

1ST QUARTER • 2020

ENDOWMENTS QUARTERLY

A LOOK AT ASSET ALLOCATION AND TOTAL RETURNS FOR US ENDOWMENTS AND FOUNDATIONS

The Cambridge Associates US endowment and foundation universe includes colleges and universities, cultural and environmental institutions, healthcare institutions, independent schools, and other endowed nonprofit institutions, as well as foundations. This report provides asset allocation and return analyses for 390 US endowments and foundations that participated in our quarterly survey. The average market value of participating long-term investment portfolios was \$1.3 billion. The median value was \$283.1 million.

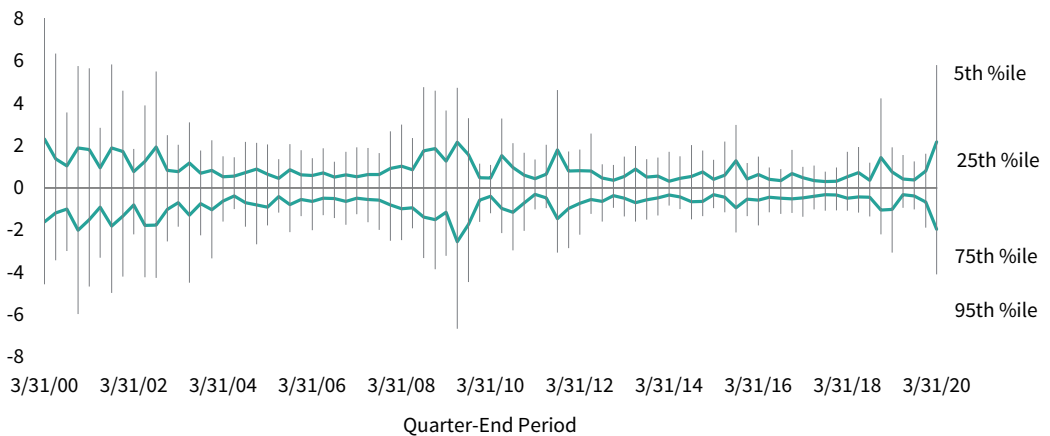
Returns are reported net of external manager fees for 388 of 390 institutions in this universe. Past Cambridge Associates surveys have shown that approximately 15% of institutions also deduct investment oversight costs in the net of fee calculation.

DISPERSION IN RETURNS DURING FIRST QUARTER 2020

The median return of the US endowment and foundation universe was -13.4% for the quarter ended March 31, 2020. Returns ranged from -7.6% at the 5th percentile to -17.5% at the 95th percentile. This dispersion in peer returns is among the widest that has been reported over the last 20 years. The variance between the 5th percentile return and the median was the highest observed since the first half of 2000.

DISPERSION IN QUARTERLY RETURNS RELATIVE TO THE MEDIAN RETURN

Quarters Ended March 31, 2000, to March 31, 2020 • Percentage Points Above/Below Median Return



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

Notes: The median return is scaled to zero for each period. The data points for the percentiles represent variance from the median. The number of institutions included in the analysis varies by quarter; there are 390 institutions included for the quarter ending March 31, 2020.

Contributing to the dispersion in first quarter returns were allocations to private investments and the various methods in which those assets were incorporated into the total return calculation. Nearly two-thirds (65%) of participants are currently reflecting a 0% return for their private investments. That flat return is used as a placeholder until actual private performance becomes available, at which point returns will be restated. Approximately 17% of respondents use the lagged basis, meaning private performance from fourth quarter 2019 is incorporated into the first quarter total return calculation. Just 5% of respondents include estimated private performance for first quarter.

PRIVATE INVESTMENT REPORTING METHODOLOGIES FOR 1Q 2020 TOTAL RETURN

| Methodology | % of E&F Universe | Consideration for Q1 Return | Key Performance Stats |
|------------------|-------------------|--|--|
| Lagged Basis | 17% | Incorporates PI performance from October 1, 2019 to December 31, 2019 | <ul style="list-style-type: none"> • 4Q 2019: CA US Private Equity Index +5.0% • 4Q:2019 CA US Venture Capital Index +5.5% |
| Flat (0%) Return | 65% | 0% for PI performance | 0% for PI performance |
| Current Basis | 5% | Uses a proxy to estimate PI performance from January 1, 2020 to March 31, 2020 | Presumably estimating markdowns that are not as great as the decline in the public markets |
| No PI Allocation | 12% | Public allocations tend to be higher in lieu of no private allocation | <ul style="list-style-type: none"> • 1Q 2020: MSCI ACWI Index -21.4% • 1Q 2020: S&P 500 Index -19.6% |

Source: Cambridge Associates LLC.

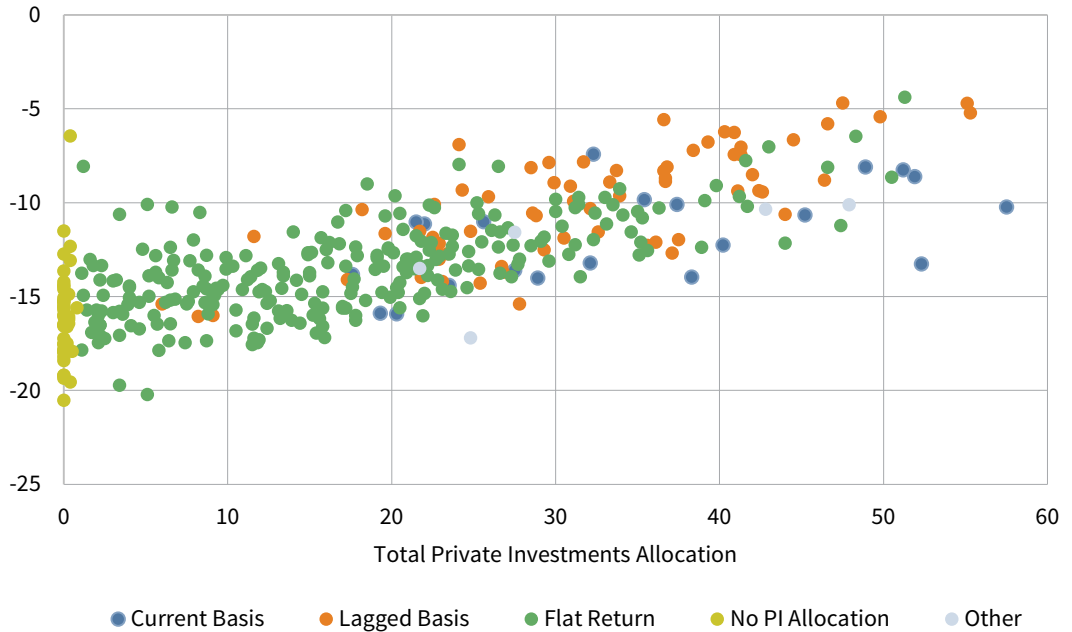
Notes: Of the universe, 1% reports in a manner in which a combination of the aforementioned methodologies are used.

Institutions with no significant private investment allocations (less than 1% of their total investment portfolios) are reflected in the No PI Allocation category.

To assess the differences in these methodologies, consider a portfolio that calculates a return using each method. The lagged basis will produce the highest return for the first quarter because it uses private investment performance from the prior quarter, a period in which private equity and venture capital produced strong returns. The flat return method will produce a return that is lower than the lagged basis, as the 0% placeholder will be lower than the private returns from the prior quarter. However, the flat method will produce a higher total return than a method that estimates private performance for first quarter. Finally, if this portfolio were to have no private allocations but higher public equity allocations instead, it would produce the lowest return of all.

1Q 2020 RETURNS VERSUS PRIVATE INVESTMENT ALLOCATIONS

Quarter Ending March 31, 2020 • US Endowments & Foundations • n = 390 • 1Q 2020 Total Portfolio Return



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

The scatterplot shows where each participant's first quarter return intersects with its total private investment allocation, with each dot assigned a color based on its private investment reporting methodology. Of the very top performers for the first quarter period, most use the lagged reporting method and tend to be at the top end of the private investment allocation range. The table below summarizes the performance quartiles, showing that 85% of respondents (57 of 67) using the lagged basis reported a return that was above the median. In contrast, 89% of respondents (40 of 45) with no private investment allocations reported a return that was below the median.

PRIVATE INVESTMENT REPORTING METHODOLOGIES BY Q1 2020 PERFORMANCE QUARTILE

| | Reporting Methodology (<i>n</i>) | | | |
|-----------------|------------------------------------|------|-------------------|---------|
| | Lagged | Flat | Current/ Other | PI < 1% |
| Top Quartile | 41 | 43 | 13 | 1 |
| 2nd Quartile | 16 | 73 | 4 | 4 |
| 3rd Quartile | 6 | 75 | 6 | 10 |
| Bottom Quartile | 4 | 61 | 3 | 30 |

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

Note: *n* denotes the number of institutions.

TRAILING ONE-YEAR RESULTS

The median return of the universe was -6.3% for the trailing one-year period. Returns ranged from 0.1% at the 5th percentile to -10.5% at the 95th percentile. Per the Consumer Price Index, the rate of inflation was 1.5% for the trailing one-year period. After adjusting nominal returns to reflect inflation, the median real return falls to -7.7%.

Figure 7 explores the relationship between asset allocation and returns and illustrates how general asset allocation structures vary across the four performance quartiles of the overall participant group. In this figure, 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.

The index returns in the top half of Figure 7 provide context on the capital market environment for the trailing one-year period. Private investment indexes are pooled horizon internal rates of return (IRRs) net of fees, expenses, and carried interest, and public indexes are time-weighted returns. Included alongside the private benchmark IRRs are public market returns on a modified public market equivalent basis (mPME). The CA mPME replicates private investment performance under public market conditions and allows for an appropriate comparison of private and public market returns.¹ The mPME analysis evaluates what return would have been earned had the dollars invested in private investments been invested in the public market index instead.

Private investment index data are not currently available for the quarter ended March 31, 2020. Therefore, the period evaluated for the private investment and mPME indexes is for the trailing nine months ended December 31, 2019. Comparative performance of private versus public markets was mixed for this period, with some private indexes outperforming their mPME benchmarks and others underperforming.

The time-weighted returns for the public indexes in Figure 7 are evaluated for the full trailing-one year period. While global equities experienced a sharp decline during first quarter 2020, the aforementioned private investment and mPME indexes do not capture that first quarter activity. Hence, there is a stark difference in the index returns between the two charts.

There is typically a relationship between the market backdrop and the disparity in asset allocations between top and bottom performers. As expected given the poor performance for public equities, institutions that posted a trailing one-year return in the top quartile had the lowest average allocation to these assets. The difference in global public equity allocations was stark, with the top quartile of performers reporting an average allocation of 35% and the bottom quartile of performers reporting an average allocation of 54%. The differential in allocations was even wider for private investments. The average combined allocation to private equity and venture capital (PE/VC) and private real assets was 28% for the top quartile of performers and just 6% for the bottom quartile of performers.

¹ Under the CA mPME methodology, the public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME net asset value is a function of mPME cash flows and public index returns.

The reporting methodologies for private investments are an important factor to consider when evaluating differentials in trailing one-year returns and asset allocations. While all institutions reflect performance for marketable asset classes through March 31, only a small proportion of the peer group have estimated private investment performance for first quarter 2020 (Figure 5). Institutions using the lagged basis incorporate private investments in a manner in which the trailing one-year return as of March 31 reflects private investment performance for the period of January 1, 2019, to December 31, 2019. While institutions using the partial basis reflect true up private returns for historical periods, the quarter ending March 31 currently uses a 0% placeholder for private investments in the total return calculation. Both the lagged basis and the partial basis will produce a better return for the period ending March 31 relative to a portfolio that has higher public equity allocations in lieu of private investments. The higher the private allocation is for a portfolio, the more magnified this effect will be.

CAMBRIDGE ASSOCIATES PRIVATE INVESTMENT INDEX RETURNS

| | One Quarter | | | | |
|------------------------------|------------------------------|---------|---------|---------|---------|
| | End-to-End Pooled Return (%) | | | | |
| | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 |
| US Private Equity | 5.5 | 4.6 | 2.2 | 5.0 | NA |
| Global ex US Private Equity | 3.8 | 3.9 | -0.2 | 7.0 | NA |
| US Venture Capital | 6.5 | 6.9 | -0.7 | 5.5 | NA |
| Global ex US Venture Capital | 3.5 | 4.4 | 0.8 | 7.3 | NA |
| Real Estate | 1.6 | 2.3 | 1.0 | 3.5 | NA |
| Natural Resources | 2.1 | -2.4 | -3.6 | -2.0 | NA |

Lagged Basis
 Partial Basis

Source: Cambridge Associates LLC.
Note: NA indicates data were not available.

ONE-YEAR ATTRIBUTION. Although asset allocation is a key driver of absolute performance, it does not fully explain the variation of returns that are reported across different institutions. The execution or implementation of an asset allocation strategy also contributes to the total returns that portfolios earn. We do not have the level of detailed data that is necessary to perform a precise attribution analysis, but our data does allow us to conduct an estimated analysis that can help illuminate the main drivers of performance for the trailing one-year period.

Figure 8 illustrates the results of an estimated attribution analysis based on the one-year return and beginning year asset allocation of 374 endowments and foundations that provided sufficient data. The portion of the mean participant return that can be attributed to asset allocation is calculated using a blend of representative asset class benchmarks weighted according to each institution’s asset allocation. The return from other factors is calculated by subtracting the mean asset allocation return from the mean participant return. This “other” portion of returns is principally driven by

implementation or execution decisions, which can include active management and manager selection.² The attribution analysis estimates the average portfolio generated an asset allocation return of -6.2% for the trailing one-year period and an implementation return of 0.5%.

The table on the bottom part of Figure 8 shows each asset class's contribution to the overall mean asset allocation return. Each category's contribution is a function of its benchmark return as well as the participant group's average allocation to the category. US bonds, which returned 9% for the trailing one-year period and had one of the higher average allocations of the detailed asset classes, had the greatest positive impact of all the asset class return contributors. Unsurprisingly, the largest negative contributions to performance came from public equity asset classes.

Figure 8 also provides a breakdown of the attribution data into the four performance quartiles of the overall group, which highlights the different experiences among institutions. The top performance quartile had the highest mean asset allocation return (-3.8%), while the bottom performance quartile had the lowest (-8.4%). The model estimates that the top quartile of performers added an average of 260 basis points (bps) to their total return because of the impact of implementation decisions. In contrast, the bottom quartile of performers lost 120 bps due to implementation.

TRAILING TEN-YEAR RESULTS

As noted earlier, asset allocation can be a factor in the variation in returns reported across the participant group. To investigate the impact of asset allocation policies on long-term investment performance, Figure 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 March 31 periods that fell from 2010 to 2020. The four quartiles in the heat map table represent the average of the institutions within each quartile.

Most private investment indexes outperformed their mPME benchmarks over the past decade. As would be expected given this market backdrop, the top quartile of performers over this period reported an average allocation to private investments that was considerably higher than the other performance quartiles.

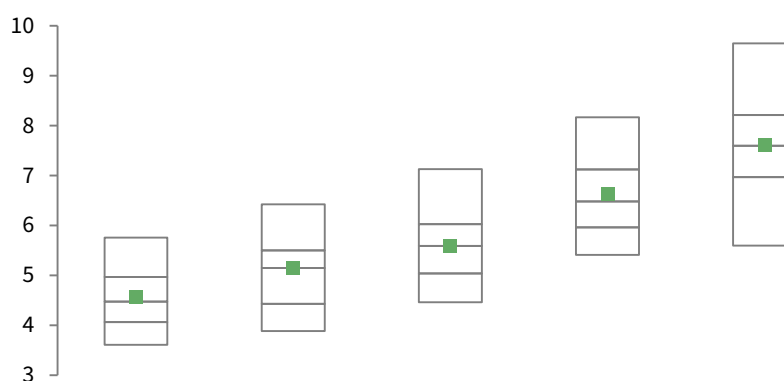
The figure on page seven organizes participants into five subgroups based on each institution's trailing ten-year average allocation to private investments. The median ten-year return for portfolios with an allocation of more than 30% to private investments was 7.6%, approximately 310 bps higher than the median return reported by portfolios with little to no private investment allocation. In fact, the median return for this group with the highest private allocations outperformed the 5th percentile return for the subgroups with less than 20% allocated to private investments.

² This model assumes that flows to and from investment managers take place on the last day of the fiscal year. In addition, the analysis uses a standard set of asset class benchmarks that may be more or less representative of the asset allocation policy across different institutions. Therefore, the portion of returns from other factors may also include some residual/unattributable asset allocation effects.

The distribution of returns for the five subgroups shows a wide range of results, a disclaimer that not all portfolios with the highest allocations to private investments earn the best performance. 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 10-YR RETURNS BY PRIVATE INVESTMENT ALLOCATION

As of March 31, 2020 • Percent (%)



| | Private Investment Allocation | | | | |
|-----------|-------------------------------|----------|-----------|-----------|-------|
| | < 5% | 5% - 10% | 10% - 20% | 20% - 30% | > 30% |
| 5th %ile | 5.8 | 6.4 | 7.1 | 8.2 | 9.6 |
| 25th %ile | 5.0 | 5.5 | 6.0 | 7.1 | 8.2 |
| Median | 4.5 | 5.1 | 5.6 | 6.5 | 7.6 |
| 75th %ile | 4.1 | 4.4 | 5.0 | 6.0 | 7.0 |
| 95th %ile | 3.6 | 3.9 | 4.5 | 5.4 | 5.6 |
| Mean | 4.6 | 5.1 | 5.6 | 6.6 | 7.6 |
| <i>n</i> | 60 | 37 | 81 | 39 | 29 |

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

Notes: Each institution's private investment allocation represents the mean for the 11 March 31 periods from 2010 to 2020. Returns are annualized.

TEN-YEAR ATTRIBUTION. The attribution model also points to an outperforming asset allocation structure for the top performance quartile over the last decade. Figure 10 shows that the top performance quartile had a mean asset class return of 6.3% for the trailing ten-year period, approximately 2.1 percentage points higher than the bottom performance quartile. The top performance quartile also added another 1.2% on average through implementation decisions, while the bottom performance quartile added no value on average.

RISK-ADJUSTED PERFORMANCE

Risk-adjusted performance is important to evaluate, as it measures the total return relative to the total amount of risk taken by 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 the standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken.

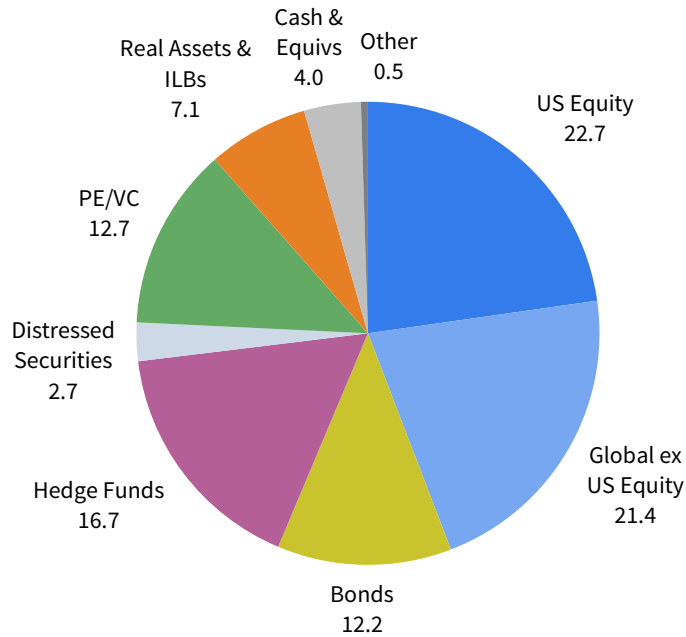
Risk-adjusted performance comparisons can be complicated when portfolios have significant allocations to private investments. The frequency and timing of private investment valuations can lead to a lower standard deviation of returns for these assets. Thus, a portfolio with high allocations to private investments can yield a lower volatility statistic relative to portfolios that have higher public equity allocations. For this reason, we have split institutions out into subcategories in Figure 13 based on their allocations to private investments.

Institutions that had an allocation of more than 15% to private investments over the last five years reported an average Sharpe ratio of 0.39, significantly higher than that of the other subgroups with smaller private allocations. While the magnitude of the differences in average Sharpe ratios is partly a function of this group's higher average five-year return, it is also attributable to its lower average standard deviation. ■

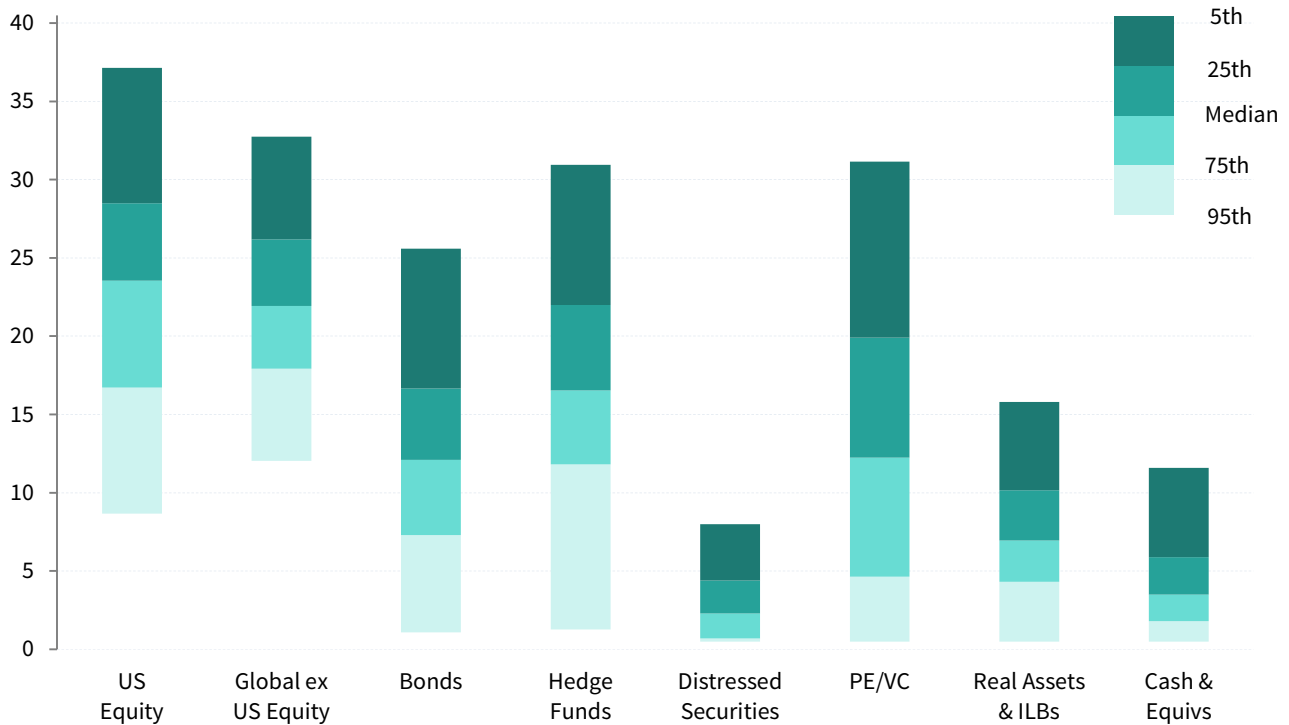
FIGURE 1 ASSET ALLOCATION SNAPSHOT: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020 • Percent (%)

Mean Asset Allocation



Distribution by Asset Class: Asset Allocation



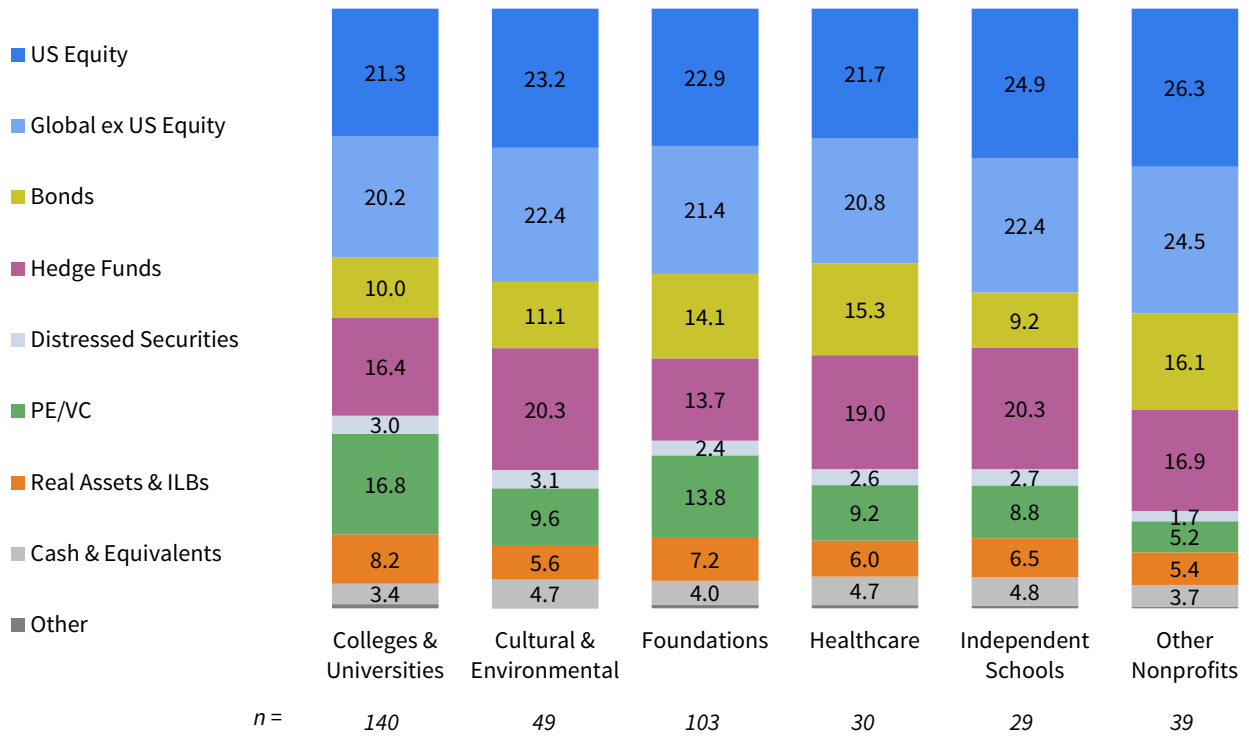
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: Analysis includes data for 390 institutions.

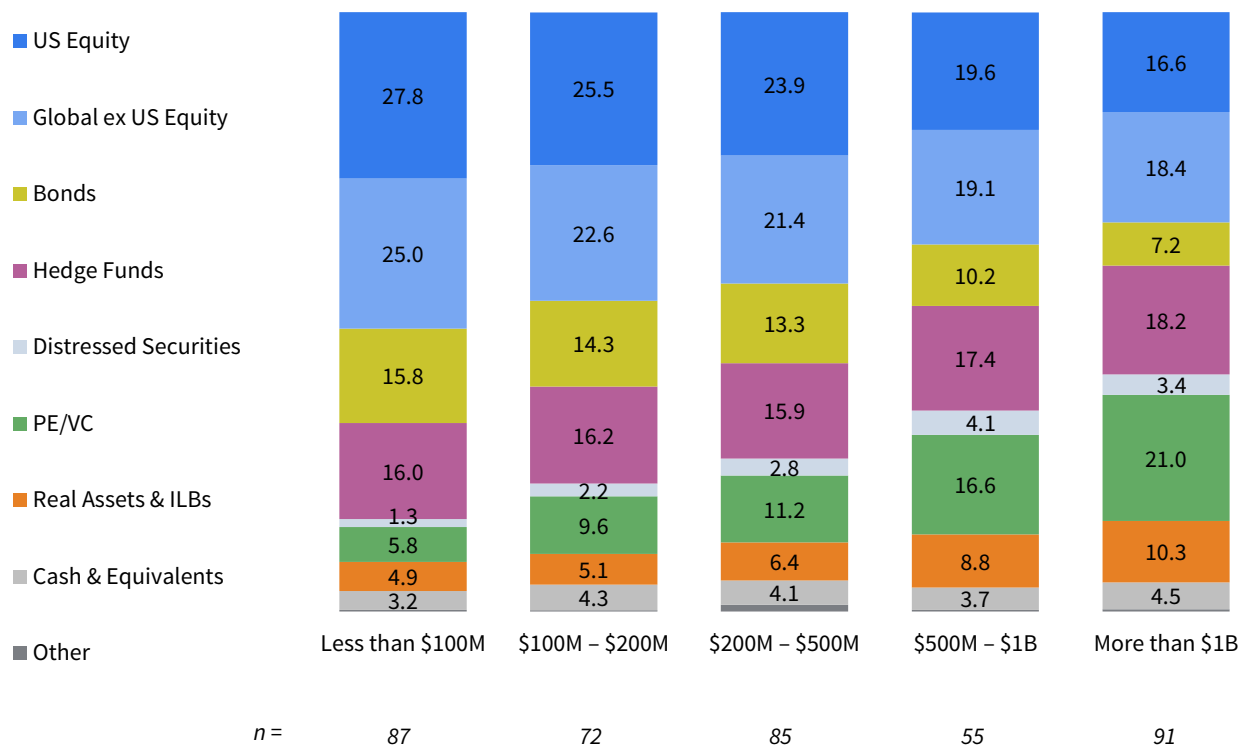
FIGURE 2 SUMMARY ASSET ALLOCATION: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020 • Percent (%)

By Peer Group



By Asset Size



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

FIGURE 3 DETAILED ASSET ALLOCATION BY PEER GROUP: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020 • Percent (%)

| | Colleges & Universities <i>n = 140</i> | | Cultural & Environmental <i>49</i> | | Foundations <i>103</i> | | Healthcare <i>30</i> | | Independent Schools <i>29</i> | | Other Nonprofits <i>39</i> | |
|---------------------------------|---|-------------|---------------------------------------|-------------|---------------------------|-------------|-------------------------|-------------|----------------------------------|-------------|-------------------------------|-------------|
| | Mean | Med | Mean | Med | Mean | Med | Mean | Med | Mean | Med | Mean | Med |
| US Equity | 21.3 | 21.4 | 23.2 | 24.2 | 22.9 | 22.5 | 21.7 | 22.3 | 24.9 | 26.0 | 26.3 | 27.7 |
| Global ex US Equity | 20.2 | 19.8 | 22.4 | 22.7 | 21.4 | 21.5 | 20.8 | 20.5 | 22.4 | 21.9 | 24.5 | 24.1 |
| Developed Markets | 13.7 | 13.2 | 15.1 | 15.1 | 14.7 | 14.3 | 14.8 | 14.4 | 15.4 | 15.7 | 17.2 | 16.8 |
| Emerging Markets | 6.5 | 6.4 | 7.3 | 7.4 | 6.7 | 6.6 | 6.1 | 6.0 | 7.0 | 6.2 | 7.3 | 7.0 |
| Bonds | 10.0 | 9.4 | 11.1 | 11.5 | 14.1 | 13.8 | 15.3 | 15.9 | 9.2 | 9.4 | 16.1 | 14.9 |
| US Bonds | 9.3 | 8.7 | 10.3 | 9.6 | 13.3 | 12.7 | 14.2 | 14.1 | 8.9 | 9.2 | 14.7 | 13.4 |
| Global ex US Bonds (DM) | 0.3 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.5 | 0.0 |
| Global ex US Bonds (EM) | 0.1 | 0.0 | 0.3 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.7 | 0.0 |
| High-Yield Bonds | 0.3 | 0.0 | 0.3 | 0.0 | 0.5 | 0.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 |
| Hedge Funds | 16.4 | 15.8 | 20.3 | 18.8 | 13.7 | 14.5 | 19.0 | 18.5 | 20.3 | 18.8 | 16.9 | 16.4 |
| Long/Short Hedge Funds | 6.4 | 5.4 | 7.4 | 6.2 | 5.0 | 4.3 | 7.3 | 6.7 | 9.1 | 7.2 | 5.7 | 4.8 |
| Absolute Return (ex Distressed) | 10.0 | 9.8 | 12.9 | 11.5 | 8.7 | 9.2 | 11.8 | 11.4 | 11.2 | 10.9 | 11.2 | 11.7 |
| Distressed Securities | 3.0 | 2.5 | 3.1 | 1.9 | 2.4 | 1.5 | 2.6 | 1.7 | 2.7 | 2.3 | 1.7 | 0.5 |
| Hedge Fund Structure | 1.4 | 0.7 | 1.8 | 0.2 | 1.0 | 0.0 | 1.5 | 0.8 | 0.8 | 0.0 | 1.0 | 0.0 |
| Private Equity Structure | 1.6 | 1.1 | 1.2 | 0.6 | 1.4 | 0.6 | 1.1 | 0.7 | 1.9 | 0.9 | 0.7 | 0.0 |
| PE/VC | 16.8 | 16.4 | 9.6 | 7.6 | 13.8 | 12.8 | 9.2 | 9.2 | 8.8 | 8.2 | 5.2 | 3.0 |
| Non-Venture Private Equity | 7.6 | 7.2 | 3.9 | 3.4 | 5.2 | 4.2 | 4.3 | 2.4 | 4.6 | 2.4 | 2.3 | 1.5 |
| Venture Capital | 7.1 | 5.5 | 4.5 | 2.1 | 6.3 | 3.8 | 3.5 | 1.5 | 2.7 | 1.7 | 2.0 | 0.2 |
| Other Private Investments | 2.1 | 0.6 | 1.1 | 0.5 | 2.3 | 0.8 | 1.5 | 0.3 | 1.4 | 0.7 | 0.9 | 0.2 |
| Real Assets & ILBs | 8.2 | 7.8 | 5.6 | 5.0 | 7.2 | 6.5 | 6.0 | 5.5 | 6.5 | 5.2 | 5.4 | 4.4 |
| Private Real Estate | 2.6 | 2.0 | 1.4 | 0.2 | 2.4 | 1.1 | 1.9 | 0.5 | 1.8 | 0.1 | 1.0 | 0.0 |
| Public Real Estate | 0.6 | 0.0 | 0.2 | 0.0 | 0.3 | 0.0 | 0.5 | 0.0 | 0.1 | 0.0 | 0.5 | 0.0 |
| Commodities | 0.3 | 0.0 | 0.3 | 0.0 | 0.5 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 |
| ILBs | 0.4 | 0.0 | 0.6 | 0.0 | 0.5 | 0.0 | 0.9 | 0.0 | 0.5 | 0.0 | 0.6 | 0.0 |
| Private O&G/Nat Resources | 3.2 | 3.1 | 2.3 | 1.3 | 2.2 | 1.6 | 1.2 | 0.3 | 2.6 | 2.1 | 1.6 | 0.7 |
| Timber | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Public Energy/Nat Resources | 1.0 | 0.1 | 0.9 | 0.0 | 1.1 | 0.0 | 1.0 | 0.0 | 1.1 | 0.1 | 1.5 | 1.0 |
| Cash & Equivalents | 3.4 | 2.5 | 4.7 | 3.7 | 4.0 | 3.2 | 4.7 | 2.7 | 4.8 | 2.8 | 3.7 | 2.8 |
| Other Assets | 0.7 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.5 | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 |

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

FIGURE 4 DETAILED ASSET ALLOCATION BY ASSET SIZE: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020 • Percent (%)

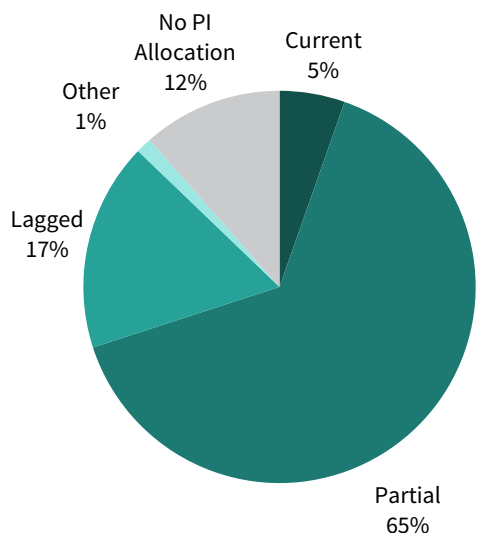
| | All Endow & Fdn <i>n</i> = 390 | | Less than \$100M 87 | | \$100M – \$200M 72 | | \$200M – \$500M 85 | | \$500M – \$1B 55 | | More than \$1B 91 | |
|---------------------------------|--------------------------------------|-------------|---------------------------|-------------|--------------------------|-------------|--------------------------|-------------|------------------------|-------------|-------------------------|-------------|
| | Mean | Med | Mean | Med | Mean | Med | Mean | Med | Mean | Med | Mean | Med |
| US Equity | 22.7 | 23.1 | 27.8 | 28.1 | 25.5 | 25.7 | 23.9 | 24.3 | 19.6 | 19.5 | 16.6 | 15.4 |
| Global ex US Equity | 21.4 | 21.5 | 25.0 | 26.1 | 22.6 | 23.1 | 21.4 | 20.9 | 19.1 | 19.8 | 18.4 | 17.0 |
| Developed Markets | 14.7 | 14.6 | 18.2 | 18.5 | 15.6 | 16.2 | 14.6 | 14.2 | 13.1 | 13.8 | 11.6 | 10.4 |
| Emerging Markets | 6.7 | 6.6 | 6.8 | 6.5 | 7.0 | 6.7 | 6.8 | 6.8 | 6.0 | 6.0 | 6.8 | 6.6 |
| Bonds | 12.2 | 11.6 | 15.8 | 14.6 | 14.3 | 14.1 | 13.3 | 13.4 | 10.2 | 9.6 | 7.2 | 6.6 |
| US Bonds | 11.4 | 11.0 | 14.8 | 13.8 | 13.6 | 13.6 | 12.6 | 12.5 | 9.8 | 9.6 | 6.0 | 6.1 |
| Global ex US Bonds (DM) | 0.3 | 0.0 | 0.3 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.5 | 0.0 |
| Global ex US Bonds (EM) | 0.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 |
| High-Yield Bonds | 0.3 | 0.0 | 0.4 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.2 | 0.0 | 0.4 | 0.0 |
| Hedge Funds | 16.7 | 16.1 | 16.0 | 15.7 | 16.2 | 15.0 | 15.9 | 14.6 | 17.4 | 15.4 | 18.2 | 17.7 |
| Long/Short Hedge Funds | 6.4 | 5.2 | 5.3 | 3.5 | 5.2 | 3.9 | 5.9 | 4.8 | 7.0 | 5.8 | 8.3 | 7.5 |
| Absolute Return (ex Distressed) | 10.4 | 10.3 | 10.7 | 10.9 | 11.0 | 10.3 | 10.0 | 10.1 | 10.4 | 9.5 | 9.9 | 10.1 |
| Distressed Securities | 2.7 | 1.8 | 1.3 | 0.0 | 2.2 | 1.3 | 2.8 | 2.8 | 4.1 | 3.1 | 3.4 | 2.5 |
| Hedge Fund Structure | 1.3 | 0.0 | 0.6 | 0.0 | 0.9 | 0.0 | 1.2 | 0.7 | 2.1 | 1.4 | 1.8 | 1.3 |
| Private Equity Structure | 1.4 | 0.7 | 0.8 | 0.0 | 1.3 | 0.4 | 1.6 | 1.2 | 2.0 | 1.6 | 1.6 | 0.9 |
| PE/VC | 12.7 | 11.8 | 5.8 | 2.3 | 9.6 | 9.4 | 11.2 | 10.5 | 16.6 | 15.8 | 21.0 | 21.5 |
| Non-Venture Private Equity | 5.5 | 4.8 | 1.7 | 0.2 | 3.3 | 2.3 | 4.8 | 5.0 | 8.0 | 7.5 | 9.9 | 10.2 |
| Venture Capital | 5.4 | 3.5 | 2.1 | 0.0 | 3.6 | 2.1 | 4.4 | 3.3 | 7.2 | 5.9 | 10.0 | 8.4 |
| Other Private Investments | 1.8 | 0.5 | 2.0 | 0.0 | 2.8 | 1.8 | 1.9 | 1.3 | 1.4 | 0.5 | 1.0 | 0.0 |
| Real Assets & ILBs | 7.1 | 6.5 | 4.9 | 4.5 | 5.1 | 5.1 | 6.4 | 6.6 | 8.8 | 8.1 | 10.3 | 9.6 |
| Private Real Estate | 2.1 | 0.9 | 0.6 | 0.0 | 0.5 | 0.1 | 1.7 | 0.7 | 3.2 | 2.1 | 4.6 | 3.2 |
| Public Real Estate | 0.4 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.8 | 0.0 | 0.4 | 0.0 |
| Commodities | 0.3 | 0.0 | 0.5 | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.4 | 0.0 |
| ILBs | 0.5 | 0.0 | 0.7 | 0.0 | 0.8 | 0.0 | 0.4 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 |
| Private O&G/Nat Resources | 2.5 | 1.9 | 1.2 | 0.0 | 1.7 | 0.9 | 2.1 | 2.1 | 3.5 | 2.9 | 4.0 | 3.9 |
| Timber | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 |
| Public Energy/Nat Resources | 1.1 | 0.1 | 1.4 | 0.5 | 1.3 | 0.2 | 1.4 | 1.2 | 0.8 | 0.0 | 0.5 | 0.0 |
| Cash & Equivalents | 4.0 | 3.0 | 3.2 | 2.4 | 4.3 | 2.8 | 4.1 | 3.0 | 3.7 | 3.1 | 4.5 | 3.6 |
| Other Assets | 0.5 | 0.0 | 0.3 | 0.0 | 0.2 | 0.0 | 1.1 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 |

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

FIGURE 5 PERFORMANCE REPORTING METHODOLOGIES: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020

Performance Reporting Methodology



By Asset Size

| | Current Basis | Partial Basis | Lagged Basis | Other | No PI Allocation |
|------------------|---------------|---------------|--------------|-------|------------------|
| Less than \$100M | - | 66% | - | - | 34% |
| <i>n</i> | | 57 | | | 30 |
| \$100M – \$200M | - | 85% | - | - | 15% |
| <i>n</i> | | 61 | | | 11 |
| \$200M – \$500M | 1% | 89% | 5% | 1% | 4% |
| <i>n</i> | 1 | 76 | 4 | 1 | 3 |
| \$500M – \$1B | 15% | 60% | 22% | 4% | - |
| <i>n</i> | 8 | 33 | 12 | 2 | |
| More than \$1B | 13% | 27% | 56% | 2% | 1% |
| <i>n</i> | 12 | 25 | 51 | 2 | 1 |

Current Basis

Total investment pool return for the trailing one-year period includes marketable asset performance and private investment performance for April 1, 2019, to March 31, 2020.

| Marketable Assets | | | |
|-------------------|------|------|------|
| 2Q19 | 3Q19 | 4Q19 | 1Q20 |
| | | | |

Private Investments

Partial Basis

Total investment pool return for the trailing one-year period includes marketable asset performance for April 1, 2019, to March 31, 2020. Private investment portion of the investment pool reflects actual performance for April 1, 2019, to December 31, 2019, and a flat return (0%) for January 1, 2020, to March 31, 2020.

| Marketable Assets | | | |
|-------------------|------|------|------|
| 2Q19 | 3Q19 | 4Q19 | 1Q20 |
| | | | |
| Actual Return | | | 0% |

Private Investments

Lagged Basis

Total investment pool return for the trailing one-year period includes marketable asset performance for April 1, 2019, to March 31, 2020, and private investment performance for January 1, 2019, to December 31, 2019.

| Marketable Assets | | | | |
|-------------------|------|------|------|------|
| 1Q19 | 2Q19 | 3Q19 | 4Q19 | 1Q20 |
| | | | | |

Private Investments

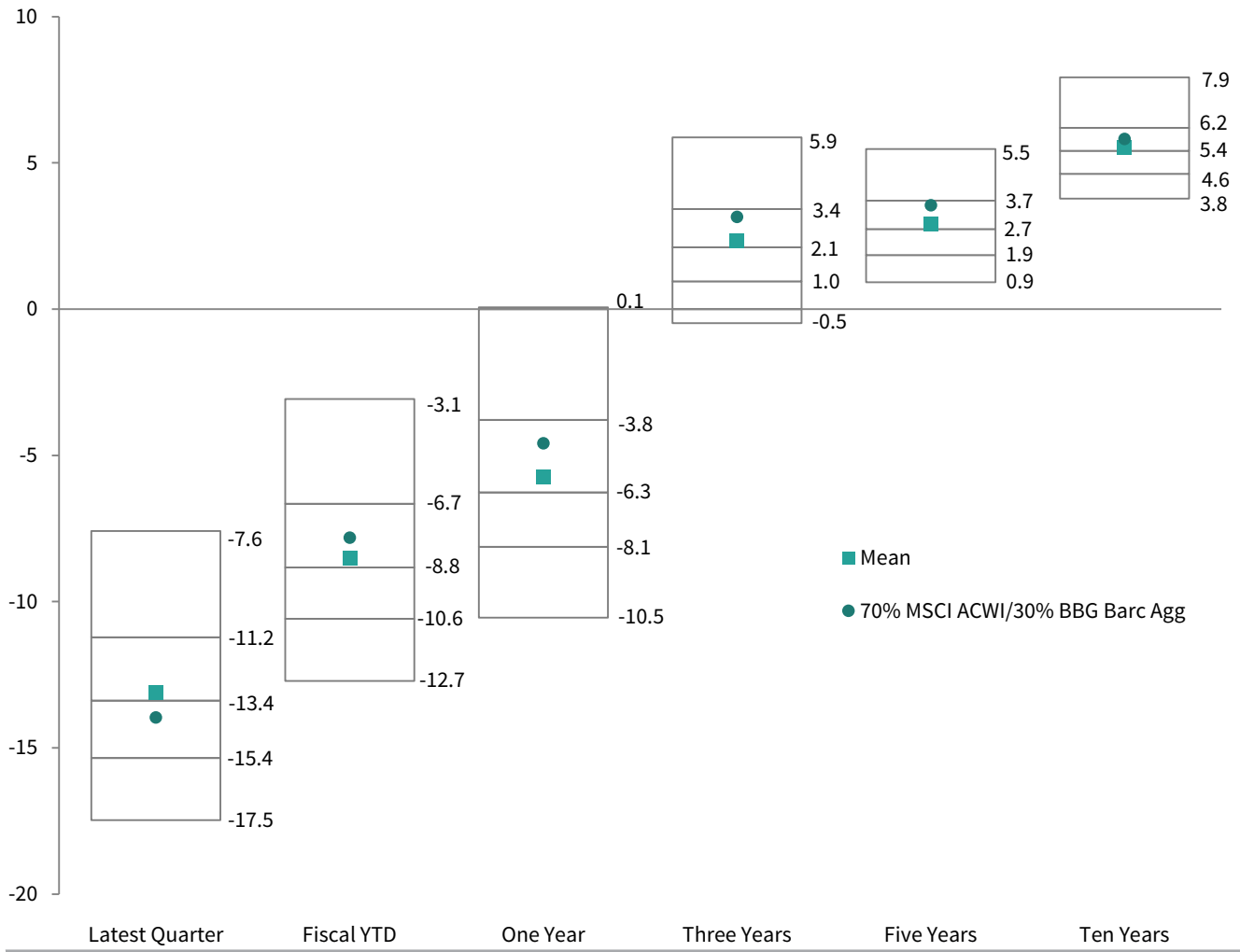
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Notes: Analysis includes data for 390 institutions. 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. Institutions with no significant private investment allocations (<1% of their total investment portfolios) are reflected in the No PI Allocation category in the pie graph and table by asset size.



FIGURE 6 NOMINAL RETURN PERCENTILES: US ENDOWMENTS AND FOUNDATIONS

Periods Ended March 31, 2020 • Percent (%)

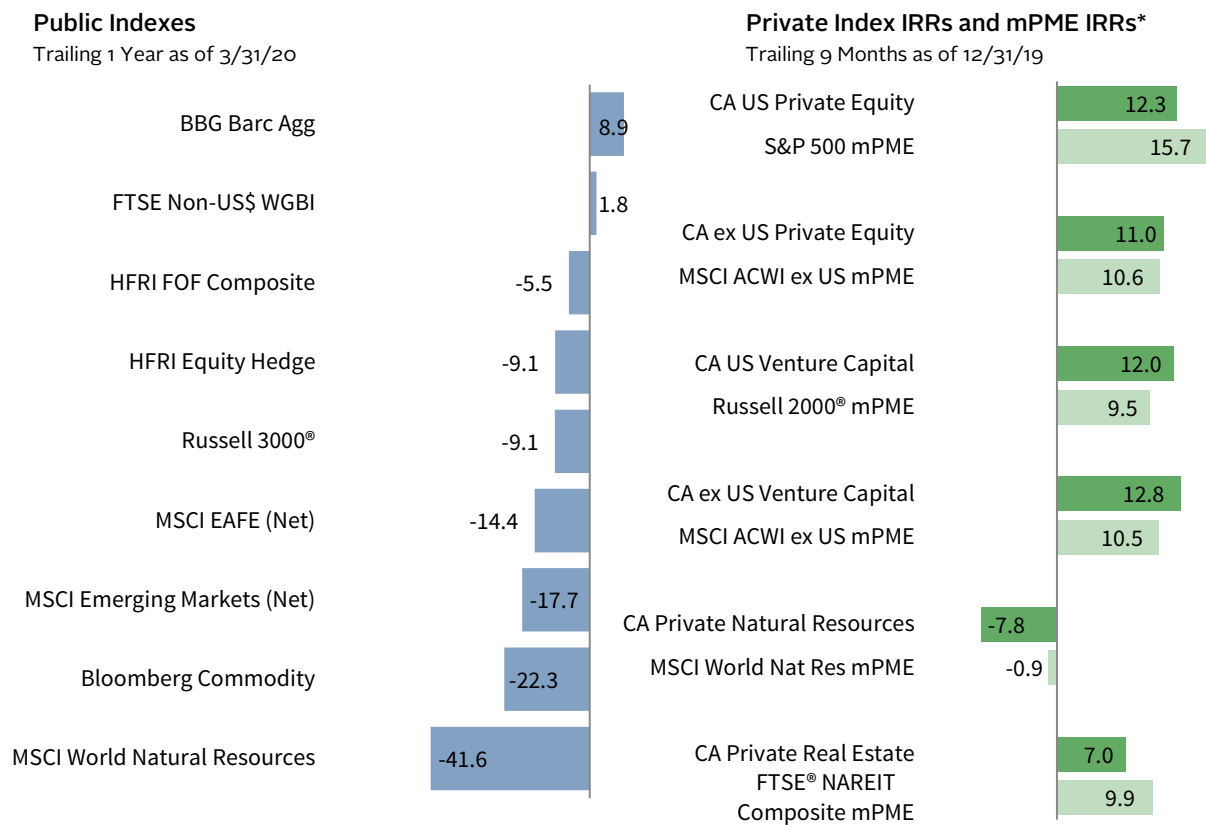


| | Latest Quarter | Fiscal YTD | One Year | Three Years | Five Years | Ten Years |
|---------------------------------------|----------------|------------|----------|-------------|------------|-----------|
| Mean | -13.1 | -8.5 | -5.7 | 2.3 | 2.9 | 5.5 |
| <i>n</i> | 390 | 389 | 389 | 383 | 377 | 351 |
| 70% MSCI ACWI/30% BBG Barc Agg | -14.0 | -7.8 | -4.6 | 3.2 | 3.6 | 5.8 |

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

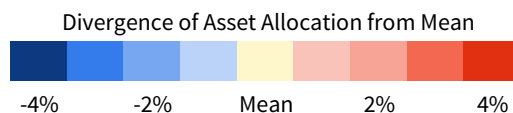
Notes: Three-, five-, and ten-year returns are annualized. The 70/30 simple portfolio benchmark is calculated assuming rebalancing occurs on the final day of each quarter. Total returns for the MSCI ACWI Index are net of dividend taxes for global ex US securities.

FIGURE 7 1-YR INDEX RETURNS AND ASSET ALLOCATION OF TOP AND BOTTOM PERFORMERS: US ENDOWMENTS AND FOUNDATIONS



Mean Asset Allocation by Performance Quartile: March 31, 2019 to March 31, 2020

| Quartile | US Equity | DM ex US Eqty | EM Equity | Bonds | Hedge Funds | Dist Sec | PE/VC | Priv RA | Pub RA & ILBs | Cash | Other |
|-------------------|-----------|---------------|-----------|-------|-------------|----------|-------|---------|---------------|------|-------|
| Top Quartile | 17.8 | 10.9 | 6.3 | 8.1 | 18.6 | 3.4 | 20.2 | 8.3 | 1.7 | 4.3 | 0.3 |
| 2nd Quartile | 22.8 | 15.3 | 7.7 | 12.1 | 16.6 | 2.9 | 12.2 | 4.4 | 2.2 | 3.6 | 0.3 |
| 3rd Quartile | 24.5 | 16.6 | 7.4 | 12.8 | 17.9 | 2.3 | 7.8 | 3.0 | 3.4 | 4.1 | 0.2 |
| Bottom Quartile | 27.1 | 19.3 | 8.0 | 13.6 | 15.3 | 1.9 | 3.9 | 1.8 | 4.7 | 3.3 | 1.2 |
| E&F Universe Mean | 23.1 | 15.5 | 7.3 | 11.6 | 17.1 | 2.6 | 11.0 | 4.4 | 3.0 | 3.8 | 0.5 |



* Private indexes are pooled horizon IRRs, net of fees, expenses, and carried interest. The CA Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME NAV is a function of mPME cash flows and public index returns.

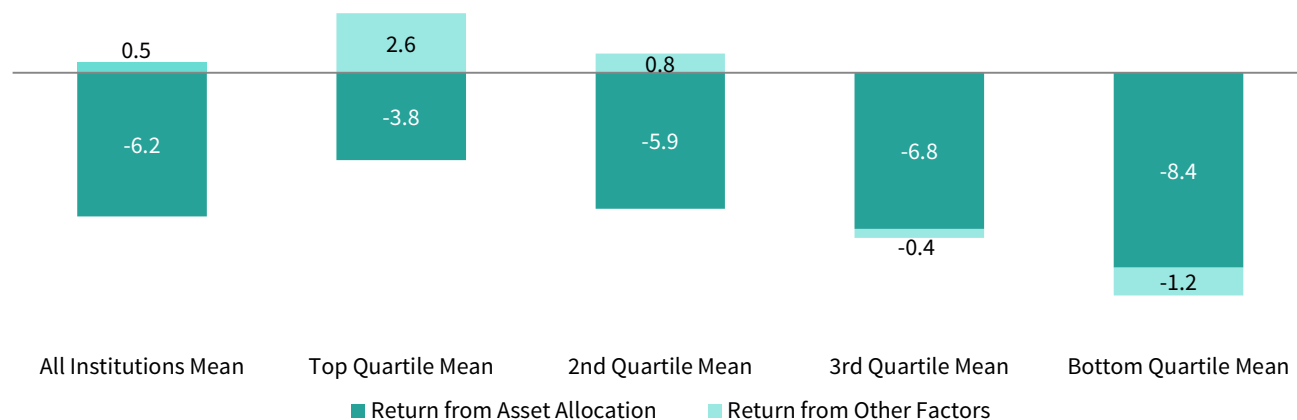
Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited, Cambridge Associates LLC, Frank Russell Company, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., the National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Analysis includes data for 374 institutions.

FIGURE 8 1-YR RETURN ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2020 • Percent (%)

1-Yr Mean Return Attribution Analysis by Quartile



Breakdown of Return from Asset Allocation for All Institutions

| Asset Class | Mean Asset Allocation | Asset Class Benchmark Return | Contribution to Asset Class Return |
|--------------------------------------|-----------------------|------------------------------|------------------------------------|
| US Bonds | 10.0 | 8.9 | 0.9 |
| Non-Venture Private Equity* | 4.1 | 12.3 | 0.5 |
| Venture Capital* | 4.2 | 12.0 | 0.5 |
| Other Private Investments* | 1.2 | 12.2 | 0.2 |
| Cash & Equivalents | 3.8 | 2.3 | 0.1 |
| Private Real Estate* | 1.7 | 7.0 | 0.1 |
| Distressed-Private Equity Structure* | 1.2 | 3.9 | 0.0 |
| Inflation-Linked Bonds | 0.5 | 6.8 | 0.0 |
| Other | 0.5 | 2.3 | 0.0 |
| Global ex US Bonds: Developed Mkts | 0.3 | 1.8 | 0.0 |
| Timber* | 0.1 | 1.2 | 0.0 |
| Global ex US Bonds: Emerging Mkts | 0.4 | -6.8 | 0.0 |
| High-Yield Bonds | 0.4 | -6.9 | 0.0 |
| Public Real Estate | 0.5 | -18.1 | -0.1 |
| Commodities | 0.5 | -22.3 | -0.1 |
| Distressed: Hedge Fund Structure | 1.4 | -12.0 | -0.2 |
| Private Oil & Gas/Natural Resources* | 2.5 | -7.8 | -0.3 |
| Absolute Return (ex Distressed) | 10.6 | -4.6 | -0.5 |
| Long/Short Hedge Funds | 6.7 | -9.1 | -0.6 |
| Public Energy / Natural Resources | 2.1 | -41.6 | -0.9 |
| Global ex US Equity: Emerging Mkts | 7.9 | -17.7 | -1.4 |
| US Equity | 23.2 | -9.1 | -2.1 |
| Global ex US Equity: Developed Mkts | 16.2 | -14.4 | -2.3 |

* Private investment benchmark returns are for the period of 4/1/19 to 12/31/19.

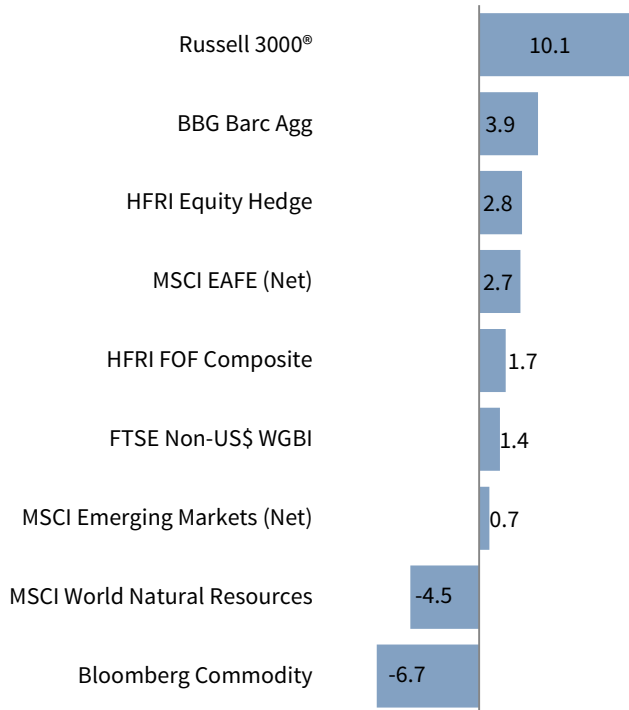
Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data provided by Bloomberg Index Services Limited, BofA Merrill Lynch, Cambridge Associates LLC, Frank Russell Company, FTSE Fixed Income LLC, FTSE International Limited, Hedge Fund Research, Inc., J.P. Morgan Securities, Inc., MSCI Inc., the National Association of Real Estate Investment Trusts, and the National Council of Real Estate Investment Fiduciaries. MSCI data provided "as is" without any express or implied warranties.

Notes: Includes data for 374 institutions that provided beginning year asset allocation. Mean asset allocation is as of March 31, 2019. The sum of the contribution to asset class return for all categories in the table equals the amount of the total return that was explained by asset allocation. To be consistent with the methodology in which private investment returns are incorporated into the total portfolio composite calculation, private investment benchmark returns are linked quarterly end-to-end returns. This model assumes that flows to and from investment managers take place on the last day of the fiscal year. In addition, the analysis uses a standard set of asset class benchmarks that may be more or less representative of the asset allocation policy across different institutions. Therefore, the portion of returns from other factors shown in the bar chart may also include some residual/unattributable asset allocation effects.

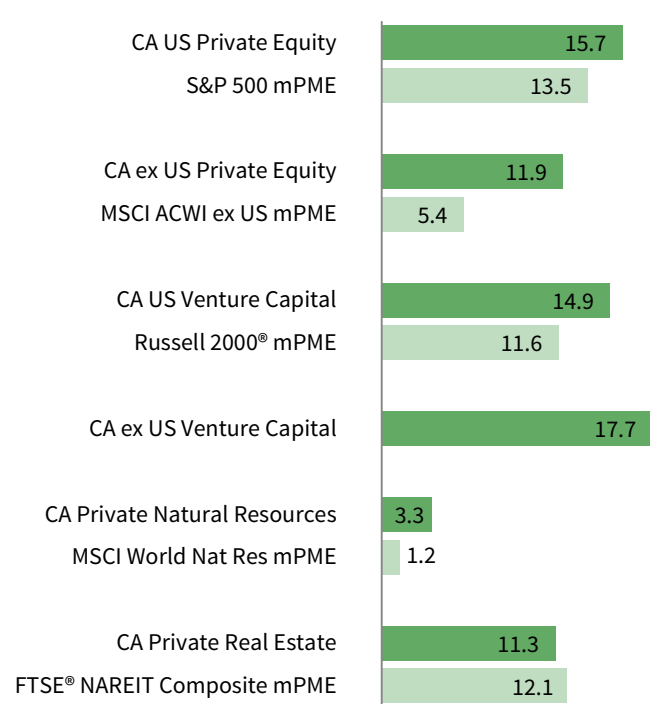
**FIGURE 9 10-YR INDEX RETURNS AND ASSET ALLOCATION OF TOP AND BOTTOM PERFORMERS:
US ENDOWMENTS AND FOUNDATIONS**

As of March 31, 2020 • Percent (%)

Public Indexes



Private Index IRRs and mPME IRRs*



Mean Asset Allocation by Performance Quartile: March 31, 2010 to March 31, 2020

| Quartile | US Equity | DM ex US Eqty | EM Equity | Bonds | Hedge Funds | Dist Sec | PE/VC | Priv RA | Pub RA & ILBs | Cash | Other |
|-------------------|-----------|---------------|-----------|-------|-------------|----------|-------|---------|---------------|------|-------|
| Top Quartile | 17.7 | 11.3 | 7.2 | 7.3 | 19.2 | 3.7 | 17.1 | 9.3 | 3.1 | 3.9 | 0.2 |
| 2nd Quartile | 21.6 | 15.2 | 7.2 | 11.6 | 18.4 | 4.0 | 8.9 | 5.1 | 4.5 | 3.2 | 0.2 |
| 3rd Quartile | 22.2 | 15.6 | 7.0 | 12.1 | 19.6 | 3.2 | 6.9 | 3.2 | 5.7 | 4.0 | 0.5 |
| Bottom Quartile | 22.1 | 16.9 | 7.4 | 15.6 | 19.1 | 2.3 | 2.7 | 1.5 | 7.5 | 4.2 | 0.6 |
| E&F Universe Mean | 20.9 | 14.8 | 7.2 | 11.7 | 19.1 | 3.3 | 8.9 | 4.8 | 5.2 | 3.8 | 0.4 |

Divergence of Asset Allocation from Mean



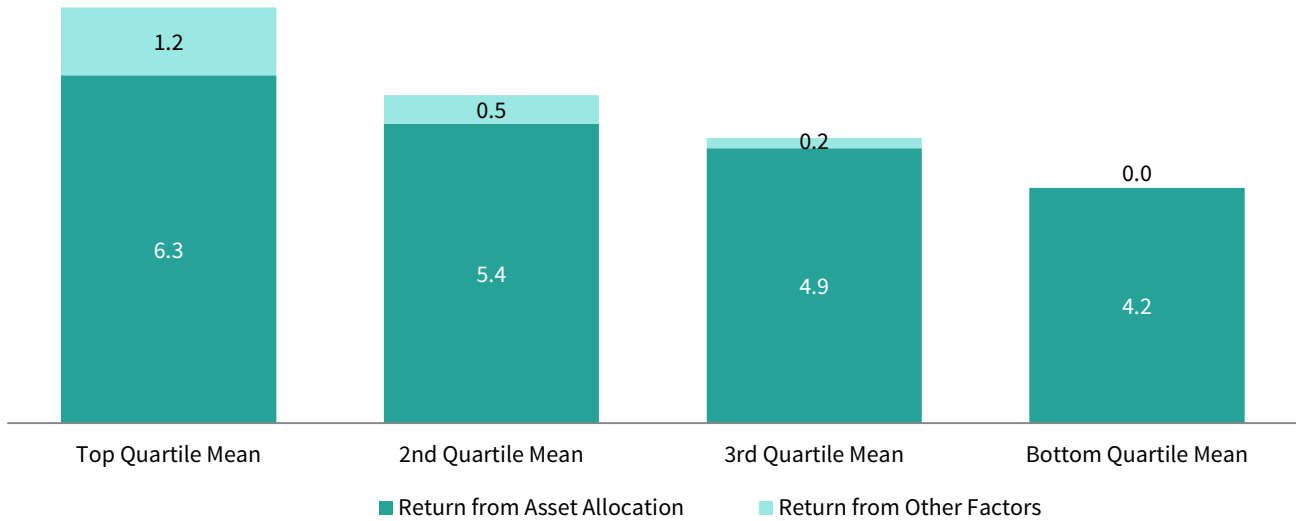
* Private indexes are pooled horizon IRRs, net of fees, expenses, and carried interest. The CA Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME NAV is a function of mPME cash flows and public index returns. Private benchmark IRRs and mPME IRRs are for the period 4/1/2010 to 12/31/2019.

Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited, Cambridge Associates LLC, Frank Russell Company, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., the National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Analysis includes data for 246 institutions.

**FIGURE 10 10-YR ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE:
US ENDOWMENTS AND FOUNDATIONS**

As of March 31, 2020 • Percent (%)



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

Notes: Includes data for 246 institutions that provided beginning year asset allocation for all ten years. This model assumes that flows to and from investment managers take place on the last day of the fiscal year. In addition, the analysis uses a standard set of asset class benchmarks that may be more or less representative of the asset allocation policy across different institutions. Therefore, the portion of returns from other factors may also include some residual/unattributable asset allocation effects.

FIGURE 11 NOMINAL TOTAL RETURN SUMMARY BY PEER GROUP: US ENDOWMENTS AND FOUNDATIONS

Periods Ended March 31, 2020 • Percent (%)

| | Latest Qtr | Fiscal YTD | Average Annual Compound Return | | | |
|-------------------------------------|------------|------------|--------------------------------|-------|-------|--------|
| | | | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs |
| Colleges & Universities | | | | | | |
| 5th %ile | -7.7 | -2.9 | 0.7 | 6.3 | 5.7 | 8.1 |
| 25th %ile | -10.4 | -6.3 | -3.4 | 4.3 | 4.2 | 6.7 |
| 75th %ile | -14.8 | -10.1 | -7.4 | 1.4 | 2.2 | 5.1 |
| 95th %ile | -16.9 | -11.9 | -9.5 | 0.1 | 1.3 | 4.2 |
| Mean | -12.7 | -8.1 | -5.1 | 2.8 | 3.3 | 5.9 |
| Median | -13.0 | -8.4 | -5.6 | 2.6 | 3.1 | 5.7 |
| <i>n</i> | 140 | 140 | 140 | 140 | 139 | 132 |
| Cultural & Environmental | | | | | | |
| 5th %ile | -8.4 | -4.9 | -1.8 | 5.2 | 5.3 | 7.2 |
| 25th %ile | -12.2 | -7.5 | -4.6 | 2.6 | 3.4 | 6.3 |
| 75th %ile | -15.4 | -10.6 | -7.7 | 1.0 | 1.9 | 4.6 |
| 95th %ile | -16.6 | -12.2 | -9.6 | -0.1 | 1.2 | 4.0 |
| Mean | -13.5 | -8.8 | -6.2 | 2.1 | 2.9 | 5.5 |
| Median | -13.7 | -9.4 | -6.8 | 1.9 | 2.7 | 5.5 |
| <i>n</i> | 49 | 49 | 49 | 49 | 49 | 46 |
| Foundations | | | | | | |
| 5th %ile | -6.7 | -2.6 | 0.3 | 6.0 | 5.7 | 8.1 |
| 25th %ile | -10.4 | -6.2 | -2.9 | 3.7 | 3.9 | 6.2 |
| 75th %ile | -14.8 | -10.2 | -7.5 | 1.4 | 2.2 | 4.8 |
| 95th %ile | -17.5 | -13.2 | -11.1 | -0.6 | 0.9 | 3.8 |
| Mean | -12.6 | -8.0 | -5.2 | 2.6 | 3.2 | 5.6 |
| Median | -12.8 | -8.3 | -5.7 | 2.5 | 3.1 | 5.4 |
| <i>n</i> | 103 | 102 | 102 | 99 | 96 | 88 |
| Healthcare | | | | | | |
| 5th %ile | -8.5 | -4.6 | -1.8 | 5.2 | 5.1 | 7.0 |
| 25th %ile | -11.7 | -6.6 | -3.9 | 2.8 | 3.2 | 5.6 |
| 75th %ile | -15.1 | -10.2 | -7.9 | 0.8 | 1.6 | 4.3 |
| 95th %ile | -17.0 | -12.4 | -10.2 | -0.5 | 0.8 | 3.9 |
| Mean | -13.3 | -8.6 | -6.1 | 2.0 | 2.5 | 5.1 |
| Median | -13.9 | -9.0 | -6.3 | 1.8 | 2.1 | 5.0 |
| <i>n</i> | 30 | 30 | 30 | 28 | 27 | 25 |
| Independent Schools | | | | | | |
| 5th %ile | -9.4 | -3.9 | -0.4 | 4.8 | 4.4 | 7.5 |
| 25th %ile | -11.4 | -7.6 | -4.5 | 2.6 | 2.9 | 5.6 |
| 75th %ile | -16.0 | -11.9 | -8.9 | 0.2 | 1.5 | 4.2 |
| 95th %ile | -17.5 | -12.6 | -10.4 | -0.8 | 0.5 | 3.4 |
| Mean | -13.7 | -9.2 | -6.4 | 1.6 | 2.3 | 5.1 |
| Median | -14.0 | -9.5 | -6.8 | 1.1 | 2.1 | 4.7 |
| <i>n</i> | 29 | 29 | 29 | 28 | 28 | 27 |
| Other Nonprofits | | | | | | |
| 5th %ile | -11.0 | -7.0 | -3.9 | 3.3 | 3.4 | 6.1 |
| 25th %ile | -12.9 | -8.9 | -7.1 | 1.4 | 2.1 | 5.4 |
| 75th %ile | -17.1 | -12.2 | -9.4 | 0.3 | 1.3 | 3.9 |
| 95th %ile | -18.3 | -14.0 | -11.3 | -0.6 | 0.5 | 3.5 |
| Mean | -14.9 | -10.5 | -8.0 | 0.9 | 1.8 | 4.7 |
| Median | -15.3 | -10.7 | -8.2 | 0.7 | 1.7 | 4.4 |
| <i>n</i> | 39 | 39 | 39 | 39 | 38 | 33 |

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

FIGURE 12 NOMINAL TOTAL RETURN SUMMARY BY ASSET SIZE: US ENDOWMENTS AND FOUNDATIONS

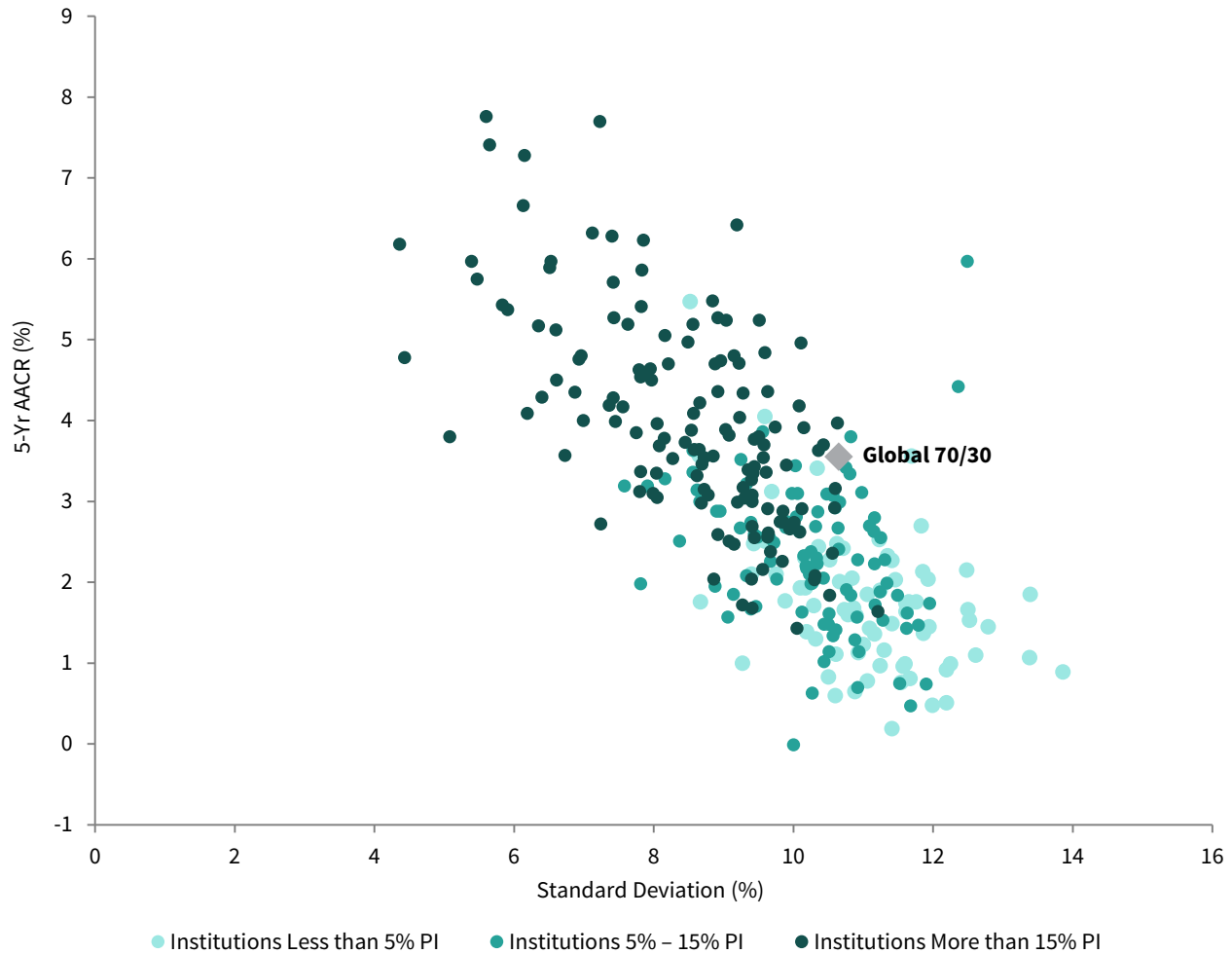
Periods Ended March 31, 2020 • Percent (%)

| | Latest Qtr | Fiscal YTD | Average Annual Compound Return | | | |
|-------------------------|------------|------------|--------------------------------|-------|-------|--------|
| | | | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs |
| Less than \$100M | | | | | | |
| 5th %ile | -10.1 | -6.2 | -3.0 | 3.3 | 3.4 | 5.8 |
| 25th %ile | -13.4 | -8.9 | -6.3 | 1.9 | 2.5 | 5.2 |
| 75th %ile | -16.5 | -12.0 | -9.4 | 0.2 | 1.4 | 4.2 |
| 95th %ile | -19.0 | -14.0 | -11.2 | -0.8 | 0.7 | 3.6 |
| Mean | -15.0 | -10.4 | -7.7 | 1.1 | 2.0 | 4.7 |
| Median | -15.3 | -10.5 | -7.9 | 0.9 | 1.9 | 4.7 |
| <i>n</i> | 87 | 87 | 87 | 84 | 80 | 72 |
| \$100M – \$200M | | | | | | |
| 5th %ile | -10.4 | -6.3 | -3.2 | 3.8 | 3.9 | 6.1 |
| 25th %ile | -12.9 | -8.3 | -5.7 | 2.6 | 2.9 | 5.5 |
| 75th %ile | -15.7 | -11.2 | -8.7 | 0.9 | 1.7 | 4.3 |
| 95th %ile | -17.5 | -13.3 | -10.9 | -0.4 | 0.9 | 3.6 |
| Mean | -14.2 | -9.6 | -7.0 | 1.7 | 2.3 | 4.8 |
| Median | -14.4 | -9.5 | -7.0 | 1.4 | 2.3 | 4.7 |
| <i>n</i> | 72 | 71 | 71 | 70 | 70 | 64 |
| \$200M – \$500M | | | | | | |
| 5th %ile | -10.3 | -5.5 | -2.4 | 4.4 | 4.3 | 6.6 |
| 25th %ile | -12.2 | -7.6 | -4.6 | 2.7 | 3.2 | 5.8 |
| 75th %ile | -15.4 | -10.6 | -8.1 | 1.0 | 1.8 | 4.7 |
| 95th %ile | -17.4 | -12.9 | -10.4 | -0.4 | 0.8 | 3.9 |
| Mean | -13.8 | -9.1 | -6.5 | 2.0 | 2.6 | 5.3 |
| Median | -13.6 | -9.1 | -6.6 | 2.0 | 2.6 | 5.3 |
| <i>n</i> | 85 | 85 | 85 | 84 | 83 | 81 |
| \$500M – \$1B | | | | | | |
| 5th %ile | -6.8 | -2.2 | 1.1 | 5.9 | 5.3 | 7.2 |
| 25th %ile | -10.3 | -5.5 | -3.1 | 3.9 | 4.2 | 6.4 |
| 75th %ile | -13.7 | -9.3 | -6.9 | 1.5 | 2.5 | 5.1 |
| 95th %ile | -15.8 | -11.4 | -9.1 | 0.5 | 1.4 | 4.5 |
| Mean | -12.0 | -7.3 | -4.6 | 2.9 | 3.3 | 5.9 |
| Median | -12.6 | -7.7 | -4.8 | 2.4 | 3.0 | 5.7 |
| <i>n</i> | 55 | 55 | 55 | 54 | 54 | 49 |
| More than \$1B | | | | | | |
| 5th %ile | -5.7 | -1.0 | 2.8 | 6.6 | 6.3 | 8.7 |
| 25th %ile | -8.8 | -4.2 | -0.8 | 5.3 | 5.2 | 7.7 |
| 75th %ile | -12.6 | -8.1 | -5.2 | 2.9 | 3.4 | 5.9 |
| 95th %ile | -15.6 | -10.9 | -8.9 | 0.8 | 2.1 | 5.3 |
| Mean | -10.6 | -6.1 | -2.9 | 4.0 | 4.2 | 6.9 |
| Median | -10.4 | -6.1 | -2.9 | 3.9 | 4.1 | 7.0 |
| <i>n</i> | 91 | 91 | 91 | 91 | 90 | 85 |

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

FIGURE 13 STANDARD DEVIATION AND SHARPE RATIO: US ENDOWMENTS AND FOUNDATIONS

Five Years Ended March 31, 2020



| | All Institutions | Mean by PI Allocation | | | 70/30 Global Benchmark |
|--------------------|------------------|-----------------------|--------------|----------|------------------------|
| | | Mean | Less than 5% | 5% - 15% | |
| 5-Yr AACR | 2.9 | 1.8 | 2.3 | 4.0 | 3.6 |
| Standard Deviation | 9.7 | 11.1 | 10.2 | 8.5 | 10.6 |
| Sharpe Ratio | 0.25 | 0.11 | 0.16 | 0.39 | 0.27 |
| <i>n</i> | 305 | 73 | 95 | 137 | |

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

Notes: Analysis includes only institutions that provided underlying quarterly returns and asset allocation for the last five years. Each institution's private investment allocation represents the mean for the six March 31 periods from 2015 to 2020. The Global 70/30 benchmark is composed of 70% MSCI ACWI Index/30% Bloomberg Barclays Aggregate Bond Index. Total returns for the MSCI ACWI Index are net of dividend taxes for global ex US securities.

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