



Endowments Quarterly

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

Third Quarter 2015

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for US Endowments and Foundations

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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 442 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 \$225.6 million.

Examining Returns

The average return of the US endowment and foundation universe was -6.0% for the quarter ended September 30, 2015. Trailing one-year returns averaged -3.3%. Returns are reported on a net of fees basis for 99% of the US endowment and foundation universe.

Per the Consumer Price Index, the rate of inflation was -0.3% for third quarter 2015 and was flat for the trailing one-year period. Adjusting nominal returns to reflect inflation, the average real return for US endowments and foundations rises to -5.8% for the third quarter and remains at -3.3% 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, however, 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.

Risk-adjusted performance, as measured by the Sharpe ratio,¹ averaged 0.82 for the trailing

five-year period, ranging from 0.47 to 1.49 after removing outliers that make up the top and bottom 5% of the universe. Relative to a pair of simple 70/30 portfolio benchmarks,² the average Sharpe ratio of respondents exceeded the portfolio containing a global benchmark for the equity component (0.73), but was lower than the portfolio containing a US benchmark for the equity component (1.12).

Trailing One-Year Results

Exhibit 8 breaks the participant group into four quartiles based on the trailing one-year investment return. Each institution's asset allocation was averaged across the beginning and ending points for the trailing one-year period. The four quartiles in the heat map table represent the average of the institutions within each quartile. Divergence in asset allocation between the top and bottom performers was largest within private equity and venture capital. Allocations to real assets, bonds, and global developed equities also varied considerably between top and bottom performers.

Private Equity and Venture Capital.

Endowments and foundations that posted a trailing one-year return in the top quartile had the highest average PE/VC allocation (15.4%). In contrast, the average PE/VC allocation for those in the bottom-performing quartile was 2.0%. The degree of divergence is especially meaningful given the recent strong returns in private markets, particularly for venture capital.

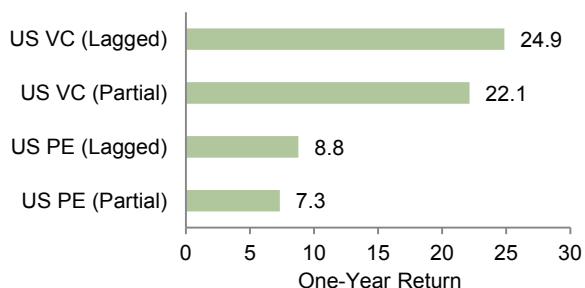
deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken.

² The global equity benchmark is the MSCI All Country World Index and the US equity benchmark is the Russell 3000® Index. Bonds are represented by the Barclays Government/Credit Bond Index.

¹ 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

Cambridge Associates Private Equity and Venture Capital Index Returns

As of September 30, 2015 • Percent (%)



Source: Cambridge Associates LLC.

Notes: US PE and US VC data are pooled end-to-end returns, net of fees, expenses, and carried interest. Partial year return represents the period 10/1/14–6/30/15 and aligns with endowments and foundations using the flat methodology to report private investment performance. Lagged return represents the period 7/1/14–6/30/15.

Cambridge Associates Private Investment Index Returns

	One Quarter End-to-End Pooled Return (%)				
	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
US Private Equity	1.4	0.8	2.6	3.8	NA
US Venture Capital	2.4	9.9	3.8	6.7	NA
Real Estate	2.1	4.9	1.8	4.2	NA
Natural Resources	-0.5	-11.5	-2.7	-0.4	NA

Lagged Basis Partial Basis

Source: Cambridge Associates LLC.

Note: NA indicates data were not available.

Private investment index returns in the figures above are shown on a lagged and partial basis to reflect the varying methodologies that clients use for their one-year and one-quarter return calculations. Most participants with private investment allocations reported third quarter 2015 private investment returns on a flat (0%) basis. This method of reporting is consistent with the partial index returns, which include only three quarters of private returns for the trailing one-year period. As September 30 valuations become available, third quarter returns will be restated to reflect actual private performance.

Private Investment (PI) Reporting Methodology by Trailing One-Year Performance Quartile

As of September 30, 2015

	Reporting Methodology (n)			
	Lagged	Partial	Current/ Other	No PI Allocation
Top Quartile	40	55	15	1
2nd Quartile	11	83	4	12
3rd Quartile	3	74	2	31
Bottom Quartile	1	54	0	54

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

The lagged basis (i.e., second quarter 2015 private return used in the third quarter 2015 total portfolio return) was the second most frequently used methodology for institutions with private investment allocations. For these investors, four quarters of private performance were included in the trailing one-year return. In periods where private market returns are positive, the lagged basis, with the inclusion of four quarters of performance, will result in a higher one-year return relative to the partial basis. Over 70% (40 of 55) of participants that use the lagged methodology were in the top performance quartile for the trailing one-year period. Of the participants that use the partial methodology, only 21% (55 of 266) were in the top performance quartile.

Real Assets. Real assets consist of a diversified group of investments, including natural resources, commodities, real estate, and inflation-linked bonds. The range of returns for these various strategies was considerable for the trailing one-year period. Private real estate was one of the strongest performing asset classes, with the Cambridge Associates Private Real Estate Index returning 13.4% on a lagged basis and 11.2% on a partial basis. Meanwhile, commodities and natural resources equities were the worst-performing asset classes, with

each posting returns below -25%. While private natural resources returns were also down double digits, relative performance was significantly better than the public counterpart. Endowments and foundations in the top performance quartile had the highest average allocation to private real assets (8.9%) and the lowest average allocation to public real assets (2.3%). In contrast, institutions in the bottom quartile had the lowest average allocation to private real assets (1.3%) and the highest average allocation to public real assets (7.9%).

Bonds. The trailing one-year return for the Barclays Government/Credit Bond Index (2.7%) was much higher than the median total portfolio return (-3.8%) for the participant group. However, endowments and foundations with higher allocations 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 (7.2%), while those in the bottom performance quartile reported the highest average allocation (14.3%).

Global Developed Equities. The US dollar rose sharply against other major currencies in the second half of 2014, and has remained strong through 2015. This reduced foreign currencies' purchasing power of US dollars and negatively impacted the return of global ex US holdings for unhedged US investors. Endowments and foundations in the top performance quartile for the trailing one-year period had the lowest average allocation to global ex US developed equities (11.2%), while those in the bottom performance quartile had the highest average allocation (19.1%).

A poor third quarter pushed the Russell 3000® Index into the red for the trailing one-year period (-0.5%). A weak public market and strong returns for private investments favored investors that had a lower allocation to US

equities. The top performance quartile for the trailing one-year period had the lowest average allocation to US equities (16.7%), while those in the bottom performance quartile had the highest average allocation (23.9%).

Trailing Ten-Year Results

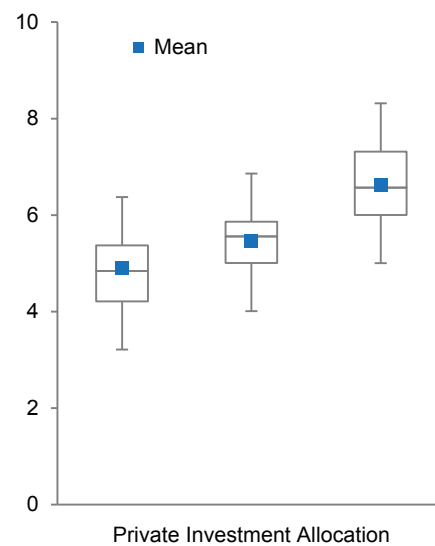
As noted earlier, asset allocation is a key contributor to the variation in returns reported across the participant group. While the analysis of asset allocation structures on a one-year basis is informative, this short-term analysis can lead to different results from one period to the next as market conditions shift. To investigate the impact of asset allocation policies on long-term investment performance, an analysis of data over an extended period is most suitable. Exhibit 9 breaks the participant group down into four quartiles based on the trailing ten-year investment return. Each institution's asset allocation was averaged across the 11 September 30 periods that fell from 2005 to 2015. The four quartiles in the heat map table represent the average of the institutions within each quartile.

Our historical asset allocation data show that the portfolios that were most diversified over the last decade generally performed the best. Among the asset class benchmarks, the top four performing indexes over the past ten years represented private investment strategies. Accordingly, the top quartile of performers over the ten-year period reported the highest average allocation to illiquid private investments, while the bottom quartile reported the lowest average allocation to these strategies. In contrast, top performers had the lowest average allocation to long-only developed equities and bonds, while bottom performers had the highest average allocation. Institutions that place significant emphasis on peer performance statistics should note the distinction in average asset allocation policies between top and bottom performers, particularly among private investments.

The figure at right breaks participants into three subgroups based on each institution's trailing ten-year average allocation to private investments. The median ten-year return for portfolios with an allocation of over 15% to private investments was 6.6%, nearly 180 bps higher than the median return reported by portfolios with little to no private investment allocation. The distribution of returns for the three subgroups show a wide range of results, a disclaimer that portfolios with high allocations to private investments can underperform the overall peer group, while those with low private investment allocations can outperform. However, these ten-year analyses show that allocations to private investments generally are a key factor in a portfolio's relative performance within the overall participant group over the long term. Institutions that benchmark peer performance should consider the subgroup median that aligns with their own private investment allocation as an alternative or complement to the peer medians that they already use. ■

Range of Ten-Year Returns by Private Investment Allocation

As of September 30, 2015 • Percent (%)



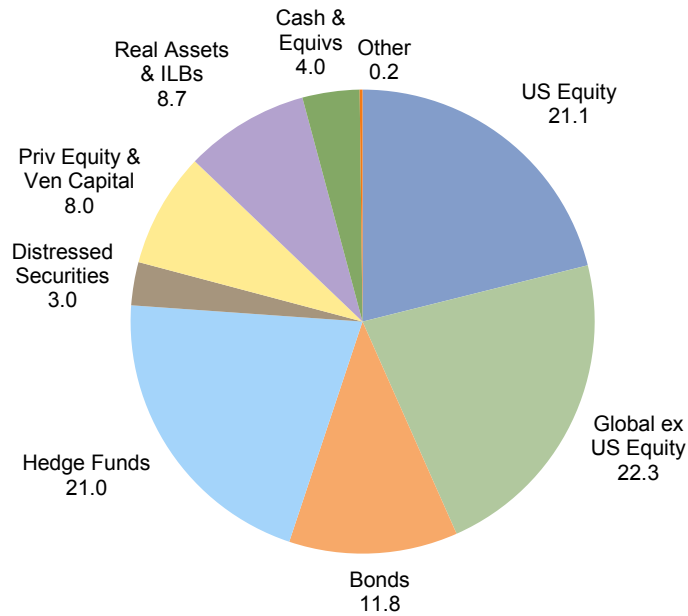
	Private Investment Allocation		
	Under 5%	5%–15%	Over 15%
5th Percentile	6.4	6.5	8.3
25th Percentile	5.4	5.9	7.3
Median	4.8	5.6	6.6
75th Percentile	4.2	5.0	6.0
95th Percentile	3.8	4.3	4.8
Mean	4.9	5.5	6.6
<i>n</i>	63	81	63

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

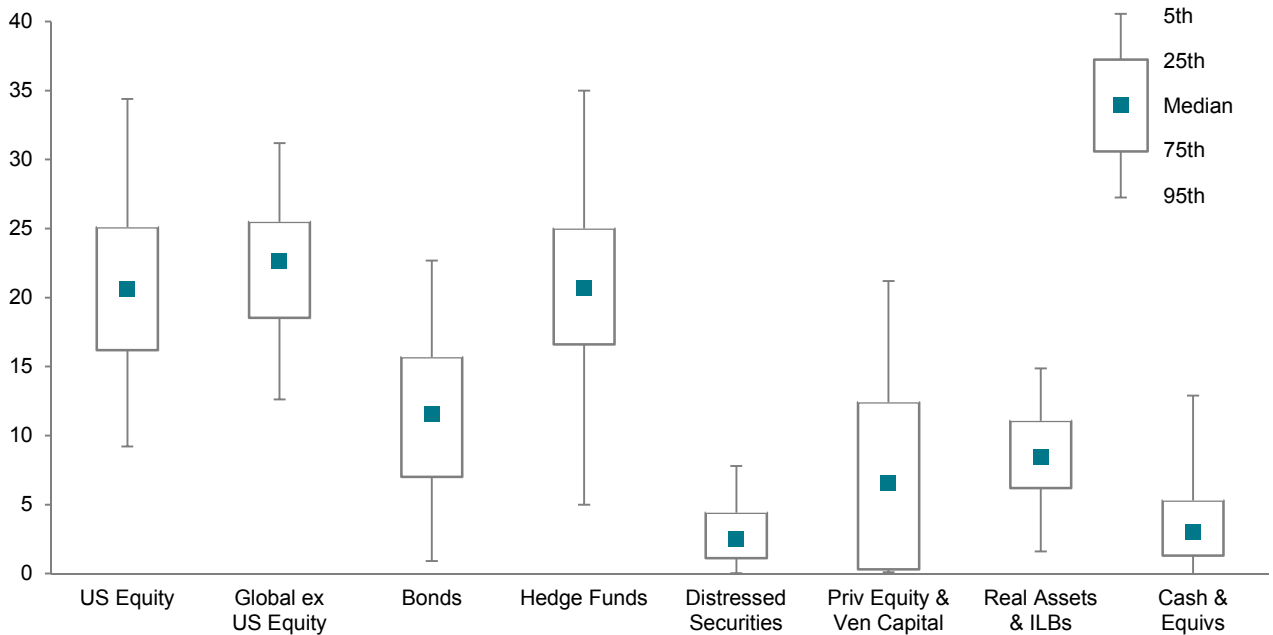
Notes: Each institution's private investment allocation represents the mean for the 11 September 30 periods from 2005 to 2015. Returns are annualized.

Exhibit 1
Asset Allocation Snapshot: US Endowments and Foundations
 As of September 30, 2015 • Percent (%)

Mean Asset Allocation (n = 442)

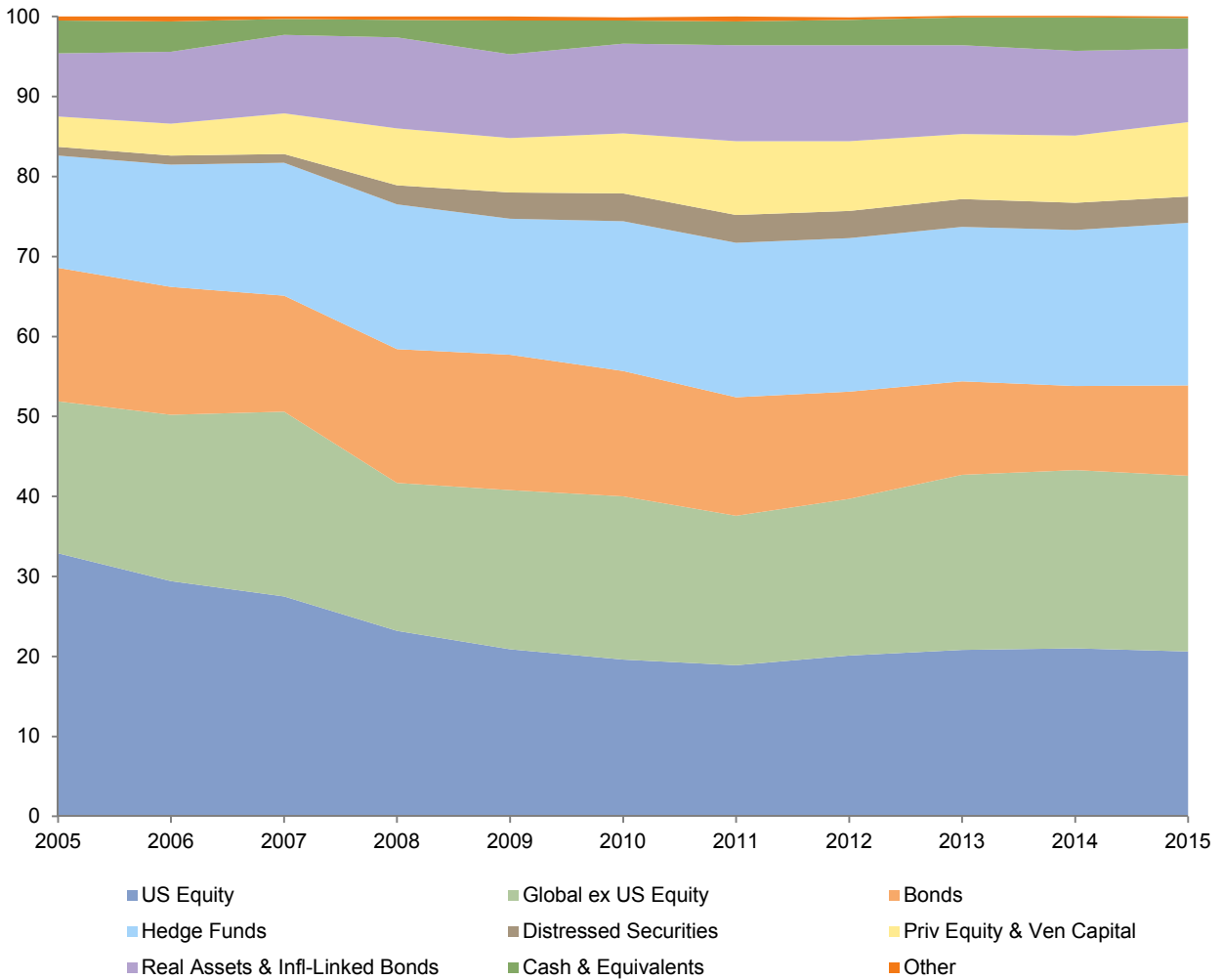


Distribution by Asset Class: Asset Allocation (n = 442)



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

Exhibit 2
Historical Mean Asset Allocation Trends: US Endowments and Foundations
 Years Ended September 30 • Percent (%)



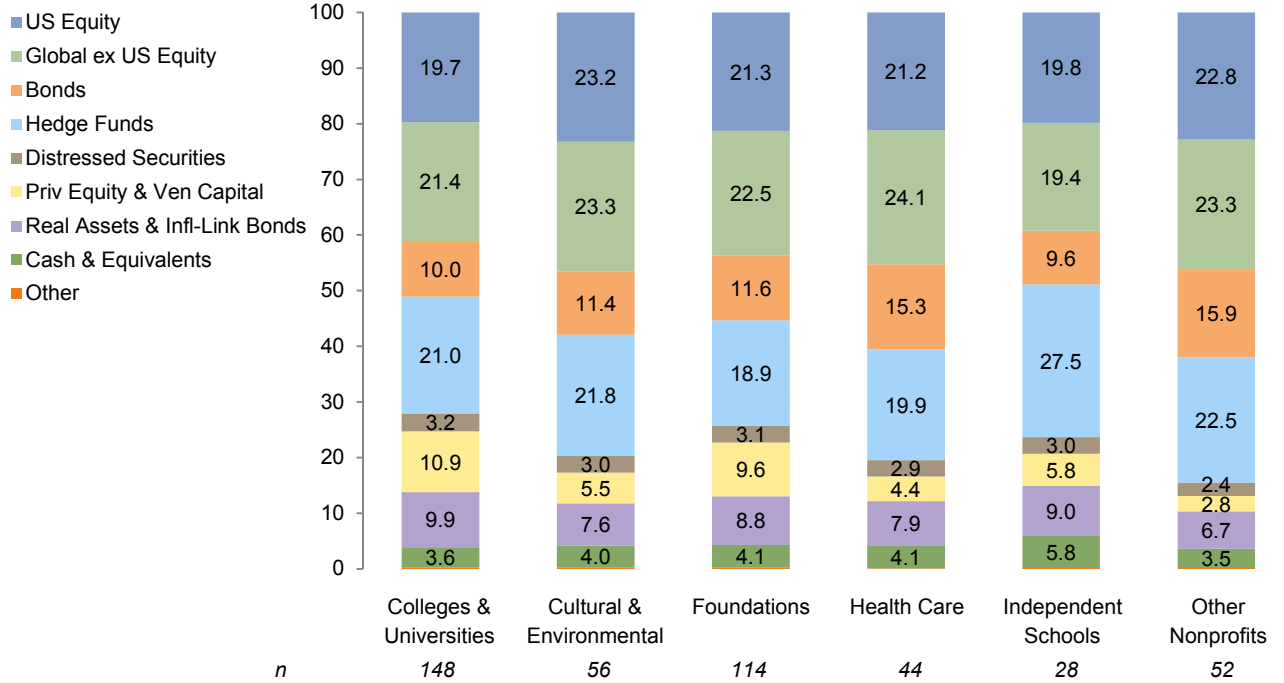
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
US Equity	32.9	29.4	27.5	23.2	20.9	19.6	18.9	20.1	20.8	21.0	20.6
Global ex US Equity	19.0	20.8	23.1	18.5	19.9	20.4	18.7	19.6	21.9	22.3	22.0
<i>Developed Markets</i>	14.9	16.4	17.5	14.4	14.6	14.3	13.2	13.1	15.0	15.1	15.2
<i>Emerging Markets</i>	4.1	4.5	5.6	4.1	5.3	6.1	5.5	6.5	6.9	7.3	6.8
Bonds	16.7	16.0	14.5	16.7	16.9	15.7	14.8	13.4	11.7	10.5	11.3
Hedge Funds	14.0	15.3	16.6	18.1	17.0	18.7	19.3	19.2	19.3	19.5	20.3
Distressed Securities	1.1	1.1	1.1	2.4	3.3	3.5	3.5	3.4	3.5	3.4	3.3
Priv Equity & Ven Capital	3.8	4.0	5.1	7.1	6.8	7.5	9.2	8.7	8.1	8.4	9.3
Real Assets & Infl-Linked Bonds	7.9	9.0	9.8	11.4	10.5	11.2	12.0	12.0	11.1	10.6	9.2
Cash & Equivalents	4.1	3.8	2.0	2.2	4.2	2.9	3.0	3.2	3.5	4.2	3.8
Other	0.5	0.6	0.3	0.4	0.5	0.4	0.6	0.3	0.2	0.2	0.2

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

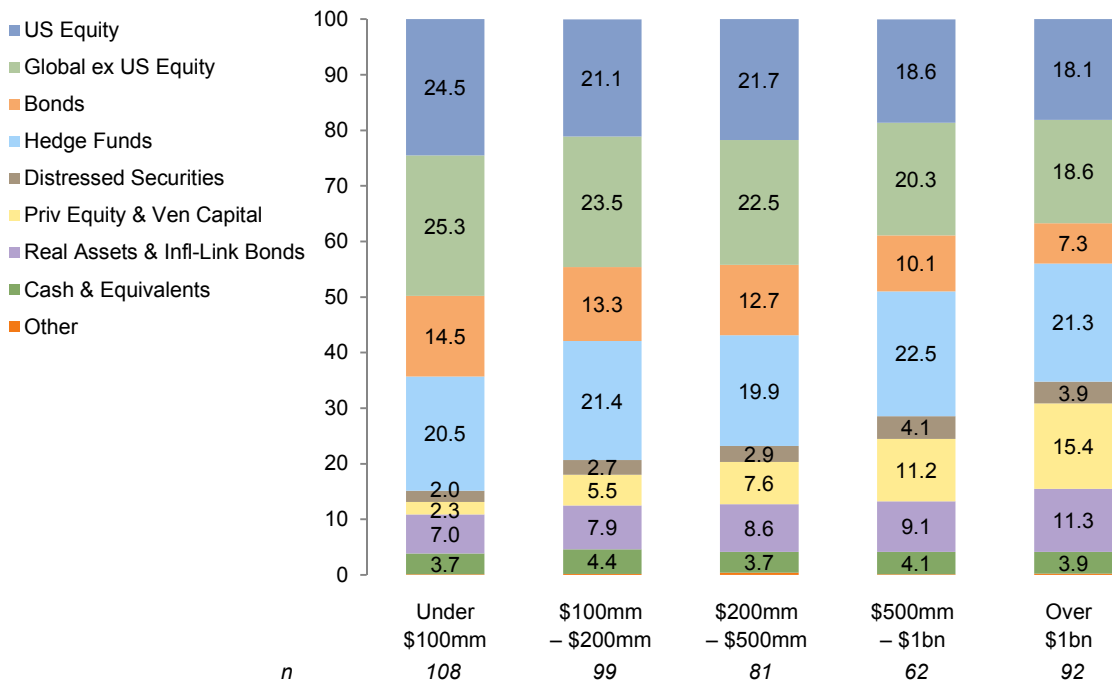
Note: The table represents 207 US endowments and foundations that provided asset allocation data for each year from 2005 to 2015.

Exhibit 3
Summary Asset Allocation: US Endowments and Foundations
 As of September 30, 2015 • 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 September 30, 2015 • Percent (%)

	Colleges & Universities (n = 148)		Cultural & Environmental (n = 56)		Foundations (n = 114)		Health Care (n = 44)		Independent Schools (n = 28)		Other Nonprofits (n = 52)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
US Equity	19.7	19.0	23.2	21.7	21.3	21.0	21.2	21.7	19.8	18.9	22.8	23.2
Global ex US Equity	21.4	21.7	23.3	24.0	22.5	22.7	24.1	23.8	19.4	19.1	23.3	24.1
Developed Markets	14.6	14.7	16.5	16.5	15.4	15.9	17.1	16.2	13.7	13.2	16.9	16.5
Emerging Markets	6.8	6.7	6.9	7.0	7.1	7.4	7.0	6.8	5.7	5.7	6.4	6.7
Bonds	10.0	10.0	11.4	12.0	11.6	11.2	15.3	14.7	9.6	10.3	15.9	15.6
US Bonds	8.2	8.0	9.5	9.5	9.8	9.6	12.4	12.4	8.1	8.1	13.2	13.3
Developed Markets ex US	0.8	0.0	0.5	0.0	0.7	0.0	1.1	0.5	0.5	0.0	1.0	0.6
Emerging Markets	0.6	0.0	0.9	0.4	0.7	0.0	1.1	0.8	0.7	0.0	1.0	0.7
High-Yield Bonds	0.4	0.0	0.5	0.0	0.4	0.0	0.7	0.0	0.4	0.0	0.6	0.0
Hedge Funds	21.0	20.8	21.8	22.3	18.9	19.2	19.9	19.5	27.5	29.9	22.5	21.3
Long/Short Hedge Funds	9.7	9.0	9.9	8.9	8.9	8.6	10.3	10.0	13.9	13.0	10.9	10.1
Absolute Return (ex Distressed)	11.2	11.0	11.9	10.5	10.0	9.7	9.6	8.6	13.6	12.1	11.6	11.3
Distressed Securities	3.2	2.6	3.0	2.7	3.1	2.8	2.9	2.0	3.0	2.3	2.4	1.9
Hedge Fund Structure	1.9	1.6	2.1	1.9	1.9	1.9	2.3	1.8	1.5	1.2	1.8	1.8
Private Equity Structure	1.4	0.8	1.0	0.1	1.2	0.5	0.7	0.0	1.5	1.1	0.7	0.0
Private Equity & Venture Capital	10.9	10.4	5.5	4.0	9.6	7.6	4.4	1.8	5.8	5.9	2.8	0.0
Non-Venture Private Equity	5.6	5.3	2.9	2.0	3.9	2.9	1.9	0.0	3.1	2.1	1.1	0.0
Venture Capital	4.5	3.6	1.8	0.3	4.6	2.8	1.9	0.3	1.7	1.0	1.2	0.0
Other Private Investments	0.8	0.0	0.9	0.0	1.1	0.1	0.6	0.0	0.9	0.1	0.4	0.0
Real Assets & Infl-Linked Bonds	9.9	9.3	7.6	8.1	8.8	8.9	7.9	8.3	9.0	7.6	6.7	6.6
Private Real Estate	2.8	2.5	1.2	0.1	2.3	1.5	1.3	0.0	2.1	0.1	0.7	0.0
Public Real Estate	0.5	0.0	0.6	0.0	0.4	0.0	0.6	0.0	0.3	0.0	0.7	0.0
Commodities	0.8	0.4	0.8	0.1	1.1	0.5	0.8	0.6	0.8	0.9	1.3	0.7
Inflation-Linked Bonds	0.4	0.0	0.6	0.0	0.3	0.0	0.5	0.2	0.4	0.0	0.5	0.0
Private Oil & Gas/Natural Resources	2.5	2.1	1.4	0.2	1.8	1.0	1.1	0.0	2.3	1.6	0.7	0.0
Timber	0.4	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0
Public Energy/Natural Resources	2.6	2.3	3.0	2.6	2.7	2.4	3.5	3.8	2.9	2.4	2.9	2.9
Cash & Equivalents	3.6	2.7	4.0	3.0	4.1	3.0	4.1	3.1	5.8	4.0	3.5	3.0
Other Assets	0.3	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1	0.0

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

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

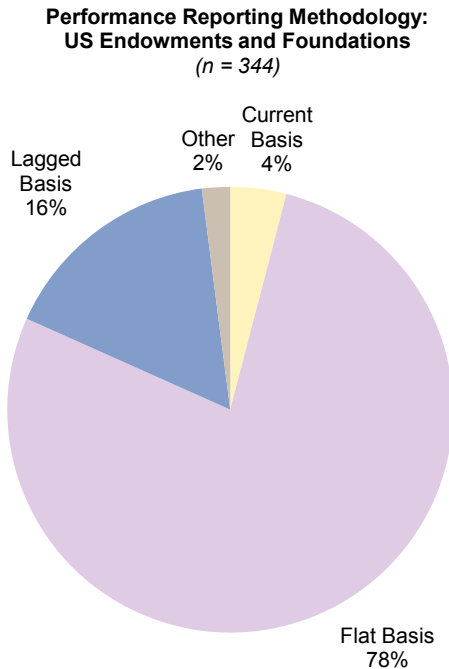
As of September 30, 2015 • Percent (%)

	All Endow & Foundation (n = 442)		Under \$100mm (n = 108)		\$100mm to \$200mm (n = 99)		\$200mm to \$500mm (n = 81)		\$500mm to \$1bn (n = 62)		Over \$1bn (n = 92)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
US Equity	21.1	20.6	24.5	24.4	21.1	21.1	21.7	20.5	18.6	17.6	18.1	16.4
Global ex US Equity	22.3	22.7	25.3	25.2	23.5	24.4	22.5	22.4	20.3	20.7	18.6	17.9
Developed Markets	15.5	15.5	18.5	18.0	16.7	17.0	15.4	15.8	13.6	14.2	12.0	11.4
Emerging Markets	6.8	6.9	6.7	6.9	6.8	6.9	7.0	6.9	6.6	6.9	6.6	6.4
Bonds	11.8	11.6	14.5	14.4	13.3	13.7	12.7	11.7	10.1	9.3	7.3	6.7
US Bonds	9.8	9.6	12.2	12.5	11.2	11.2	10.7	9.8	8.2	7.7	5.7	5.6
Developed Markets ex US	0.7	0.0	0.8	0.4	0.6	0.1	0.8	0.0	0.7	0.0	0.7	0.0
Emerging Markets	0.8	0.0	1.0	0.6	1.0	0.6	0.7	0.0	0.6	0.0	0.3	0.0
High-Yield Bonds	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0
Hedge Funds	21.0	20.7	20.5	20.4	21.4	20.4	19.9	20.1	22.5	22.6	21.3	21.1
Long/Short Hedge Funds	10.0	9.4	11.5	11.2	10.5	10.4	8.1	7.8	9.2	8.4	9.9	8.9
Absolute Return (ex Distressed)	11.0	10.5	9.0	8.0	10.9	10.2	11.8	10.9	13.2	12.8	11.3	11.6
Distressed Securities	3.0	2.5	2.0	1.7	2.7	2.3	2.9	2.8	4.1	3.7	3.9	3.3
Hedge Fund Structure	1.9	1.7	1.6	1.6	1.8	1.6	1.7	1.7	2.2	2.0	2.2	1.8
Private Equity Structure	1.1	0.4	0.4	0.0	0.9	0.4	1.1	0.7	1.9	1.5	1.7	1.2
Private Equity & Venture Capital	8.0	6.6	2.3	0.0	5.5	3.4	7.6	7.0	11.2	10.1	15.4	15.4
Non-Venture Private Equity	3.8	2.6	0.8	0.0	2.3	1.6	3.6	2.6	5.8	5.2	7.6	7.5
Venture Capital	3.4	1.6	0.8	0.0	2.0	0.3	3.0	2.2	4.7	4.0	7.2	5.9
Other Private Investments	0.8	0.0	0.6	0.0	1.2	0.1	1.0	0.5	0.7	0.4	0.6	0.0
Real Assets & Infl-Linked Bonds	8.7	8.4	7.0	7.3	7.9	7.9	8.6	8.8	9.1	8.9	11.3	11.7
Private Real Estate	2.0	1.0	0.6	0.0	1.1	0.0	1.7	1.2	2.4	2.3	4.7	4.3
Public Real Estate	0.5	0.0	0.4	0.0	0.4	0.0	0.7	0.0	0.7	0.0	0.3	0.0
Commodities	0.9	0.4	1.3	0.9	1.0	0.7	0.9	0.2	0.6	0.3	0.7	0.0
Inflation-Linked Bonds	0.4	0.0	0.4	0.0	0.6	0.0	0.4	0.0	0.3	0.0	0.5	0.0
Private Oil & Gas/Natural Resources	1.8	0.9	0.5	0.0	1.2	0.2	1.7	1.4	2.5	2.3	3.7	3.7
Timber	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.5	0.2
Public Energy/Natural Resources	2.8	2.5	3.8	4.1	3.6	3.6	3.0	2.5	2.3	2.1	0.9	0.0
Cash & Equivalents	4.0	3.0	3.7	2.9	4.4	2.9	3.7	3.5	4.1	3.1	3.9	2.5
Other Assets	0.2	0.0	0.1	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.2	0.0

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

Exhibit 6
Performance Reporting Methodologies

As of September 30, 2015 • Methods Used to Account for Performance of Private Investments in Third Quarter 2015

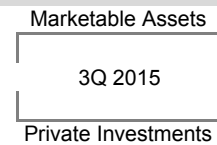


By Asset Size

	Current Basis	Flat Basis	Lagged Basis	Other
Under \$100 million	2%	98%	—	—
<i>n</i>	1	51	—	—
\$100 million to \$200 million	—	100%	—	—
<i>n</i>	—	75	—	—
\$200 million to \$500 million	—	93%	4%	3%
<i>n</i>	—	63	3	2
\$500 million to \$1 billion	8%	69%	15%	7%
<i>n</i>	5	41	9	4
Over \$1 billion	9%	41%	49%	1%
<i>n</i>	8	37	44	1

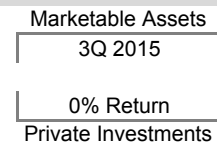
Current Basis

Total investment pool return for 3Q 2015 includes marketable asset performance and private investment performance for July 1, 2015, to September 30, 2015. All 14 institutions in our endowment universe using this methodology used estimated valuations.



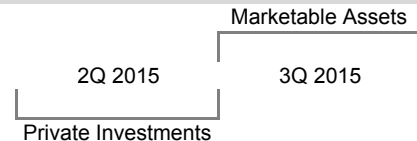
Flat Basis

Total investment pool return for 3Q 2015 includes marketable asset performance for July 1, 2015, to September 30, 2015. Private investment portion of the investment pool is represented by a flat return (0%) for July 1, 2015, to September 30, 2015



Lagged Basis

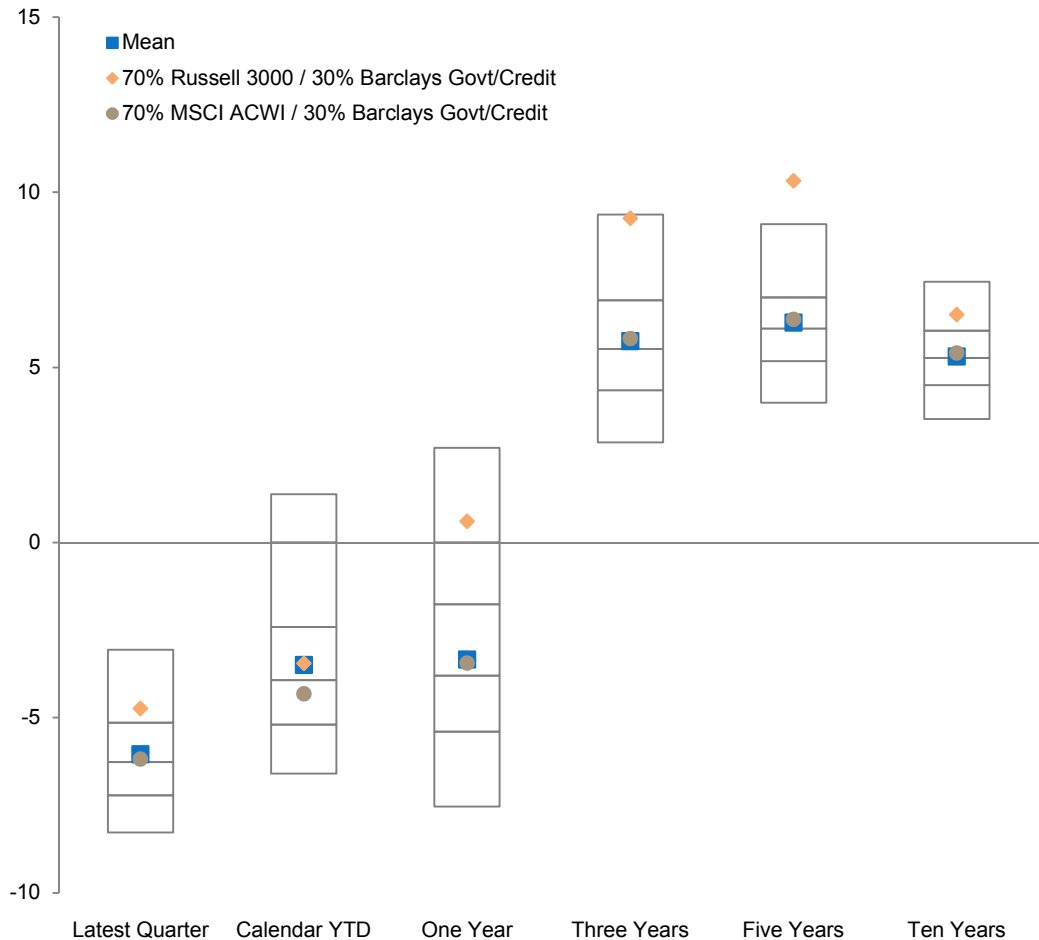
Total investment pool return for 3Q 2015 includes marketable asset performance for July 1, 2015, to September 30, 2015, and private investment performance for April 1, 2015, to June 30, 2015. Of the 56 institutions in our endowment universe using this methodology, two will restate 3Q 2015 returns to 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 98 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
 Period Ended September 30, 2015 • Percent (%)

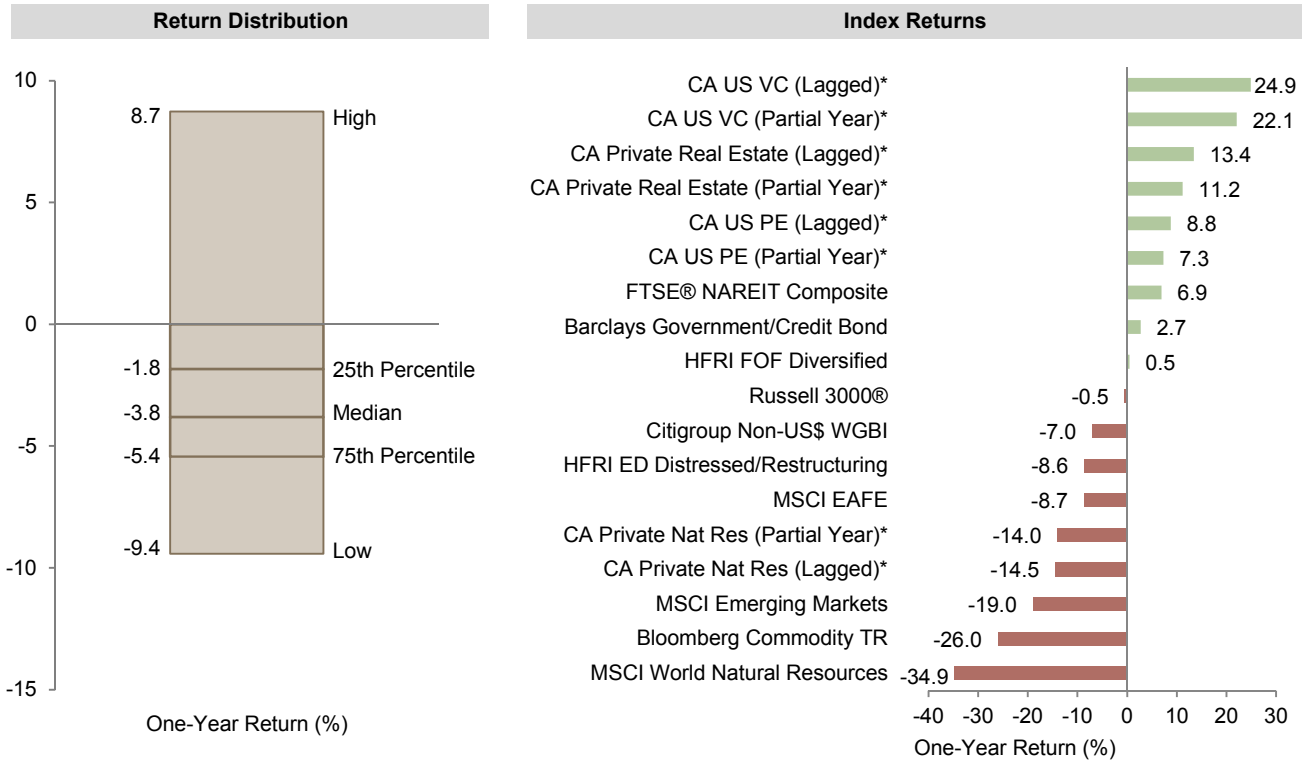


	Latest Quarter	Calendar YTD	One Year	Three Years	Five Years	Ten Years
5th Percentile	-3.1	1.4	2.7	9.4	9.1	7.4
25th Percentile	-5.1	-2.4	-1.8	6.9	7.0	6.0
Median	-6.3	-3.9	-3.8	5.5	6.1	5.3
75th Percentile	-7.2	-5.2	-5.4	4.3	5.2	4.5
95th Percentile	-8.3	-6.6	-7.5	2.9	4.0	3.5
Mean	-6.0	-3.5	-3.3	5.7	6.3	5.3
<i>n</i>	442	442	440	433	423	383
70% Russell 3000 / 30% Barclays Govt/Credit	-4.7	-3.5	0.6	9.3	10.3	6.5
70% MSCI ACWI / 30% Barclays Govt/Credit	-6.2	-4.3	-3.4	5.8	6.4	5.4

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

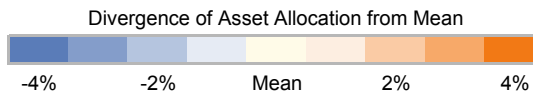
Notes: Three-, five-, and ten-year returns are annualized. The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

Exhibit 8
One-Year Asset Allocation of Top and Bottom Performers: US Endowments and Foundations
 As of September 30, 2015



Mean Asset Allocation by Performance Quartile (%): September 30, 2014 to September 30, 2015

Quartile	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Dist Sec	PE & VC	Private RA	Public RA & ILBs	Cash	Other
Top Quartile	16.7	11.2	6.3	7.2	23.4	4.0	15.4	8.9	2.3	4.4	0.2
2nd Quartile	21.4	14.6	6.9	10.9	21.6	3.5	8.1	4.4	4.3	4.2	0.2
3rd Quartile	22.8	17.2	7.1	13.4	19.2	2.8	4.6	2.4	6.4	3.9	0.2
Bottom Quartile	23.9	19.1	8.0	14.3	17.9	2.1	2.0	1.3	7.9	3.4	0.2
US E&F Universe	21.2	15.5	7.1	11.4	20.5	3.1	7.6	4.2	5.2	4.0	0.2

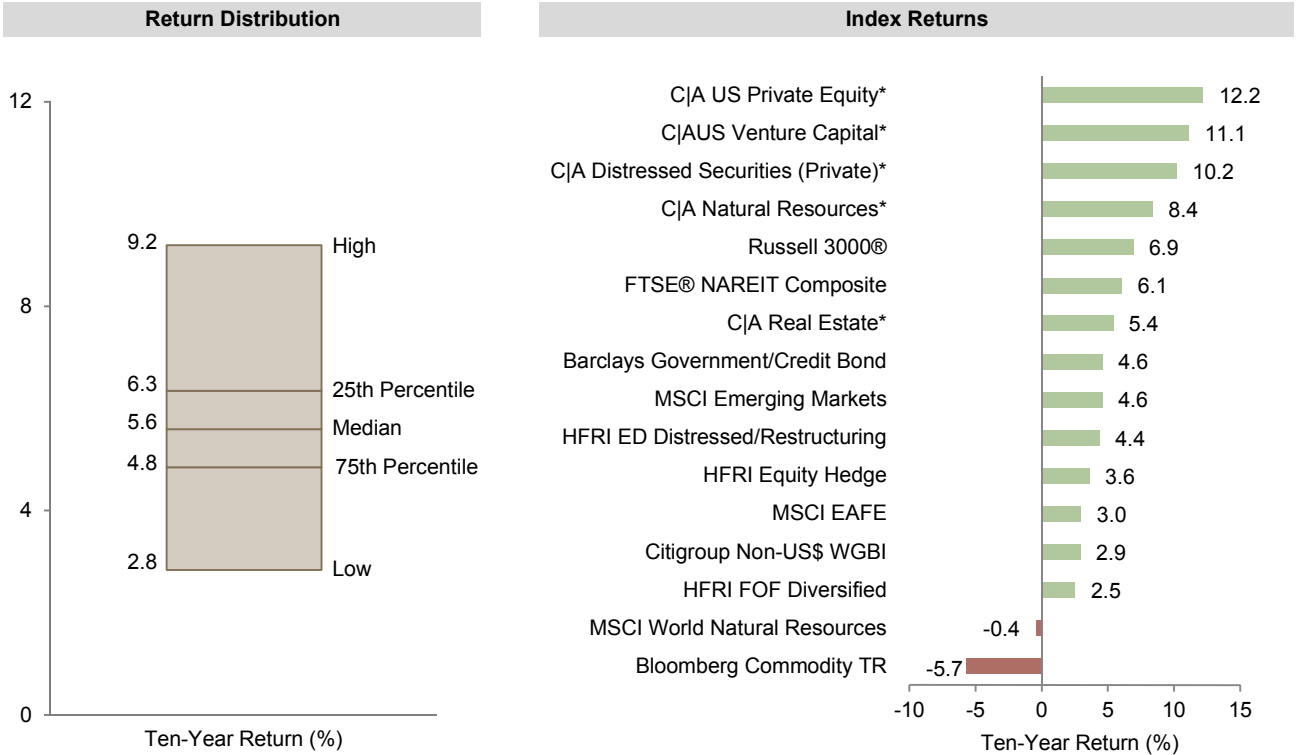


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Bloomberg L.P., Cambridge Associates LLC, Citigroup Global Markets, Frank Russell Company, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., and the National Association of Real Estate Investment Trusts. MSCI data provided "as is" without any express or implied warranties.

Notes: CA US Endowment and Foundation Universe performance quartiles are based on the trailing one-year return as of September 30, 2015. Mean allocations are for the 2014 and 2015 September 30 periods. Analysis includes data for 417 institutions.

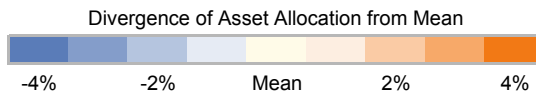
* Private investment returns are pooled end-to-end returns. Partial year return represents the period 10/1/14–6/30/15 and lagged return represents the period 7/1/14–6/30/15. These periods align with endowments and foundations using the flat and lagged methodologies, respectively, to report private investment performance. See Exhibit 6 for more detail on these reporting methodologies.

Exhibit 9
Trailing Ten-Year Asset Allocation of Top and Bottom Performers: US Endowments and Foundations
 As of September 30, 2015



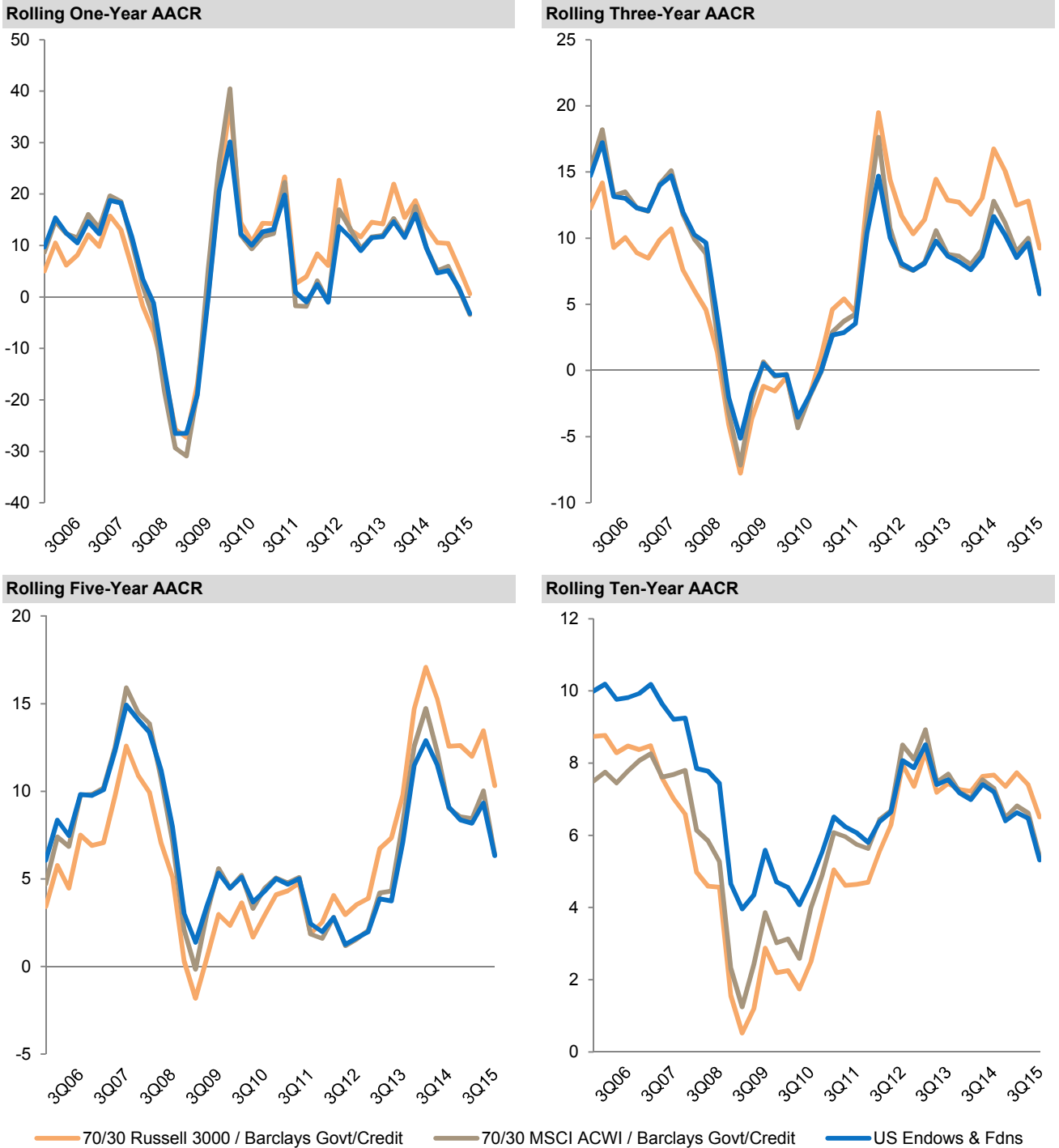
Mean Asset Allocation by Performance Quartile (%): September 30, 2005 to September 30, 2015

Quartile	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Dist Sec	PE & VC	Private RA	Public RA & ILBs	Cash	Other
Top Quartile	18.8	12.4	5.9	10.5	18.9	3.6	13.0	8.8	4.1	3.8	0.1
2nd Quartile	23.1	13.6	5.8	11.5	22.1	3.2	7.5	4.2	4.9	3.6	0.5
3rd Quartile	24.7	16.5	5.8	15.9	15.7	2.3	4.8	2.9	7.7	3.1	0.5
Bottom Quartile	26.1	17.0	5.3	19.7	15.0	1.7	3.0	1.7	7.2	2.9	0.4
US E&F Universe	23.2	14.9	5.7	14.4	17.9	2.7	7.1	4.4	6.0	3.4	0.4



Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Bloomberg L.P., Cambridge Associates LLC, Citigroup Global Markets, Frank Russell Company, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., and the National Association of Real Estate Investment Trusts. MSCI data provided "as is" without any express or implied warranties. Notes: CA US Endowment and Foundation Universe performance quartiles are based on the trailing ten-year return as of September 30, 2015. Mean allocations are for the 11 September 30 periods from 2005 and 2015. Analysis includes data for 207 institutions. * Private investment returns are pooled end-to-end returns. Returns are for the period of October 1, 2005, to June 30, 2015.

Exhibit 10
Nominal Returns Over Time: US Endowments and Foundations
 Periods Ended Fourth Quarter 2005 – Third Quarter 2015 • Percent (%)

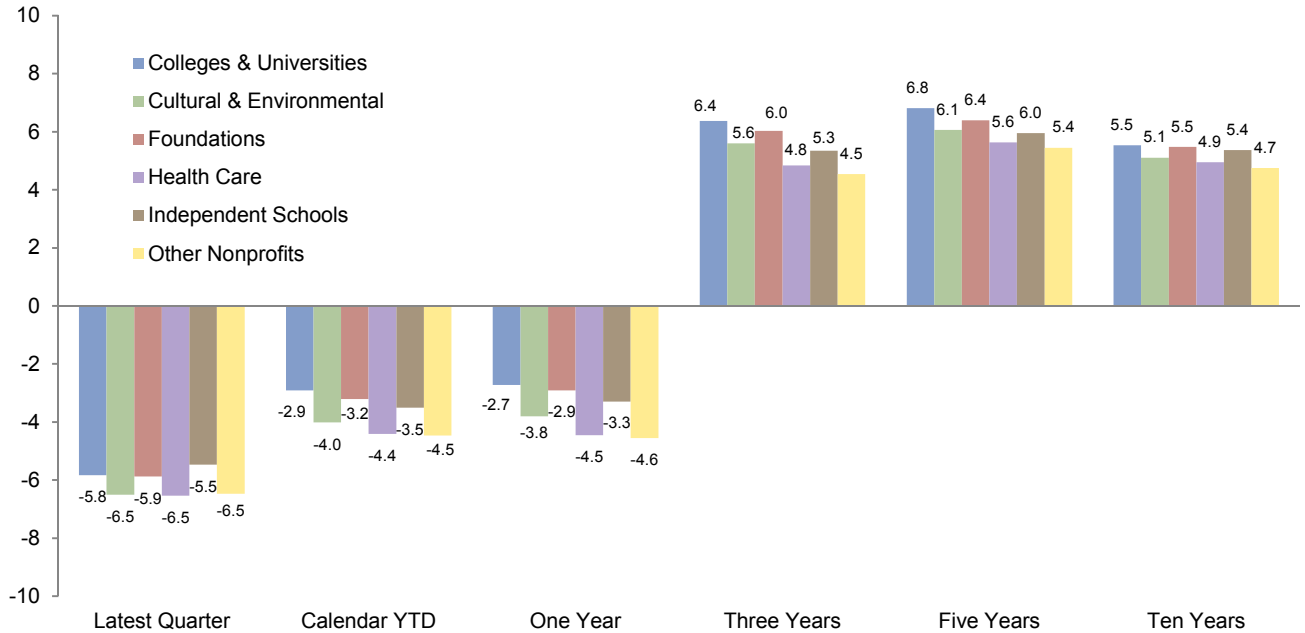


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Frank Russell Company, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

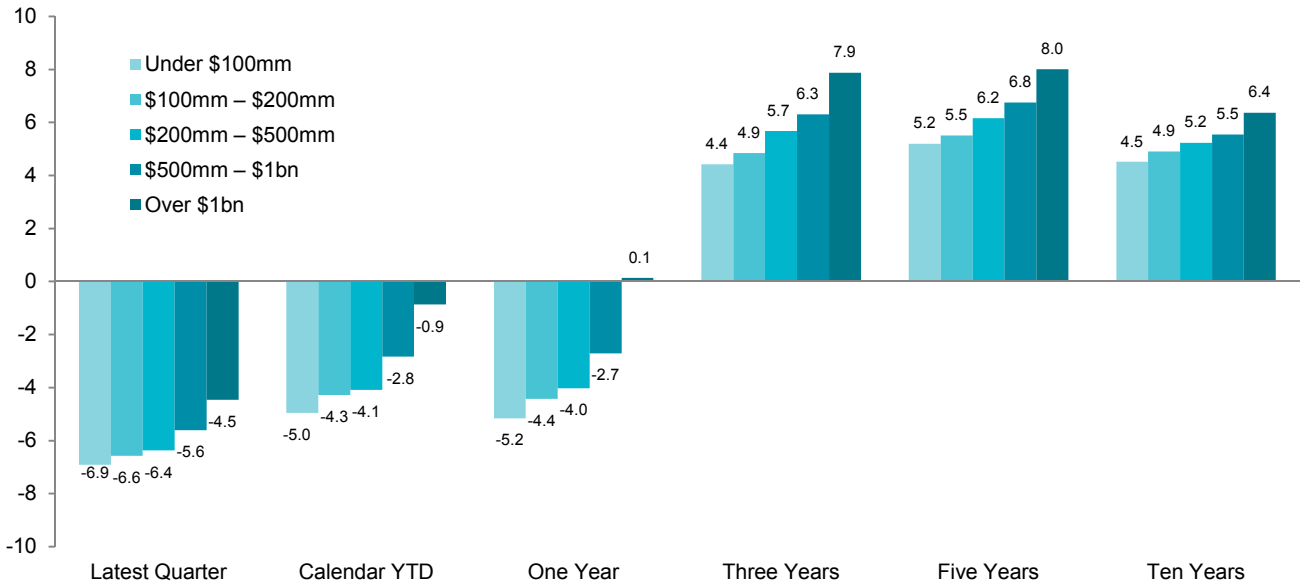
Note: The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

Exhibit 11
Nominal Mean Return Summary: US Endowments and Foundations
 Periods Ended September 30, 2015 • Percent (%)

By Peer Group



By Asset Size



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

Exhibit 12

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

Periods Ended September 30, 2015 • Percent (%)

	Latest Quarter	Calendar YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
Colleges & Universities						
5th Percentile	-3.3	2.2	2.5	9.4	9.2	7.7
25th Percentile	-4.6	-1.5	-0.8	7.4	7.7	6.2
75th Percentile	-6.9	-4.7	-5.0	5.1	5.7	4.7
95th Percentile	-8.1	-6.0	-7.1	3.6	4.7	3.8
Mean	-5.8	-2.9	-2.7	6.4	6.8	5.5
Median	-6.2	-3.4	-2.9	6.3	6.7	5.4
<i>n</i>	148	148	147	146	143	136
Cultural & Environmental						
5th Percentile	-4.2	-0.3	1.0	8.6	8.3	6.9
25th Percentile	-5.7	-3.1	-5.5	6.7	6.9	5.9
75th Percentile	-7.3	-5.3	-5.6	4.6	5.2	4.2
95th Percentile	-8.0	-6.1	-7.0	2.9	4.0	3.1
Mean	-6.5	-4.0	-3.8	5.6	6.1	5.1
Median	-6.8	-4.3	4.0	5.3	5.8	5.4
<i>n</i>	56	56	56	56	55	49
Foundations						
5th Percentile	-2.2	2.4	3.9	10.3	9.8	7.6
25th Percentile	-5.1	-2.1	-1.5	7.0	7.1	6.3
75th Percentile	-7.2	-5.2	-5.4	4.5	5.2	4.7
95th Percentile	-8.5	-6.5	-7.1	3.3	4.1	3.8
Mean	-5.9	-3.2	-2.9	6.0	6.4	5.5
Median	-6.1	-3.8	-3.7	5.7	6.1	5.4
<i>n</i>	114	114	114	110	108	93
Health Care						
5th Percentile	-4.2	-1.9	-0.4	7.7	7.9	6.6
25th Percentile	-5.4	-3.3	-2.8	6.1	6.3	5.6
75th Percentile	-7.6	-5.9	-6.5	3.4	4.6	4.0
95th Percentile	-9.0	-7.5	-8.2	2.5	3.9	3.5
Mean	-6.5	-4.4	-4.5	4.8	5.6	4.9
Median	-6.5	-4.6	-4.3	4.7	5.5	4.8
<i>n</i>	44	44	44	44	44	40
Independent Schools						
5th Percentile	-2.7	-0.7	0.1	8.4	8.6	6.5
25th Percentile	-4.8	-2.3	-2.0	6.7	6.9	5.9
75th Percentile	-6.3	-4.8	-4.9	4.1	4.8	4.7
95th Percentile	-8.0	-6.8	-7.5	3.1	4.2	3.4
Mean	-5.5	-3.5	-3.3	5.3	6.0	5.4
Median	-5.6	-3.4	-3.1	5.2	5.6	5.6
<i>n</i>	28	28	28	28	28	26
Other Nonprofits						
5th Percentile	-3.6	-1.2	-0.6	7.0	7.3	6.1
25th Percentile	-6.0	-4.0	-3.8	5.6	6.2	5.2
75th Percentile	-7.3	-5.4	-5.9	3.6	4.6	4.1
95th Percentile	-8.4	-6.6	-7.5	2.2	3.1	3.5
Mean	-6.5	-4.5	-4.6	4.5	5.4	4.7
Median	-6.7	-4.6	-4.8	4.4	5.5	4.7
<i>n</i>	52	52	51	49	45	39

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

Exhibit 13

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

Periods Ended September 30, 2015 • Percent (%)

	Latest Quarter	Calendar YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
Under \$100 Million						
5th Percentile	-4.4	-2.6	-2.3	6.6	7.0	6.1
25th Percentile	-6.2	-4.1	-4.2	5.2	5.9	5.1
75th Percentile	-7.7	-5.8	-6.3	3.6	4.5	4.0
95th Percentile	-8.7	-7.0	-7.7	2.3	3.5	3.0
Mean	-6.9	-5.0	-5.2	4.4	5.2	4.5
Median	-7.0	-5.1	-5.3	4.5	5.3	4.4
<i>n</i>	108	108	107	103	99	80
\$100 Million to \$200 Million						
5th Percentile	-4.6	-1.6	-0.6	7.2	7.1	6.4
25th Percentile	-5.8	-3.3	-3.0	5.9	6.2	5.6
75th Percentile	-7.5	-5.4	-6.2	3.8	4.8	4.2
95th Percentile	-8.1	-6.7	-7.8	2.9	3.9	3.3
Mean	-6.6	-4.3	-4.4	4.9	5.5	4.9
Median	-6.7	-4.3	-4.5	4.8	5.6	4.9
<i>n</i>	99	99	99	98	98	88
\$200 Million to \$500 Million						
5th Percentile	-4.2	-1.3	-0.1	8.3	7.8	6.7
25th Percentile	-5.6	-3.1	-3.0	6.6	7.0	5.8
75th Percentile	-7.2	-5.1	-5.7	4.8	5.5	4.6
95th Percentile	-8.3	-6.5	-7.7	3.2	4.1	3.6
Mean	-6.4	-4.1	-4.0	5.7	6.2	5.2
Median	-6.3	-4.0	-3.8	5.6	6.1	5.2
<i>n</i>	81	81	81	79	77	74
\$500 Million to \$1 Billion						
5th Percentile	-3.4	1.2	1.9	9.0	8.7	7.0
25th Percentile	-4.6	-1.8	-1.5	7.3	7.2	5.9
75th Percentile	-6.6	-4.4	-4.3	5.4	5.9	4.9
95th Percentile	-7.3	-5.5	-5.9	3.8	4.6	4.3
Mean	-5.6	-2.8	-2.7	6.3	6.8	5.5
Median	-5.7	-3.3	-3.1	6.3	6.6	5.6
<i>n</i>	62	62	61	61	57	54
Over \$1 Billion						
5th Percentile	-1.7	3.9	5.6	10.9	10.8	8.2
25th Percentile	-3.5	0.9	2.0	9.2	9.0	7.1
75th Percentile	-5.4	-2.4	-1.8	6.6	7.0	5.6
95th Percentile	-6.9	-5.2	-4.5	4.9	5.4	4.9
Mean	-4.5	-0.9	0.1	7.9	8.0	6.4
Median	-4.5	-1.2	-0.4	7.7	8.0	6.3
<i>n</i>	92	92	92	92	92	87

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

Exhibit 14

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

Periods Ended September 30, 2015 • Percent (%)

	Latest Quarter	Calendar YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
Colleges & Universities						
5th Percentile	-3.0	0.9	2.6	8.4	7.3	5.8
25th Percentile	-4.3	-2.8	-0.7	6.4	5.8	4.3
75th Percentile	-6.6	-6.0	-5.0	4.2	3.9	2.9
95th Percentile	-7.8	-7.3	-7.1	2.6	2.9	2.0
Mean	-5.6	-4.2	-2.7	5.4	5.0	3.6
Median	-5.9	-4.7	-2.9	5.3	4.9	3.6
<i>n</i>	148	148	147	146	143	136
Cultural & Environmental						
5th Percentile	-3.9	-1.6	1.1	7.6	6.5	5.0
25th Percentile	-5.4	-4.3	-2.9	5.7	5.1	4.0
75th Percentile	-7.0	-6.5	-5.5	3.6	3.4	2.4
95th Percentile	-7.7	-7.3	-7.0	2.0	2.3	1.3
Mean	-6.2	-5.3	-3.8	4.6	4.3	3.2
Median	-6.6	-5.6	-4.0	4.3	4.0	3.5
<i>n</i>	56	56	56	56	55	49
Foundations						
5th Percentile	-1.9	1.1	4.0	9.2	7.9	5.7
25th Percentile	-4.8	-3.4	-1.5	6.0	5.3	4.4
75th Percentile	-6.9	-6.4	-5.4	3.6	3.4	2.8
95th Percentile	-8.2	-7.7	-7.1	2.3	2.4	1.9
Mean	-5.6	-4.5	-2.9	5.1	4.6	3.6
Median	-5.9	-5.1	-3.7	4.7	4.3	3.5
<i>n</i>	114	114	114	110	108	93
Health Care						
5th Percentile	-3.9	-3.2	-0.4	6.8	6.0	4.7
25th Percentile	-5.2	-4.6	-2.8	5.1	4.5	3.7
75th Percentile	-7.3	-7.1	-6.4	2.4	2.9	2.2
95th Percentile	-8.7	-8.7	-8.1	1.5	2.1	1.7
Mean	-6.3	-5.7	-4.4	3.9	3.8	3.1
Median	-6.2	-5.9	-4.3	3.7	3.7	3.0
<i>n</i>	44	44	44	44	44	40
Independent Schools						
5th Percentile	-2.4	-2.0	0.2	7.4	6.7	4.6
25th Percentile	-4.6	-3.6	-2.0	5.7	5.1	4.1
75th Percentile	-6.1	-6.1	-4.8	3.1	3.0	2.8
95th Percentile	-7.8	-8.0	-7.4	2.1	2.5	1.6
Mean	-5.2	-4.8	-3.3	4.4	4.2	3.5
Median	-5.3	-4.7	-3.1	4.2	3.8	3.7
<i>n</i>	28	28	28	28	28	26
Other Nonprofits						
5th Percentile	-3.3	-2.5	-0.5	6.0	5.5	4.2
25th Percentile	-5.7	-5.2	-3.7	4.6	4.4	3.4
75th Percentile	-7.0	-6.6	-5.9	2.7	2.8	2.3
95th Percentile	-8.1	-7.8	-7.5	1.2	1.4	1.6
Mean	-6.2	-5.7	-4.5	3.6	3.7	2.9
Median	-6.4	-5.8	-4.8	3.5	3.7	2.9
<i>n</i>	52	52	51	49	45	39

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.

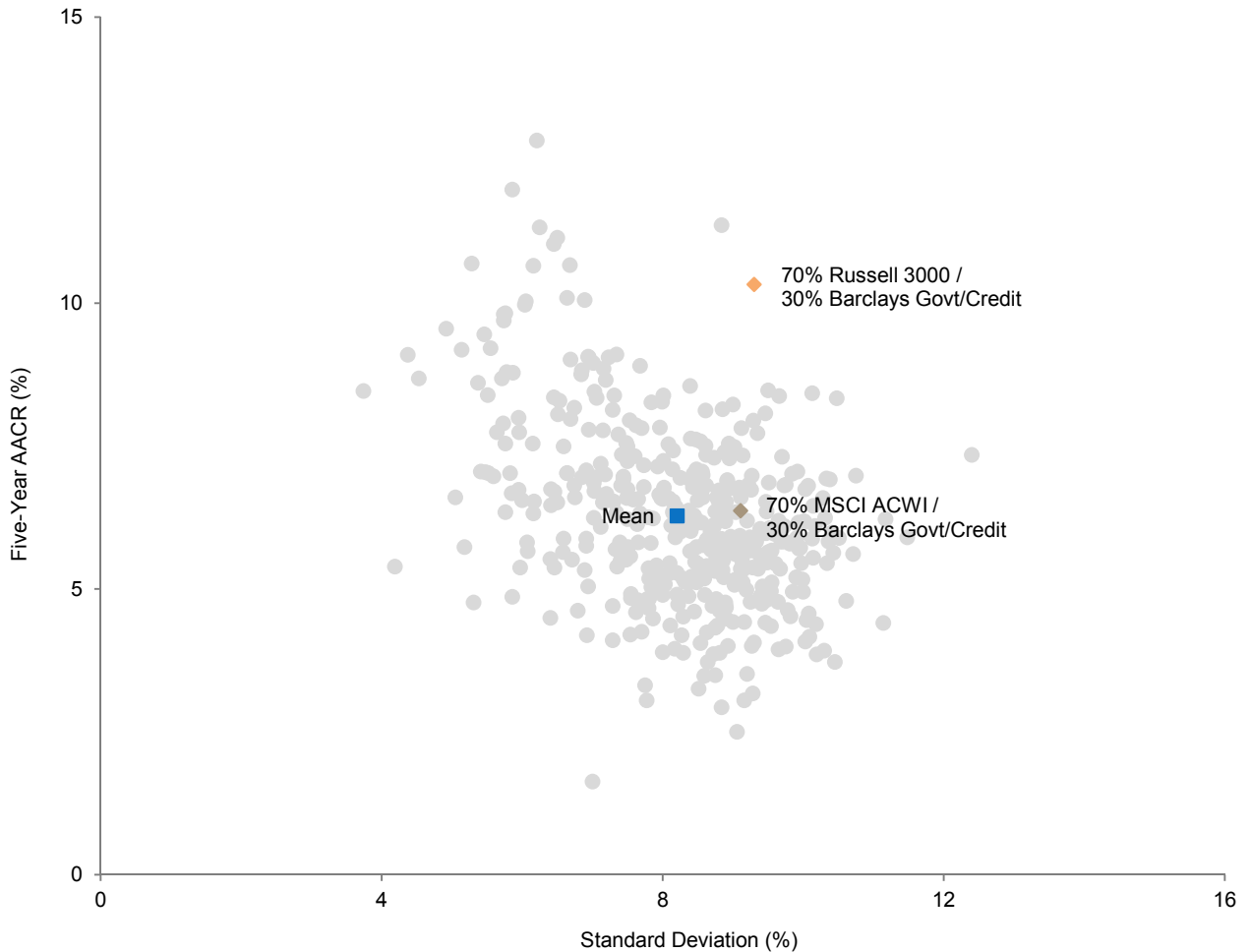
Exhibit 15**Real Total Return Summary by Asset Size: US Endowments and Foundations**

Periods Ended September 30, 2015 • Percent (%)

	Latest Quarter	Calendar YTD	Average Annual Compound			
			One Year	Three Years	Five Years	Ten Years
Under \$100 Million						
5th Percentile	-4.1	-3.9	-2.3	5.6	5.2	4.2
25th Percentile	-6.0	-5.3	-4.1	4.3	4.1	3.2
75th Percentile	-7.5	-7.0	-6.2	2.7	2.7	2.1
95th Percentile	-8.5	-8.2	-7.7	1.3	1.7	1.1
Mean	-6.6	-6.2	-5.1	3.4	3.5	2.6
Median	-6.7	-6.3	-5.3	3.5	3.5	2.5
<i>n</i>	108	108	107	103	99	80
\$100 Million to \$200 Million						
5th Percentile	-4.3	-2.9	-0.6	6.2	5.3	4.5
25th Percentile	-5.6	-4.5	-2.9	4.9	4.4	3.7
75th Percentile	-7.2	-6.6	-6.1	2.8	3.1	2.4
95th Percentile	-7.8	-7.9	-7.7	2.0	2.2	1.4
Mean	-6.3	-5.5	-4.4	3.9	3.7	3.0
Median	-6.5	-5.6	-4.5	3.8	3.8	3.0
<i>n</i>	99	99	99	98	98	88
\$200 Million to \$500 Million						
5th Percentile	-4.0	-2.6	-0.0	7.3	5.9	4.8
25th Percentile	-5.4	-4.3	-3.0	5.6	5.1	4.0
75th Percentile	-6.9	-6.4	-5.6	3.8	3.7	2.8
95th Percentile	-8.0	-7.8	-7.6	2.3	2.3	1.8
Mean	-6.1	-5.3	-4.0	4.7	4.4	3.4
Median	-6.0	-5.3	-3.7	4.7	4.3	3.4
<i>n</i>	81	81	81	79	77	74
\$500 Million to \$1 Billion						
5th Percentile	-3.1	-0.2	1.9	8.0	6.8	5.1
25th Percentile	-4.3	-3.0	-1.4	6.3	5.4	4.0
75th Percentile	-6.3	-5.6	-4.3	4.4	4.1	3.0
95th Percentile	-7.1	-6.7	-5.9	2.8	2.8	2.5
Mean	-5.3	-4.1	-2.7	5.3	4.9	3.7
Median	-5.5	-4.6	-3.1	5.3	4.8	3.7
<i>n</i>	62	62	61	61	57	54
Over \$1 Billion						
5th Percentile	-1.4	2.6	5.7	9.9	9.0	6.3
25th Percentile	-3.3	-0.4	2.1	8.2	7.1	5.2
75th Percentile	-5.2	-3.7	-1.7	5.6	5.1	3.7
95th Percentile	-6.6	-6.5	-4.5	4.0	3.6	3.0
Mean	-4.2	-2.2	0.2	6.9	6.2	4.5
Median	-4.2	-2.5	-0.4	6.7	6.1	4.4
<i>n</i>	92	92	92	92	92	87

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 16
Standard Deviation and Sharpe Ratio: US Endowments and Foundations
 Five Years Ended September 30, 2015



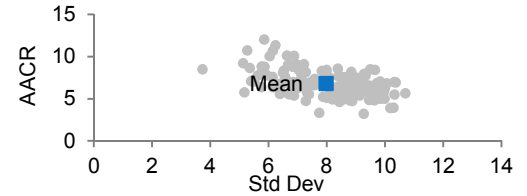
	AACR (%)	Standard Deviation (%)	Sharpe Ratio
5th Percentile	9.1	10.2	1.49
25th Percentile	7.0	9.2	0.93
75th Percentile	5.2	7.3	0.62
95th Percentile	4.0	5.7	0.47
Mean	6.3	8.2	0.82
Median	6.1	8.5	0.74
<i>n = 423</i>			
70% Russell 3000 / 30% Barclays Govt/Credit	10.3	9.3	1.12
70% MSCI ACWI / 30% Barclays Govt/Credit	6.4	9.1	0.73

Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Frank Russell Company, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties. Sharpe ratio calculated using data from BofA Merrill Lynch.

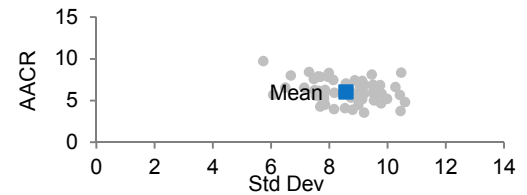
Notes: This exhibit includes only those institutions that have provided trailing quarterly returns. The 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter.

Exhibit 17
Standard Deviation and Sharpe Ratio by Peer Group: US Endowments and Foundations
 Five Years Ended September 30, 2015

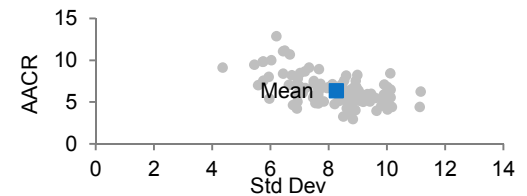
	AACR (%)	Standard Deviation (%)	Sharpe Ratio
Colleges & Universities			
5th Percentile	9.2	10.0	1.55
25th Percentile	7.7	9.1	1.05
75th Percentile	5.7	6.9	0.67
95th Percentile	4.7	5.5	0.53
Mean	6.8	8.0	0.91
Median	6.7	8.3	0.83
<i>n</i> = 143			



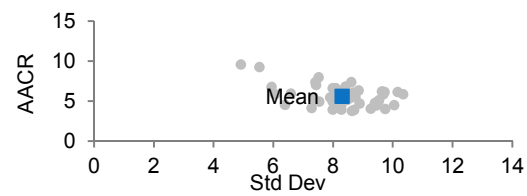
Cultural & Environmental			
5th Percentile	8.3	10.4	1.06
25th Percentile	6.9	9.3	0.84
75th Percentile	5.2	7.8	0.61
95th Percentile	4.0	6.6	0.50
Mean	6.1	8.6	0.75
Median	5.8	8.7	0.72
<i>n</i> = 55			



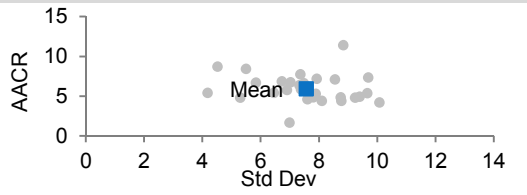
Foundations			
5th Percentile	9.8	10.1	1.66
25th Percentile	7.1	9.2	0.92
75th Percentile	5.2	7.3	0.61
95th Percentile	4.1	5.8	0.45
Mean	6.4	8.3	0.83
Median	6.1	8.5	0.74
<i>n</i> = 108			



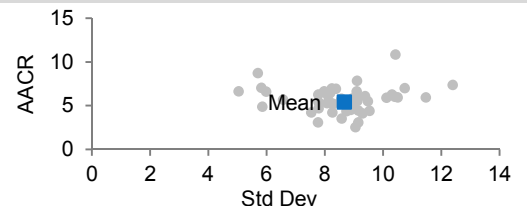
Health Care			
5th Percentile	7.9	10.0	1.11
25th Percentile	6.3	9.3	0.82
75th Percentile	4.6	7.5	0.56
95th Percentile	3.9	6.0	0.46
Mean	5.6	8.3	0.73
Median	5.5	8.5	0.66
<i>n</i> = 44			



Independent Schools			
5th Percentile	8.6	9.7	1.41
25th Percentile	6.9	8.8	0.97
75th Percentile	4.8	6.9	0.58
95th Percentile	4.2	4.8	0.47
Mean	6.0	7.6	0.84
Median	5.6	7.6	0.84
<i>n</i> = 28			



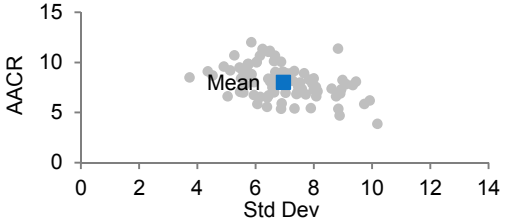
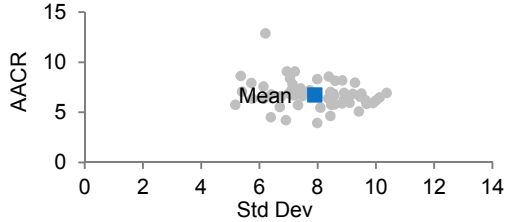
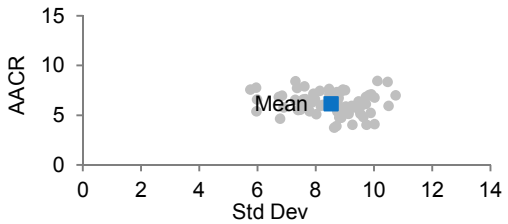
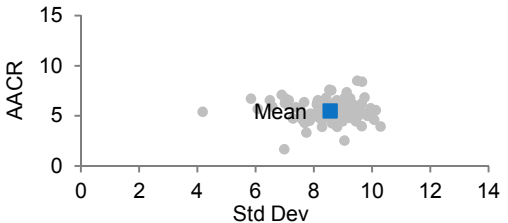
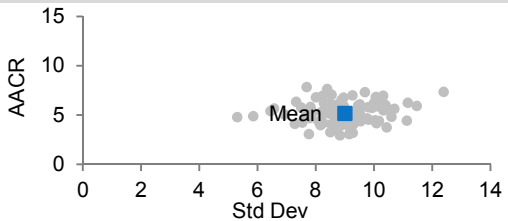
Other Nonprofits			
5th Percentile	7.3	10.7	1.04
25th Percentile	6.2	9.2	0.74
75th Percentile	4.6	8.1	0.55
95th Percentile	3.1	5.9	0.42
Mean	5.4	8.7	0.67
Median	5.5	8.9	0.63
<i>n</i> = 45			



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

Exhibit 18
Standard Deviation and Sharpe Ratio by Asset Size: US Endowments and Foundations
 Five Years Ended September 30, 2015

	AACR (%)	Standard Deviation (%)	Sharpe Ratio
Under \$100 Million			
5th Percentile	7.0	10.6	0.85
25th Percentile	5.9	9.7	0.68
75th Percentile	4.5	8.3	0.53
95th Percentile	3.5	7.3	0.41
Mean	5.2	9.0	0.62
Median	5.3	8.9	0.62
<i>n</i> = 99			
\$100 Million to \$200 Million			
5th Percentile	7.1	10.0	0.93
25th Percentile	6.2	9.3	0.76
75th Percentile	4.8	8.0	0.58
95th Percentile	3.9	6.9	0.48
Mean	5.5	8.6	0.68
Median	5.6	8.7	0.66
<i>n</i> = 98			
\$200 Million to \$500 Million			
5th Percentile	7.8	10.1	1.05
25th Percentile	7.0	9.2	0.85
75th Percentile	5.5	7.8	0.65
95th Percentile	4.1	6.6	0.47
Mean	6.2	8.5	0.75
Median	6.1	8.7	0.74
<i>n</i> = 77			
\$500 Million to \$1 Billion			
5th Percentile	8.7	9.9	1.29
25th Percentile	7.2	8.9	1.02
75th Percentile	5.9	7.0	0.69
95th Percentile	4.6	5.7	0.61
Mean	6.8	7.9	0.89
Median	6.6	8.0	0.83
<i>n</i> = 57			
Over \$1 Billion			
5th Percentile	10.8	9.2	1.87
25th Percentile	9.0	7.7	1.47
75th Percentile	7.0	6.0	0.93
95th Percentile	5.4	5.1	0.68
Mean	8.0	7.0	1.20
Median	8.0	6.8	1.17
<i>n</i> = 92			



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 stock-holders 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:

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

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. ■