July 1, 2014 – December 31, 2014



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: EM currencies is an equal-weighted basket of 20 currencies.

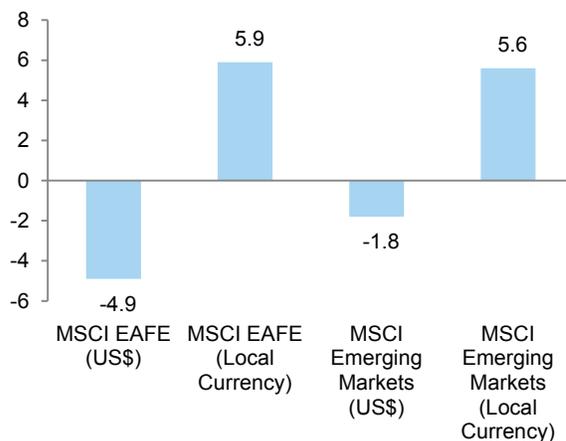
The US dollar began consistently rising against other major currencies in July 2014 and finished the year up strongly against all. This reduced foreign currencies’ purchasing power of US dollars and negatively impacted the return of global ex US holdings for US investors. With allocations to global ex US equities near an all-time high at calendar year-end 2014, the significance of this negative currency effect is amplified for participants in this study. Endowments and foundations in the top performance quartile for 2014 entered the year with the lowest average allocation to global ex US equities, while those in the bottom performance quartile had the highest average allocation.

To limit or reduce exposure to the currency fluctuations of foreign holdings, investors can employ currency hedging. A recent Cambridge Associates survey of large universities and foundations revealed that only a small proportion (21%) of these investors hedge their foreign currency exposure. Due to the operational complexity and resources needed to adequately oversee a currency hedging program, the prevalence of currency hedging among all reporting endowments and foundations in this study is likely to be much lower.

The chart below displays the impact that currency fluctuations had on global ex US equity returns for US investors in 2014. The return of global ex US developed equities as measured by the MSCI EAFE Index was 5.9% in local currency terms. However, for an unhedged US investor, the return in US\$ terms was over 1,000 bps lower (-4.9%). While the difference in emerging market returns was not as wide as for global ex US developed equities, the impact for unhedged investors was still substantial. Emerging market equities increased by 5.6% in local currency terms but declined by 1.8% in US\$ terms.

### Global ex US Index Returns

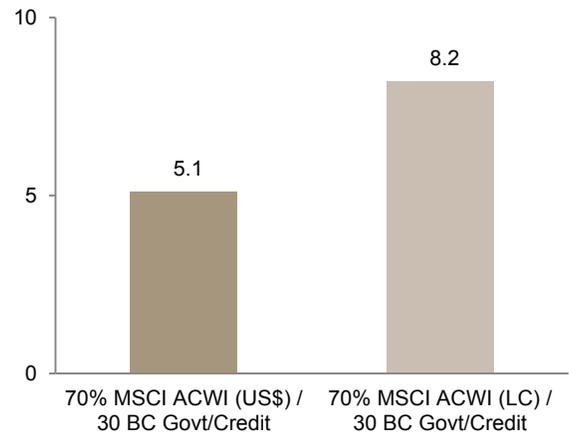
January 1, 2014 – December 31, 2014 • Percent (%)



Source: MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

### Global 70/30 Benchmark Returns

January 1, 2014 – December 31, 2014 • (%)

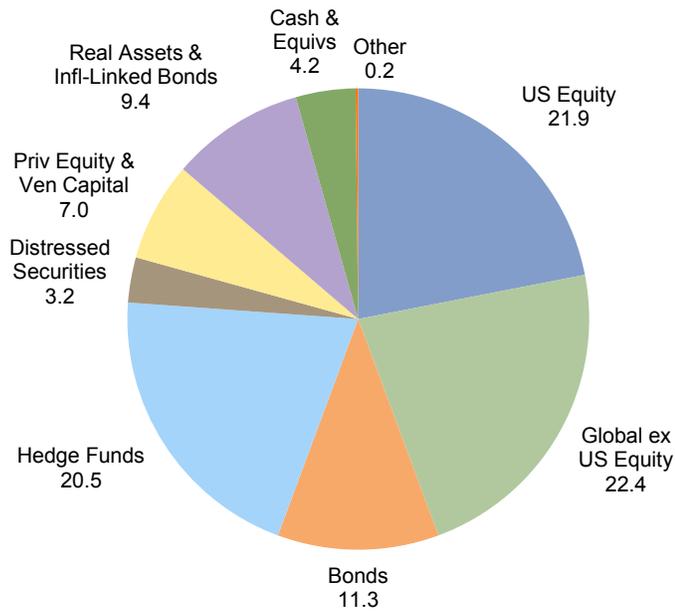


Sources: Barclays and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

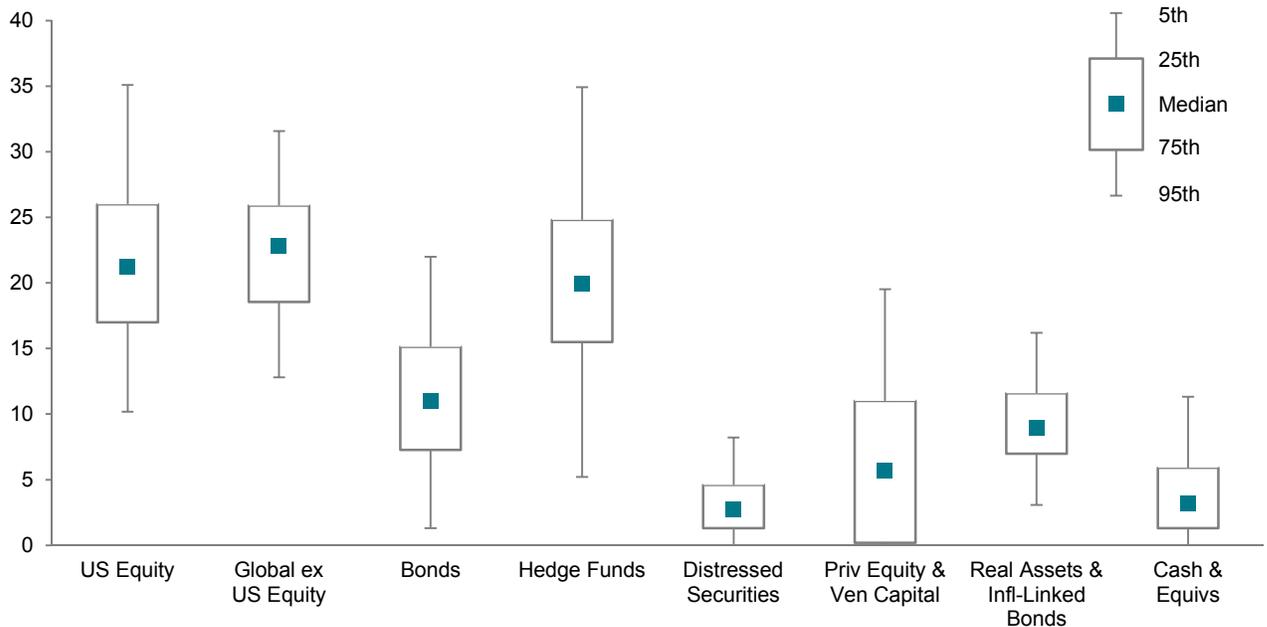
A comparison of 70/30 portfolios shows that a benchmark with an unhedged global equity index returned 5.1% in US\$ terms in 2014 while the same benchmark in local currency terms returned 8.2%. The average trailing one-year return of participating endowments and foundations was 4.4%, further indication that currency hedging is not widely employed within this universe. While results for this recent isolated period should not be the sole impetus for an institution to establish a currency hedging program, US investors with significant allocations to non-US assets should assess the impact of currency risk on their total portfolio to determine whether the cost and effort of hedging are warranted. ■

**Exhibit 1**  
**Asset Allocation Snapshot: US Endowments and Foundations**  
 As of December 31, 2014 • Percent (%)

**Mean Asset Allocation (n = 436)**

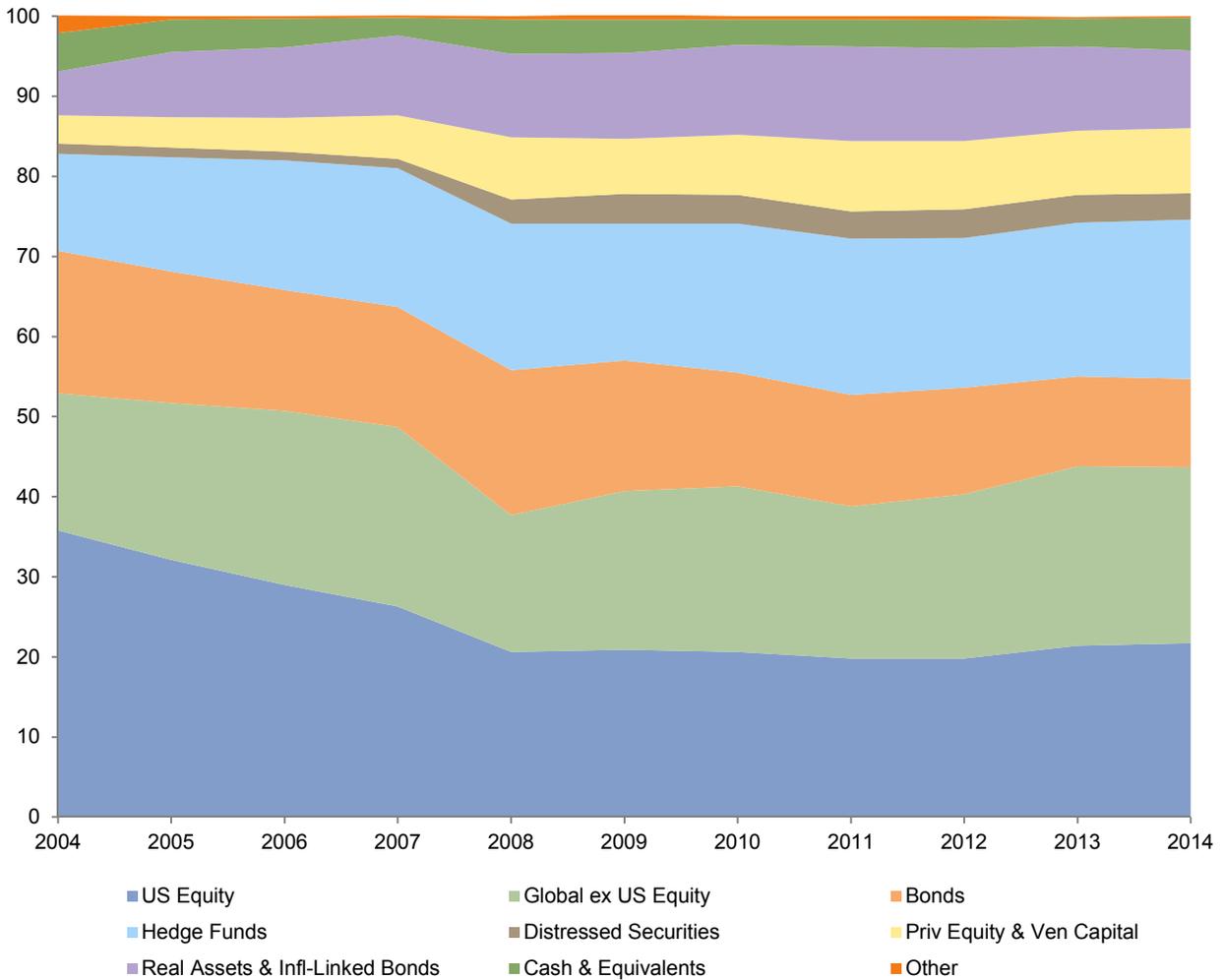


**Distribution by Asset Class: Asset Allocation (n = 436)**



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

**Exhibit 2**  
**Historical Mean Asset Allocation Trends: US Endowments and Foundations**  
 Years Ended December 31 • Percent (%)



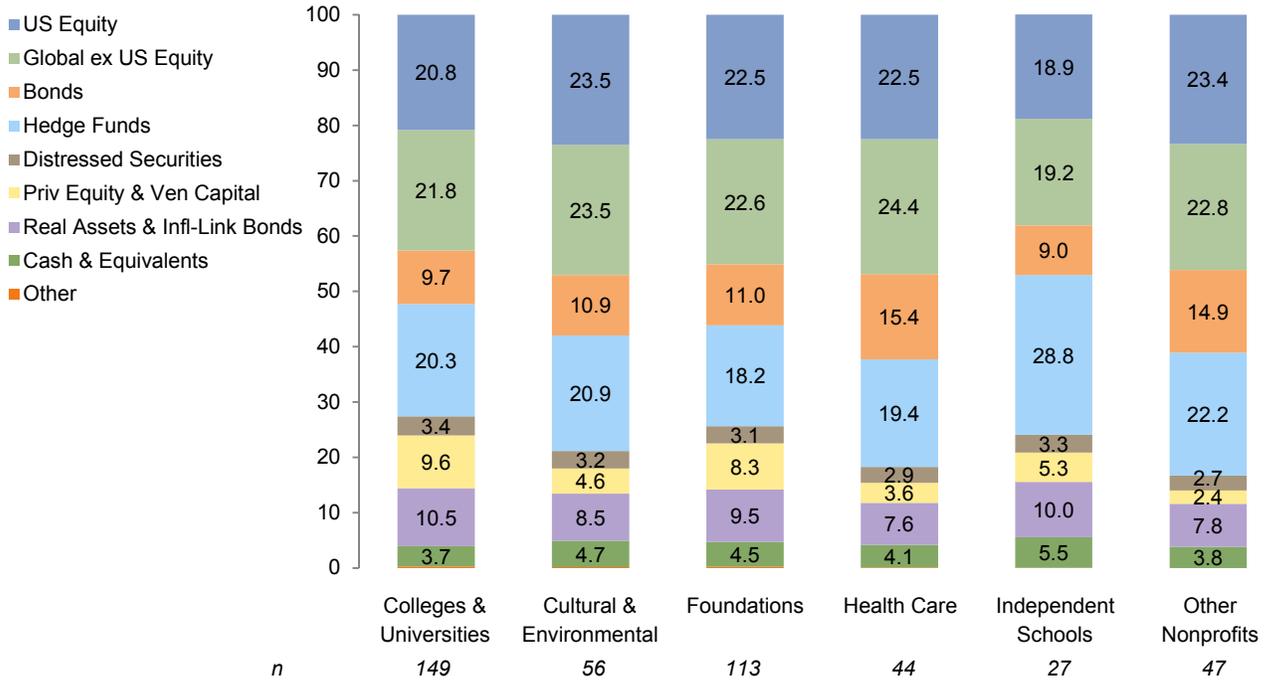
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
US Equity	35.8	32.1	29.0	26.3	20.6	20.9	20.6	19.8	19.8	21.4	21.7
Global ex US Equity	17.1	19.6	21.7	22.4	17.1	19.8	20.7	19.0	20.5	22.4	22.0
<i>Developed Markets</i>	13.9	15.2	16.8	16.8	13.5	14.2	14.4	13.1	13.5	15.4	14.8
<i>Emerging Markets</i>	3.2	4.4	4.9	5.7	3.6	5.5	6.3	5.9	6.9	7.0	7.2
Bonds	17.8	16.4	15.1	15.0	18.1	16.3	14.2	13.9	13.3	11.2	11.0
Hedge Funds	12.1	14.3	16.2	17.3	18.3	17.1	18.6	19.5	18.7	19.2	19.9
Distressed Securities	1.3	1.2	1.1	1.2	3.0	3.7	3.6	3.4	3.6	3.5	3.3
Priv Equity & Ven Capital	3.5	3.8	4.2	5.4	7.8	6.9	7.5	8.8	8.5	8.0	8.1
Real Assets & Inflation-Linked Bonds	5.5	8.1	8.8	10.0	10.4	10.7	11.2	11.8	11.6	10.5	9.7
Cash & Equivalents	4.8	4.1	3.6	2.2	4.3	4.2	3.2	3.4	3.5	3.5	4.1
Other	2.2	0.4	0.3	0.3	0.4	0.6	0.4	0.4	0.5	0.2	0.2

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

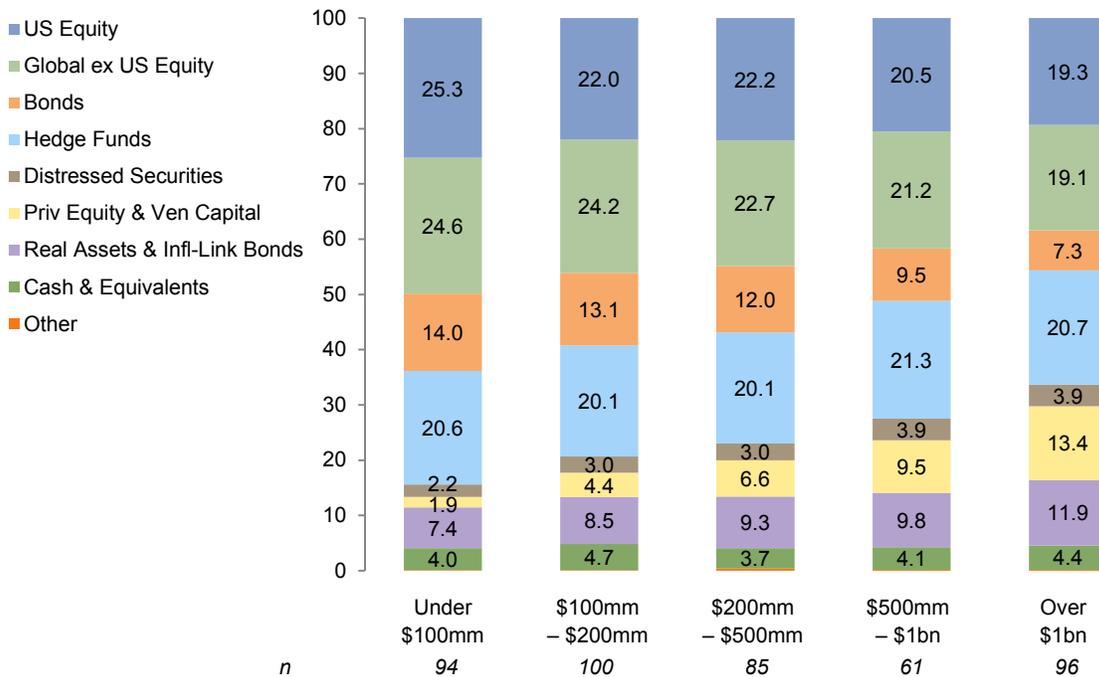
Note: The table represents 208 US endowments and foundations that provided asset allocation data for each year from 2004 to 2014.

**Exhibit 3**  
**Summary Asset Allocation: US Endowments and Foundations**  
 As of December 31, 2014 • Percent (%)

**By Peer Group**



**By Asset Size**



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

**Exhibit 4**  
**Detailed Asset Allocation by Peer Group: US Endowments and Foundations**

As of December 31, 2014 • Percent (%)

	Colleges & Universities (n = 149)		Cultural & Environmental (n = 56)		Foundations (n = 113)		Health Care (n = 44)		Independent Schools (n = 27)		Other Nonprofits (n = 47)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<b>US Equity</b>	<b>20.8</b>	<b>19.8</b>	<b>23.5</b>	<b>21.2</b>	<b>22.5</b>	<b>20.6</b>	<b>22.5</b>	<b>23.3</b>	<b>18.9</b>	<b>19.5</b>	<b>23.4</b>	<b>23.0</b>
<b>Global ex US Equity</b>	<b>21.8</b>	<b>22.1</b>	<b>23.5</b>	<b>25.0</b>	<b>22.6</b>	<b>23.1</b>	<b>24.4</b>	<b>24.9</b>	<b>19.2</b>	<b>20.1</b>	<b>22.8</b>	<b>23.2</b>
Developed Markets	14.4	14.1	16.1	16.5	15.1	15.3	17.1	16.2	13.4	14.0	16.1	16.2
Emerging Markets	7.4	7.3	7.4	7.6	7.5	7.8	7.3	6.8	5.9	5.8	6.7	6.9
<b>Bonds</b>	<b>9.7</b>	<b>9.3</b>	<b>10.9</b>	<b>10.9</b>	<b>11.0</b>	<b>10.6</b>	<b>15.4</b>	<b>16.7</b>	<b>9.0</b>	<b>9.5</b>	<b>14.9</b>	<b>14.4</b>
US Bonds	7.7	7.5	8.9	8.7	9.0	9.7	12.2	13.1	7.4	8.9	11.9	12.4
Global ex US Developed Markets	0.9	0.0	0.7	0.0	0.8	0.0	1.2	0.6	0.6	0.0	1.1	0.7
Emerging Markets	0.6	0.0	0.9	0.4	0.8	0.0	0.9	0.6	0.6	0.0	1.2	0.8
High-Yield Bonds	0.4	0.0	0.4	0.0	0.5	0.0	1.0	0.0	0.4	0.0	0.7	0.0
<b>Hedge Funds</b>	<b>20.3</b>	<b>20.5</b>	<b>20.9</b>	<b>21.5</b>	<b>18.2</b>	<b>18.4</b>	<b>19.4</b>	<b>18.6</b>	<b>28.8</b>	<b>29.0</b>	<b>22.2</b>	<b>20.7</b>
Long/Short Hedge Funds	9.2	8.6	9.8	9.0	8.7	8.5	9.7	9.6	14.1	13.0	10.6	9.8
Absolute Return (ex Distressed)	11.1	10.0	11.1	10.6	9.5	8.9	9.7	8.2	14.8	13.4	11.6	10.6
<b>Distressed Securities</b>	<b>3.4</b>	<b>2.8</b>	<b>3.2</b>	<b>2.8</b>	<b>3.1</b>	<b>2.7</b>	<b>2.9</b>	<b>2.5</b>	<b>3.3</b>	<b>3.3</b>	<b>2.7</b>	<b>2.3</b>
Hedge Fund Structure	2.0	1.7	2.0	2.0	1.9	1.7	2.1	1.9	1.7	1.5	1.8	1.9
Private Equity Structure	1.4	0.9	1.2	0.3	1.2	0.4	0.8	0.0	1.5	1.1	0.9	0.0
<b>Private Equity &amp; Venture Capital</b>	<b>9.6</b>	<b>8.7</b>	<b>4.6</b>	<b>3.5</b>	<b>8.3</b>	<b>6.5</b>	<b>3.6</b>	<b>0.6</b>	<b>5.3</b>	<b>5.7</b>	<b>2.4</b>	<b>0.1</b>
Non-Venture Private Equity	5.2	4.6	2.3	1.4	3.5	2.2	1.6	0.0	2.8	1.9	1.2	0.0
Venture Capital	3.5	2.9	1.4	0.1	3.6	1.8	1.5	0.0	1.3	0.8	0.9	0.0
Other Private Investments	0.8	0.0	0.9	0.0	1.3	0.1	0.6	0.0	1.1	0.1	0.4	0.0
<b>Real Assets &amp; Inflation-Linked Bonds</b>	<b>10.5</b>	<b>10.0</b>	<b>8.5</b>	<b>8.8</b>	<b>9.5</b>	<b>9.3</b>	<b>7.6</b>	<b>8.2</b>	<b>10.0</b>	<b>10.0</b>	<b>7.8</b>	<b>8.0</b>
Private Real Estate	2.9	2.4	1.3	0.1	2.3	1.5	1.2	0.0	2.0	0.0	0.7	0.0
Public Real Estate	0.5	0.0	0.5	0.0	0.5	0.0	0.6	0.0	0.3	0.0	0.5	0.0
Commodities	1.0	0.7	1.1	0.6	1.2	0.8	1.0	0.8	1.2	1.1	1.5	1.1
Inflation-Linked Bonds	0.4	0.0	0.7	0.0	0.5	0.0	0.5	0.1	0.4	0.0	0.4	0.0
Private Oil & Gas/Natural Resources	2.8	2.2	1.4	0.2	2.1	1.4	1.0	0.0	2.6	1.6	0.8	0.0
Timber	0.3	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Public Energy/Natural Resources	2.5	2.2	3.3	3.3	2.8	2.6	3.2	3.9	3.2	2.8	3.9	4.0
<b>Cash &amp; Equivalents</b>	<b>3.7</b>	<b>2.8</b>	<b>4.7</b>	<b>4.3</b>	<b>4.5</b>	<b>3.4</b>	<b>4.1</b>	<b>3.1</b>	<b>5.5</b>	<b>4.3</b>	<b>3.8</b>	<b>3.2</b>
<b>Other Assets</b>	<b>0.3</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

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

**Exhibit 5**  
**Detailed Asset Allocation by Asset Size: US Endowments and Foundations**

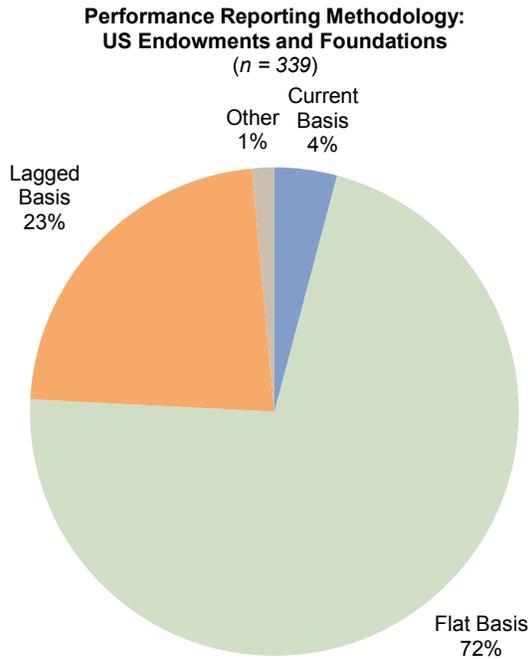
As of December 31, 2014 • Percent (%)

	All Endow & Foundation (n = 436)		Under \$100mm (n = 94)		\$100mm to \$200mm (n = 100)		\$200mm to \$500mm (n = 85)		\$500mm to \$1bn (n = 61)		Over \$1bn (n = 96)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<b>US Equity</b>	<b>21.9</b>	<b>21.2</b>	<b>25.3</b>	<b>24.5</b>	<b>22.0</b>	<b>22.0</b>	<b>22.2</b>	<b>21.2</b>	<b>20.5</b>	<b>19.7</b>	<b>19.3</b>	<b>17.6</b>
<b>Global ex US Equity</b>	<b>22.4</b>	<b>22.8</b>	<b>24.6</b>	<b>25.0</b>	<b>24.2</b>	<b>25.1</b>	<b>22.7</b>	<b>22.9</b>	<b>21.2</b>	<b>21.5</b>	<b>19.1</b>	<b>17.9</b>
Developed Markets	15.2	15.3	17.8	17.5	16.8	16.8	15.3	15.4	13.8	13.9	11.7	10.8
Emerging Markets	7.3	7.3	6.8	7.1	7.4	7.3	7.4	7.5	7.4	7.5	7.3	7.5
<b>Bonds</b>	<b>11.3</b>	<b>11.0</b>	<b>14.0</b>	<b>13.8</b>	<b>13.1</b>	<b>13.3</b>	<b>12.0</b>	<b>10.9</b>	<b>9.5</b>	<b>8.9</b>	<b>7.3</b>	<b>6.6</b>
US Bonds	9.1	9.0	11.2	11.8	10.5	10.7	9.8	9.3	7.8	7.4	5.6	5.9
Global ex US Developed Markets	0.9	0.0	1.1	0.4	0.8	0.1	0.9	0.0	0.8	0.0	0.8	0.0
Emerging Markets	0.8	0.2	1.1	0.7	1.2	0.9	0.8	0.4	0.6	0.0	0.3	0.0
High-Yield Bonds	0.5	0.0	0.5	0.0	0.7	0.0	0.5	0.0	0.4	0.0	0.5	0.0
<b>Hedge Funds</b>	<b>20.5</b>	<b>19.9</b>	<b>20.6</b>	<b>19.1</b>	<b>20.1</b>	<b>19.3</b>	<b>20.1</b>	<b>20.7</b>	<b>21.3</b>	<b>21.6</b>	<b>20.7</b>	<b>20.6</b>
Long/Short Hedge Funds	9.7	9.1	11.5	11.4	10.1	9.8	8.0	7.7	8.3	7.5	9.8	9.0
Absolute Return (ex Distressed)	10.8	10.1	9.1	7.4	10.0	9.2	12.1	10.8	13.0	12.0	10.8	11.3
<b>Distressed Securities</b>	<b>3.2</b>	<b>2.7</b>	<b>2.2</b>	<b>2.1</b>	<b>3.0</b>	<b>2.6</b>	<b>3.0</b>	<b>2.8</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<b>3.5</b>
Hedge Fund Structure	1.9	1.7	1.7	1.7	2.0	1.7	1.8	1.7	2.1	1.9	2.2	1.8
Private Equity Structure	1.2	0.5	0.5	0.0	1.0	0.3	1.2	0.7	1.9	1.6	1.7	1.3
<b>Private Equity &amp; Venture Capital</b>	<b>7.0</b>	<b>5.7</b>	<b>1.9</b>	<b>0.0</b>	<b>4.4</b>	<b>2.3</b>	<b>6.6</b>	<b>5.5</b>	<b>9.5</b>	<b>8.3</b>	<b>13.4</b>	<b>13.4</b>
Non-Venture Private Equity	3.4	2.2	0.6	0.0	1.7	0.3	3.1	2.2	5.0	4.1	7.3	7.5
Venture Capital	2.6	1.2	0.6	0.0	1.5	0.1	2.4	1.7	3.7	2.8	5.5	4.6
Other Private Investments	0.9	0.0	0.7	0.0	1.2	0.0	1.1	0.2	0.7	0.3	0.6	0.0
<b>Real Assets &amp; Infl-Linked Bonds</b>	<b>9.4</b>	<b>8.9</b>	<b>7.4</b>	<b>7.9</b>	<b>8.5</b>	<b>8.4</b>	<b>9.3</b>	<b>9.9</b>	<b>9.8</b>	<b>9.3</b>	<b>11.9</b>	<b>11.9</b>
Private Real Estate	2.1	1.1	0.5	0.0	1.0	0.0	1.7	1.2	2.5	1.8	4.7	4.5
Public Real Estate	0.5	0.0	0.5	0.0	0.4	0.0	0.6	0.0	0.7	0.0	0.5	0.0
Commodities	1.1	0.8	1.5	1.1	1.3	1.2	1.2	1.0	0.8	0.5	0.8	0.0
Inflation-Linked Bonds	0.5	0.0	0.5	0.0	0.6	0.2	0.5	0.0	0.1	0.0	0.5	0.0
Private Oil & Gas/Natural Resources	2.0	1.1	0.4	0.0	1.3	0.0	1.8	1.6	2.6	2.1	4.1	4.0
Timber	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.5	0.0
Public Energy/Natural Resources	3.0	2.7	4.0	4.4	3.9	4.2	3.3	2.9	2.8	2.5	0.8	0.0
<b>Cash &amp; Equivalents</b>	<b>4.2</b>	<b>3.2</b>	<b>4.0</b>	<b>3.2</b>	<b>4.7</b>	<b>3.3</b>	<b>3.7</b>	<b>3.2</b>	<b>4.1</b>	<b>3.7</b>	<b>4.4</b>	<b>3.1</b>
<b>Other Assets</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>

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

**Exhibit 6**  
**Performance Reporting Methodologies**

As of December 31, 2014 • Methods Used to Account for Performance of Private Investments in Fourth Quarter 2014



**By Asset Size**

	Current Basis	Flat Basis	Lagged Basis	Other
Under \$100 million	2%	98%	—	—
<i>n</i>	1	44	—	—
\$100 million to \$200 million	—	100%	—	—
<i>n</i>	—	71	—	—
\$200 million to \$500 million	—	91%	6%	3%
<i>n</i>	—	65	4	2
\$500 million to \$1 billion	7%	71%	21%	1%
<i>n</i>	4	41	12	1
Over \$1 billion	10%	23%	65%	2%
<i>n</i>	9	22	61	2

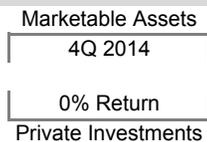
**Current Basis**

Total investment pool return for 4Q 2014 includes marketable asset performance and private investment performance for October 1, 2014, to December 31, 2014. All 14 institutions in our endowment universe using this methodology used estimated valuations.



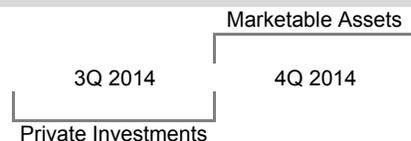
**Flat Basis**

Total investment pool return for 4Q 2014 includes marketable asset performance for October 1, 2014, to December 31, 2014. Private investment portion of the investment pool is represented by a flat return (0%) for October 1, 2014, to December 31, 2014.



**Lagged Basis**

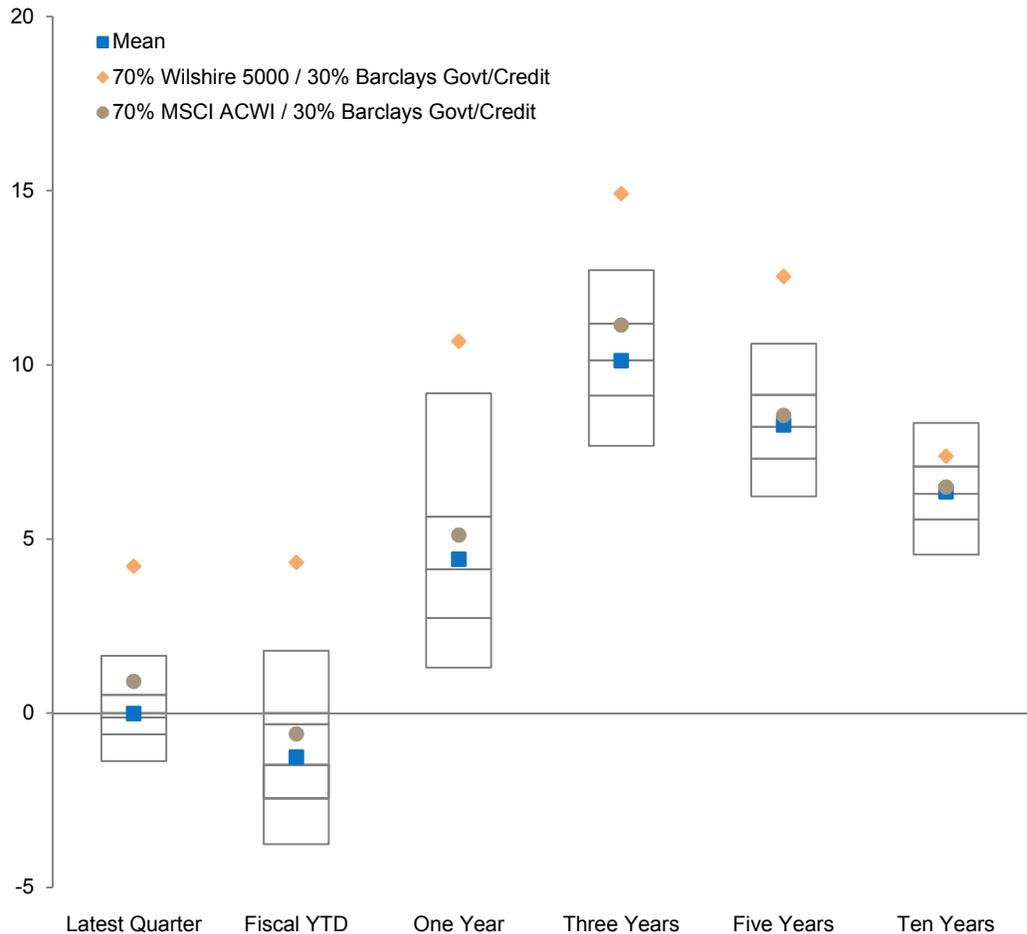
Total investment pool return for 4Q 2014 includes marketable asset performance for October 1, 2014, to December 31, 2014, and private investment performance for July 1, 2014, to September 30, 2014. Of the 77 institutions in our endowment universe using this methodology, six will restate 3Q 2014 returns to reflect private investment valuations on a current basis.



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

Notes: Private investments include total allocation to non-venture private equity, venture capital, distressed securities (private equity structure), private oil & gas/natural resources, timber, private real estate, and other private investments. Excluded from this exhibit are 97 US endowments and foundations that have no significant private investment allocations (<1% of their total investment portfolios).

**Exhibit 7**  
**Nominal Return Percentiles: US Endowments and Foundations**  
 Periods Ended December 31, 2014 • Percent (%)

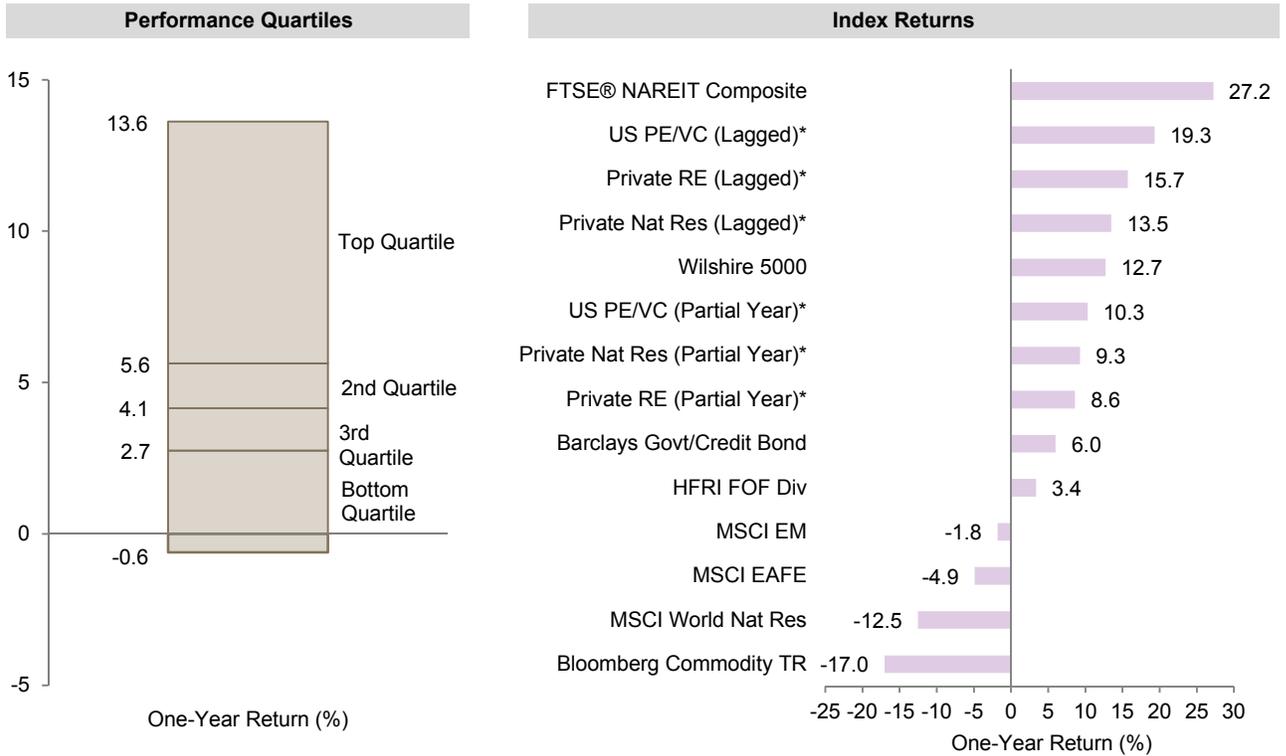


	Latest Quarter	Fiscal YTD	One Year	Three Years	Five Years	Ten Years
5th Percentile	1.7	1.8	9.2	12.7	10.6	8.3
25th Percentile	0.5	-0.3	5.6	11.2	9.1	7.1
Median	-0.1	-1.5	4.1	10.1	8.2	6.3
75th Percentile	-0.6	-2.5	2.7	9.1	7.3	5.6
95th Percentile	-1.4	-3.8	1.3	7.7	6.2	4.6
Mean	0.0	-1.3	4.4	10.1	8.3	6.4
<i>n</i>	436	436	435	430	422	377
70% Wilshire 5000 / 30% Barclays Govt/Credit	4.2	4.3	10.7	14.9	12.5	7.4
70% MSCI ACWI / 30% Barclays Govt/Credit	0.9	-0.6	5.1	11.1	8.5	6.5

Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, MSCI Inc., and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

Notes: Three-, five-, and ten-year returns are annualized. The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

**Exhibit 8**  
**Performance Attribution: US Endowments and Foundations**  
 As of December 31, 2014 • Analysis of Top and Bottom Performers



Quartile	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Dist Sec	PE & VC	Public RA & ILBs	Private RA	Cash	Other
Top Quartile	19.5	11.7	6.9	7.4	20.0	4.5	12.7	3.3	9.5	4.3	0.2
2nd Quartile	22.2	15.5	6.8	11.3	20.1	3.6	7.5	5.5	3.8	3.4	0.4
3rd Quartile	22.7	17.0	6.9	12.8	20.0	2.7	4.4	7.2	2.7	3.6	0.0
Bottom Quartile	21.5	18.4	7.4	14.4	19.4	2.4	2.8	8.1	1.2	4.2	0.1
US E&F Universe	21.5	15.6	7.0	11.5	19.9	3.3	6.9	6.0	4.3	3.9	0.2

Quartile	Divergence (%)
Top Quartile	-4%
2nd Quartile	-2%
3rd Quartile	0%
Bottom Quartile	2%
US E&F Universe	0%

Source: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Citigroup, Global Markets, Dow Jones Indexes, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., the National Association of Real Estate Investment Trusts, and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

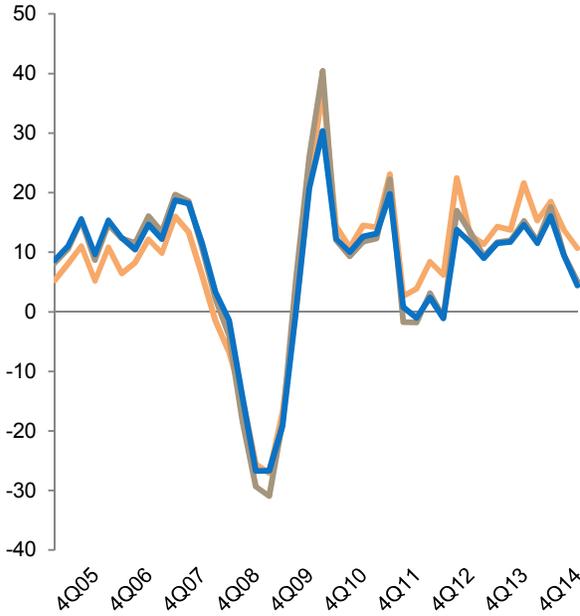
Note: CJA US Endowment and Foundation Universe performance quartiles are based on the trailing one-year return as of December 31, 2014.

\* Private investment returns are calculated as an IRR. The source of these returns is the CJA private investment benchmark database.

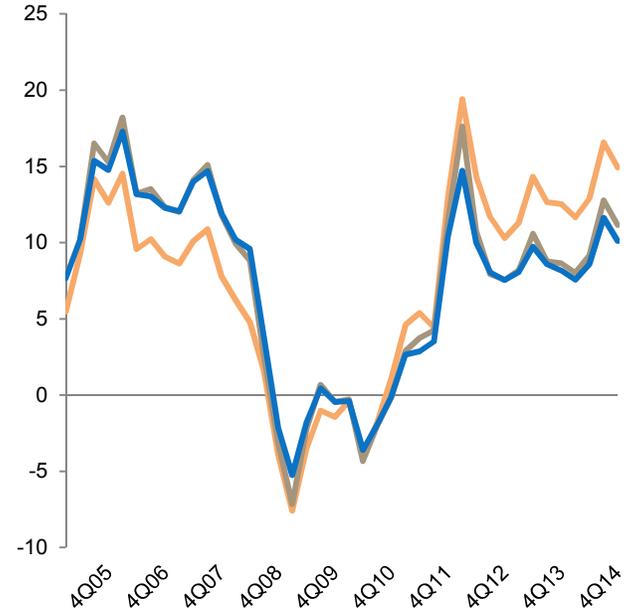
Partial Year return represents the period 1/1/14-9/30/14 and Lagged return represents the period 10/1/13-9/30/14. These periods align with endowments and foundations using the flat and lagged methodologies, respectively, to report private investment performance. See Exhibit 6 for more detail on these reporting methodologies.

**Exhibit 9**  
**Nominal Returns Over Time: US Endowments and Foundations**  
 Periods Ended First Quarter 2005 – Fourth Quarter 2014 • Percent (%)

**Rolling One-Year AACR**



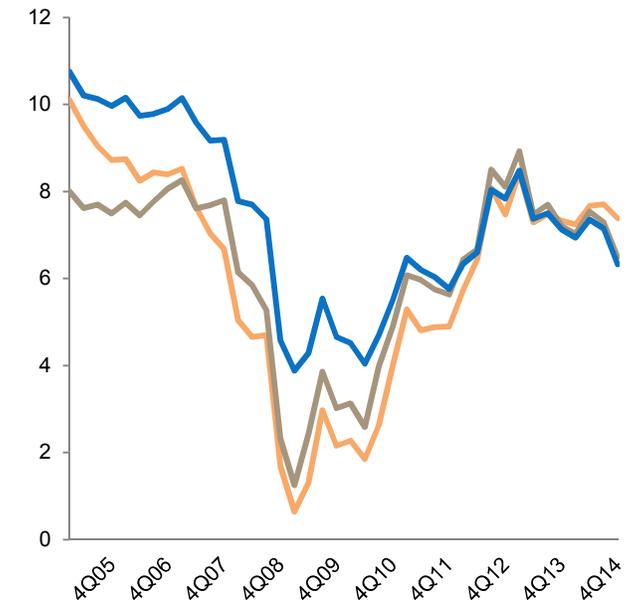
**Rolling Three-Year AACR**



**Rolling Five-Year AACR**



**Rolling Ten-Year AACR**



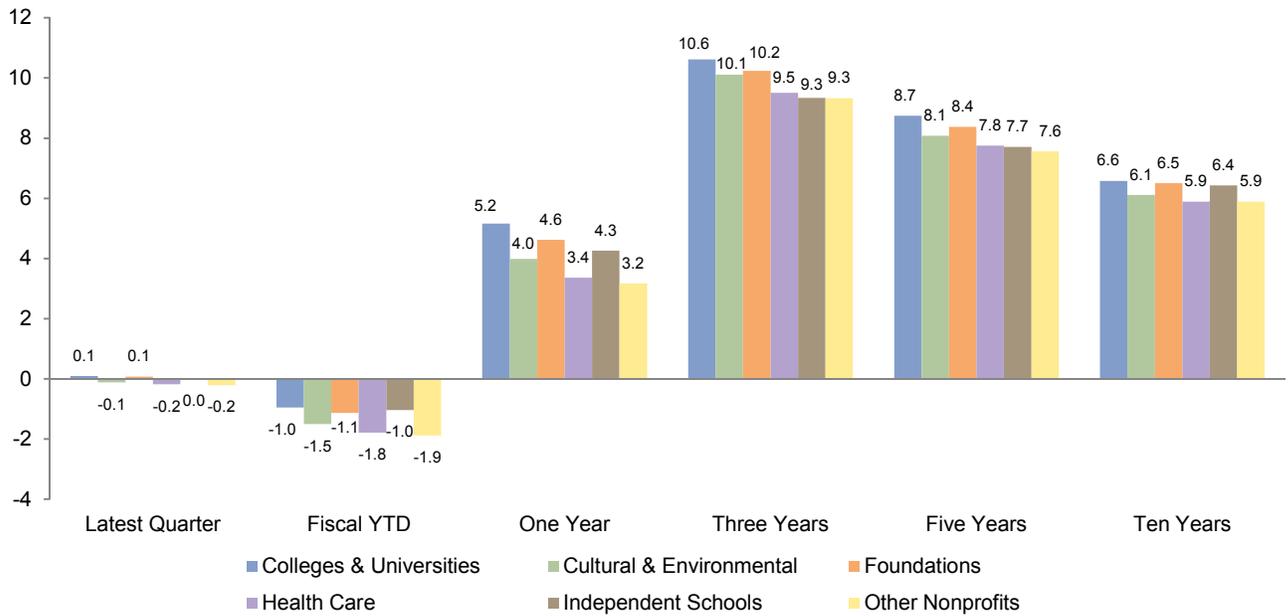
— 70/30 Wilshire 5000 / Barclays Govt/Credit    — 70/30 MSCI ACWI / Barclays Govt/Credit    — US Endows & Fdns

Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, MSCI Inc., and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

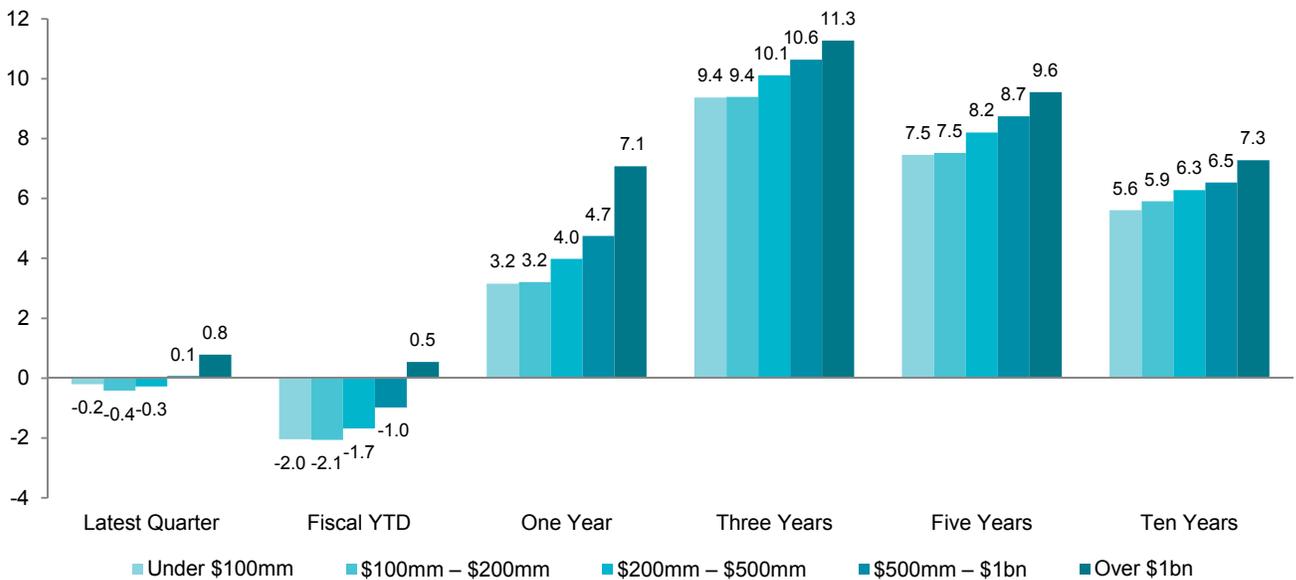
Note: The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

**Exhibit 10**  
**Nominal Mean Returns Summary: US Endowments and Foundations**  
 Periods Ended December 31, 2014 • Percent (%)

**By Peer Group**



**By Asset Size**



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

**Exhibit 11****Nominal Total Return Summary by Peer Group: US Endowments and Foundations**

Periods Ended December 31, 2014 • Percent (%)

	Latest Quarter	Fiscal YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
<b>Colleges &amp; Universities</b>						
5th Percentile	1.7	2.1	9.4	12.7	10.8	8.6
25th Percentile	0.8	0.2	6.6	11.7	9.5	7.3
75th Percentile	-0.6	-2.2	3.4	9.5	7.8	5.8
95th Percentile	-1.4	-3.7	1.5	8.2	6.6	4.9
Mean	0.1	-1.0	5.2	10.6	8.7	6.6
Median	0.0	-1.0	5.0	10.8	8.7	6.5
<i>n</i>	149	149	149	148	146	138
<b>Cultural &amp; Environmental</b>						
5th Percentile	1.0	1.0	6.9	12.7	10.0	7.8
25th Percentile	0.3	-0.8	4.8	11.2	8.9	7.0
75th Percentile	-0.6	-2.5	2.6	9.2	7.2	5.4
95th Percentile	-1.1	-3.2	1.5	7.8	6.1	4.0
Mean	-0.1	-1.5	4.0	10.1	8.1	6.1
Median	-0.2	-1.7	3.8	10.0	8.0	6.3
<i>n</i>	56	56	56	56	55	48
<b>Foundations</b>						
5th Percentile	1.8	3.7	9.8	13.2	11.0	8.3
25th Percentile	0.4	-0.5	5.8	11.1	9.2	7.4
75th Percentile	-0.6	-2.4	2.9	9.2	7.3	5.7
95th Percentile	-1.2	-3.7	1.2	7.9	6.6	4.5
Mean	0.1	-1.1	4.6	10.2	8.4	6.5
Median	-0.2	-1.6	4.1	10.1	8.1	6.4
<i>n</i>	113	113	112	108	107	92
<b>Health Care</b>						
5th Percentile	1.1	0.3	6.1	11.7	9.4	7.4
25th Percentile	0.2	-0.9	4.3	10.5	8.5	6.5
75th Percentile	-0.8	-2.7	2.3	8.5	6.9	5.1
95th Percentile	-1.3	-4.3	1.3	7.3	6.4	4.6
Mean	-0.2	-1.8	3.4	9.5	7.8	5.9
Median	-0.2	-1.9	2.9	9.4	7.6	6.0
<i>n</i>	44	44	44	44	43	38
<b>Independent Schools</b>						
5th Percentile	1.6	1.4	7.2	11.9	9.6	7.7
25th Percentile	0.9	0.3	5.6	10.7	8.7	7.3
75th Percentile	-0.7	-2.3	2.9	8.5	7.0	5.7
95th Percentile	-1.7	-4.0	1.3	7.4	6.1	4.6
Mean	0.0	-1.0	4.3	9.3	7.7	6.4
Median	-0.1	-0.6	4.2	9.3	7.5	6.6
<i>n</i>	27	27	27	27	27	24
<b>Other Nonprofits</b>						
5th Percentile	1.3	1.0	5.3	11.4	9.6	7.7
25th Percentile	0.3	-1.4	4.2	10.3	8.3	6.4
75th Percentile	-0.9	-3.1	2.1	8.5	6.9	5.3
95th Percentile	-1.4	-3.5	1.2	6.9	5.5	4.4
Mean	-0.2	-1.9	3.2	9.3	7.6	5.9
Median	-0.3	-2.1	3.0	9.2	7.7	5.9
<i>n</i>	47	47	47	46	43	36

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

## Exhibit 12

**Nominal Total Return Summary by Asset Size: US Endowments and Foundations**

Periods Ended December 31, 2014 • Percent (%)

	Latest Quarter	Fiscal YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
<b>Under \$100 Million</b>						
5th Percentile	1.0	0.2	5.4	11.9	9.2	7.5
25th Percentile	0.2	-1.5	4.2	10.4	8.1	6.3
75th Percentile	-0.6	-2.8	2.2	8.5	6.9	4.9
95th Percentile	-1.3	-3.5	1.2	7.2	5.9	3.9
Mean	-0.2	-2.0	3.2	9.4	7.5	5.6
Median	-0.2	-2.1	3.0	9.3	7.4	5.5
<i>n</i>	94	94	93	91	86	70
<b>\$100 Million to \$200 Million</b>						
5th Percentile	0.7	-0.3	5.8	11.6	9.4	7.4
25th Percentile	0.0	-1.2	4.0	10.4	8.3	6.6
75th Percentile	-1.0	-3.0	2.3	8.5	6.8	5.2
95th Percentile	-1.5	-4.0	0.9	7.2	5.9	4.3
Mean	-0.4	-2.1	3.2	9.4	7.5	5.9
Median	-0.3	-1.9	3.1	9.4	7.5	5.9
<i>n</i>	100	100	100	99	99	83
<b>\$200 Million to \$500 Million</b>						
5th Percentile	1.1	0.2	6.4	12.2	9.8	7.8
25th Percentile	0.2	-0.8	5.0	11.1	8.9	7.0
75th Percentile	-0.8	-2.7	2.7	9.3	7.5	5.6
95th Percentile	-1.5	-3.9	1.5	8.0	6.4	4.7
Mean	-0.3	-1.7	4.0	10.1	8.2	6.3
Median	-0.3	-1.5	4.2	10.0	8.3	6.2
<i>n</i>	85	85	85	83	83	77
<b>\$500 Million to \$1 Billion</b>						
5th Percentile	1.8	2.2	7.4	13.0	10.5	8.3
25th Percentile	0.6	-0.0	6.0	11.2	9.2	7.0
75th Percentile	-0.7	-2.2	3.4	9.9	8.1	5.9
95th Percentile	-1.1	-2.9	2.2	8.6	7.3	5.2
Mean	0.1	-1.0	4.7	10.6	8.7	6.5
Median	-0.3	-1.3	4.8	10.5	8.7	6.5
<i>n</i>	61	61	61	60	57	54
<b>Over \$1 Billion</b>						
5th Percentile	2.1	4.0	11.8	13.3	11.6	9.1
25th Percentile	1.4	1.5	9.0	12.3	10.4	8.0
75th Percentile	0.1	-0.6	5.5	10.3	8.8	6.5
95th Percentile	-0.6	-2.1	3.4	8.9	7.2	6.0
Mean	0.8	0.5	7.1	11.3	9.6	7.3
Median	0.8	0.4	6.8	11.4	9.5	7.2
<i>n</i>	96	96	96	96	96	92

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

**Exhibit 13****Real Total Return Summary by Peer Group: US Endowments and Foundations**

Periods Ended December 31, 2014 • Percent (%)

	Latest Quarter	Fiscal YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
<b>Colleges &amp; Universities</b>						
5th Percentile	3.1	3.6	8.5	11.2	8.9	6.3
25th Percentile	2.2	1.7	5.8	10.2	7.7	5.1
75th Percentile	0.8	-0.7	2.6	8.1	5.9	3.6
95th Percentile	0.0	-2.3	0.8	6.8	4.8	2.7
Mean	1.5	0.5	4.4	9.2	6.9	4.4
Median	1.4	0.5	4.2	9.3	6.9	4.3
<i>n</i>	149	149	149	148	146	138
<b>Cultural &amp; Environmental</b>						
5th Percentile	2.4	2.5	6.1	11.2	8.1	5.5
25th Percentile	1.6	0.7	4.0	9.7	7.1	4.8
75th Percentile	0.7	-1.1	1.9	7.8	5.4	3.2
95th Percentile	0.3	-1.7	0.8	6.3	4.4	1.8
Mean	1.2	0.0	3.2	8.7	6.3	3.9
Median	1.2	-0.2	3.0	8.6	6.2	4.1
<i>n</i>	56	56	56	56	55	48
<b>Foundations</b>						
5th Percentile	3.2	5.3	9.0	11.7	9.2	6.1
25th Percentile	1.8	1.0	5.0	9.7	7.3	5.2
75th Percentile	0.8	-0.9	2.1	7.8	5.6	3.5
95th Percentile	0.2	-2.2	0.4	6.5	4.8	2.4
Mean	1.4	0.4	3.8	8.8	6.6	4.3
Median	1.2	-0.1	3.3	8.7	6.3	4.2
<i>n</i>	113	113	112	108	107	92
<b>Health Care</b>						
5th Percentile	2.5	1.8	5.3	10.3	7.5	5.1
25th Percentile	1.6	0.6	3.5	9.0	6.7	4.3
75th Percentile	0.6	-1.3	1.5	7.1	5.1	2.9
95th Percentile	0.0	-2.8	0.6	5.9	4.6	2.4
Mean	1.2	-0.3	2.6	8.1	6.0	3.7
Median	1.2	-0.4	2.1	8.0	5.8	3.8
<i>n</i>	44	44	44	44	43	38
<b>Independent Schools</b>						
5th Percentile	3.0	2.9	6.4	10.5	7.7	5.4
25th Percentile	2.2	1.8	4.8	9.2	6.9	5.1
75th Percentile	0.7	-0.8	2.2	7.1	5.2	3.5
95th Percentile	-0.3	-2.6	0.6	6.0	4.4	2.4
Mean	1.4	0.4	3.5	7.9	5.9	4.2
Median	1.3	0.9	3.4	7.8	5.7	4.3
<i>n</i>	27	27	27	27	27	24
<b>Other Nonprofits</b>						
5th Percentile	2.7	2.5	4.5	9.9	7.8	5.5
25th Percentile	1.6	0.1	3.4	8.8	6.5	4.1
75th Percentile	0.5	-1.6	1.4	7.1	5.1	3.1
95th Percentile	-0.1	-2.0	0.4	5.5	3.7	2.2
Mean	1.2	-0.4	2.4	7.9	5.8	3.7
Median	1.1	-0.6	2.3	7.8	5.9	3.7
<i>n</i>	47	47	47	46	43	36

Sources: Endowment and foundation data as reported to Cambridge Associates LLC, adjusted for inflation using CPI-U from the US Department of Labor - Bureau of Labor Statistics.

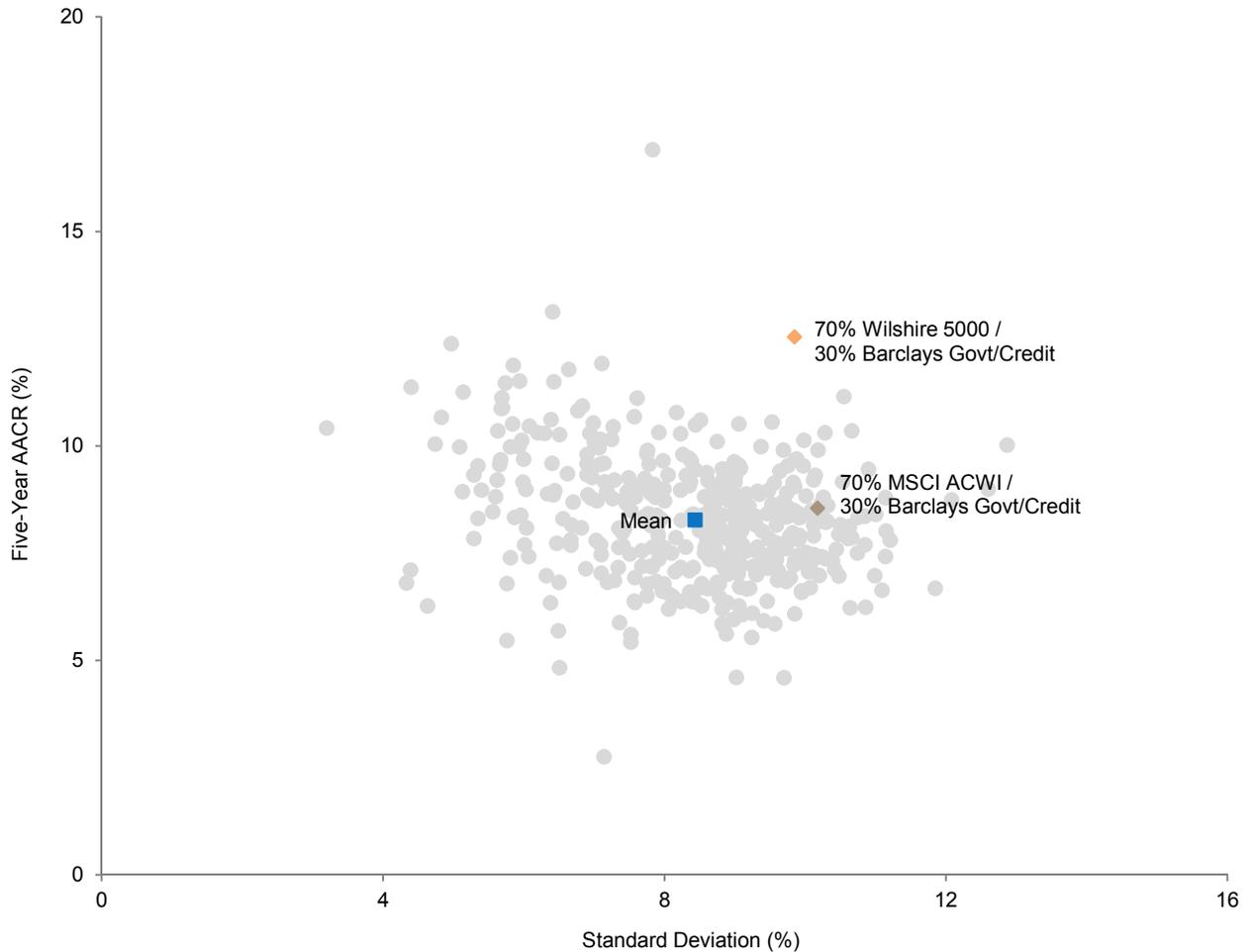
**Exhibit 14****Real Total Return Summary by Asset Size: US Endowments and Foundations**

Periods Ended December 31, 2014 • Percent (%)

	Latest Quarter	Fiscal YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
<b>Under \$100 Million</b>						
5th Percentile	2.4	1.7	4.7	10.4	7.3	5.2
25th Percentile	1.6	0.0	3.4	9.0	6.3	4.1
75th Percentile	0.7	-1.4	1.4	7.1	5.2	2.8
95th Percentile	0.1	-2.1	0.4	5.8	4.1	1.7
Mean	1.2	-0.6	2.4	7.9	5.7	3.4
Median	1.1	-0.7	2.3	7.8	5.6	3.3
<i>n</i>	94	94	93	91	86	70
<b>\$100 Million to \$200 Million</b>						
5th Percentile	2.1	1.2	5.0	10.1	7.5	5.1
25th Percentile	1.4	0.3	3.2	9.0	6.5	4.4
75th Percentile	0.4	-1.6	1.6	7.1	5.0	3.1
95th Percentile	-0.2	-2.6	0.1	5.8	4.1	2.1
Mean	0.9	-0.6	2.4	8.0	5.7	3.7
Median	1.1	-0.5	2.3	8.0	5.7	3.7
<i>n</i>	100	100	100	99	99	83
<b>\$200 Million to \$500 Million</b>						
5th Percentile	2.5	1.7	5.6	10.7	8.0	5.5
25th Percentile	1.6	0.7	4.2	9.6	7.1	4.7
75th Percentile	0.6	-1.2	1.9	7.8	5.7	3.4
95th Percentile	-0.2	-2.4	0.8	6.6	4.6	2.5
Mean	1.1	-0.2	3.2	8.7	6.4	4.1
Median	1.1	-0.1	3.4	8.6	6.5	4.0
<i>n</i>	85	85	85	83	83	77
<b>\$500 Million to \$1 Billion</b>						
5th Percentile	3.2	3.7	6.6	11.6	8.7	6.1
25th Percentile	1.9	1.5	5.2	9.7	7.4	4.8
75th Percentile	0.7	-0.7	2.6	8.5	6.3	3.7
95th Percentile	0.3	-1.4	1.4	7.2	5.5	3.0
Mean	1.4	0.5	4.0	9.2	6.9	4.3
Median	1.1	0.2	4.0	9.1	6.9	4.3
<i>n</i>	61	61	61	60	57	54
<b>Over \$1 Billion</b>						
5th Percentile	3.5	5.6	10.9	11.8	9.7	6.9
25th Percentile	2.8	3.1	8.1	10.8	8.6	5.7
75th Percentile	1.5	0.9	4.7	8.9	7.0	4.3
95th Percentile	0.8	-0.6	2.6	7.5	5.5	3.8
Mean	2.2	2.0	6.3	9.8	7.7	5.0
Median	2.2	1.9	6.0	9.9	7.7	4.9
<i>n</i>	96	96	96	96	96	92

Source: Endowment and foundation data as reported to Cambridge Associates LLC, adjusted for inflation using CPI-U from the US Department of Labor - Bureau of Labor Statistics.

**Exhibit 15**  
**Standard Deviation and Sharpe Ratio: US Endowments and Foundations**  
 Five Years Ended December 31, 2014



	AACR (%)	Standard Deviation (%)	Sharpe Ratio
5th Percentile	10.6	10.6	1.69
25th Percentile	9.1	9.6	1.15
75th Percentile	7.3	7.4	0.81
95th Percentile	6.2	5.7	0.69
Mean	8.3	8.4	1.03
Median	8.2	8.7	0.94
<i>n = 421</i>			
70% Wilshire 5000 / 30% Barclays Govt/Credit	12.5	9.8	1.26
70% MSCI ACWI / 30% Barclays Govt/Credit	8.5	10.2	0.85

Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, BofA Merrill Lynch, MSCI Inc., and Wilshire Associates, Inc. MSCI data provided "as is" without any express or implied warranties.

Notes: This exhibit includes only those institutions that have provided trailing quarterly returns. The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

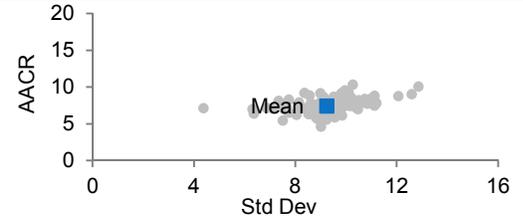
**Exhibit 16**  
**Standard Deviation and Sharpe Ratio by Peer Group: US Endowments and Foundations**  
 Five Years Ended December 31, 2014

	AACR (%)	Standard Deviation (%)	Sharpe Ratio	
<b>Colleges &amp; Universities</b>				
5th Percentile	10.8	10.4	1.77	
25th Percentile	9.5	9.5	1.36	
75th Percentile	7.8	6.9	0.88	
95th Percentile	6.6	5.6	0.74	
Mean	8.7	8.1	1.13	
Median	8.7	8.4	1.04	
<i>n</i> = 146				
<b>Cultural &amp; Environmental</b>				
5th Percentile	10.0	10.9	1.22	
25th Percentile	8.9	9.8	1.04	
75th Percentile	7.2	7.9	0.80	
95th Percentile	6.1	7.2	0.70	
Mean	8.1	8.9	0.93	
Median	8.0	8.9	0.90	
<i>n</i> = 55				
<b>Foundations</b>				
5th Percentile	11.0	10.7	1.74	
25th Percentile	9.2	9.5	1.14	
75th Percentile	7.3	7.6	0.80	
95th Percentile	6.6	5.9	0.68	
Mean	8.4	8.6	1.02	
Median	8.1	8.8	0.93	
<i>n</i> = 107				
<b>Health Care</b>				
5th Percentile	9.4	10.2	1.31	
25th Percentile	8.5	9.6	1.05	
75th Percentile	6.9	7.9	0.78	
95th Percentile	6.4	6.0	0.70	
Mean	7.8	8.6	0.95	
Median	7.6	8.6	0.87	
<i>n</i> = 43				
<b>Independent Schools</b>				
5th Percentile	9.6	9.9	1.69	
25th Percentile	8.7	8.6	1.25	
75th Percentile	7.0	6.6	0.82	
95th Percentile	6.1	4.4	0.66	
Mean	7.7	7.5	1.09	
Median	7.5	7.4	1.07	
<i>n</i> = 27				
<b>Other Nonprofits</b>				
5th Percentile	9.6	11.1	1.36	
25th Percentile	8.3	9.9	0.93	
75th Percentile	6.9	7.9	0.76	
95th Percentile	5.5	5.9	0.69	
Mean	7.6	8.9	0.88	
Median	7.7	9.0	0.84	
<i>n</i> = 43				

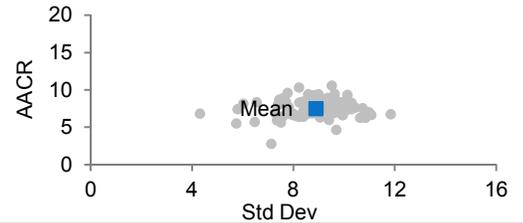
Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Sharpe ratio calculated using data from BofA Merrill Lynch.

**Exhibit 17**  
**Standard Deviation and Sharpe Ratio by Asset Size: US Endowments and Foundations**  
 Five Years Ended December 31, 2014

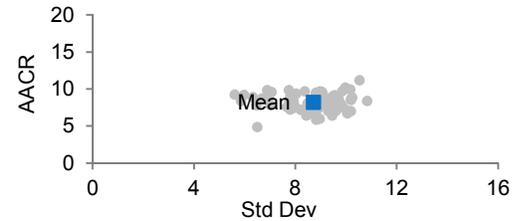
	AACR (%)	Standard Deviation (%)	Sharpe Ratio
<b>Under \$100 Million</b>			
5th Percentile	9.2	11.1	1.05
25th Percentile	8.1	10.0	0.92
75th Percentile	6.9	8.6	0.75
95th Percentile	5.9	7.2	0.66
Mean	7.5	9.2	0.83
Median	7.4	9.2	0.80
<i>n</i> = 86			



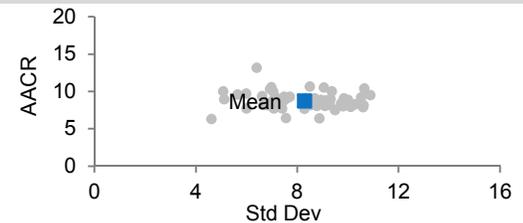
<b>\$100 Million to \$200 Million</b>			
5th Percentile	9.4	10.7	1.21
25th Percentile	8.3	9.9	0.94
75th Percentile	6.8	8.1	0.77
95th Percentile	5.9	6.6	0.63
Mean	7.5	8.9	0.87
Median	7.5	9.0	0.85
<i>n</i> = 99			



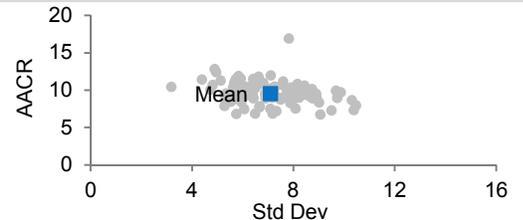
<b>\$200 Million to \$500 Million</b>			
5th Percentile	9.8	10.2	1.37
25th Percentile	8.9	9.6	1.05
75th Percentile	7.5	7.9	0.82
95th Percentile	6.4	6.5	0.71
Mean	8.2	8.7	0.97
Median	8.3	8.9	0.95
<i>n</i> = 83			



<b>\$500 Million to \$1 Billion</b>			
5th Percentile	10.5	10.6	1.65
25th Percentile	9.2	9.4	1.22
75th Percentile	8.1	7.1	0.89
95th Percentile	7.3	5.6	0.80
Mean	8.7	8.3	1.10
Median	8.7	8.6	1.00
<i>n</i> = 57			



<b>Over \$1 Billion</b>			
5th Percentile	11.6	9.7	2.07
25th Percentile	10.4	8.0	1.62
75th Percentile	8.8	5.9	1.11
95th Percentile	7.2	5.1	0.90
Mean	9.6	7.1	1.39
Median	9.5	7.0	1.33
<i>n</i> = 96			



Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Sharpe ratio calculated using data from BofA Merrill Lynch.

**Absolute Return:** The use of different strategies (e.g., global macro, market neutral, open mandate) to produce a positive return regardless of the direction and fluctuation of capital markets. Common techniques include using arbitrage, derivatives, futures, leverage, options, short selling, and unconventional assets.

**Bonds (Fixed Income):** Includes long-term promissory notes that cannot be exchanged for other assets, government bonds, preferred stocks, structured debt, and derivatives where bonds are the underlying assets. Generally earn interest paid semiannually and are repaid at the principal (par) value. Does not include mortgage real estate.

**Cash & Equivalents:** Highly liquid, virtually risk-free assets with maturities of less than one year (e.g., certificates of deposit, commercial paper, nonconvertible bonds, and Treasury bills). Manager-held discretionary cash is included in the asset class category for which that manager's strategy is classified (with the exception of multi-strategy funds in which assets are allocated across multiple asset classes).

**Commodities:** Diversified baskets of fully collateralized, long-only, commodity futures contracts. Includes funds whose value is based on the spot price of a commodity.

**Developed Markets:** Markets within countries that have an established economic infrastructure.

**Distressed Securities:** Securities of companies that are currently in default, bankruptcy, financial distress, or a turnaround situation.

**Emerging Markets:** Typically includes countries that have an underdeveloped or developing infrastructure with significant potential for economic growth and increased capital markets participation by foreign investors.

**Emerging Markets Debt:** Debt instruments of emerging markets countries and issuers, including US\$-denominated and local currency bonds.

**Emerging Markets Equity:** Equity securities of emerging markets countries; considered emerging even if the equity market is fully functional and well regulated.

**Equities:** Ownership positions in companies that can be traded in public markets. Often produce current income, which is paid in the form of quarterly dividends. The holders' claims are subordinate to the claims of preferred stockholders and bondholders. Includes convertible bonds if they are held as an opportunistic means of eventually acquiring a company's stock. Also includes futures, options, rights, and warrants where the underlying assets are equities.

**Faculty Mortgages:** Homeownership loans issued by an institution to faculty or staff.

**High-Yield Bonds:** Bonds regarded, on balance, as predominantly speculative with respect to capacity to pay interest and repay principal in accordance with the terms of the obligation. Typically, these bonds have a credit rating of BB or lower and pay higher yields because they are more risky than investment-grade bonds. Also includes collateralized bond obligations (CBOs).

**Inflation-Linked Bonds:** Fixed coupon bonds that earn interest paid semi-annually on inflation-adjusted principal.

**Long/Short Hedge Funds:** Portfolios with long positions in undervalued companies and short positions in overvalued companies, to capture the disparity in prospective returns, while maintaining a low level of overall market risk.

**Long-Term Investment Portfolio:** The group of assets that an institution deems best represents its investment policies and endowment asset allocation and returns. These assets should be subject to frequent market valuation and may include operating funds. Pooled income funds and charitable remainder trusts should be excluded if the investment strategy varies from the institution's asset allocation policy. Assets that cannot be fairly valued such as artwork, copyrights, and patents should also be excluded.

**Non-Venture Private Equity:** Through negotiation or tender offer, a takeover of a majority percentage of a company's equity with the purpose of acquiring its assets and operations. Includes leveraged buyouts (LBOs).

**Other Assets:** Should only include assets that cannot be classified as one or more of the other asset classes.

**Other Private Investments:** Includes funds that are invested across multiple private investments and cannot be allocated to a single asset class. Includes multi-strategy fund-of-funds and secondary market private investments.

**Private Investments:** Investments that are not traded in the public market including, but not limited to, leveraged buyouts, venture capital, private real estate, private distressed securities, and private energy and natural resources.

**Private Oil & Gas/Natural Resources:** Funds created to invest in the exploration or development of energy-related reserves and natural resources.

**Private Real Estate:** Includes ownership positions in land and buildings as well as private operating companies. May also include equity-like investments in mortgages or land leases that include substantial participation in revenues and capital appreciation. Does not

include equity mortgages such as collateralized mortgage obligations (CMOs), mortgage-backed securities, publicly traded REITs, or other public real estate.

**Public Energy/Natural Resources:** Includes marketable energy funds and natural resources.

**Public Real Estate:** Includes REITs and other public real estate equity such as umbrella partnership REITs (UPREITs), and other public operating companies (REOCs).

**Real Returns:** The real, or inflation-adjusted, rate of return for a given investment is calculated by dividing the nominal total return by the appropriate deflator for the same time period. Throughout this report, the measure used for this purpose is the Consumer Price Index (CPI). Note that simply subtracting CPI from the nominal total return does not result in an accurate computation of real total return. The formula is:

$$\frac{1 + \text{Nominal Total Return}}{1 + \text{CPI}} - 1 = \frac{\text{Real Total Return}}{\text{Total Return}}$$

**Sharpe Ratio:** 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-adjusted performance is by the Sharpe ratio, which shows how much return above the risk-free rate (T-bills) the investor has earned per unit of risk (defined as standard deviation of returns). The higher the Sharpe ratio (assuming the ratio is above zero), 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 T-bill (risk-free) quarterly returns, and

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

**Standard Deviation:** The standard deviation of a portfolio's return is used as a measure of its total risk (measured by variability of returns). It is a measure of the extent to which returns vary from their average. The larger the standard deviation, the wider the range of likely returns and the greater the risk implicit in the portfolio.

**Timber:** Funds created to invest in timber-related business. Usually limited partnerships.

**Total Return:** The sum of income earned and appreciation, both realized and unrealized, for a specified period of time. Preferred method of calculation uses time-weighted cash flows.

**Traditional Assets:** Include US equities, non-US equities (including emerging markets), US investment-grade bonds, non-dollar bonds, high-yield bonds, emerging markets debt, and all cash and cash equivalents.

**Venture Capital:** Investments in private securities of new companies or companies considered to be in the early stages of growth; these investments may have high risk and the potential for high return. ■