



Annual Analysis of Foundation Investment Pool Returns: Calendar Year 2014

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Investment Pool Returns:
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Geoffrey Bollier also contributed to this report.

Annual Analysis of Foundation Investment Pool Returns

This report summarizes portfolio returns, asset allocation, investment manager structures, and payout characteristics for 112 foundations as of calendar year 2014. The majority of participants are private foundations, 95 of which are classified as non-operating foundations and four as operating foundations. The remaining 13 participants are community foundations. The 112 participants in this study reported investment pool assets as of December 31, 2014, totaling \$164 billion. The investment pool size of participants ranged from \$7.8 million to \$43.5 billion. The mean investment pool size was \$1.5 billion and the median was \$251 million. Twenty-five foundations reported investment pool assets greater than \$1 billion, and they controlled 87% of the aggregate investment pool assets.

This year's report takes a closer look at additional portfolio attributes and investor trends relevant to foundations. Included are exhibits on asset class returns, performance attribution, risk analytics, and policy portfolio benchmarking. We also highlight private investment programs and their impact on portfolio liquidity. Our section on investment management structures reviews the use of external managers by asset class and details portfolio implementation techniques. The report's final section includes exhibits covering payout rates, payout distribution components, and payout objectives.

Investment Portfolio Returns

Returns in 2014

After two straight years in which most foundations posted double-digit returns, performance in calendar year 2014 settled in at a more modest level. Public developed equity returns for US\$-based investors decoupled in 2014, with US equities continuing to post strong returns as global ex US equities ended the year in the red in US\$ terms. Private equity generated

strong returns, while hedge funds contributed modest gains to portfolios in 2014. Commodities and natural resources-related investments, which were dragged down considerably by collapsing oil prices in the second half of the year, detracted from overall portfolio performance.

The mean nominal total return earned by participating foundations was 4.8% in 2014 (Figure 1). After factoring in inflation of 0.8% (as measured by the Consumer Price Index), the mean real return for all

Figure 1. Summary of Investment Pool Returns
Years Ended December 31, 2014 • Percent (%)

Nominal Total Returns				
	Average Annual Compound Nominal Return			
	1 Year	3 Years	5 Years	10 Years
Responding Institutions				
High	13.6	14.1	13.6	9.9
Low	-0.6	4.8	4.6	3.9
Mean	4.8	10.2	8.3	6.5
Median	4.2	10.1	8.1	6.4
<i>n</i>	112	110	109	93
Mean After Spending	-0.1	5.0	3.5	1.8
<i>n</i>	70	51	42	29
Benchmarks				
70% Russell 3000® / 30% Barclays Govt/Credit	10.6	15.1	12.6	7.4
70% MSCI ACWI / 30% Barclays Govt/Credit	5.1	11.1	8.5	6.5
Real Total Returns				
	Average Annual Compound Real Return			
	1 Year	3 Years	5 Years	10 Years
Responding Institutions				
High	12.8	12.6	11.7	7.6
Low	-1.4	3.5	2.9	1.7
Mean	4.0	8.8	6.5	4.3
Median	3.4	8.7	6.3	4.2
<i>n</i>	112	110	109	93
Mean After Spending	-0.9	3.6	1.8	-0.3
<i>n</i>	70	51	42	29
Benchmarks				
70% Russell 3000® / 30% Barclays Govt/Credit	9.7	13.6	10.7	5.1
70% MSCI ACWI / 30% Barclays Govt/Credit	4.3	9.7	6.7	4.3

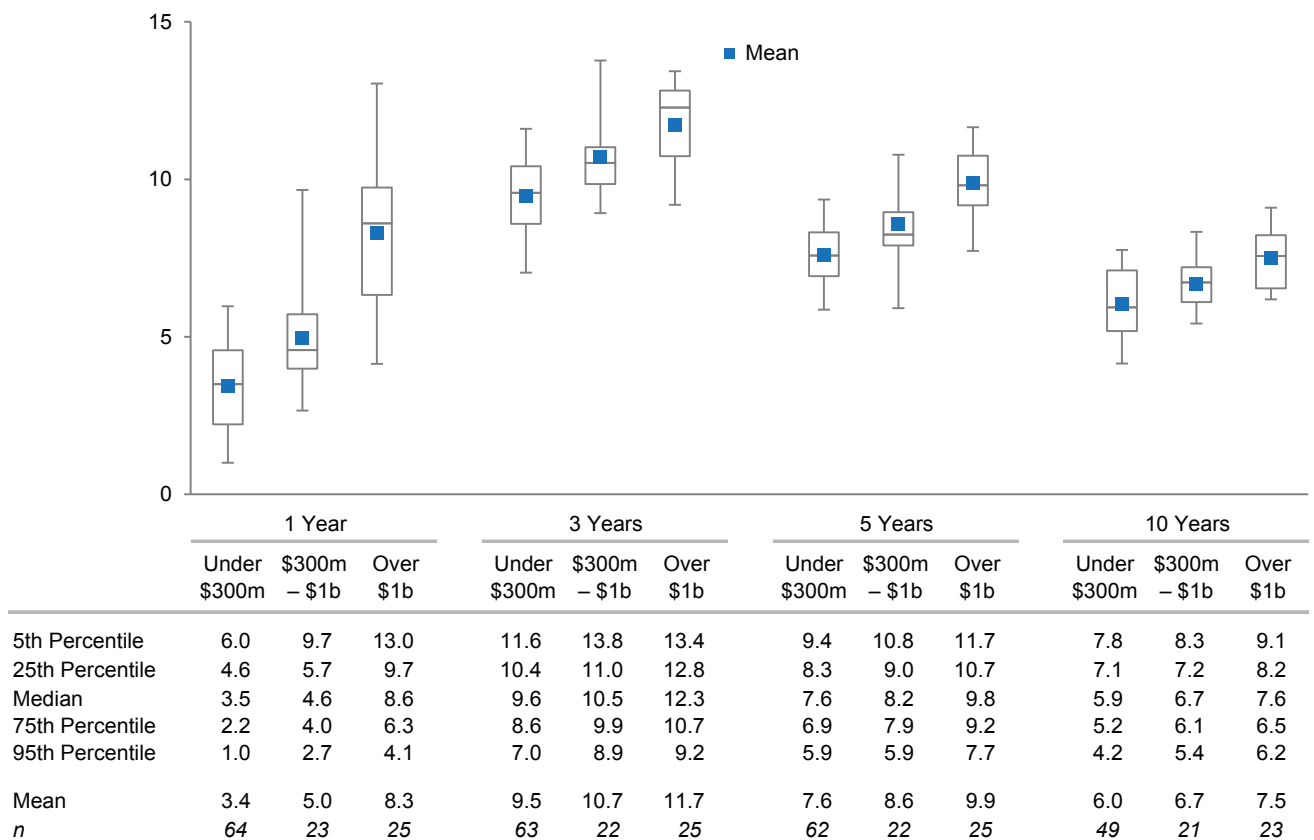
Sources: Foundations data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Frank Russell Company, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

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

respondents is adjusted to 4.0%. Breaking the data out by participants' asset size shows a significant amount of disparity in trailing one-year nominal returns. Foundations with assets over \$1 billion reported the highest average performance (8.3%) (Figure 2). In fact, the vast majority of these large portfolios (19 of 25) reported a one-year return that was in the top quartile of the entire participant group. Foundations with assets between \$300 million and \$1 billion reported an average return of 5.0%, followed by those with assets under \$300 million (3.4%).

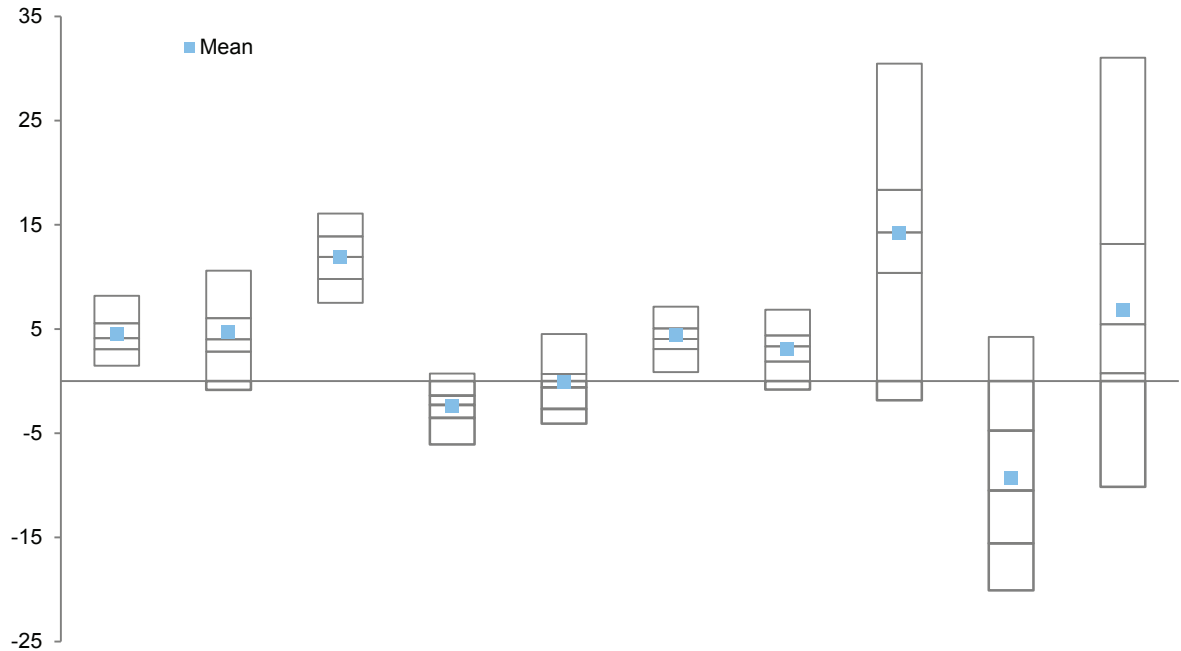
In this year's survey, we asked respondents to provide composite returns for the major asset classes in their portfolio. Figure 3 displays the range of participants' returns across these asset classes and shows median composite returns for the three broad asset size groups. The charts that follow in this section provide 2014 median asset class returns for the total participant group alongside returns for relevant indexes (all index returns are in US\$ terms unless otherwise noted).

Figure 2. Summary of Long-Term Investment Pool Return Percentiles by Asset Size
Years Ended December 31, 2014 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC.
Note: Three-, five-, and ten-year returns are annualized.

Figure 3. Dispersion of Participants' Asset Class Returns
Trailing One-Year as of December 31, 2014



	Public Equity ¹	Global Equity ²	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Private Equity ³	Public RA	Private RA
5th Percentile	8.2	10.6	16.1	0.7	4.5	7.1	6.9	30.5	4.2	31.0
25th Percentile	5.5	6.0	13.9	-1.4	0.7	5.1	4.4	18.3	-4.8	13.2
Median	4.1	4.0	11.9	-2.3	-0.6	4.0	3.3	14.3	-10.5	5.5
75th Percentile	3.1	2.8	9.8	-3.5	-2.7	3.1	1.9	10.4	-15.6	0.8
95th Percentile	1.5	-0.8	7.5	-6.1	-4.1	0.9	-0.8	-1.8	-20.1	-10.2
Mean	4.5	4.7	11.8	-2.4	-0.1	4.4	3.1	14.2	-9.3	6.8
<i>n</i>	98	45	96	93	88	93	93	79	88	65
<u>Median by Asset Size</u>										
Under \$300mm	3.9	3.5	11.3	-2.4	-0.5	4.3	3.4	13.8	-11.4	4.6
<i>n</i>	63	30	61	60	56	60	58	46	57	33
\$300mm to \$1bn	4.7	3.9	13.1	-2.0	-1.6	3.7	2.9	15.5	-9.8	4.9
<i>n</i>	20	10	21	20	20	20	21	19	20	17
Over \$1bn	4.1	5.0	12.8	-2.1	2.2	2.0	3.5	18.3	-3.3	7.2
<i>n</i>	15	5	14	13	12	13	14	14	11	15

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Private equity and private real assets return statistics are reported as internal rates of return (IRR).

¹ Public equity is a composite of global equity, US equity, developed markets ex US equity, and emerging markets equity.

² Global equity includes only investment vehicles that have a mandate to invest in US and international markets.

³ Private equity also includes venture capital and distressed securities that are invested through a private investment vehicle.

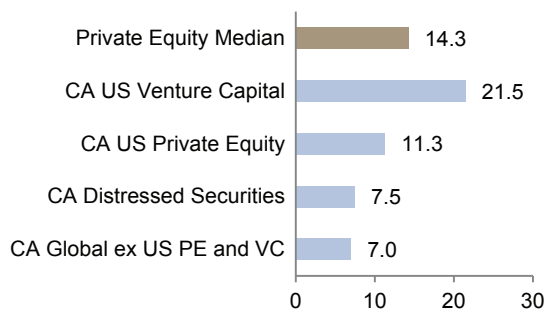
Private Equity. Private equity turned in the best performance of the broad asset class strategies in 2014. For participants in this study, the median return for private equity¹ was 14.3% in 2014 (Figure 4). Foundations with portfolios greater than \$1 billion reported the highest median composite return (18.3%) (Figure 3).

Historically, private equity fund returns have varied considerably more than public equities, underscoring the importance of manager selection within this strategy. Excluding outliers that make up the top and bottom 5% of participants, private equity returns in 2014 ranged from 30.5% to -1.8% (Figure 3). The return distribution is also somewhat illustrative of the J-curve effect, as returns at the bottom of the distribution came from foundations with low private investment allocations and presumably less mature private programs. In addition to the wide dispersion normally associated with this asset class, some of the variance in private equity returns is attributable to the broad range of strategies incorporated

¹ Throughout this section of the report, participants' private equity performance statistics also include venture capital and distressed securities that are invested through a private investment vehicle. All private investment return statistics in this study are reported as an internal rate of return (IRR).

Figure 4. Private Equity: Median Participant Return Versus Index Returns

Trailing One-Year as of December 31, 2014



Sources: Cambridge Associates LLC and foundation data as reported to Cambridge Associates LLC.

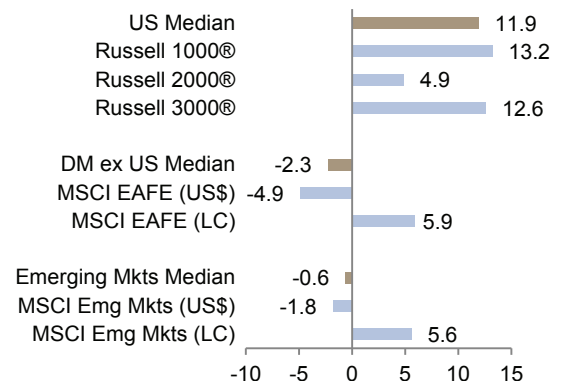
in this composite and each institution's custom asset mix across these strategies. The Cambridge Associates LLC US Venture Capital Index® produced the highest return (21.5%) in 2014 among the strategies in this composite (Figure 4).

Public Equity. US equities, represented by the Russell 3000® Index, returned 12.6% in 2014 (Figure 5). Returns for large-cap stocks were considerably higher than those of small-cap stocks. Among participants in this study, the median return for US equities was 11.9% (Figure 3). Participant returns varied from 16.1% at the 5th percentile to 7.5% at the 95th percentile, a substantially smaller range compared to that of private equity.

The US dollar began consistently rising against other major currencies in July 2014 and finished the year up strongly against all. Consequently, 2014 saw a wide divergence in returns of global ex US equities in local currency and US\$ terms. Trailing one-year

Figure 5. Public Equity: Median Participant Return Versus Index Returns

Trailing One-Year as of December 31, 2014



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

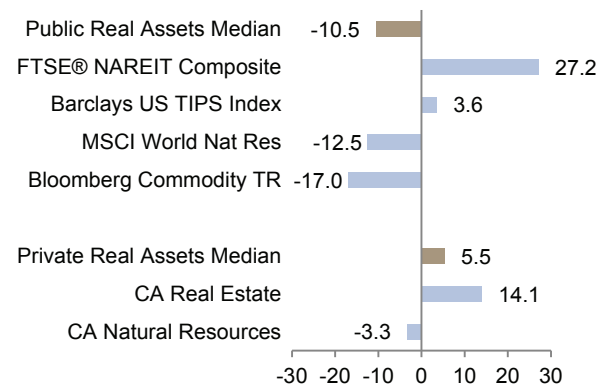
returns for the MSCI EAFE and MSCI Emerging Markets indexes in US\$ terms were -4.9% and -1.8%, respectively (Figure 5).

A separate 2014 survey of large foundations revealed that only 19% of these investors hedge a portion of 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 foundations in this study is likely to be considerably lower. Median participant performance for both developed markets ex US equities (-2.3%) and emerging market equities (-0.6%) was much closer to index returns in US\$ terms, an indication that currency hedging is not widely employed within this study's universe. While median returns for developed markets ex US equities varied little across the disparate asset sizes, emerging markets had a somewhat wide range, with the largest portfolios reporting the highest median composite return (2.2%) (Figure 3).

Real Assets. The real assets composite consists of a diverse group of investments, including commodities, natural resources, real estate, and inflation-linked bonds. The range of returns for these various strategies was considerable in 2014. Real estate was the strongest-performing asset class, with public US REITs returning 27.2% and the Cambridge Associates Private Real Estate Index returning 14.1% (Figure 6). Meanwhile, commodity and natural resources returns were dragged down considerably by collapsing oil prices in the second half of 2014.

Figure 6. Real Assets: Median Participant Return Versus Index Returns

Trailing One-Year as of December 31, 2014



Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Bloomberg L.P., Cambridge Associates LLC, FTSE International Limited, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Despite the outperformance of US REITs, public real estate represents a small portion of participants' portfolios and therefore had little impact on the returns of public real assets. Commodities and public natural resources equities, which both posted double digit losses, compose the largest portion of participants' public real assets composite.² Median performance among participants for public real assets was -10.5%. The varying asset mixes across the diverse substrategies of this category contributed to a wide range in returns reported across foundations. Participants' returns ranged from 4.2% to -20.1% (Figure 3) when outliers in the top and bottom 5% are excluded. Larger portfolios, which generally had lower allocations to the underperforming commodities and public natural resources equities strategies, reported the highest median public real assets return (-3.3%).

² On average, natural resources equities and commodities accounted for 57% and 24% of all participating foundations' public real assets allocation, respectively. Public real estate (10%) and inflation-linked bonds (9%) made up the remaining proportion.

Composite returns for private real assets were stronger than those in the public markets. While natural resources also lagged real estate in the private markets, the Cambridge Associates Natural Resources Index return (-3.3%) performed significantly better than its public counterpart (Figure 6). The median private real assets return among participants was 5.5%, with the largest portfolios reporting the highest median return (7.2%) (Figure 3). Private real asset returns for participants showed more variation than the public composite, with participants' returns ranging from 31.0% to -10.2%, excluding outliers.

Hedge Funds. The median hedge fund composite return among participants was 3.3% in 2014 (Figure 7). Median hedge fund returns varied little across the three asset size groups. On an index basis, diversified funds-of-funds that invest across a variety of strategies outperformed equity-oriented hedge funds over the one-year period. The variation in hedge fund returns was considerably lower than that in private equity and real assets, ranging from 6.9% to -0.8% (Figure 3) excluding outliers making up the top and bottom 5%.

Figure 7. Hedge Funds: Median Participant Return Versus Index Returns

Trailing One-Year as of December 31, 2014

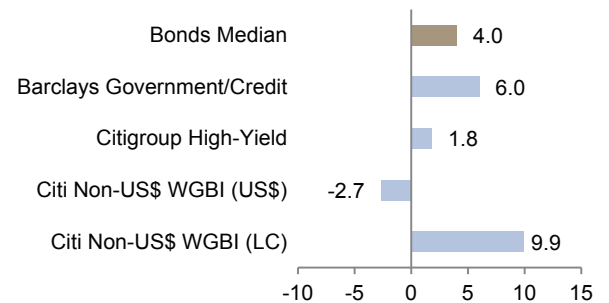


Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Hedge Fund Research, Inc.

Bonds. Median participant performance for bonds was 4.0% (Figure 8). US bonds, as represented by the Barclays Government/Credit Bond Index, outperformed international bond indexes in US\$ terms, but underperformed the same international markets in local currency terms. The smallest portfolios reported the highest median bonds return (4.3%) while the largest portfolios reported the lowest median return (2.0%) (Figure 3).

Figure 8. Bonds: Median Participant Return Versus Index Returns

Trailing One-Year as of December 31, 2014



Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays and Citigroup Global Markets.

Analysis of Top and Bottom Performers in 2014

Many factors contribute to investor returns, including asset allocation policy, manager selection, and the timing of investments. In addition, varying performance measurement methodologies may impact the peer performance statistics reported in this study.

A true attribution analysis on peer investment performance would require an extraordinary amount of detailed data and uniformity among the performance measurement methodologies used to calculate that data. Since neither is available for each of the foundations in this study, we cannot perform attribution analysis that attempts to deconstruct returns into precise components. However, our data do allow us to make broader observations that can help illuminate the main drivers of performance for the 2014 calendar year.

Performance Attribution: Asset

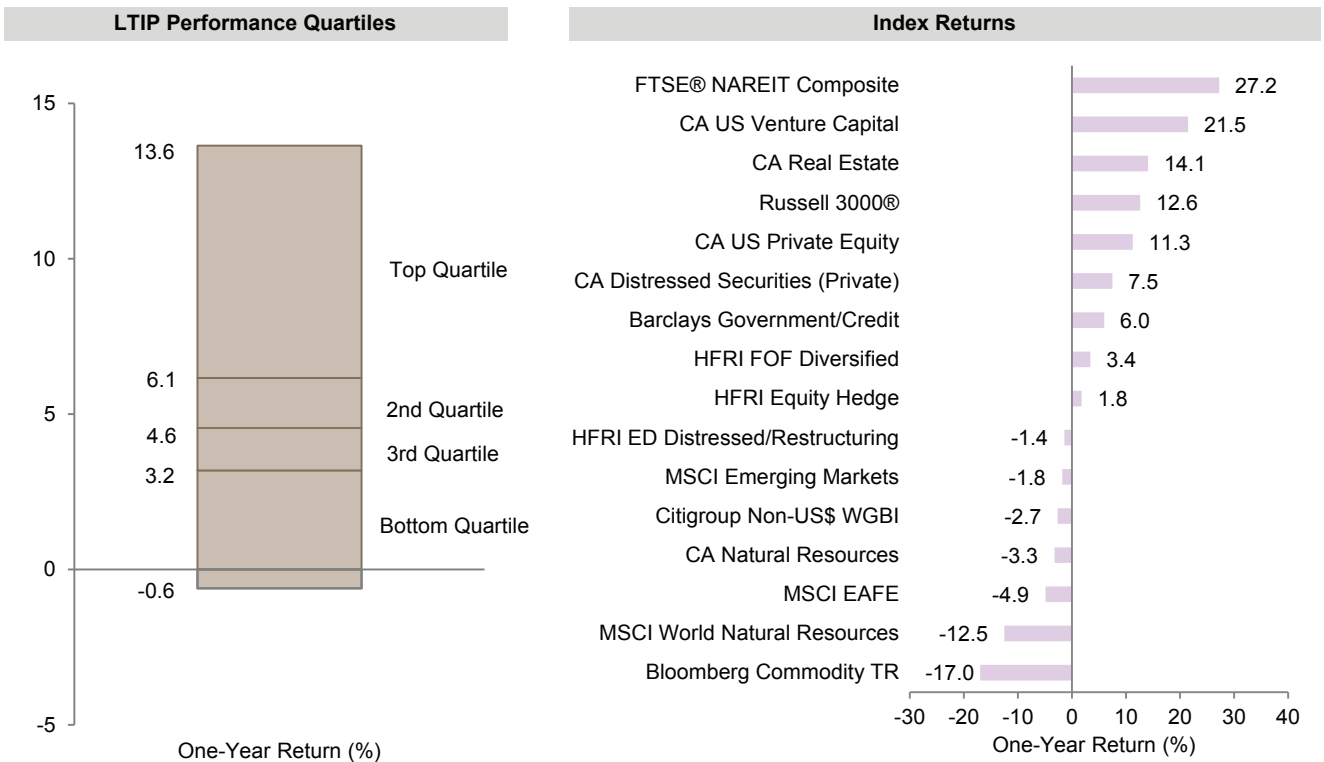
Allocation. The importance of an asset allocation mix and its contributions to performance cannot be overstated. Figure 9 breaks out foundations that provided beginning year asset allocation into four quartiles based on 2014 investment performance. The table in this figure is presented in the style of a heat map, in which the beginning year average asset allocation of each quartile is shaded based on its divergence from the overall participant mean.

The greatest disparity between top and bottom performers was the way in which the overall equity portfolio was allocated. Foundations that posted a trailing one-year return in the top quartile entered the year with the highest average allocation to

private equity and venture capital (15.8%). Foundations in the bottom quartile of performers reported an average allocation to private equity and venture capital of just 3.6%. Conversely, the top quartile of performers reported the lowest average allocations to long-only US equity (17.9%) and developed markets ex US equity (11.0%), while the bottom quartile of performers had the highest average developed ex US equity allocations (18.9%). Emerging markets equity allocations were similar across the four performance quartiles.

Allocations to real assets and bonds also showed substantial differences. As with equity allocations, foundations in the top quartile of performers had the highest average allocation to private real assets (9.4%), while those in the bottom quartile had the highest average allocation to public real assets (7.4%). Within bonds, the bottom quartile of performers had the highest average allocation (13.7%) and the top quartile had the lowest (9.2%).

Figure 9. Analysis of Top and Bottom Quartile Performers: One-Year Asset Allocation
As of December 31, 2014



Average Asset Allocation by LTIP Quartile (%) as of December 31, 2013											
	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Dist Sec	PE & VC	Private RA	Public RA and ILBs	Cash	Other
Top Quartile	17.9	11.0	7.8	9.2	16.3	4.1	15.8	9.4	3.9	4.5	0.1
2nd Quartile	22.3	15.7	6.9	10.6	19.3	3.8	8.7	3.6	5.7	3.4	0.1
3rd Quartile	23.4	17.4	7.1	12.8	17.9	3.5	4.8	2.8	6.6	3.6	0.3
Bottom Quartile	22.1	18.9	7.4	13.7	17.8	1.4	3.6	2.0	7.4	5.8	0.0
Fdn Universe Mean	21.4	15.7	7.3	11.6	17.8	3.2	8.3	4.5	5.9	4.3	0.1

Divergence of Asset Allocation from Mean

Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Barclays, Bloomberg L.P., 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: Performance quartiles are based on the long-term investment portfolio's (LTIP) trailing one-year return as of December 31, 2014. Analysis includes 101 foundations that provided a trailing one-year return and beginning year asset allocation.

Return Calculation Methodologies.

Performance reporting methodologies differ across foundations in this study. Institutions that place a significant emphasis on benchmarking peer performance should take note of the following issues.

Private Investments. Foundations used two main methodologies to account for private investments in their 2014 total portfolio return. The most frequently used methodology was to report returns on a current basis (see sidebar), meaning the total portfolio return incorporated private investment valuations for the entire calendar year period. The second most frequently used methodology to account for private investments was the lagged basis. Under this methodology, private investment valuations lag other assets in the portfolio by one quarter. In essence, the private investment portion of the calendar year 2014 total return represents performance for the period October 1, 2013, to September 30, 2014.

When assessing the impact of these two methodologies, it is important to consider private investment returns for both fourth quarter 2013 and fourth quarter 2014. With the lagged basis methodology, performance for the former period will be included in the one-year total return calculation, while performance for the latter period will be excluded. As Figure 10 shows, the Cambridge Associates private investment index returns for fourth quarter 2013 were significantly stronger than returns for fourth quarter 2014 across all strategies.

For a blended private investment benchmark that is weighted according to the overall participant group's average asset

Performance Reporting Methodologies

Current Basis

Total investment pool return for 2014 includes marketable asset and private investment performance for January 1, 2014, to December 31, 2014. Of the 69 institutions using this methodology, 68 used confirmed private investment valuations and one used estimated valuations.



Lagged Basis

Total investment pool return for 2014 includes marketable asset performance for January 1, 2014, to December 31, 2014, and private investment performance for October 1, 2013, to September 30, 2014.



Methodologies Used by Participants

Asset Size	Current Basis	Lagged Basis	Other	No PI Allocation
Under \$300mm	66%	0%	6%	28%
<i>n</i>	42	0	4	18
\$300mm to \$1bn	74%	17%	0%	9%
<i>n</i>	17	4	0	2
Over \$1bn	40%	56%	4%	0%
<i>n</i>	10	14	1	0
All Institutions	62%	16%	4%	18%
<i>n</i>	69	18	5	20

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Private investments include non-venture private equity, venture capital, distressed securities (private equity structure), private oil & gas/natural resources, timber, private real estate, and other private investments. Foundations with no significant private investment allocations (<1% of their total investment portfolios) are reflected in the right-hand column.

Figure 10. Cambridge Associates Private Investment Index Returns

	One Quarter End-to-End Pooled Return		Beginning Year Mean Asset Allocation
	Q4 2013	Q4 2014	
US Private Equity	7.0	0.8	4.3
US Venture Capital	12.1	9.9	3.9
Distressed Securities	5.4	0.2	1.4
Real Estate	6.6	4.9	2.4
Natural Resources	4.1	-11.4	2.0

Blended Benchmark Return

Q4 2013	7.8
Q4 2014	2.2

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Blended benchmark incorporates the return for each asset class and is weighted according to the beginning year mean allocation of private investments for the total participant group.

allocation, the return for fourth quarter 2013 was 7.8%, 560 bps higher than the return for fourth quarter 2014 (Figure 10). For a portfolio with a 14% allocation to private investments weighted according to the average asset mix, the differential in benchmark returns between the two periods could impact the total portfolio return by nearly 75 bps.³ While the actual impact for each foundation would vary according to the actual asset allocation and investment performance, those using the lagged basis methodology would generally have shown a calendar year 2014 return that is higher than what would have been calculated with the current basis methodology.

Net of Fee Calculations. Nearly all participating foundations (110 of 112) in this study provided performance on a net-of-fees basis (Figure 11). The vast majority (86%) of respondents deduct only asset- and

performance-based management fees while another 10% also deduct custody expenses. The inclusion/exclusion of custody expenses typically has little impact on return calculations, as past Cambridge Associates surveys have shown that total custody fees average between 2 bps and 3 bps of assets under management for our endowment and foundation clients.

Figure 11. Calculation of Net Returns 2014

<i>Number of Institutions</i>	95	11	2	1	1
<i>% of Institutions</i>	86	10	2	1	1
Asset-Based Mgmt Fees	X	X	X	X	X
Perf-Based Mgmt Fees	X	X	X	X	X
Custody Fees		X	X	X	
Staff Salaries			X	X	
Travel Expenses			X	X	
Legal Expenses			X	X	
Accounting Expenses			X	X	
IC Meetings Costs			X	X	X
Rents/ Space Costs			X		

Source: Foundation data as reported to Cambridge Associates LLC.

³ This impact on the total return is estimated by multiplying the overall participant group's mean private investment allocation (14%) by the difference in the fourth quarter 2013 and fourth quarter 2014 blended benchmark return (560 bps).

Long-Term Returns

Foundations' mean average annual compound return (AACR) was 8.3% for the five-year period ending December 31, 2014 (Figure 1). Foundations with assets greater than \$1 billion reported the highest average five-year return (9.9%) (Figure 2). For a group of 71 foundations that have reported consistent historical performance, the most recent five-year period represents the fourth highest return from the last decade, trailing only the five-year periods ending in 2006, 2007, and 2013 (Figure 12). Similar to those years, this most recent five-year period incorporates a recovery following a recession in which stock markets had significantly declined. The mean nominal AACR for the ten-year period was 6.5% (Figure 1), with the largest portfolios again reporting the highest mean return (7.5%) (Figure 2).

Most foundations, particularly private non-operating foundations that are influenced by government-mandated spending requirements, aim to distribute approximately 5% of their portfolio on an annual basis. To maintain purchasing power over the long term, foundations must achieve a real return that offsets this target spending rate. Of the foundations that provided a long-term real total return objective, a majority (44 of 77) aim to earn 5% (Figure 13). Most of the remaining foundations (31 of 77) have an objective to achieve a long-term real return above 5%. Through the trailing ten-year period ending December 31, 2014, the average real return for participating foundations was 4.3% (Figure 1). For the foundations that provided spending rates for the last ten years, the average ten-year real return after spending was -0.3%.

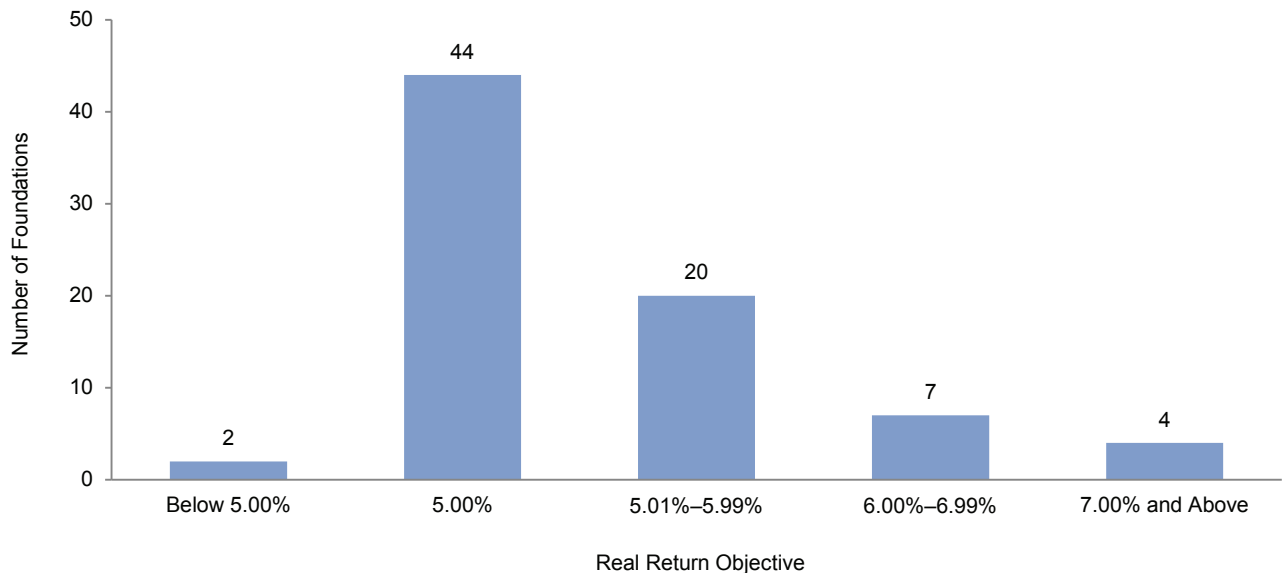
Figure 12. Rolling Five-Year Average Annual Compound Returns
Years Ended December 31 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Analysis includes data for 71 institutions that provided returns for the last 15 years.

Figure 13. Real Total Portfolio Return Objectives



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Graph includes data for 77 foundations that provided a real total portfolio return objective.

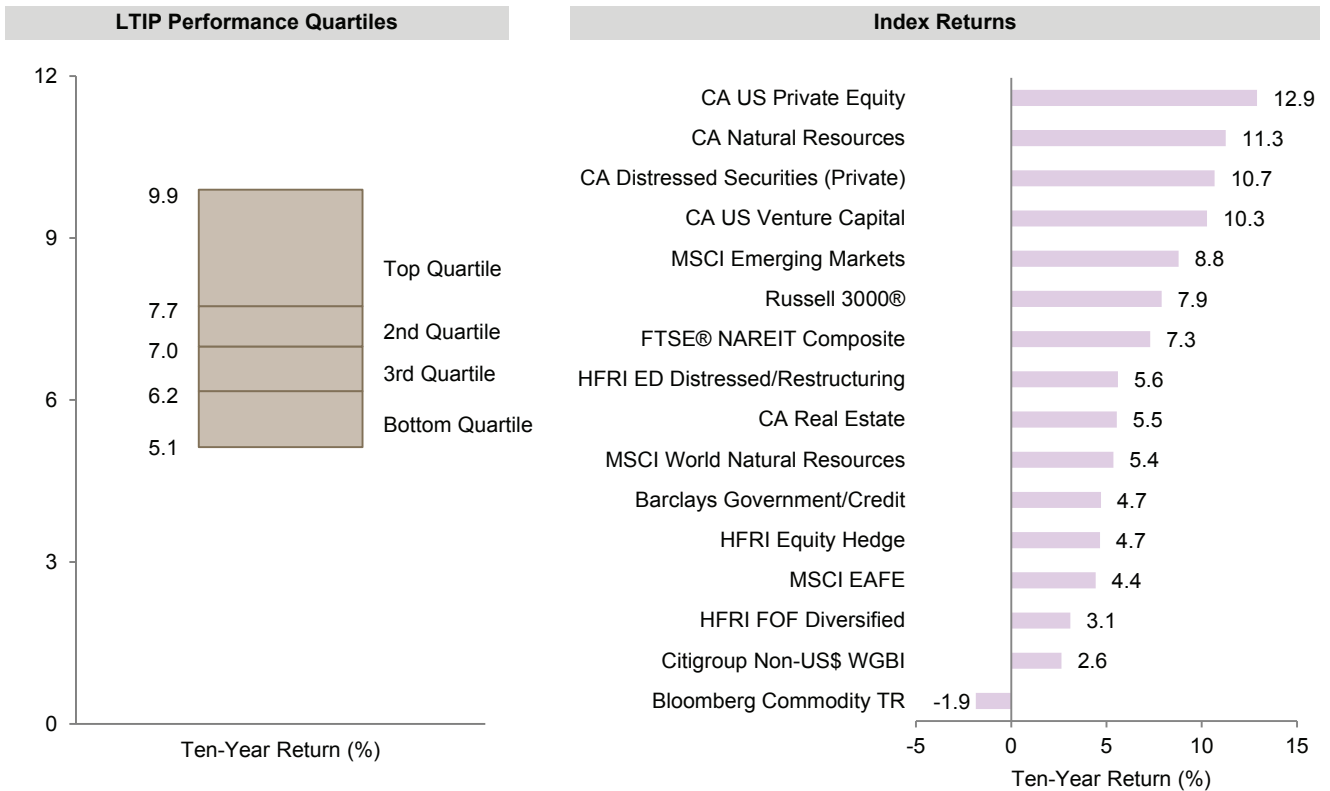
Relative Returns: Simple Portfolio Benchmark.

Since the stock market bottom on March 9, 2009, US equities have been among the top-performing investments. Consequently, most foundations have considerably lagged a simple 70/30 benchmark that uses a US index for the equity component. The average foundation return underperformed this simple benchmark by over 400 bps (Figure 1) for the trailing five-year period. Even over the ten-year period that incorporates the stock market crash of late 2008 to early 2009, the average foundation return has underperformed the benchmark by 90 bps. Foundations have fared better against a 70/30 benchmark that uses a global equity index, matching this benchmark's return over the ten-year period.

These simple benchmarks help evaluate the decision to adopt the endowment model of investing where a portion of assets are

allocated across non-traditional, less liquid assets. While criticism has been recently levied against the endowment model of investing, our historical asset allocation data show that the portfolios that were most diversified over the last decade generally performed the best. Figure 14 breaks out foundations that provided asset allocation data over the last decade into four quartiles based on the trailing ten-year return. Each foundation's asset allocation data was averaged across the 11 December 31 periods that fell from 2004 to 2014. The four quartiles in the heat map table represent the average of the foundations within each quartile. The top quartile of performers, all of which reported a ten-year return that surpassed the domestic 70/30 benchmark, reported the highest average allocation to illiquid private investments and the lowest average allocation to long-only developed equities and traditional bonds.

Figure 14. Analysis of Top and Bottom Quartile Performers: Trailing Ten-Year Asset Allocation
As of December 31, 2014



	US Equity	DM ex US Equity	EM Equity	Bonds	Hedge Funds	Dist Sec	PE & VC	Private RA	Public RA and	Cash	Other
Top Quartile	20.2	13.3	7.3	12.1	15.1	3.4	11.1	8.5	4.1	4.4	0.4
2nd Quartile	23.1	14.4	5.3	13.0	18.1	2.9	8.5	3.8	5.8	4.7	0.4
3rd Quartile	28.0	14.6	6.1	14.0	14.3	2.5	6.6	3.4	7.4	2.9	0.2
Bottom Quartile	27.1	16.5	5.6	16.6	15.7	2.4	4.0	2.6	6.3	2.9	0.2
Fdn Universe Mean	24.6	14.7	6.1	13.9	15.8	2.8	7.5	4.6	5.9	3.7	0.3

Divergence of Asset Allocation from Mean

Sources: 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: Performance quartiles are based on the long-term investment portfolio’s (LTIP) trailing ten-year return as of December 31, 2014. Analysis includes 52 foundations that provided asset allocation for each December 31 period from 2004 to 2014.



Policy Portfolio Benchmarks

Relative Returns. Each nonprofit institution has its own unique blend of investment objectives, constraints, and risk tolerances. Consequently, investment policies will vary, leading to different asset allocation structures for institutions that may otherwise be considered worthy peers. While performance results of peers can be informative, they are not necessarily the most effective benchmark to evaluate an institution's investment performance.

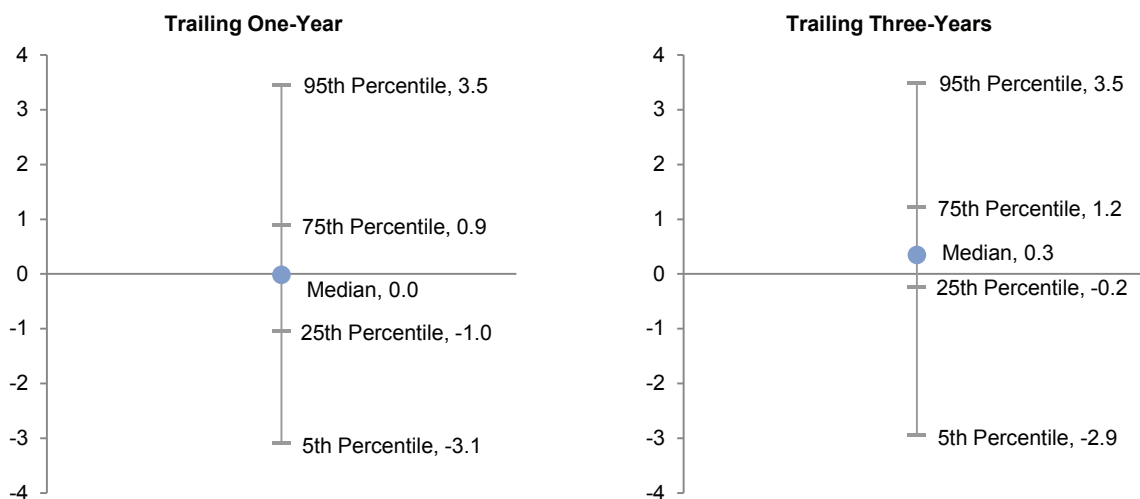
The comparison of an institution's return to its policy portfolio benchmark is the true mark for determining whether a portfolio is being successfully managed against its target investment policy. For the foundations that provided performance for their policy portfolio benchmark, the median difference between the total portfolio return and the benchmark was 0.0% for calendar year 2014 (Figure 15). Essentially, an equal number

of foundations outperformed and underperformed their policy benchmark over the trailing one-year period. Excluding outliers, returns versus the policy portfolio benchmark ranged from outperformance of 350 bps to underperformance of 310 bps. For the trailing three-year period, two-thirds of foundations (60 of 91) outperformed their policy portfolio benchmark return. The median difference between the total portfolio AACR and the benchmark was 30 bps for this three-year period.

Policy Portfolio Benchmark

Components. Nearly all of the respondents (96 of 100) that provided a policy portfolio benchmark use a detailed, asset class-specific benchmark to evaluate the performance of the total portfolio. Figure 16 summarizes the most frequently used benchmarks in policy portfolios by asset class/strategy.

Figure 15. Range of Out/Underperformance of Total Return Versus Policy Portfolio Benchmark
Statistics as of December 31, 2014 • Percentage Points



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Data points represent the difference between the total portfolio return and the policy portfolio benchmark return. One-year graph displays a range of data for 94 foundations and the three-year graph displays data for 91 foundations.

Figure 16. Frequently Used Components of Policy Portfolio Benchmarks
As of December 31, 2014

Simple Policy Benchmarks (n = 4)		
	Benchmark Description	Percent (%) of Institutions
Simple Benchmark Combinations	Combination: MSCI World and Barclays Aggregate Bond indexes	25.0
	Combination: Russell 3000® and Barclays Aggregate Bond indexes	25.0
	Combination: S&P 500 and Barclays Aggregate Bond indexes	25.0
	Combination: S&P 500, MSCI ACWI ex US, and Barclays Aggregate Bond indexes	25.0
Detailed Policy Benchmarks (n = 96)		
Asset Class/ Strategy	Benchmark Description	Percent (%) of Institutions
Global Equity (n = 41)	MSCI All Country World Index	68.3
	MSCI World Index	17.1
	MSCI All Country World Investable Market Index	2.4
	3 Other Unique Benchmarks/Combinations	12.2
US Equity (n = 61)	Russell 3000® Index	50.8
	Wilshire 5000 Index	23.0
	S&P 500 Index	16.4
	5 Other Unique Benchmarks/Combinations	9.8
Global ex US Equity (n = 62)	Combination: MSCI EAFE and MSCI Emerging Markets indexes	54.8
	MSCI All Country World ex US Index	21.0
	MSCI EAFE Index	4.8
	8 Other Unique Benchmarks/Combinations	19.4
Bonds (n = 96)	Barclays Aggregate Bond Index	27.1
	Combination: Barclays Aggregate Bond and Citigroup WGBI indexes	6.3
	Barclays Government/Credit Bond Index	6.3
	46 Other Unique Benchmarks/Combinations	60.4
Hedge Funds (n = 79)	HFRI Fund of Funds Diversified Index	40.5
	HFRI Fund of Funds Composite Index	29.1
	91-Day Treasury Bills + prespecified percentage	7.6
	15 Other Unique Benchmarks/Combinations	22.8
Private Investments (n = 52)	Cambridge Associates LLC Private Equity® and/or Venture Capital® indexes	46.2
	Russell 3000® Index + prespecified percentage	21.2
	S&P 500 Index + prespecified percentage	13.5
	6 Other Unique Benchmarks/Combinations	19.2

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Not all foundations reported a benchmark for each asset class/strategy. The percent of institutions calculation includes only those with a benchmark to the specific asset class/strategy. Benchmarks for real assets are not shown due to the unique combinations that are employed across nearly all participating foundations.

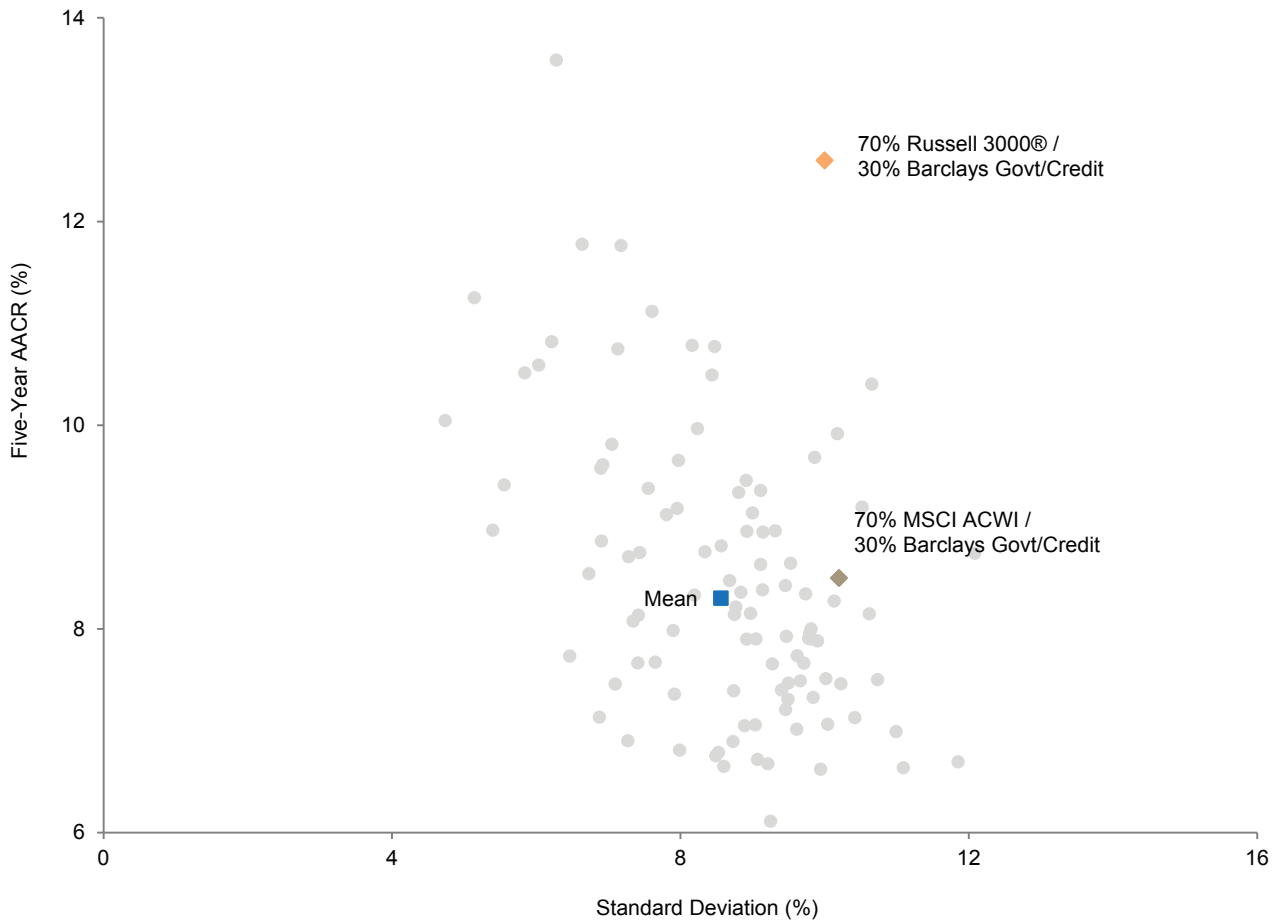
The most commonly cited benchmark used to evaluate the US equity portion of the portfolio was the Russell 3000® Index. Global ex US equity was most often measured by a blend of the MSCI EAFE and MSCI Emerging Markets indexes. The Cambridge Associates LLC Private Equity and Venture Capital indexes were the most frequently used benchmarks for private investments. An increasing number of foundations are incorporating a global equity component into their policy benchmark, which in some cases is used to measure their entire equity portfolio (including private equity). For foundations using a global equity component, the most common is the MSCI All Country World Index.

Most respondents used an HFRI index for benchmarking hedge funds, with the Fund of Funds Diversified Index the most common. The most frequently used bond benchmark was the Barclays Aggregate Bond Index, though many institutions use unique index combinations to better reflect their underlying bond exposure. For real assets, benchmark combinations are unique across nearly all participants due to the wide variety of strategies under this category.

Risk-Adjusted Performance

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 the standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken. While the average standard deviation among foundations was lower compared to a simple 70/30 benchmark containing a US equity component, the group's average return underperformed the simple benchmark by over 400 bps (Figure 17). As a result, the average Sharpe ratio of respondents over the trailing five-year period (1.01) was lower than that of the domestic 70/30 benchmark (1.25). The Sharpe ratio for a 70/30 benchmark with a global equity component was 0.85.

Figure 17. Risk/Return and Sharpe Ratio
Five Years Ended December 31, 2014



	Five-Year AACR (%)	Standard Deviation (%)	Sharpe Ratio
5th Percentile	10.8	10.6	1.70
25th Percentile	9.2	9.6	1.15
75th Percentile	7.3	7.4	0.80
95th Percentile	5.9	6.1	0.68
Mean	8.3	8.6	1.01
Median	8.1	8.8	0.93
<i>n</i> = 108			
70% Russell 3000® / 30% Barclays Govt/Credit	12.6	10.0	1.25
70% MSCI ACWI / 30% Barclays Govt/Credit	8.5	10.2	0.85

Sources: 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: Analysis includes only institutions that provided underlying quarterly returns, and excludes those that provided only annual returns.



Portfolio Asset Allocation

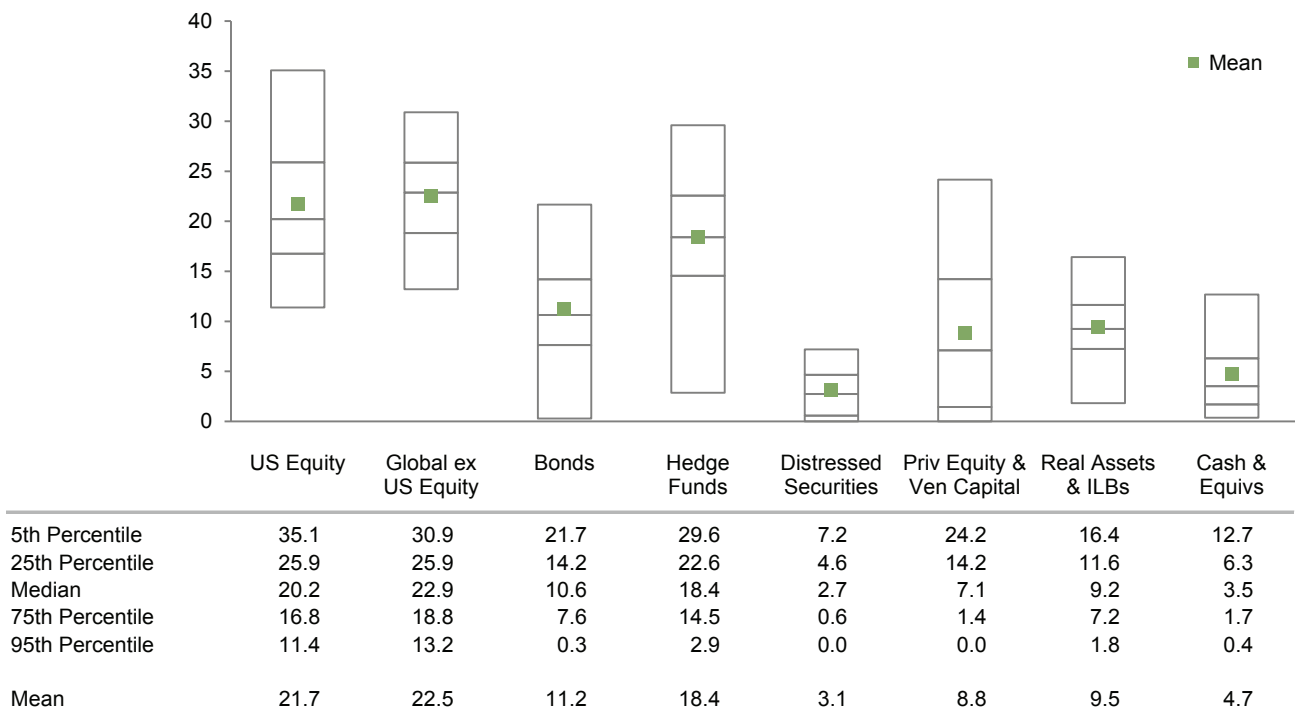
2014 Asset Allocation

Nearly 45% of the average long-term investment portfolio (LTIP) consisted of public equities at December 31, 2014. On average, allocations to global ex US equities (22.5%) were slightly higher than those to US equities (21.7%). Portfolios had significant exposure to alternative assets, with 18.4% allocated to hedge funds and 8.8% allocated to private equity/venture capital, on average. Another 3.1% was allocated on average to distressed securities, which are invested through either a hedge fund or private equity-type investment vehicle. Real assets, which consist of a diversified group of public and private assets, made up 9.5% of

portfolios, on average. Average allocations to bonds and cash were 11.2% and 4.7%, respectively (Figure 18).

Allocations to these broad asset classes vary considerably. A key factor in the variation of asset allocations continues to be the total value of assets in the LTIP (Figure 19). Smaller portfolios continue to maintain higher allocations to US equities and global ex US equities, in part because smaller asset sizes may preclude a meaningful degree of diversification into alternative assets (particularly private investments). The average allocation to private equity and venture capital is highest for institutions with assets over \$1 billion, while the average allocation to hedge funds is highest for midsized portfolios.

Figure 18. Asset Allocation Distribution by Asset Class
As of December 31, 2014 • Percent (%) • (n = 112)



Source: Foundation data as reported to Cambridge Associates LLC.

Figure 19. Summary Asset Allocation by Asset Size

As of December 31, 2014 • Percent (%)

	Under \$300mm (n = 64)		From \$300mm to \$1bn (n = 23)		Over \$1bn (n = 25)	
	Mean	Median	Mean	Median	Mean	Median
US Equity	23.3	23.2	20.7	18.4	18.3	16.8
Global ex US Equity	24.2	25.0	21.5	21.4	19.0	18.1
Developed Markets	16.8	16.8	13.7	14.0	11.0	10.5
Emerging Markets	7.4	7.7	7.8	7.8	8.0	7.7
Bonds	13.3	12.9	10.3	9.8	6.5	6.6
US Bonds	10.8	10.6	8.8	9.7	5.2	6.0
Global ex US Bonds (Developed)	1.0	0.0	0.5	0.0	0.5	0.0
Global ex US Bonds (Emerging)	1.0	0.4	0.7	0.0	0.3	0.0
High-Yield Bonds	0.4	0.0	0.3	0.0	0.5	0.0
Hedge Funds	17.8	18.4	19.2	17.9	19.0	19.6
Long/Short Hedge Funds	9.1	8.8	9.0	7.9	7.7	8.3
Absolute Return (ex Distressed)	8.7	8.3	10.2	10.1	11.3	12.2
Distressed Securities	2.7	2.7	3.2	3.7	3.8	2.5
Hedge Fund Structure	1.8	1.4	1.7	1.8	2.0	1.3
Private Equity Structure	0.9	0.2	1.6	1.5	1.9	1.3
Private Equity & Venture Capital	5.3	2.3	10.5	8.0	16.3	15.7
Venture Capital	1.7	0.2	5.7	3.9	8.1	7.5
Non-Venture Private Equity	1.6	0.3	4.1	3.3	7.8	7.3
Other Private Investments	2.0	0.5	0.7	0.3	0.3	0.0
Real Assets & Infl-Linked Bonds	8.6	8.3	9.6	10.0	11.5	11.7
Private Real Estate	1.5	0.3	2.2	2.1	4.7	4.4
Public Real Estate	0.4	0.0	0.8	0.0	0.5	0.0
Commodities	1.5	1.2	0.9	0.8	0.9	0.0
Inflation-Linked Bonds	0.4	0.0	0.3	0.0	0.8	0.0
Private Oil & Gas/Natural Resources	1.1	0.0	2.2	2.4	3.7	4.1
Timber	0.1	0.0	0.2	0.0	0.3	0.0
Public Energy/Natural Resources	3.6	4.0	2.9	2.1	0.7	0.0
Cash & Equivalents	4.5	3.5	4.7	3.5	5.4	3.3
Other	0.2	0.0	0.2	0.0	0.1	0.0

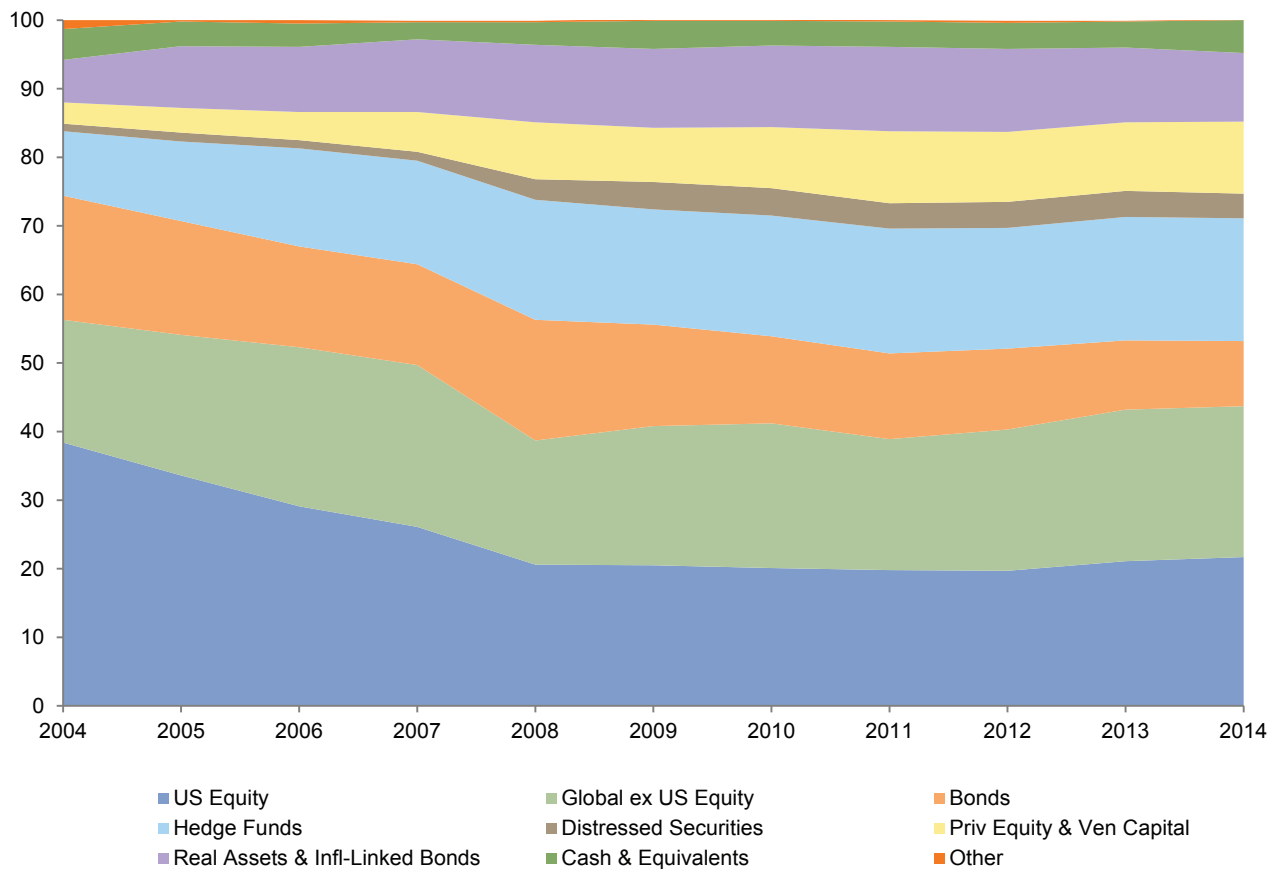
Source: Foundation data as reported to Cambridge Associates LLC.

Historical Asset Allocation

Average asset allocations at year-end 2014 look considerably different than those reported a decade ago. In general, allocations to US equities and bonds are substantially lower, while allocations to global ex US equities, hedge funds, private investments, and real assets have increased. However, the greatest extent of these changes occurred in the years leading up to the 2008–09 financial crisis (Figure 20).

Figure 21 shows the average asset allocation of foundations in 2004, 2009, and 2014. Institutions are divided into three broad asset size groups: those with assets under \$300 million, from \$300 million to \$1 billion, and over \$1 billion. Over the full ten-year period, US equity allocations declined the most, dropping by at least 16 ppts for all three peer groups. Allocations to bonds also decreased considerably, falling by more than 7 ppts across the board. All

Figure 20. Historical Mean Asset Allocation Trends
 Years Ended December 31 • Percent (%)



	Constant Universe											All Inst
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2014
US Equity	38.4	33.6	29.1	26.1	20.6	20.5	20.1	19.8	19.7	21.1	21.7	21.7
Global ex US Equity	17.9	20.5	23.2	23.6	18.1	20.3	21.1	19.1	20.6	22.1	22.0	22.5
<i>Developed Markets</i>	14.6	15.9	17.7	17.2	13.8	14.1	13.9	12.5	13.1	14.7	14.2	14.9
<i>Emerging Markets</i>	3.3	4.7	5.5	6.4	4.3	6.3	7.1	6.6	7.5	7.5	7.8	7.6
Bonds	18.1	16.6	14.7	14.7	17.6	14.8	12.7	12.5	11.8	10.1	9.5	11.2
Hedge Funds	9.4	11.6	14.3	15.1	17.5	16.8	17.6	18.2	17.6	18.0	17.9	18.4
Distressed Securities	1.1	1.3	1.2	1.3	3.0	4.0	4.0	3.7	3.8	3.8	3.6	3.1
Priv Equity & Ven Capital	3.1	3.6	4.1	5.8	8.3	7.9	8.9	10.5	10.2	10.0	10.5	8.8
Real Assets & Inflation-Linked Bonds	6.2	9.0	9.5	10.6	11.3	11.5	11.9	12.3	12.1	10.9	10.0	9.5
Cash & Equivalents	4.5	3.6	3.4	2.5	3.3	4.1	3.6	3.7	3.8	3.8	4.8	4.7
Other	1.3	0.2	0.5	0.2	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.2

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Constant universe represents 52 institutions that provided asset allocation data for each year from 2004 to 2014. All institutions represents 112 institutions that provided 2014 data.

Figure 21. Trends in Asset Allocation by Asset Size
Equal-Weighted Means as of December 31 • Percent (%)

	US	Global ex US			Bonds	Hedge Funds	Dist Sec	PE/VC	RA & ILBs	Cash & Equiv
	Equity	Total	Dev	EM						
Under \$300mm (n = 22)										
2004	40.3	18.1	15.2	2.9	19.0	8.2	1.0	1.8	5.7	4.7
2009	21.7	21.1	15.7	5.4	17.4	16.7	2.7	5.7	10.1	4.4
2014	23.8	23.7	16.4	7.3	11.7	16.9	3.3	7.6	8.6	4.5
Change (ppt)										
2009–14	2.1	2.6	0.7	1.9	-5.7	0.2	0.6	1.9	-1.5	0.1
2004–14	-16.5	5.6	1.2	4.4	-7.3	8.7	2.3	5.8	2.9	-0.2
From \$300mm to \$1bn (n = 10)										
2004	41.9	17.7	15.0	2.7	17.2	9.1	1.3	1.0	5.7	5.1
2009	24.0	23.3	16.4	6.8	15.7	16.3	3.9	3.7	10.3	2.8
2014	24.0	24.5	16.2	8.3	9.7	18.8	3.2	6.8	9.6	3.5
Change (ppt)										
2009–14	0.0	1.2	-0.2	1.5	-6.0	2.5	-0.7	3.1	-0.7	0.7
2004–14	-17.9	6.8	1.2	5.6	-7.5	9.7	1.9	5.8	3.9	-1.6
Over \$1bn (n = 20)										
2004	34.6	17.7	13.7	4.0	17.7	10.8	1.2	5.5	7.0	4.0
2009	17.3	18.1	11.2	6.9	11.5	17.0	5.5	12.5	13.6	4.3
2014	18.3	18.9	10.8	8.1	7.0	18.5	4.1	15.5	11.7	5.8
Change (ppt)										
2009–14	1.0	0.8	-0.4	1.2	-4.5	1.5	-1.4	3.0	-1.9	1.5
2004–14	-16.3	1.2	-2.9	4.1	-10.7	7.7	2.9	10.0	4.7	1.8

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Asset sizes are based on December 31, 2014, data.

asset size groups saw considerable increases to alternative assets. For the largest portfolios, the greatest increase in allocation was to private equity and venture capital. Hedge fund allocations increased the most for mid-sized portfolios.

Changes in portfolio allocations were generally more modest over the second half of the decade, and in some cases a reverse of the longer-term trends. Since 2009, US equity allocations have increased for both small and large portfolios. After increasing substantially over the first part of the last decade, allocations to real assets have

declined for all asset size groups since 2009. The largest increases over the last five years were reported to private equity and venture capital for both mid-sized and larger portfolios. Long-only equities increased the most for the smallest portfolios. All asset size groups substantially lowered their allocation to bonds over the last five years.

Target Asset Allocation

While long-term asset allocation trends clearly show how investment policies have evolved over time, one-year changes in actual allocations can be influenced by factors such as asset returns and rebalancing flows. Using shorter-term data can be misleading in determining whether foundations are altering their long-term asset allocation policies. An analysis of target asset allocations is more suitable for such an evaluation.

Over 90% of survey participants (103 of 112) provided target asset allocation data. Foundations construct their target asset allocation mix under different frameworks. Of the 103 foundations that provided target asset allocation data, 91% reported data using the traditional asset allocation-centered structure. The remaining foundations reported data using other frameworks, including role-in-portfolio. Under the role-in-portfolio framework, targets are set to broad categories based on the roles that certain investments are

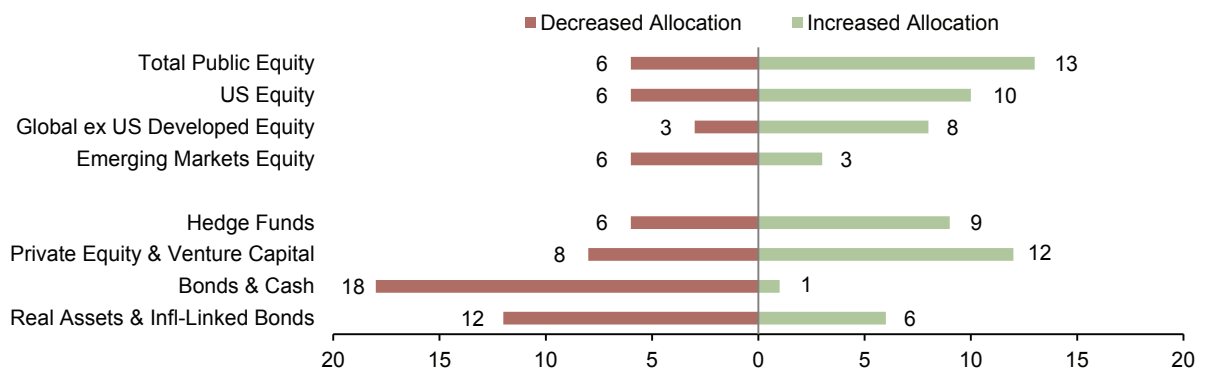
expected to play in the portfolio (e.g., growth, deflation hedging, diversifier).

Our trend analysis on this topic focuses on foundations that reported under the traditional asset allocation-centered framework. A little over one-third (36%) of these foundations made a change to their policy targets in 2014. Larger foundations were most likely to make changes to their policy targets (41%) followed by mid-sized foundations (40%) and smaller foundations (32%).

As shown in Figure 22, 13% of participating foundations increased their targets to public equities in fiscal year 2014, more than double the proportion that decreased their target (6%). Foundations were more likely to increase their policy target to US markets than other geographic regions. Among the other broad asset allocation categories, 18% lowered their target to bonds, while just 1% reported an increase. Foundations were more likely to increase their target allocations to hedge funds and private equity than to decrease them. In contrast, the proportion of institutions that

Figure 22. Changes in Target Asset Allocation

December 31, 2013 to December 31, 2014 • Percentage of Institutions Increasing or Decreasing Targets



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Exhibit represents data for 78 foundations that provided target asset allocation data for 2013 and 2014. Real assets includes targets to both public and private assets.

Figure 23. Changes in Target Asset Allocation by Asset Size
December 31, 2013 to December 31, 2014 • Percentage of Institutions Making Changes to Targets

	Total Equity	US Equity	Global ex US		Hedge Funds	PE/VC	Bonds & Cash	RA & ILBs	Other
			Dev	EM					
Under \$300mm (n = 46)									
Mean Target AA (%)									
2013	46.3	22.1	17.2	7.7	17.4	6.9	18.4	11.0	0.0
2014	46.7	22.3	17.4	7.9	17.4	6.9	17.8	10.7	0.9
% of Inst Making Changes to Targets									
Increased	15	14	10	7	11	9	0	2	7
Decreased	7	11	7	7	2	7	17	13	0
From \$300mm to \$1bn (n = 15)									
Mean Target AA (%)									
2013	42.4	19.4	15.6	8.6	16.9	11.5	15.5	12.6	1.0
2014	42.8	19.8	14.8	8.1	16.2	12.3	14.8	12.5	1.2
% of Inst Making Changes to Targets									
Increased	13	18	11	0	7	20	0	7	7
Decreased	0	0	0	10	20	0	20	7	0
Over \$1bn (n = 17)									
Mean Target AA (%)									
2013	35.6	14.3	10.2	8.2	19.8	14.4	11.3	15.2	3.8
2014	35.9	14.7	10.9	7.9	19.8	14.3	10.9	15.0	4.1
% of Inst Making Changes to Targets									
Increased	6	9	18	0	6	12	6	18	6
Decreased	12	9	0	18	6	18	18	12	6

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Asset sizes are based on December 31, 2014, data.

lowered targets to real assets was double the proportion that reported an increase. Figure 23 shows detailed data by asset size.

Private Investments and Uncalled Capital Commitments

One of the core principles of the endowment model is the use of private investments that, in part due to their illiquid nature, offer the potential for higher long-term returns than those of public equities. Participating foundations, particularly those with larger asset sizes, continue to allocate a significant portion of their portfolios to

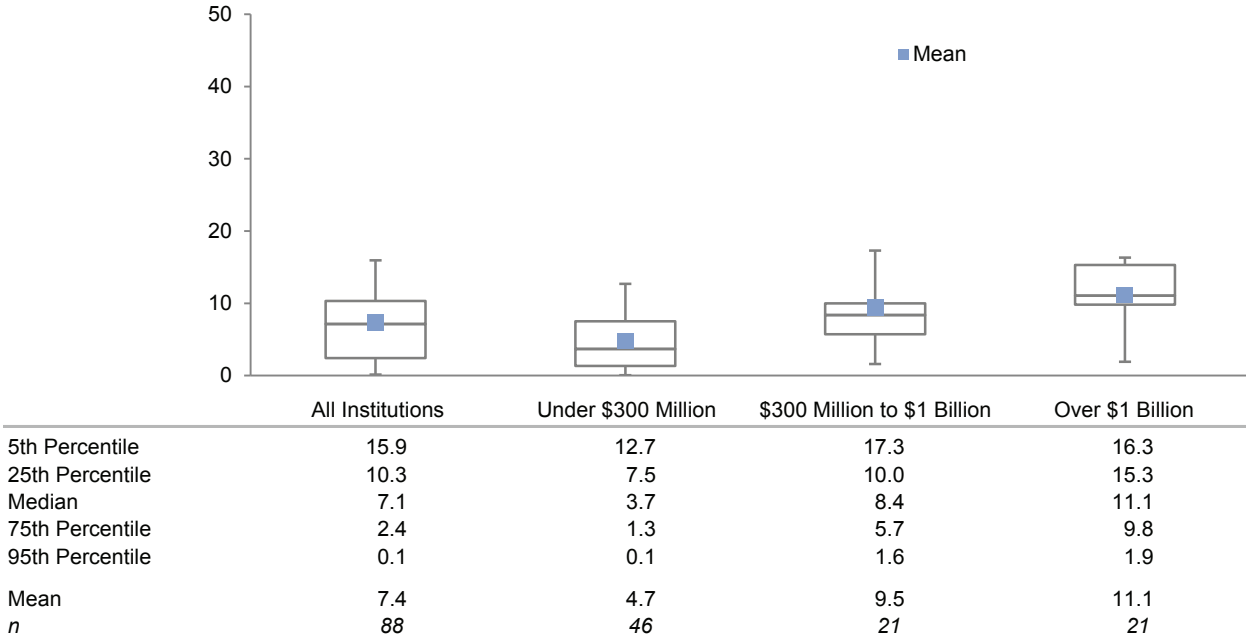
private investments.⁴ The average allocation to private investments for all participants was 14.5%, while those with portfolios greater than \$1 billion had an average allocation of 26.9% (Figure 19).

Investors should be mindful of the liquidity implications of investing in and funding a private investment program. Uncalled capital represents a commitment of capital to be funded in the future. While annual spending distributions usually represent the biggest liquidity need of a portfolio, foundations with private investment programs

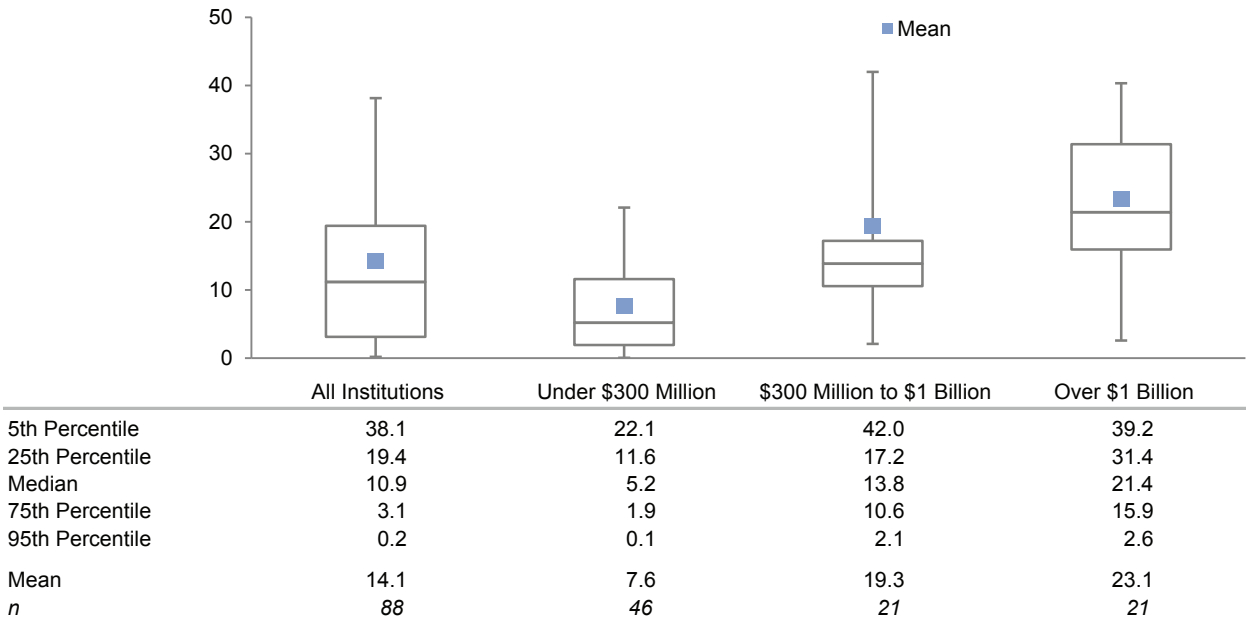
⁴ Private investments include private equity, venture capital, private distressed securities, private real estate, private oil & gas/natural resources, and timber.

Figure 24. Uncalled Capital Committed to Private Investment Funds
As of December 31, 2014 • Percent (%)

Uncalled Capital Commitments as a Percentage of the Total LTIP



Uncalled Capital Commitments as a Percentage of the LTIP's Liquid Assets



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Uncalled capital is the amount committed, but not yet paid in, to private investment funds. Liquid assets consist of all LTIP assets excluding hedge funds and private investments. Private investments include non-venture private equity, venture capital, distressed securities (private equity structure), private oil & gas/natural resources, private real estate, and timber.

must also consider the potential impact of uncalled capital commitments.

For participants with private investment programs, uncalled capital commitments as a percentage of the total LTIP value averaged 7.4% at the end of 2014 (Figure 24). Predictably, foundations with larger asset sizes tend to have a higher ratio of uncalled capital commitments to the total LTIP value. For those with asset sizes greater than \$1 billion, uncalled capital commitments represented an average of 11.1% of their total LTIP value (ranging from 1.9% to 16.3%, excluding outliers).

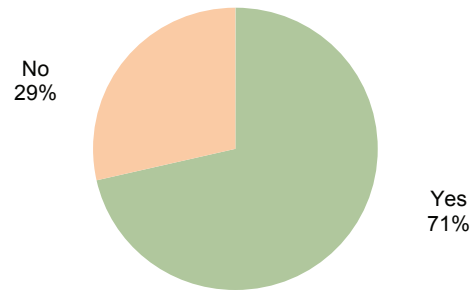
Larger foundations also tend to have a higher ratio of uncalled capital commitments to the LTIP’s total liquid assets, which exclude hedge funds and private investments. For foundations with asset sizes greater than \$1 billion, uncalled capital commitments represented an average of 23.1% of their total liquid assets. For foundations with asset sizes under \$300 million, the average was 7.6% (Figure 24).

Institutions can use a variety of sources to fund capital calls, including private investment fund distributions, cash reserves, and proceeds from sales of other investment assets. In 2014, private investment programs for most participants were cash flow positive, meaning the amount of fund distributions was higher than paid-in capital calls (Figure 25).

Figure 25. Private Investment Program Cash Flow 2014 • Data for 91 Foundations

Was Your Private Investment Program Cash Flow—Positive in 2014?

By Percentage of Institutions



By Asset Size

	Yes	No
Under \$300 Million	67%	33%
<i>n</i>	32	16
\$300 Million to \$1 Billion	67%	33%
<i>n</i>	14	7
Over \$1 Billion	86%	14%
<i>n</i>	19	3

Source: Foundation data as reported to Cambridge Associates LLC.

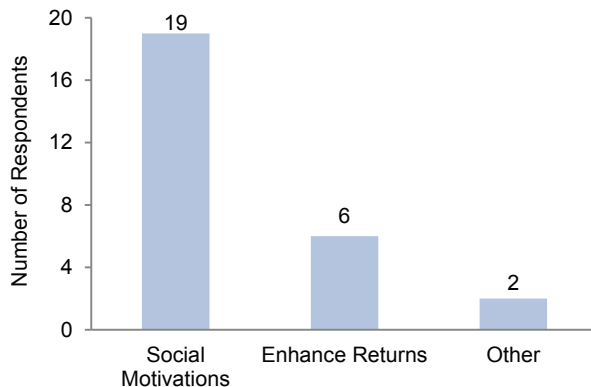
Note: Private investment fund programs were considered cash flow positive if fund distributions were higher than paid in capital calls in 2014.

Mission-Related Investing

Mission-related investing (MRI) generally refers to the incorporation of environmental and social considerations into the investment decision-making process. MRI can encompass a variety of strategies and approaches, including, but not limited to: environmental, social, and governance investing, impact investing, and socially responsible investing.

Of the 95 participants that provided data, 25 (26%) indicated that mission-related investing was factored into investment decisions for a part of the LTIP. Nearly all that cited a rationale for MRI cited social motivations, which include those that further the mission of the foundation. Six foundations indicated that they incorporate MRI factors in an effort to enhance investment returns (Figure 26).

Figure 26. Mission-Related Investing Rationales 2014



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Of the 25 foundations that reported they were engaged in mission-related investing, 21 provided data on their rationale/reasons. Respondents were able to choose multiple reasons.

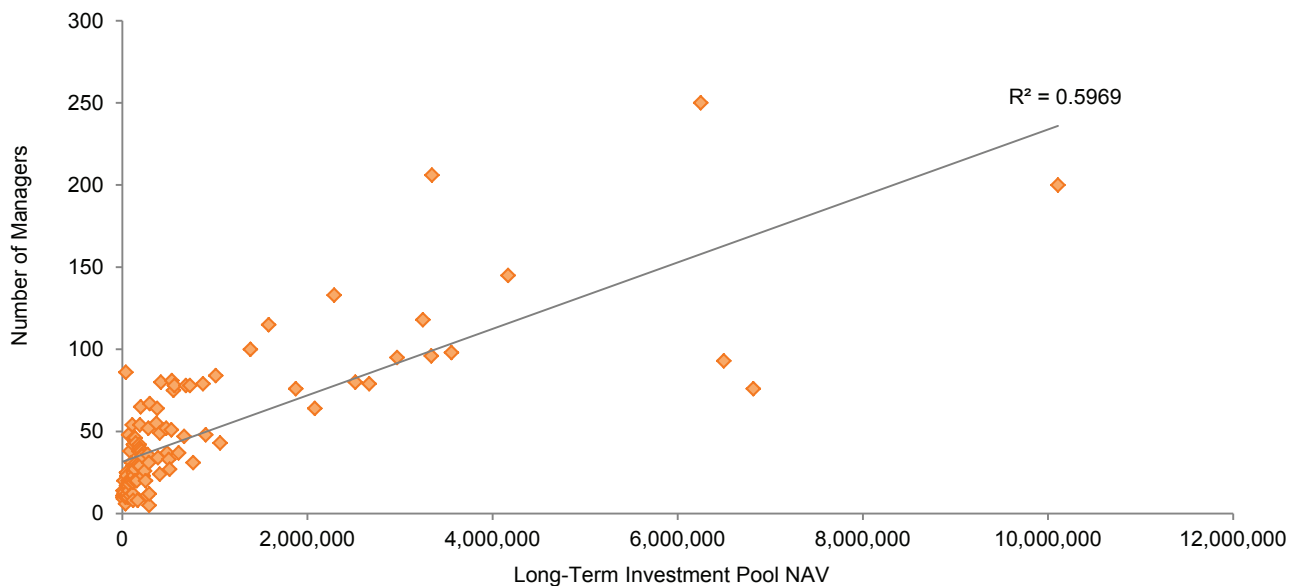
Investment Management Structures

Number of External Managers

Many factors contribute to the number of managers employed within an investment portfolio. As shown in Figure 27, the scale of total assets in the LTIP is a primary factor, as portfolios with more assets generally spread their assets across a greater number of managers. On average, foundations with assets over \$1 billion employed 109 external investment managers in fiscal year 2014 (Figure 28). In contrast, mid-sized portfolios had an average of 54 managers, while smaller portfolios reported even fewer (27). The number of investment vehicles is even higher for each peer group, mainly because of the allocation of capital across multiple funds of the same investment manager in private investment asset classes.

Even within the broad asset size groups, the range of managers employed can be wide. Within the smallest portfolios, the number of managers employed at the 25th percentile (38) is more than twice the amount used at the 75th percentile (14). For portfolios over \$1 billion, there are 208 managers employed at the 5th percentile compared to just 43 at the 95th percentile. Much of the variation can be attributed to the management of alternative asset classes. As Figure 29 shows, the dispersion in the number of alternative asset managers employed, particularly within private investments, is much wider than that of the more traditional equity and bond asset classes. Further detail on these and other asset classes are provided for the three broad asset size groups in Figure 30.

Figure 27. Number of External Managers Versus LTIP Market Value
As of December 31, 2014 • Data for 103 Foundations

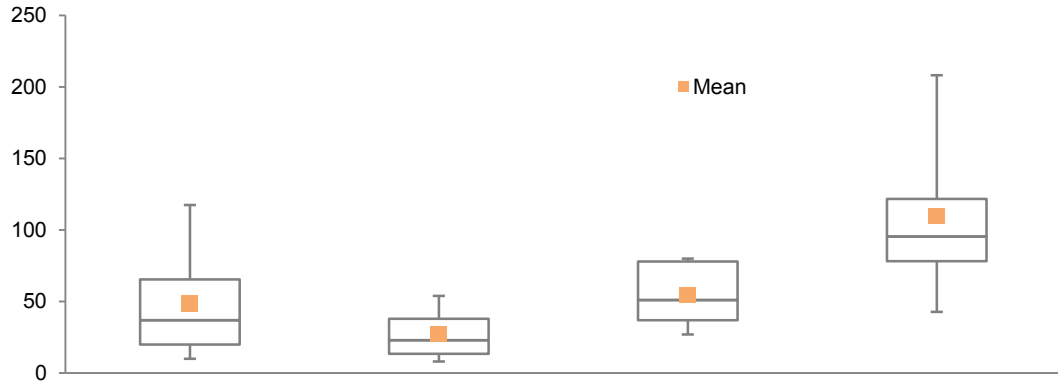


Source: Foundation data as reported to Cambridge Associates LLC.

Note: One foundation was removed as an outlier due to a relatively high LTIP market value compared to the rest of the peer universe.

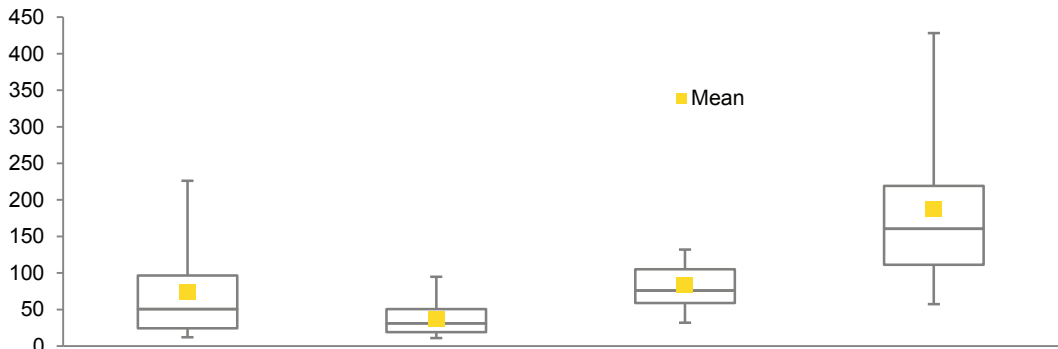
Figure 28. Number of External Managers and Investment Vehicles
As of December 31, 2014

External Managers



	All Institutions	Under \$300 Million	\$300 Million to \$1 Billion	Over \$1 Billion
5th Percentile	118	54	80	208
25th Percentile	66	38	78	122
Median	37	23	51	96
75th Percentile	20	14	37	78
95th Percentile	10	8	27	43
Mean	48	27	54	109
<i>n</i>	104	63	21	20

Investment Vehicles

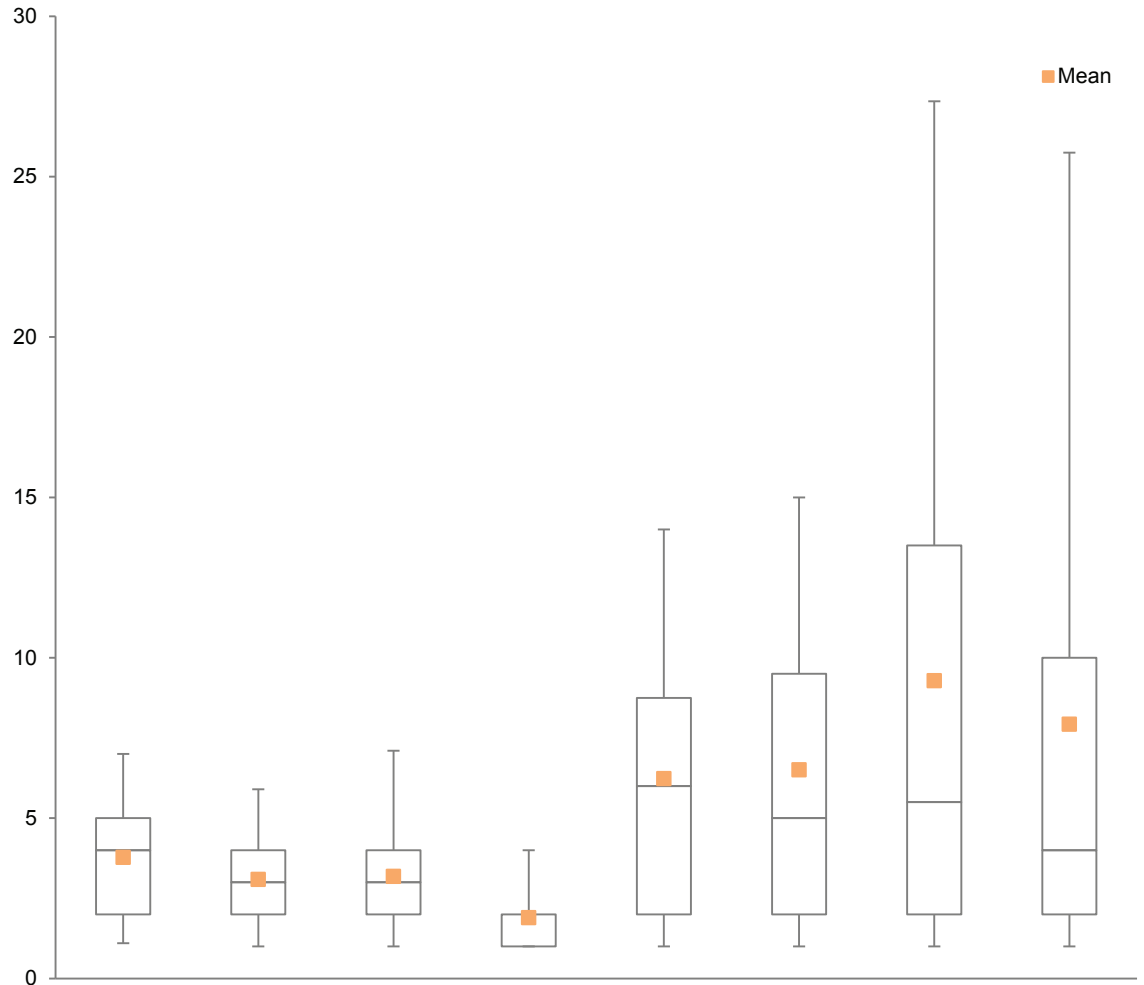


	All Institutions	Under \$500 Million	\$500 Million to \$1 Billion	Over \$1 Billion
5th Percentile	225	92	138	425
25th Percentile	96	50	105	211
Median	50	28	76	149
75th Percentile	24	18	59	117
95th Percentile	12	11	32	58
Mean	74	37	84	188
<i>n</i>	103	63	21	19

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Funds-of-funds are counted as one separate investment manager and investment vehicle.

Figure 29. Dispersion in Number of Managers for Selected Asset Classes
As of December 31, 2014



	US Equity	Global ex US Dev Equity	Emerging Markets Equity	US Bonds	Long/Short Hedge Funds	Ab Return Hedge Funds	Private Equity	Venture Capital
5th Percentile	7	6	7	4	14	15	27	26
25th Percentile	5	4	4	2	9	10	14	10
Median	4	3	3	2	6	5	6	4
75th Percentile	2	2	2	1	2	2	2	2
95th Percentile	1	1	1	1	1	1	1	1
Mean	4	3	3	2	6	7	9	8
<i>n</i>	103	103	99	95	78	99	74	70

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Only those institutions with an allocation to the specific asset class have been included. Funds-of-funds are counted as one manager.

Figure 30. Externally Managed Investment Pool Holdings by Strategy
As of December 31, 2014

Strategy	Under \$300 Million			\$300 Million to \$1 Billion			Over \$1 Billion		
	Average Number of			Average Number of			Average Number of		
	Managers	Vehicles	<i>n</i>	Managers	Vehicles	<i>n</i>	Managers	Vehicles	<i>n</i>
Traditional Equity									
Global Equity	2	2	34	2	2	11	3	3	10
US Equity	3	3	62	4	4	21	6	6	20
Global ex US Equity - Developed	2	2	62	4	4	21	5	5	20
Global ex US Equity - Emerging	2	2	59	3	3	21	6	6	19
Traditional Bonds									
Global Bonds	1	1	29	1	1	7	2	2	5
US Bonds	2	2	60	2	2	21	3	3	14
Global ex US Bonds - Developed	1	1	3	1	1	3	1	1	2
Global ex US Bonds - Emerging	1	1	8	2	2	3	1	1	3
High-Yield Bonds	1	1	7	2	3	3	2	3	3
Hedge Funds									
Long/Short Hedge Funds	4	4	41	7	7	20	10	10	17
Absolute Return (ex Dist Securities)	4	5	59	8	8	21	12	13	19
Distressed Securities									
Distressed (Hedge Fund Structure)	2	2	24	2	2	15	2	2	15
Distressed (Private Equity Structure)	2	3	33	4	7	17	8	17	13
Private Investments									
Non-Venture Private Equity	3	6	36	7	14	18	23	42	20
Venture Capital	4	6	33	7	14	18	16	41	19
Other Private Investments	2	4	37	2	3	15	3	5	9
Real Assets & ILBs									
Private Real Estate	3	5	33	5	8	17	15	28	20
Public Real Estate	1	1	9	1	1	5	1	1	6
Commodities	1	1	22	1	1	12	1	2	6
Inflation-Linked Bonds (TIPS)	1	1	3	1	1	4	1	1	4
Private Oil & Gas / Natural Resources	2	4	31	6	10	15	9	18	19
Timber	1	2	5	2	2	6	2	3	10
Public Energy/Natural Resources	1	2	48	2	2	15	1	1	9
Diversified (Multi-Strategy) RA	1	1	15	1	2	4	1	1	2
Cash (Dedicated Cash Managers Only)	2	2	43	1	2	16	1	1	17
Tactical Asset Allocation	1	1	11	1	1	4	1	1	2
Other	1	2	1	0	0	0	0	0	0

Source: Foundation data as reported to Cambridge Associates LLC.

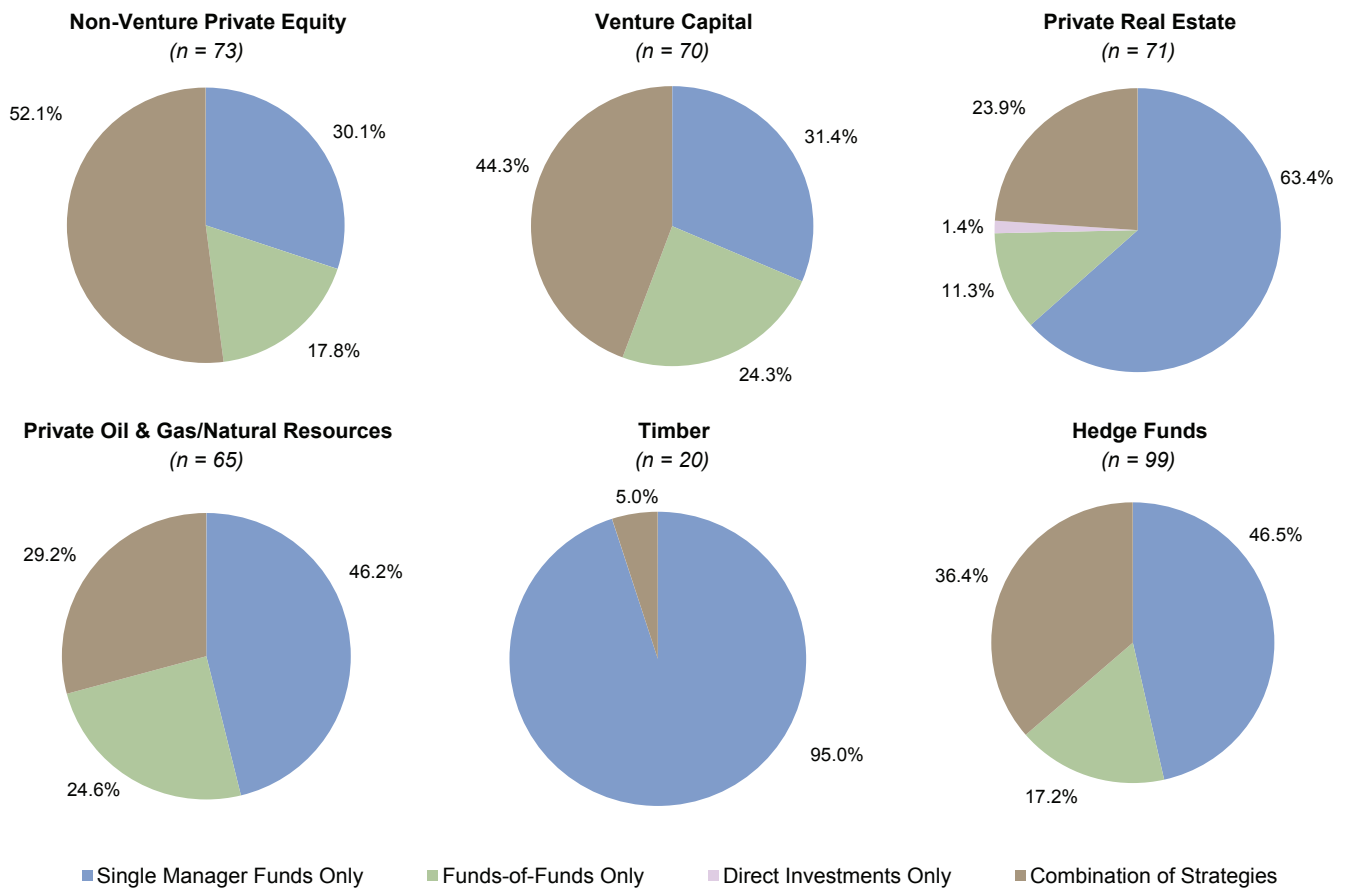
Notes: *n* indicates the number of foundations that are included in the average number of managers and average number of vehicles. Only those foundations with an allocation to the specific asset class are included in each category. As a result, the sum of the individual asset classes will not equal the true total average of managers and vehicles. Please reference Figure 28 for that information.

Asset Class Implementation

Alternative Assets. Just under half of participants (47%) have constructed a hedge fund program that solely uses single manager funds, while 17% rely only on funds-of-funds. The remaining foundations employ a combination of single manager funds and funds-of-funds (Figure 31). Implementation practices also vary across private investment asset classes. The use of a combination of strategies was most common for the implementation of private equity and

venture capital portfolios. A sole reliance upon single manager funds was most prevalent in real estate (63%) and private energy/natural resources (46%). Smaller portfolios generally employ more funds-of-funds managers than larger portfolios in all alternative asset classes, which is not surprising given the typically high minimum investments for alternative asset funds.

Figure 31. Portfolio Implementation: Private Investments and Hedge Funds
As of December 31, 2014

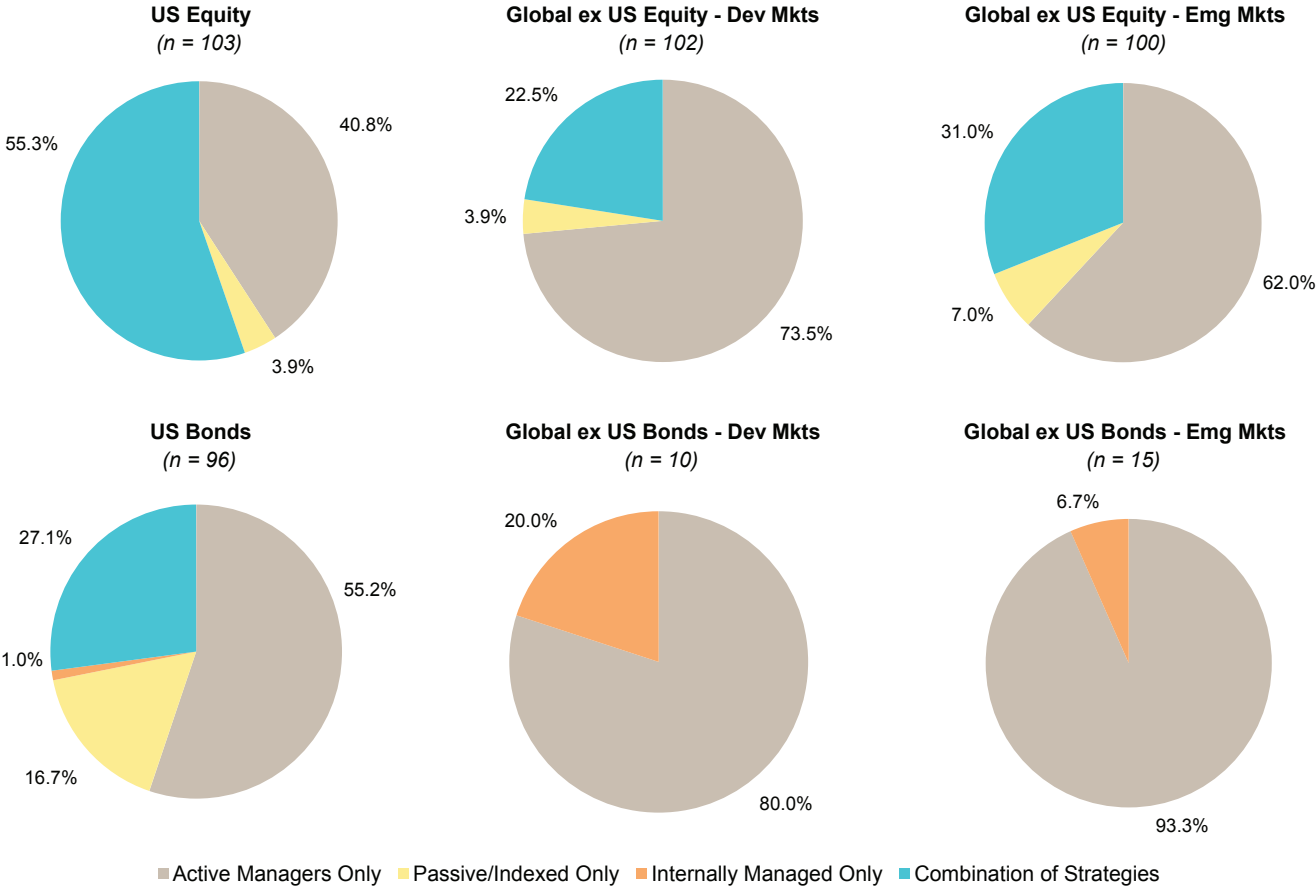


Source: Foundation data as reported to Cambridge Associates LLC.
Note: n represents the number of institutions that provided the portfolio implementation for each asset class.

Public Equities and Bonds. Of the foundations that provided data on their portfolio implementation, 41% used active managers for all of their US equity allocation. The proportion was higher for global ex US equity allocations, where developed markets and emerging markets allocations were achieved solely through active managers for

74% and 62% of respondents, respectively. For bonds, a majority of respondents used only active managers for their total allocation to US markets (55%). All respondents used either active management or internal management for their allocation to bonds in global ex US developed markets and emerging markets (Figure 32).

Figure 32. Portfolio Implementation: Traditional Equities and Bonds
As of December 31, 2014



Source: Foundation data as reported to Cambridge Associates LLC.
Note: n represents the number of institutions that provided the portfolio implementation for each asset class.



Payout From the Long-Term Investment Portfolio

Spending Requirements

While all foundations are charitable organizations, specific characteristics and objectives help to distinguish foundations into three broad classification types.

Private foundations, which generally receive funding from a single donor, are defined by the IRS as one of two types: operating or non-operating. While both must meet an annual spending requirement, each is subject to different conditions that determine the minimum spending amount.

Private Non-Operating Foundations.

Private non-operating foundations, which make up the majority of participants in this study, are required to make qualifying distributions of at least 5% of their asset value every year. They function primarily as grant-making organizations, providing funding and support to other charitable organizations.

Private Operating Foundations. In contrast, private operating foundations are established not with the intention to fund grants to outside organizations, but to provide funding and support to the foundation's own programs and activities. Bound by an annual spending requirement, private operating foundations are subject to specific guidelines that determine their minimum amount.

Community Foundations. Community foundations are a type of public charity, deriving funds from many donors rather than a single source. They mainly function as grant-making organizations, funding

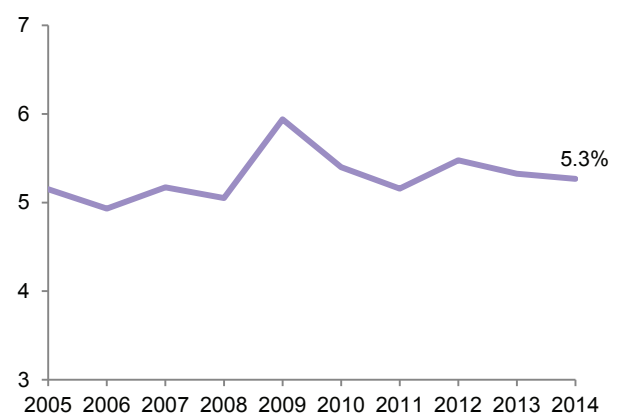
charitable support in the immediate region or locality where they are located. Community foundations are not subject to a minimum spending requirement.

Payout Rates

Annual spending distributions are withdrawn from investment assets to fund grants, program-related investments, loans, and administrative expenses related to charitable purposes. The payout rate in this study is calculated using the annual spending distribution as a percentage of the beginning market value of the long-term investment portfolio.

For the 57 private non-operating foundations that provided data in 2014, payout rates averaged 5.4%. As shown in Figure 33, when looking at a constant universe of 24 foundations that provided data from 2005 to 2014, average payout rates peaked near 6% in 2009. In the years since 2009, average payout rates have varied only modestly,

Figure 33. Mean Annual Payout Rate
2005–14 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Data represent the average of 24 private non-operating foundations that provided payout rates for each year from 2005 to 2014.

ranging from 5.2% to 5.5% over these five years. The ten community foundations that provided data for 2014 reported an average payout rate of 6.3%, while three operating foundations reported an average rate of 3.8%.

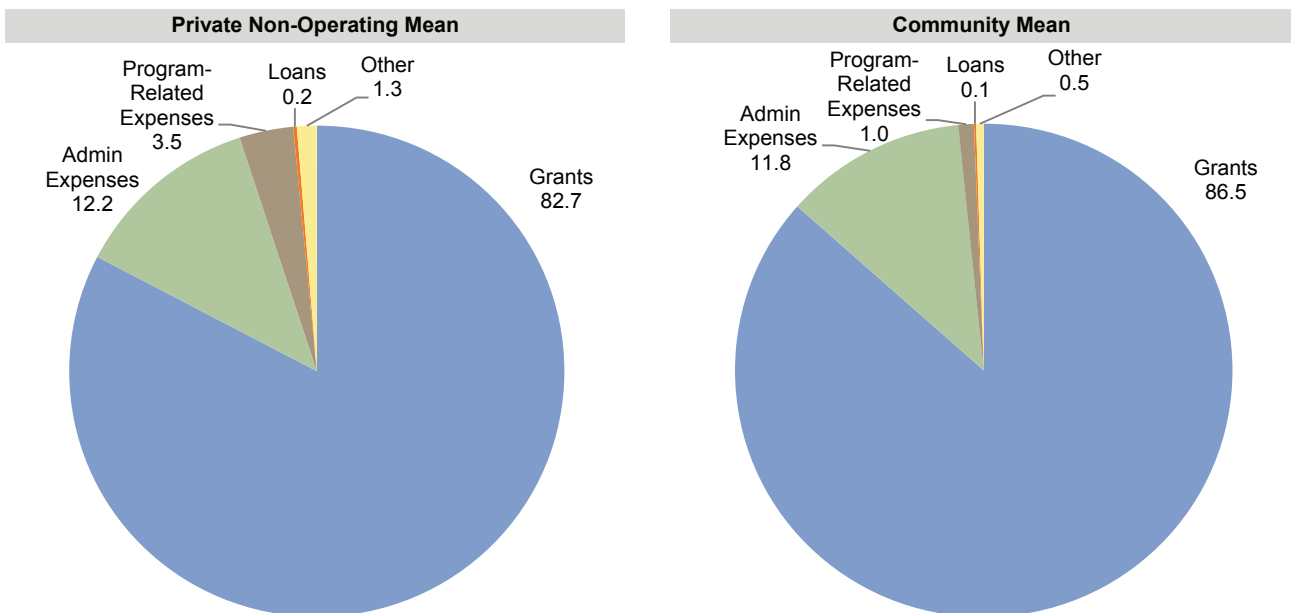
Components of Payout. Figure 34 takes a detailed look at the different components that compose a foundation’s annual payout distribution. For both private non-operating and community foundations, grants are the single largest component of annual payout, making up an average of 83% and 87% of the total payout distribution, respectively. Administrative expenses were the next largest component, consisting of 12% for both foundation types. For the three private operating foundations in this study that provided data, the largest component of

payout was program-related expenses, averaging 49% of the annual payout distribution. For these foundations, grants composed an average of 20% of annual payout.

Payout Objectives

Of the 77 private non-operating foundations that provided information about their payout objective, 53% indicated that their objective in 2013 was to pay out the legal requirement. An additional 22% reported an objective of paying out slightly more than the legal requirement, 11% had an objective shaped mainly by program goals, 5% had a payout objective shaped mainly by investment performance, and 9% reported their objective was something other than the aforementioned objectives (Figure 35).

Figure 34. Components of Payout Distribution for Foundation Types
2014 • Percentage (%) of Total Payout

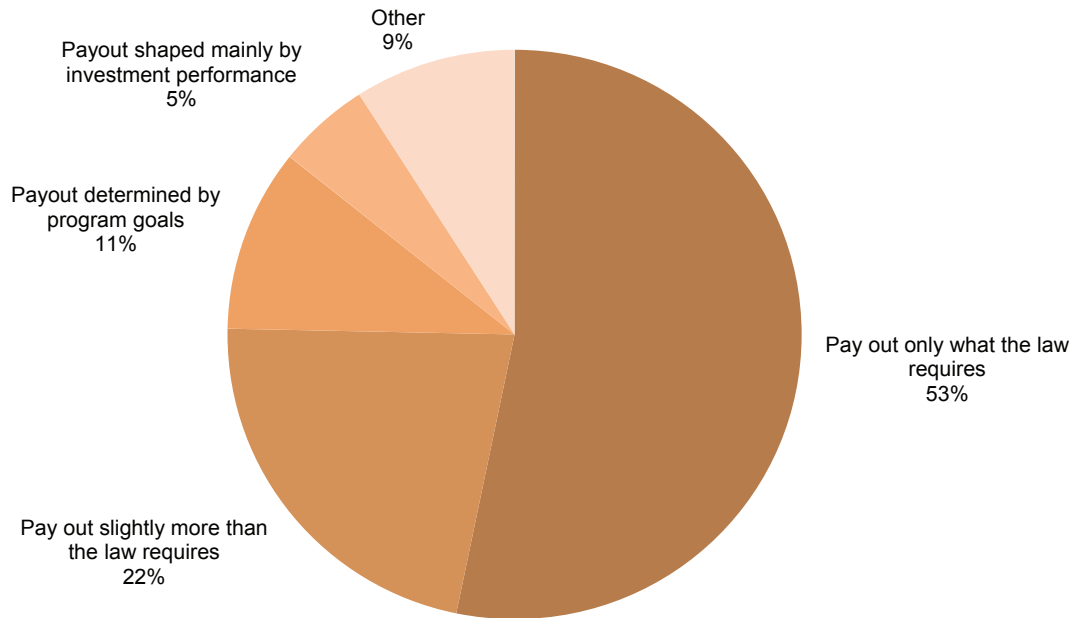


Source: Foundation data as reported to Cambridge Associates LLC.

Note: For the three private operating foundations that provided details on their payout distribution, program-related expenses represented the largest component of payout.

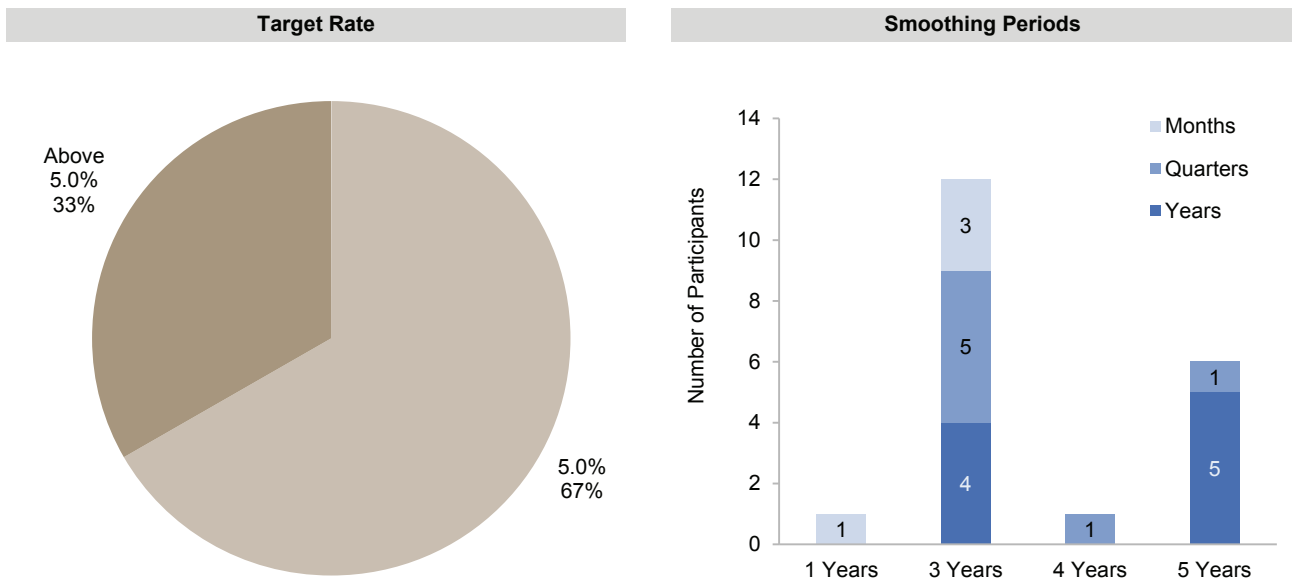


Figure 35. Payout Policy Objectives for Private Non-Operating Foundations
2014 • n = 77



Source: Foundation data as reported to Cambridge Associates LLC.

Figure 36. Characteristics of Market Value–Based Smoothing Rules
December 31, 2014



Source: Foundation data as reported to Cambridge Associates LLC

Note. Data for the Target Rate chart represent 21 private non-operating foundations that indicated the use of a market value–based smoothing rule. One institution is excluded from the Smoothing Periods chart because it uses a 13-month smoothing period.

Of the 12 community foundations in this study that provided a payout objective for 2013, six indicated that their objective was shaped mainly by investment performance. Of the remaining community foundations, four stated that payout was shaped mainly by program goals and two reported some other objective.

The three private operating foundations that provided their payout objective stated that it was to pay out slightly more than the legal requirement.

Smoothing Rule. In an effort to avoid fluctuations in their annual spending budget, some foundations will employ a smoothing rule, usually spending a targeted percentage of a moving average of market values. This helps to bring a level of stability to annual spending distributions, allowing foundations to better forecast future expenditures without the risk of compromising the long-term viability of the portfolio. The use of carryover credits and payments assists foundations in avoiding penalties in years where underspending may occur.

Of private non-operating foundations in this study, 21 indicated the use of a market value–based smoothing rule to help contain year-to-year spending. As shown in Figure 36, a target spending rate of 5.0% was used by two-thirds of these foundations, while the remaining foundations reported a target rate above 5.0%. Smoothing periods ranged from one to five years. ■

Data Collection and Results

This report includes data for 112 foundations. All participants provided investment pool data as of December 31, 2014. The notation of n denotes the number of institutions included in each analysis.

The majority of participants are private foundations, 95 of which are classified as non-operating foundations and four as operating foundations. Of the remaining participants, 13 are community foundations.

Calculation of the Real Rate of Return

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 the report, the measure used for this purpose is the Consumer Price Index (CPI-U). Note that simply subtracting the CPI-U from the nominal total return does not result in an accurate computation of real total return. The formula is:

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

Calculation of the Return After Spending

The rate of return after spending for a given investment is calculated by dividing the total return by the spending rate for the time period. The spending rate is the dollar amount of spending for a fiscal year as a percentage of the beginning market value of assets. Note that simply subtracting the spending rate from the total return does not result in an accurate computation of total return after spending. The formula is:

$$\frac{1 + \text{Total Return}}{1 + \text{Spending Rate}} - 1 = \text{Total Return After Spending}$$

Calculation of the Sharpe Ratio

The Sharpe ratio 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, 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.

Blended Portfolio Benchmarks

Throughout the report, the 70/30 simple portfolio benchmarks are calculated assuming rebalancing occurs on the final day of each quarter. ■

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 stock, 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).
Co-investments	A direct investment made into a company alongside a general partner that originates the transaction.
Commodities	Diversified baskets of fully collateralized, long-only, commodity futures contracts. Includes funds whose value is based on the spot price of a commodity.
Community Foundation	Public charity, deriving funds from many donors rather than a single source. Mainly function as grant-making organizations, funding charitable support in the immediate region or locality where they are located. Not subjected to a minimum spending requirement.
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 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.
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 funds-of-funds and secondary market private investments.
Payout Rate	The payout rate in this study is calculated using the annual spending distribution as a percentage of the beginning market value of the long-term investment portfolio.
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 Non-Operating Foundation	Tax-exempt charitable organization that primarily makes grants to other charitable organizations, rather than operating its own programs. Typically funded from one source, usually an individual, family, or business, with ongoing revenue derived from foundation investments.
Private Oil & Gas/ Natural Resources	Funds created to invest in the exploration or development of energy-related reserves and natural resources.
Private Operating Foundation	Tax-exempt charitable organization that makes its required expenditures by sponsoring and managing its own programs, rather than making grants to other charitable organizations.
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).
Single Manager Fund	A fund in which the fund manager makes the investment decisions for the assets/securities/companies held within the fund.

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 uses time-weighted cash flows.
Traditional Assets	Includes 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.

Access Strategies Fund
 Albany Foundation
 The James B. and Lois R. Archer Charitable Foundation
 Associated Jewish Community Fed. of Baltimore
 Atherton Family Foundation
 Baltimore Community Foundation
 Claude Worthington Benedum Foundation
 Marion and Henry Bloch Family Foundation
 The Herb Block Foundation
 California Community Foundation
 The California Endowment
 James & Abigail Campbell Family Foundation
 Carnegie Corporation of New York
 The Annie E. Casey Foundation
 Central Indiana Community Foundation, Inc.
 The Clarence T.C. Ching Foundation
 Circle of Service Foundation
 Connecticut Health Foundation, Inc.
 The Dana Foundation
 William Davidson Foundation
 The Duke Endowment
 The Enfranchisement Foundation
 The Erie Community Foundation
 Richard M. Fairbanks Foundation, Inc.
 Sherman Fairchild Foundation
 Fetzer Institute
 The Field Foundation of Illinois Inc.
 The Flinn Foundation
 The Ford Family Foundation
 The Ford Foundation
 France-Merrick Foundation
 Franklin Southampton Charities
 Bill and Melinda Gates Foundation Trust
 The Gerber Foundation
 Gidwitz Memorial Foundation
 John T. Gorman Foundation
 The Florence Gould Foundation
 Grantham Foundation for the Protection of the Environment
 William Caspar Graustein Memorial Fund
 The Heinz Endowments
 Clarence E. Heller Charitable Foundation
 The F.B. Heron Foundation
 The William and Flora Hewlett Foundation
 The Highland Street Foundation
 Conrad N. Hilton Foundation
 The H & R Block Foundation
 The Hyams Foundation
 Inasmuch Foundation and Ethics and Excellence
 in Journalism
 InFaith Community Foundation
 Jewish Federation of Cleveland
 The Robert Wood Johnson Foundation
 Johnson Scholarship Foundation
 The Fletcher Jones Foundation
 The Shimon Ben Joseph Foundation
 Kansas Health Foundation
 Ewing Marion Kauffman Foundation
 W.K. Kellogg Foundation Trust
 Kleberg Foundation
 John S. and James L. Knight Foundation
 The Kresge Foundation
 Forrest C. & Frances H. Lattner Foundation
 Leaves of Grass Foundation
 Lockhart Vaughan Foundation
 John and Catherine MacArthur Foundation
 Josiah Macy Jr. Foundation
 Maine Community Foundation
 Mathile Family Foundation
 McGregor Fund
 Meadows Foundation Inc.
 The Andrew W. Mellon Foundation
 Eugene and Agnes E. Meyer Foundation
 Meyer Memorial Trust
 The Gordon & Betty Moore Foundation
 Moorings Capital LLC
 Charles Stewart Mott Foundation
 The Mt. Cuba Center Inc.
 The Dan Murphy Foundation
 National Endowment for Financial Education
 New Hampshire Charitable Foundation
 New York Community Trust
 New York State Health Foundation
 The Oregon Community Foundation
 Osprey Cove Foundation
 The David and Lucile Packard Foundation
 Ralph M. Parsons Foundation
 Virginia G. Piper Charitable Trust
 The Pittsburgh Foundation
 Nina Mason Pulliam Charitable Trust
 The Queen Lili'uokalani Trust
 The REACH Healthcare Foundation
 Regenstrief Foundation
 Winthrop Rockefeller Charitable Trust
 The Rockefeller Foundation
 Rocky Road Foundations
 The Scherman Foundation Inc.
 Caroline & Sigmund Schott Fund
 Norton Simon Art Foundation
 The Norton Simon Foundation
 The Skoll Foundation
 Alfred P. Sloan Foundation
 Square One Foundation
 The Steelcase Foundation
 W. Clement & Jessie Stone Foundation
 Stoneman Family Foundation
 The Aaron & Lillie Straus Foundation, Inc.
 Surdna Foundation Inc.
 TDC Foundation
 The Tinker Foundation
 The Wallace Foundation
 The Robert A. Welch Foundation
 Wenner-Gren Foundation
 Zellerbach Family Foundation

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