

1ST QUARTER • 2022

# ENDOWMENTS QUARTERLY

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

## TRAILING ONE-YEAR RESULTS

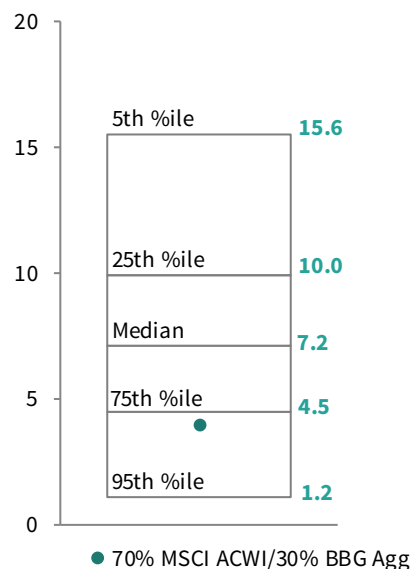
The median return of the endowment and foundation universe was 7.2% for the trailing one-year period (Figure 1) ended March 31, 2022. A blended index return consisting of 70% MSCI ACWI and 30% Bloomberg Aggregate Bond Index earned 4.0% and would have landed within the bottom performance quartile of the respondent group. The largest portion of participants' portfolios continues to be allocated to equity-oriented assets. On average, institutions allocated 44.0% to public equity and 18.3% to private equity/venture capital (PE/VC), which combined represents nearly two-thirds of the overall portfolio. The average mix between public and private equities varies substantially across certain subgroups of the overall universe. Asset size is the key differentiator in allocations across the total participant group. Larger portfolios tend to have the highest average allocation to PE/VC and the smallest portfolios have the highest average allocation to public equities.

**FIGURE 1 PERFORMANCE AND ASSET ALLOCATION SNAPSHOT**

Period Ended March 31, 2022 • Percent (%)

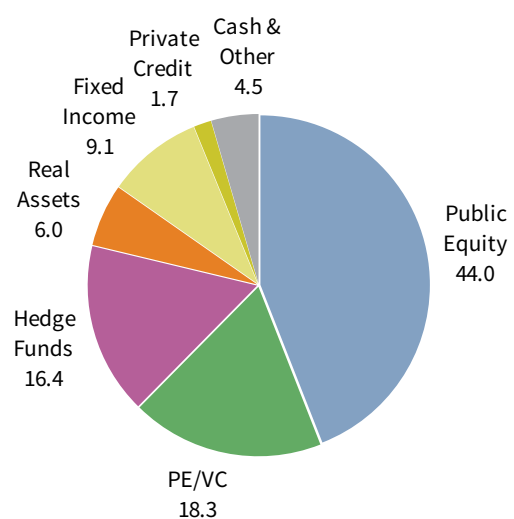
### Trailing 1-Yr Return

n = 371



### Mean Average Asset Allocation

n = 371

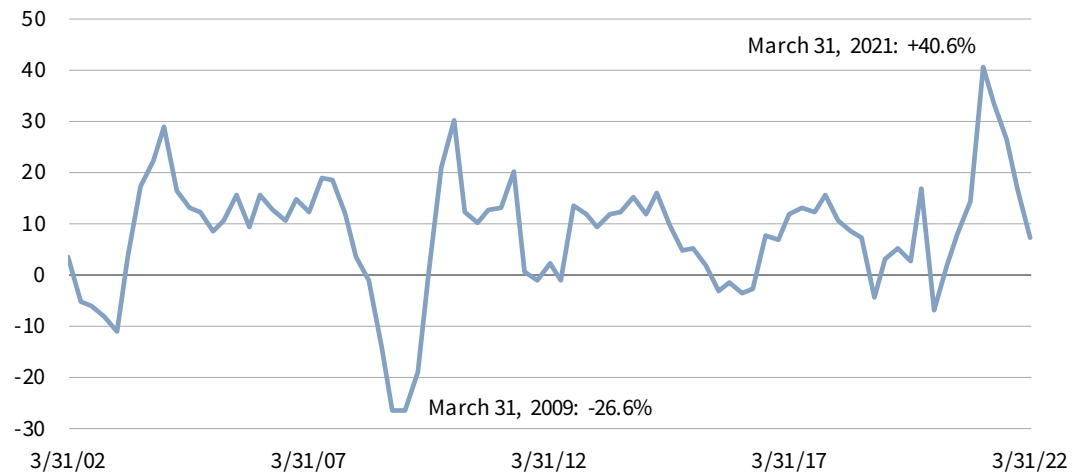


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Figure 2 incorporates performance data that Cambridge Associates (CA) has collected for endowments and foundations from the last 20 years. The median return for this most recent trailing one-year period is substantially lower than what it was over the last few quarter-ends. The highest returns from this entire 20-year period were as of March 31, 2021, when the trailing one-year median return registered at 40.6%.

### FIGURE 2 TRAILING ONE-YEAR MEDIAN RETURNS

Quarters Ended March 31, 2002 – March 31, 2022



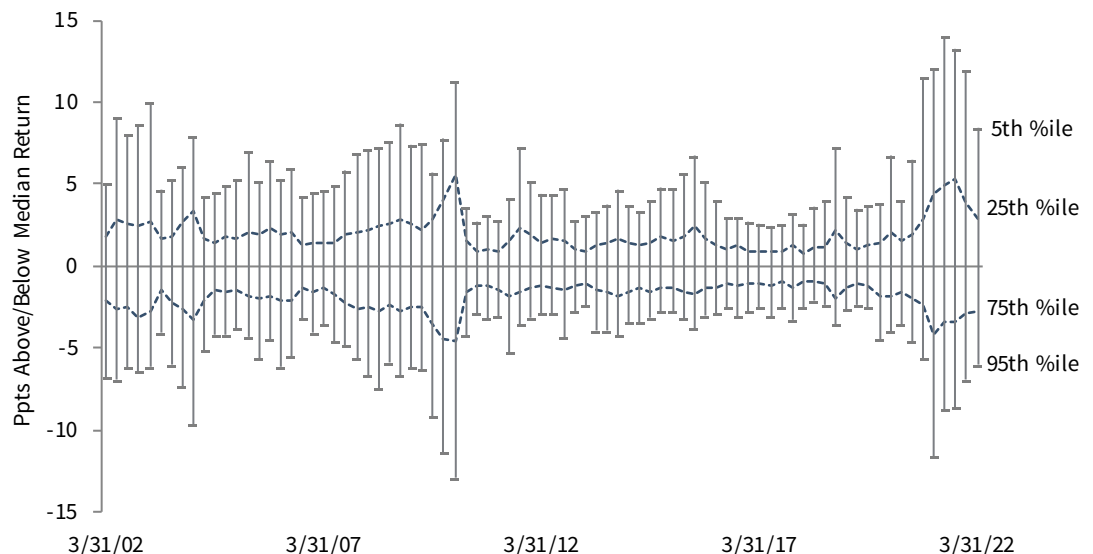
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: The number of institutions included in the median calculation varies from one period to the next, and is smaller in earlier years compared to the present day.

The spread between the trailing one-year return at the 5th percentile return (15.6%) and the median return was 8.4 percentage points (ppts) for the period ended March 31, 2022. While this level of dispersion is higher than most historical periods, it is considerably smaller compared to the data reported throughout 2021 (Figure 3). At the bottom end of the distribution, the 95th percentile return (1.2%) was 6.0 ppts lower than the median return.

### FIGURE 3 DISPERSION IN TRAILING 1-YR RETURNS RELATIVE TO THE MEDIAN RETURN

Based on Quarters Ended March 31, 2002 – March 31, 2022



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

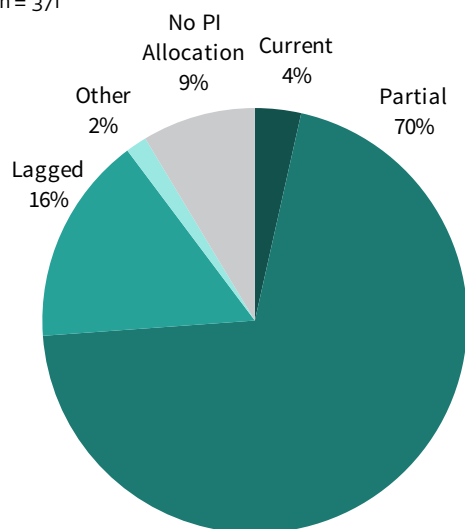
**PRIVATE INVESTMENT REPORTING METHODOLOGIES.** The reporting methodologies for private investments are an important factor when comparing peer returns for the trailing one-year period. Most study participants (70%) reported their trailing one-year private investment returns on a partial basis (Figure 4). Under this method, only three quarters of private returns are incorporated for the one-year period. As March 31 valuations become available, first quarter 2022 returns will be restated to reflect actual private performance. The revisions to returns typically take place four to five months after quarter-end for this group of institutions.

**FIGURE 4 PERFORMANCE REPORTING METHODOLOGIES: PRIVATE INVESTMENTS**

As of March 31, 2022

#### All Endowments & Foundations

n = 371



#### Current Basis

Trailing one-year period includes private investment performance for April 1, 2021, to March 31, 2022.

Marketable Assets			
2Q21	3Q21	4Q21	1Q22
Private Investments			

#### Partial Basis

Trailing one-year period includes private investment performance for April 1, 2021, to December 31, 2021, and a flat return (0%) for January 1, 2022, to March 31, 2022.

Marketable Assets				
2Q21	3Q21	4Q21	1Q22	
Actual Return				0%
Private Investments				

#### Lagged Basis

Trailing one-year period includes private investment performance for January 1, 2021, to December 31, 2021.

Marketable Assets				
1Q21	2Q21	3Q21	4Q21	1Q22
Private Investments				

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

Institutions that used the partial basis in 2021 reported significant revisions to returns on the upside throughout that year as private marks became available. Initial private investment fund data collected by CA for first quarter 2022 show that private equity, venture capital, and private credit returns are more muted compared to 2021, and even negative for some substrategies. Private real assets strategies—including real estate and natural resources—are still robust according to the preliminary data set. Institutions using the partial basis should see smaller revisions to the first quarter 2022 return compared to what was reported throughout 2021.

Some institutions have already incorporated four quarters of private performance into their trailing one-year return, although the exact method and timing can vary. Under the lagged basis, which was cited by 16% of participants, private valuations are perpetually lagged by one quarter so that the one-year return represents private investment performance from January 1, 2021, to December 31, 2021. In contrast, under the

current basis, the four quarters of private investment performance are time-matched with other assets in the portfolio and reflect investment activity from April 1, 2021, to March 31, 2022. Just 4% of institutions use the current basis method.

Institutions using the lagged basis for the trailing one-year return are incorporating private investment performance from first quarter 2021, which saw extraordinary performance across most private strategies (Figure 5). These institutions are almost assuredly calculating a higher return than they would under any of the other reporting methodologies. Nearly two-thirds (38 of 59) of the institutions using this methodology reported a trailing one-year return that landed in the top performance quartile of the overall peer universe.

**FIGURE 5 CAMBRIDGE ASSOCIATES PRIVATE INVESTMENT INDEX RETURNS**

	One Quarter End-to-End Pooled Return (%)				
	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
US Private Equity	11.0	13.5	5.9	5.7	NA
Global ex US Private Equity	4.4	11.3	2.9	3.4	NA
US Venture Capital	17.8	11.7	9.4	7.1	NA
Global ex US Venture Capital	17.0	9.1	2.5	0.8	NA
Private Credit	4.3	5.5	2.3	1.8	NA
Distressed Control - Oriented	10.3	9.5	10.1	7.2	NA
Real Estate	2.7	6.2	7.0	7.4	NA
Natural Resources	8.2	9.3	4.1	6.6	NA

Lagged Basis
  Partial Basis

Source: Cambridge Associates LLC.

Note: NA indicates that the sample size was too small at this time to report data.

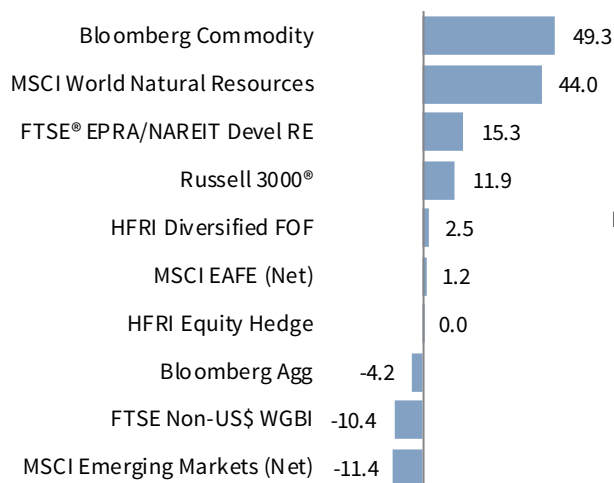
**ONE-YEAR ASSET ALLOCATION.** Asset allocation is one of the key factors that explains the dispersion in returns among institutions in our universe. Figure 6 explores this relationship between investment performance and asset allocation. For this analysis, each institution's asset allocation was averaged 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 6 provide context on the capital markets 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. 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. With data currently unavailable for first quarter 2022, the period evaluated for the private investment and mPME indexes is the trailing nine months ended December 31, 2021.

**FIGURE 6 1-YR INDEX RETURNS AND ASSET ALLOCATION OF TOP AND BOTTOM PERFORMERS:  
US ENDOWMENTS AND FOUNDATIONS**

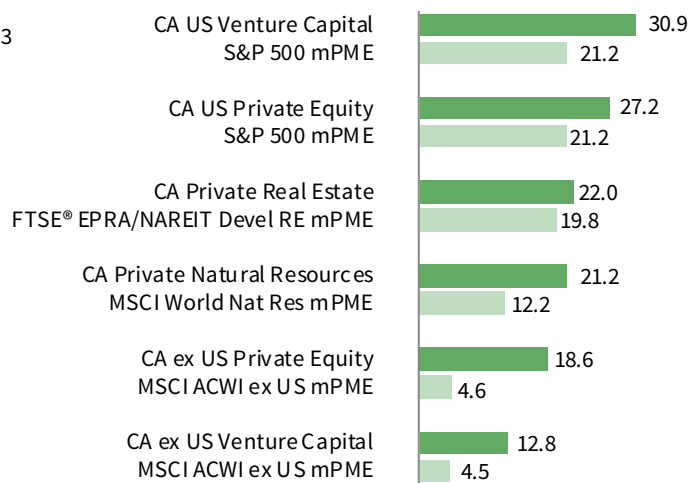
**Public Indexes**

Trailing 1 Year as of 3/31/22



**Private Index IRRs and mPME IRRs**

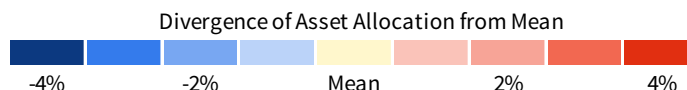
Trailing 9 Months as of 12/31/21



**Mean Asset Allocation by Performance Quartile: March 31, 2021, to March 31, 2022**

*n* = 366

Quartile	Public Equity	PE/VC	Hedge Funds	Real Assets	Fixed Income	Private Credit	Cash	Other
Top Quartile	36.4	26.3	16.0	8.6	6.3	2.0	4.1	0.4
2nd Quartile	43.9	19.3	16.0	5.4	9.1	1.8	3.8	0.7
3rd Quartile	51.2	11.5	16.9	4.7	10.4	1.3	3.5	0.4
Bottom Quartile	51.6	7.9	18.2	4.0	11.9	0.9	4.8	0.7
E&F Universe Mean	45.8	16.2	16.8	5.7	9.4	1.5	4.1	0.6



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.

When we conduct this analysis, we expect the key takeaways from the index comparisons to translate to the data reported in the heat map table. This is in fact what we found for the most recent one-year period, with top-performing institutions reporting the highest allocations to the best-performing asset classes and vice versa. The returns for the CA Venture Capital and Private Equity indexes continue to outperform the mPME indexes over recent periods. When considering this context, it is no surprise to learn that the top quartile of performers reported the highest average allocation to PE/VC (26.3%). The average allocation to PE/VC for the bottom performance quartile was over 18 ppts lower (7.9%). Relatedly, top-performing institutions had the lowest average allocation to public equity (36.4%), while the bottom performance quartile reported the highest average allocation (51.6%).

Allocations to real assets and fixed income also stand out when comparing peer asset allocations. Natural resources–related and commodities indexes on the public side posted returns greater than 40% for the full trailing one-year period, while private strategies had strong returns for the nine months as of December 31. Real estate–related indexes reported strong performance as well. Institutions in the top performance quartile reported an average allocation of 8.6% to real assets, which was more than double the average allocation (4.0%) of the bottom performance quartile. In contrast, investment-grade bonds were among the lowest-performing strategies over the past year, and institutions with the highest allocations to these asset classes tended to have the lowest overall performance.

**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. Our data allow us to conduct an estimated attribution analysis that can help illuminate the main drivers of performance for the trailing one-year period and how the experiences of top and bottom performers diverge.

#### CA US ENDOWMENT & FOUNDATION UNIVERSE AT A GLANCE

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

**371** US endowments and foundations that participated in our quarterly survey  
**\$1.8B** Average market value of participating long-term investment portfolios  
**\$403M** Median value

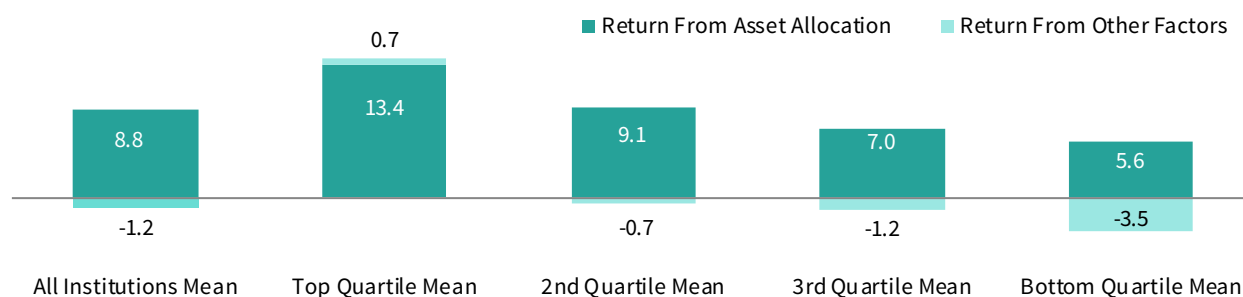
Returns are reported net of external manager fees for 370 of 371 institutions in this universe. Past Cambridge Associates surveys have shown that approximately 10% to 15% of institutions also deduct investment oversight costs in the net of fee calculation.

Figure 7 illustrates the results of the attribution analysis for the trailing one-year period based on 366 endowments and foundations that provided sufficient data. For each participating institution, we have calculated a blend of representative asset class indexes that is weighted according to their beginning year asset allocation. This is the amount of return that can be explained by the institution’s asset allocation heading into the one-year period. The portion of return that comes from other factors is calculated by subtracting the asset allocation return from the actual total return that the institution earned. This “other” portion of returns is partially driven by implementation or execution decisions, which can include active management and manager selection. In addition, this other portion of return will account for any decision to modify the asset allocation structure or rebalance the portfolio allocations throughout the course of the one-year period. The attribution analysis estimates the average portfolio generated an asset allocation return of 8.8% for the trailing one-year period and a return from other factors of -1.2%.

**FIGURE 7 1-YR RETURN ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE:  
US ENDOWMENTS AND FOUNDATIONS**

As of March 31, 2022 • Percent (%) • n = 366

**1-Yr Return Attribution Analysis by Quartile**



**Breakdown of Return from Asset Allocation**

Asset Class	Mean Beginning Year Asset Allocation	Asset Class Benchmark Return	Contribution to Asset Class Return
US Equity	25.8	11.9	3.1
Venture Capital	6.6	30.8	2.5
Non-Venture Private Equity	5.9	27.1	1.8
Other Private Investments	1.7	28.2	0.5
Private Oil & Gas/Natural Resources	1.6	21.1	0.4
Private Real Estate	1.7	22.0	0.4
Public Energy/Natural Resources	0.7	44.0	0.3
Distressed-Private Equity Structure	1.3	20.2	0.3
Absolute Return (ex Distressed)	9.0	2.5	0.2
Global ex US Equity-Developed Mkts	14.6	1.2	0.2
Commodities	0.3	49.3	0.2
Distressed-Hedge Fund Structure	1.1	7.5	0.1
Public Real Estate	0.4	15.3	0.1
Inflation-Linked Bonds	0.5	4.3	0.0
Other	0.6	4.0	0.0
Cash & Equivalents	4.1	0.1	0.0
Long/Short Hedge Funds	7.1	0.0	0.0
High Yield Bonds	0.2	-0.7	0.0
Global ex US Bonds	0.2	-10.4	0.0
US Bonds	9.2	-4.2	-0.4
Global ex US Equity-Emerging Mkts	7.2	-11.4	-0.8

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

Note: Private investment benchmark returns are for the period of 4/1/21 to 12/31/21.

The table on the bottom of Figure 7 shows each asset class's contribution to the average asset allocation return of the overall universe. Each category's contribution is a function of its benchmark return for the one-year period, as well as the participant group's average allocation to the category. While commodities and natural resources indexes produced the best returns by far over the trailing one-year period, the allocations to these strategies represented a very small percentage of the average participant portfolio. Therefore, the contribution of these categories to the overall asset class return was relatively minor compared to some of the equity asset classes

where allocations are higher. US equity, which continues to account for approximately one-quarter of the average portfolio, had the greatest impact of all the asset class return contributors to the trailing one-year return.

Attribution results for individual institutions are based on their respective asset allocation structures and the total portfolio return that was earned. The average asset allocation return for institutions in the top performance quartile was 13.4%, 780 basis points (bps) higher than that of the bottom quartile. The model estimates that the differential in the return from other factors was generally smaller across the peer universe, although the top quartile of performers was the only group with a positive average contribution from this category (0.7%).

### TRAILING TEN-YEAR RESULTS

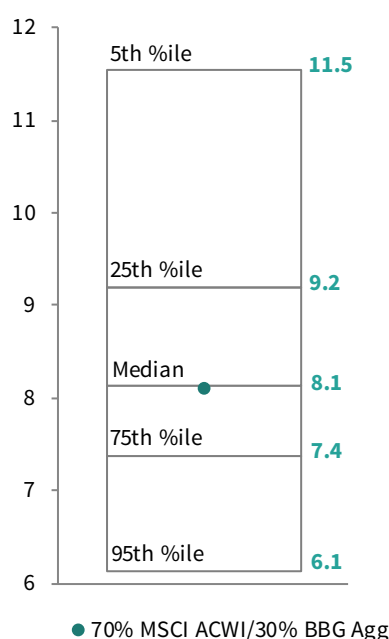
The median trailing ten-year return was 8.1% (Figure 8). Returns ranged from 11.5% at the 5th percentile to 6.1% at the 95th percentile. The simple 70/30 index return earned 8.1% and would have landed just a hair below the median of the respondent group for the trailing ten-year period.

**FIGURE 8 10-YR PERFORMANCE AND ASSET ALLOCATION SNAPSHOT**

Percent (%)

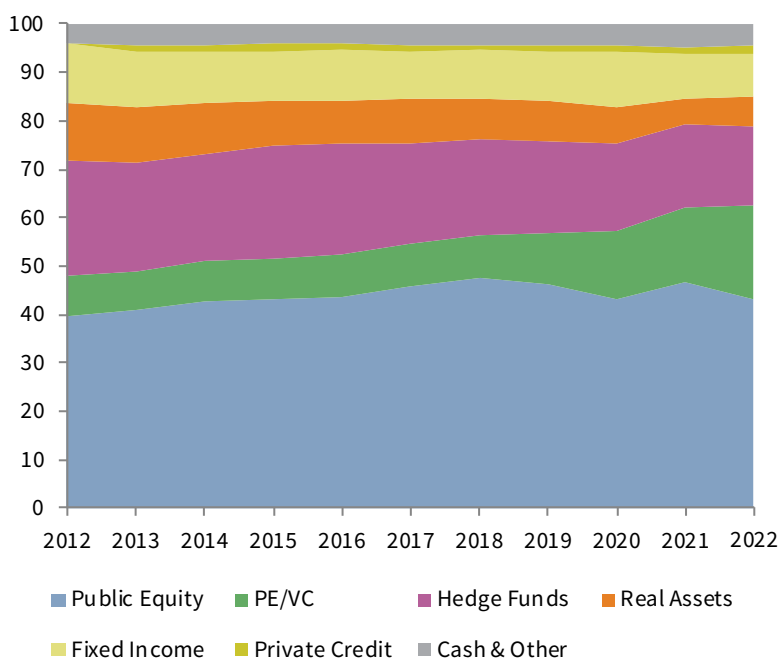
#### Trailing 10-Yr Return

Period Ending March 31, 2022 • n = 341



#### Trend in Mean Average Asset Allocation

Periods Ending March 31 • n = 236



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.

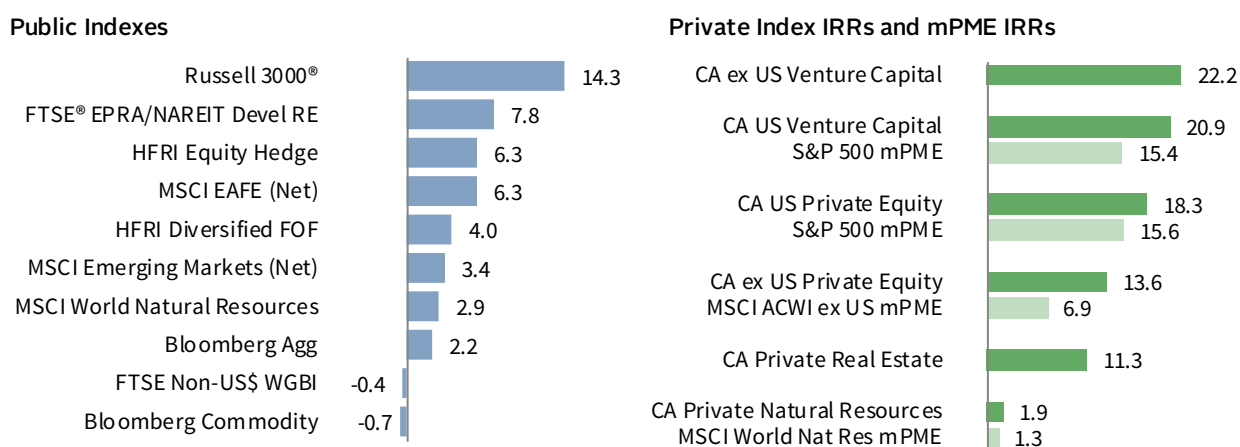
There have been several meaningful changes to the average asset allocation mix for participants over the past decade. In general, average allocations have increased to growth assets and declined for other strategies in the portfolio. As of March 31, 2012, the average combined allocation to public equity and PE/VC was less than half (47.9%)



of the total portfolio. That figure has risen to 62.6% for the most recent March 31. The growth in average equity exposure over the first part of the past decade can be attributed primarily to an increase in public equity allocations. However, average public allocations have actually ticked down since 2018 and dropped off quite a bit as global stock markets began to decline in first quarter 2022. On the other hand, average allocations to PE/VC have grown substantially over the last few years. Across the entire ten-year period, the average increase to PE/VC (11.3 ppts) was far greater than the increase to public equity (3.4 ppts). Meanwhile, the average allocations to hedge funds (-7.8 ppts), real assets (-5.5 ppts), and fixed income (-3.8 ppts) have all declined over the last decade.

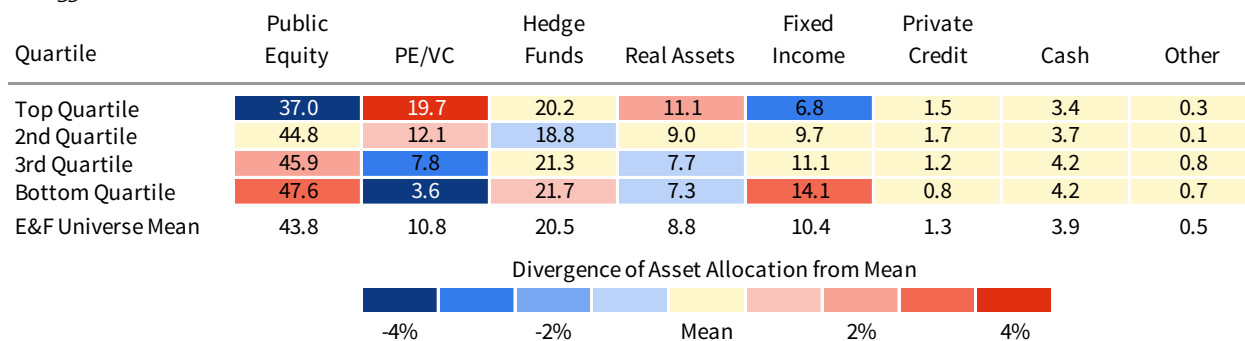
**TEN-YEAR ASSET ALLOCATION.** Figure 9 explores the relationship between peer returns and asset allocations for the trailing ten-year period. In this analysis, the participant group is broken down into four quartiles based on the trailing ten-year investment return. Each institution's asset allocation was averaged across the 11 periods starting March 31 that fell from 2012 to 2022. The four quartiles in the heat map represent the average of the institutions within each quartile.

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



**Mean Asset Allocation by Performance Quartile: March 31, 2012, to March 31, 2022**

*n* = 235



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.

Each of the PE/VC indexes outperformed their mPME benchmarks over the past decade, with the ex US and US VC indexes leading the way. As would be expected given the market backdrop, the top quartile of performers over this period reported an average allocation to PE/VC that was considerably higher than the other performance quartiles. The average allocation to PE/VC was 19.7% for the top quartile of performers over this ten-year period and just 3.6% for the bottom quartile of performers, a 16-ppt difference between the two performance quartiles. In addition, the top quartile's average allocations to public equities (37.0%) and fixed income (6.8%) were lower than that of the bottom quartile, which were 47.6% and 14.1%, respectively.

Figure 10 organizes participants into five subgroups based on each institution's trailing ten-year average allocation to total private investments. The median ten-year return for portfolios with an allocation of over 30% to private investments was 10.8%, approximately 370 bps higher than the median return reported by portfolios with little to no private investment allocation. In fact, the median return for the highest private investment allocators was higher than the 5th percentile return for all other subgroups. The distribution of returns for the five subgroups shows a wide range of results, a disclaimer that not all portfolios with the highest private allocations earn top 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.

**FIGURE 10 RANGE OF 10-YR RETURNS BY PRIVATE INVESTMENT ALLOCATION**

As of March 31, 2022 • Percent (%)



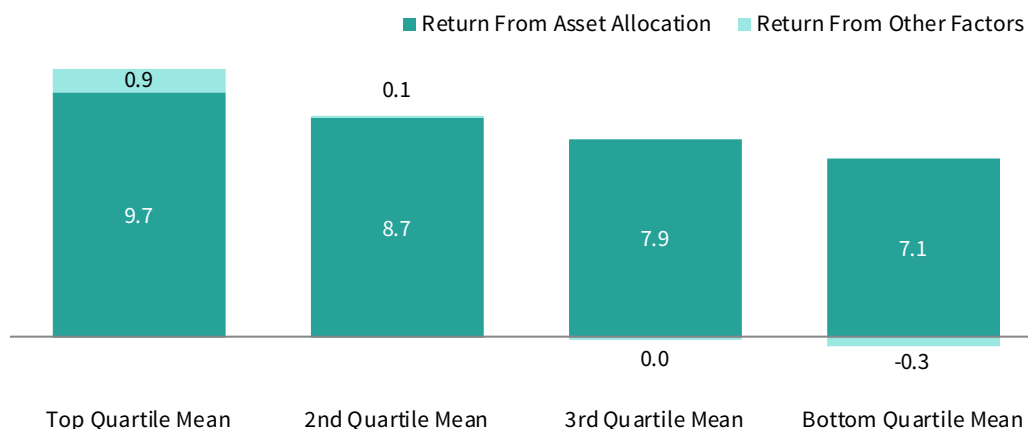
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: Each institution's private investment allocation represents the mean for the 11 March 31 periods from 2012 to 2022.

**TEN-YEAR ATTRIBUTION.** The attribution model also points to an outperforming asset allocation structure for the top performance quartile over the last decade. Figure 11 shows that the top performance quartile had a mean asset allocation return of 9.7% for the trailing ten-year period, approximately 260 bps higher than the bottom performance quartile. The top performance quartile also added another 0.9% on average from other factors, while the bottom performance quartile lost an average of 0.3%.

**FIGURE 11 10-YR ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE: US ENDOWMENTS AND FOUNDATIONS**

As of March 31, 2022 • Percent (%) • n = 235



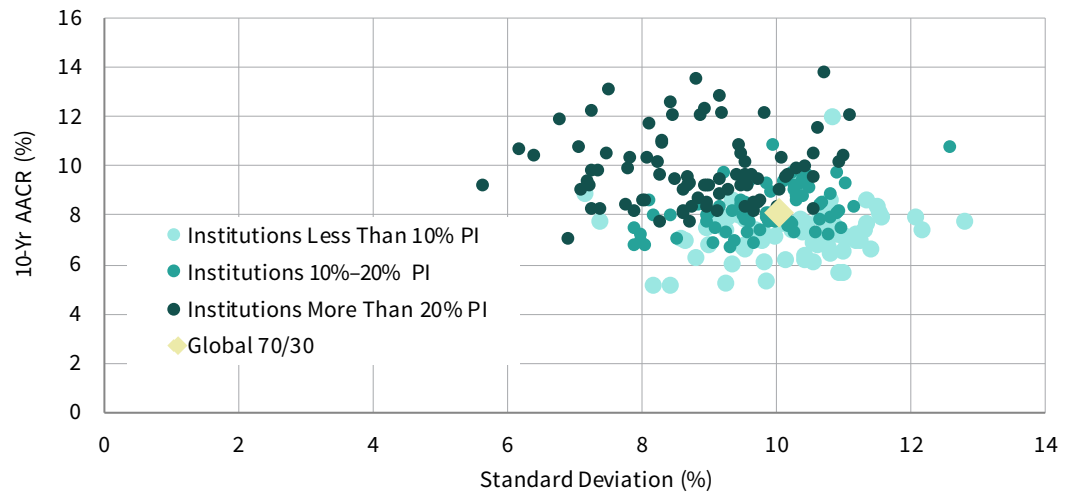
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

**SHARPE RATIO.** 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 impacted 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, Figure 12 shows subcategories based on an institution's private investment allocation.

**FIGURE 12 STANDARD DEVIATION AND SHARPE RATIO:  
US ENDOWMENTS AND FOUNDATIONS**

10 Years Ended March 31, 2022



	All Institutions	Mean by PI Allocation			70/30 Global
	Mean	Less than 10%	10%–20%	More Than 20%	Benchmark
10-Yr AACR	8.5	7.3	8.2	9.8	8.1
Standard Deviation	9.6	10.3	9.8	8.8	10.0
Sharpe Ratio	0.86	0.69	0.80	1.07	0.77
<i>n</i>	235	76	74	85	

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.

Institutions that had an allocation of more than 20% to private investments over the last ten years reported an average Sharpe ratio of 1.07, significantly higher than that of the other subgroups with smaller private allocations, and the blended global benchmark. While the magnitude of the differences in average Sharpe ratios is partly a function of this group's higher average ten-year return, it is also attributable to its lower average standard deviation. ■

## NOTES ON THE DATA

Returns for periods greater than one year are annualized.

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

The MSCI Indexes contained in this report are net of dividend taxes for global ex US securities.

Hedge Fund Research data are preliminary for the preceding five months.

Figure 4: Institutions with no significant private investment allocations (less than 1% of the total portfolio) are reflected in the No PI Allocation category in the pie graph by asset size.

Figure 7: To be consistent with the methodology in which private investment returns are incorporated into the total portfolio composite calculation, private investment benchmark data represent quarterly end-to-end returns that have been compounded.

Figure 12: Analysis includes only institutions that provided underlying quarterly returns and asset allocation for the ten years. Each institution's private investment allocation represents the mean for the 11 March 31 periods from 2012 to 2022. The Global 70/30 benchmark is composed of 70% MSCI ACWI/30% Bloomberg Aggregate Bond Index.

## Appendix: Figures A–E

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

As of March 31, 2022 • Percent (%)

	Colleges & Universities <i>n</i> = 123	Cultural & Environmental 49	Foundations 103	Healthcare 29	Independent Schools 27	Other Nonprofits 40
	Mean	Mean	Mean	Mean	Mean	Mean
<b>Public Equity</b>	<b>40.7</b>	<b>44.3</b>	<b>45.0</b>	<b>42.7</b>	<b>45.5</b>	<b>51.4</b>
Global	8.1	9.9	9.9	8.7	11.7	11.3
US	18.9	20.7	20.2	18.9	21.7	23.6
Global ex US Developed	9.1	9.7	10.0	10.5	8.5	12.2
Emerging Markets	4.6	4.1	4.9	4.7	3.6	4.3
<b>PE/VC</b>	<b>23.3</b>	<b>16.0</b>	<b>19.2</b>	<b>15.1</b>	<b>13.3</b>	<b>9.6</b>
Venture Capital	11.5	8.3	9.6	7.0	4.8	4.2
Non-Venture Private Equity	9.7	6.0	6.7	6.6	6.4	3.5
Other Private Investments	2.1	1.7	2.9	1.5	2.2	1.9
<b>Hedge Funds</b>	<b>15.5</b>	<b>18.5</b>	<b>13.4</b>	<b>18.8</b>	<b>22.4</b>	<b>18.5</b>
Long/Short	6.5	7.8	5.1	7.3	12.2	6.5
Absolute Return	7.9	9.6	7.5	10.1	9.9	10.7
Distressed	1.1	1.0	0.8	1.4	0.3	1.3
<b>Real Assets &amp; ILBs</b>	<b>7.2</b>	<b>5.0</b>	<b>5.9</b>	<b>5.6</b>	<b>5.0</b>	<b>4.3</b>
Private Real Estate	2.4	1.5	2.1	1.6	0.8	0.6
Public Real Estate	0.5	0.4	0.4	0.4	0.2	0.4
Commodities	0.4	0.4	0.3	0.5	0.6	0.1
Inflation Linked-Bonds	0.4	0.5	0.6	0.7	0.6	0.7
Private O&G/Nat Resources	2.6	1.7	1.8	1.5	1.6	1.1
Public Energy/Nat Resources	0.8	0.5	0.8	1.0	1.3	1.3
<b>Bonds</b>	<b>7.3</b>	<b>8.6</b>	<b>10.4</b>	<b>12.1</b>	<b>6.1</b>	<b>11.8</b>
Global	0.1	0.5	0.4	0.3	0.0	1.0
US	7.0	7.9	9.6	11.3	5.9	10.8
Global ex US	0.0	0.0	0.1	0.1	0.0	0.1
High-Yield Bonds	0.2	0.2	0.3	0.4	0.1	0.0
<b>Private Credit</b>	<b>1.8</b>	<b>1.5</b>	<b>1.9</b>	<b>1.7</b>	<b>1.7</b>	<b>0.7</b>
Distressed - Control Oriented	0.8	0.2	0.5	0.6	0.5	0.2
Private Credit ex Distressed	1.1	1.3	1.3	1.1	1.1	0.5
<b>Cash &amp; Equivalents</b>	<b>3.5</b>	<b>6.0</b>	<b>3.6</b>	<b>3.5</b>	<b>5.5</b>	<b>3.5</b>
<b>Other Assets</b>	<b>0.7</b>	<b>0.0</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.2</b>

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

## FIGURE B DETAILED ASSET ALLOCATION BY ASSET SIZE: US ENDOWMENTS AND FOUNDATIONS

As of March 31, 2022 • Percent (%)

	All Endow & Fdn <i>n</i> = 371	Less Than \$100M 61	\$100M– \$200M 56	\$200M– \$500M 85	\$500M– \$1B 45	\$1B– \$3B 67	More Than \$3B 57
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
<b>Public Equity</b>	<b>44.0</b>	<b>53.5</b>	<b>46.4</b>	<b>47.8</b>	<b>42.6</b>	<b>39.1</b>	<b>32.9</b>
Global	9.5	12.2	9.8	10.3	7.0	8.4	8.4
US	20.2	24.3	22.0	23.0	20.2	17.3	13.2
Global ex US Developed	9.8	12.4	10.4	10.0	10.7	9.2	6.2
Emerging Markets	4.5	4.5	4.2	4.5	4.6	4.2	5.1
<b>PE/VC</b>	<b>18.3</b>	<b>9.3</b>	<b>13.7</b>	<b>15.8</b>	<b>20.2</b>	<b>23.1</b>	<b>29.3</b>
Venture Capital	8.9	4.1	6.4	7.0	9.3	10.7	17.0
Non-Venture Private Equity	7.2	2.7	3.9	5.9	8.9	11.3	11.3
Other Private Investments	2.2	2.5	3.4	3.0	2.0	1.1	1.0
<b>Hedge Funds</b>	<b>16.4</b>	<b>14.7</b>	<b>18.2</b>	<b>15.7</b>	<b>15.5</b>	<b>17.3</b>	<b>17.1</b>
Long/Short	6.7	6.5	7.1	6.4	5.0	7.2	7.9
Absolute Return	8.7	7.9	10.4	8.4	9.1	8.5	8.0
Distressed	1.0	0.3	0.6	0.9	1.4	1.6	1.3
<b>Real Assets &amp; ILBs</b>	<b>6.0</b>	<b>4.1</b>	<b>4.9</b>	<b>4.6</b>	<b>6.9</b>	<b>6.6</b>	<b>9.5</b>
Private Real Estate	1.8	0.7	0.7	1.0	2.7	2.5	4.0
Public Real Estate	0.4	0.5	0.3	0.4	0.7	0.4	0.4
Commodities	0.3	0.3	0.3	0.2	0.3	0.3	0.9
Inflation Linked–Bonds	0.5	0.6	1.0	0.5	0.6	0.2	0.3
Private O&G/Nat Resources	1.9	0.8	1.4	1.7	2.0	2.4	3.5
Public Energy/Nat Resources	0.9	1.2	1.2	0.9	0.7	0.7	0.4
<b>Bonds</b>	<b>9.1</b>	<b>13.1</b>	<b>10.6</b>	<b>9.9</b>	<b>8.8</b>	<b>6.8</b>	<b>5.1</b>
Global	0.3	0.6	0.5	0.1	0.4	0.4	0.1
US	8.5	12.1	10.0	9.8	8.2	6.3	4.2
Global ex US	0.0	0.0	0.0	0.0	0.0	0.0	0.2
High-Yield Bonds	0.2	0.4	0.1	0.0	0.2	0.1	0.6
<b>Private Credit</b>	<b>1.7</b>	<b>0.8</b>	<b>1.7</b>	<b>1.4</b>	<b>2.2</b>	<b>2.2</b>	<b>1.9</b>
Distressed - Control Oriented	0.5	0.2	0.3	0.4	0.8	0.8	0.7
Private Credit ex Distressed	1.1	0.6	1.3	1.0	1.4	1.4	1.2
<b>Cash &amp; Equivalents</b>	<b>4.1</b>	<b>3.8</b>	<b>4.1</b>	<b>3.9</b>	<b>3.7</b>	<b>4.6</b>	<b>3.8</b>
<b>Other Assets</b>	<b>0.5</b>	<b>0.7</b>	<b>0.5</b>	<b>0.8</b>	<b>0.1</b>	<b>0.4</b>	<b>0.4</b>

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

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

Periods Ended March 31, 2022 • Percent (%)

	Latest Qtr	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>All Endowments &amp; Foundations</b>						
5th %ile	-0.2	6.7	15.6	17.7	14.3	11.6
25th %ile	-2.8	2.5	10.0	14.0	11.3	9.2
Median	-3.9	0.5	7.2	11.7	9.6	8.1
75th %ile	-5.1	-1.7	4.5	10.2	8.6	7.4
95th %ile	-7.0	-4.6	1.2	8.1	7.0	6.2
Mean	-3.8	0.6	7.6	12.2	10.0	8.4
<i>n</i>	371	371	371	370	363	340
<b>Less Than \$100M</b>						
5th %ile	-2.2	3.4	11.6	14.5	10.5	9.0
25th %ile	-3.8	-0.6	5.7	11.5	9.3	7.9
Median	-4.9	-1.7	4.2	9.9	8.5	7.3
75th %ile	-6.1	-3.8	1.6	8.7	7.4	6.5
95th %ile	-8.2	-6.4	-1.4	6.7	5.9	5.3
Mean	-5.1	-1.9	4.2	10.3	8.4	7.3
<i>n</i>	61	61	61	60	57	49
<b>\$100M-\$200M</b>						
5th %ile	-2.0	3.2	10.6	13.8	11.1	9.0
25th %ile	-3.3	1.1	7.9	12.0	9.9	8.1
Median	-4.3	0.3	6.1	10.9	9.1	7.6
75th %ile	-5.3	-1.3	4.5	9.9	8.2	7.0
95th %ile	-7.2	-4.9	0.8	7.5	6.6	6.2
Mean	-4.3	-0.3	5.9	10.8	9.0	7.6
<i>n</i>	56	56	56	56	55	53
<b>\$200M-\$500M</b>						
5th %ile	-2.3	4.3	12.0	15.6	12.4	9.6
25th %ile	-3.3	2.2	9.3	13.1	10.5	8.5
Median	-3.9	0.4	7.2	11.5	9.5	7.8
75th %ile	-5.0	-1.4	4.9	10.4	8.5	7.3
95th %ile	-6.8	-3.9	1.2	8.7	7.7	6.2
Mean	-4.2	0.4	7.0	11.9	9.7	7.9
<i>n</i>	85	85	85	85	84	82
<b>\$500M-\$1B</b>						
5th %ile	-1.4	6.0	14.2	16.2	12.7	9.9
25th %ile	-2.7	2.3	9.1	13.7	10.9	9.1
Median	-3.9	0.9	7.5	12.0	9.6	8.4
75th %ile	-4.5	-0.4	5.6	10.8	8.9	7.8
95th %ile	-5.8	-3.7	1.8	8.9	7.6	6.9
Mean	-3.7	1.0	7.9	12.4	10.0	8.4
<i>n</i>	45	45	45	45	45	43
<b>\$1B-\$3B</b>						
5th %ile	0.1	6.8	15.3	18.9	15.0	11.7
25th %ile	-2.3	4.0	12.1	15.0	12.0	9.8
Median	-3.5	1.2	8.5	13.0	10.6	9.0
75th %ile	-4.6	-0.5	5.7	10.4	9.0	8.1
95th %ile	-6.1	-3.0	2.8	8.6	7.6	7.2
Mean	-3.5	1.5	8.8	13.2	10.8	9.1
<i>n</i>	67	67	67	67	66	61
<b>More Than \$3B</b>						
5th %ile	3.5	10.1	26.3	20.8	16.0	12.7
25th %ile	-0.1	6.3	15.0	17.4	14.1	11.6
Median	-2.1	2.5	12.1	14.9	12.0	10.0
75th %ile	-3.6	-0.5	7.7	12.1	9.8	9.1
95th %ile	-6.1	-3.3	3.3	10.2	8.9	7.8
Mean	-1.9	2.9	12.4	15.1	12.2	10.2
<i>n</i>	57	57	57	57	56	52

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



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

Periods Ended March 31, 2022 • Percent (%)

	Latest Qtr	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Colleges &amp; Universities</b>						
5th %ile	0.6	8.0	19.9	19.4	15.3	12.1
25th %ile	-2.2	3.9	13.0	15.3	12.0	9.7
Median	-3.4	1.5	9.4	13.3	10.9	8.7
75th %ile	-4.3	-0.5	6.7	11.4	9.4	8.1
95th %ile	-5.9	-3.2	3.1	9.6	8.3	7.1
Mean	-3.1	1.8	10.1	13.7	11.1	9.0
<i>n</i>	123	123	123	122	122	119
<b>Cultural &amp; Environmental</b>						
5th %ile	-0.7	6.7	13.0	15.9	13.1	10.6
25th %ile	-2.9	2.0	8.8	12.7	10.3	9.0
Median	-4.3	0.1	6.3	11.3	9.2	8.0
75th %ile	-5.6	-2.3	2.1	9.9	8.4	7.3
95th %ile	-7.9	-6.3	0.2	8.3	7.3	6.2
Mean	-4.3	0.0	6.4	11.5	9.5	8.1
<i>n</i>	49	49	49	49	48	47
<b>Foundations</b>						
5th %ile	-0.2	5.2	13.3	17.4	14.1	11.4
25th %ile	-3.0	2.2	9.0	13.9	11.2	9.2
Median	-4.2	0.3	6.6	11.8	9.6	8.1
75th %ile	-5.2	-1.8	4.4	10.3	8.9	7.5
95th %ile	-7.0	-4.0	1.2	7.6	6.9	6.2
Mean	-4.0	0.2	7.0	12.2	10.1	8.4
<i>n</i>	103	103	103	103	99	89
<b>Healthcare</b>						
5th %ile	-1.0	6.6	14.1	15.7	12.7	10.4
25th %ile	-2.7	1.1	7.6	11.7	9.7	8.1
Median	-4.1	0.3	6.1	10.7	8.8	7.6
75th %ile	-4.3	-1.8	4.3	9.9	8.3	7.1
95th %ile	-5.9	-3.0	2.8	8.3	7.2	6.6
Mean	-3.7	0.4	6.6	11.2	9.3	7.8
<i>n</i>	29	29	29	29	28	25
<b>Independent Schools</b>						
5th %ile	-0.8	5.0	13.6	16.1	12.3	9.6
25th %ile	-3.1	2.0	8.3	12.8	9.6	8.2
Median	-4.4	-0.2	5.8	10.3	8.6	7.7
75th %ile	-6.3	-3.4	1.9	9.6	7.9	6.8
95th %ile	-9.1	-8.3	-3.0	6.8	6.3	5.8
Mean	-4.5	-0.6	5.6	11.0	8.9	7.7
<i>n</i>	27	27	27	27	26	26
<b>Other Nonprofits</b>						
5th %ile	-1.9	3.0	9.1	13.4	10.4	8.9
25th %ile	-3.3	0.9	7.5	11.4	9.4	7.8
Median	-4.2	-0.3	5.2	10.2	8.5	7.3
75th %ile	-5.0	-2.5	3.5	8.7	7.4	6.7
95th %ile	-6.6	-4.3	1.2	7.5	6.5	5.8
Mean	-4.3	-0.6	5.3	10.2	8.5	7.3
<i>n</i>	40	40	40	40	40	34

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

## FIGURE E PRIVATE INVESTMENT PERFORMANCE REPORTING METHODOLOGIES BY ASSET SIZE AND INSTITUTION TYPE

As of March 31, 2022

### By Asset Size

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Less Than \$100M	—	66%	—	—	34%
<i>n</i>		40			21
\$100M–\$200M	—	93%	2%	—	5%
<i>n</i>		52	1		3
\$200M–\$500M	—	91%	1%	—	8%
<i>n</i>		77	1		7
\$500M–\$1B	2%	82%	13%	2%	—
<i>n</i>	1	37	6	1	
\$1B–\$3B	10%	60%	27%	1%	2%
<i>n</i>	7	40	18	1	1
More Than \$3B	9%	26%	58%	7%	—
<i>n</i>	5	15	33	4	

### By Institution Type

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Colleges & Universities	5%	63%	26%	4%	2%
<i>n</i>	6	78	32	5	2
Cultural & Environmental	4%	80%	8%	—	8%
<i>n</i>	2	39	4		4
Foundations	5%	70%	14%	1%	11%
<i>n</i>	5	72	14	1	11
Healthcare	—	66%	24%	—	10%
<i>n</i>		19	7		3
Independent Schools	—	96%	—	—	4%
<i>n</i>		26			1
Other Nonprofits	—	68%	5%	—	22%
<i>n</i>		27	2		11

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

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