

2ND QUARTER • 2022

# ENDOWMENTS QUARTERLY

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

## TRAILING ONE-YEAR RESULTS

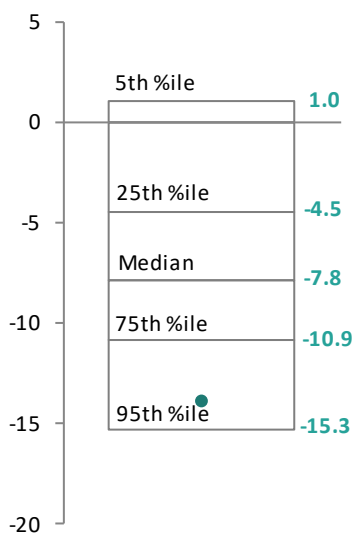
The median return of the endowment and foundation universe was -7.8% for the trailing one-year period ended June 30, 2022 (Figure 1). A blended index return consisting of 70% MSCI ACWI and 30% Bloomberg Aggregate Bond Index earned -13.8% and would have landed within the bottom performance quartile of the respondent group. On average, institutions allocated 41.5% to public equity and 19.6% to private equity/venture capital (PE/VC). Asset size continued to be the key differentiator in the variation of asset allocations across the total participant group. Institutions with portfolios less than \$100 million had the highest mean allocation to public equity (50.1%), while those with portfolios greater than \$3 billion had the highest mean allocation to PE/VC (28.2%).

**FIGURE 1 PERFORMANCE AND ASSET ALLOCATION SNAPSHOT**

Period Ended June 30, 2022 • Percent (%)

### Trailing 1-Yr Return

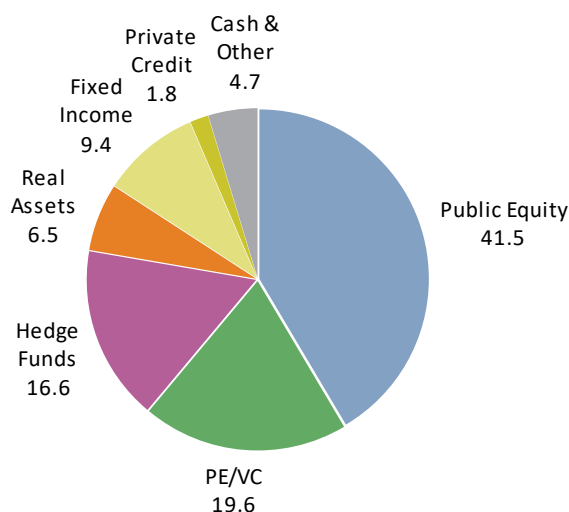
n = 378



● 70% MSCI ACWI/30% BBG Agg

### Mean Average Asset Allocation

n = 378

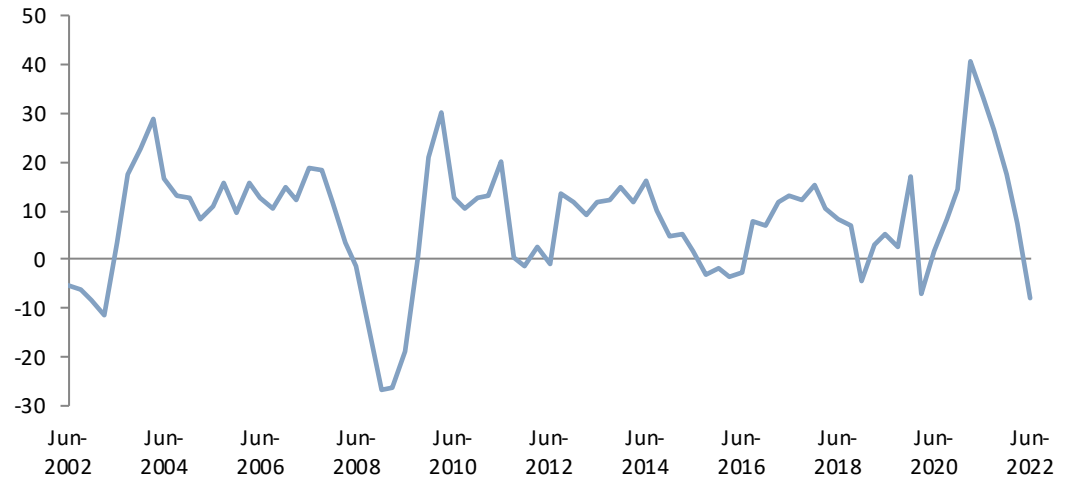


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Figure 2 incorporates performance data that Cambridge Associates (CA) has collected for endowments and foundations for the last 20 years and shows the median one-year return on a rolling basis. There have been dramatic swings in performance across recent periods. In 2021, the median one-year returns as of March 31 and June 30 were the highest figures calculated across this era. In contrast, the median for this most recent one-year period was the lowest return for the peer universe since 2009.

## FIGURE 2 TRAILING ONE-YEAR MEDIAN RETURNS

Quarters Ended June 30, 2002 – June 30, 2022



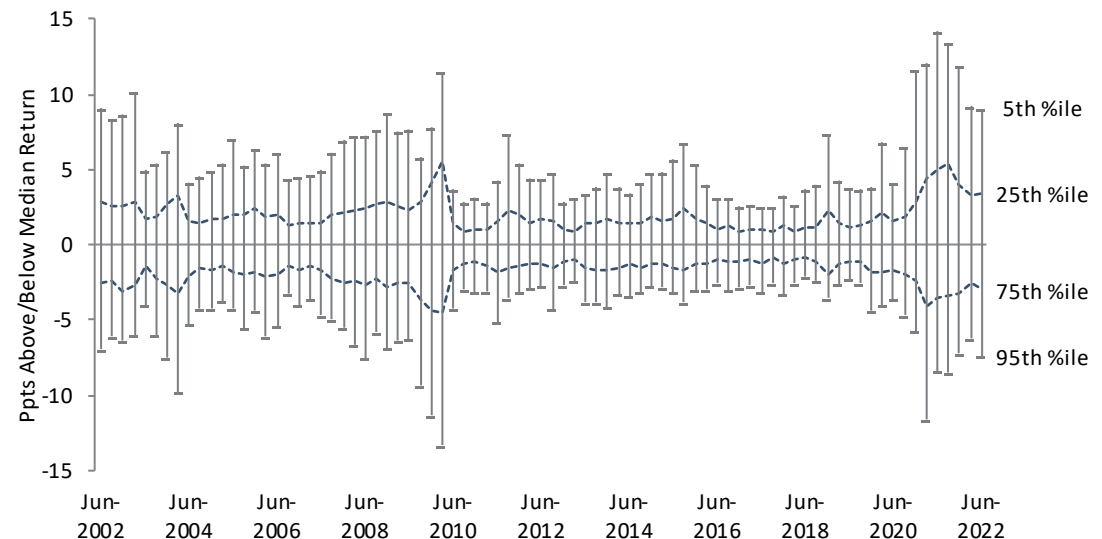
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

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 (1.0%) and the 95th percentile return (-15.3%) was 16.3 percentage points (ppts) for the one-year period ended June 30, 2022 (Figure 1). This range of returns has narrowed slightly compared to the data that was reported throughout 2021. However, the level of dispersion continues to be significantly higher than the experiences of the 2010s (Figure 3).

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

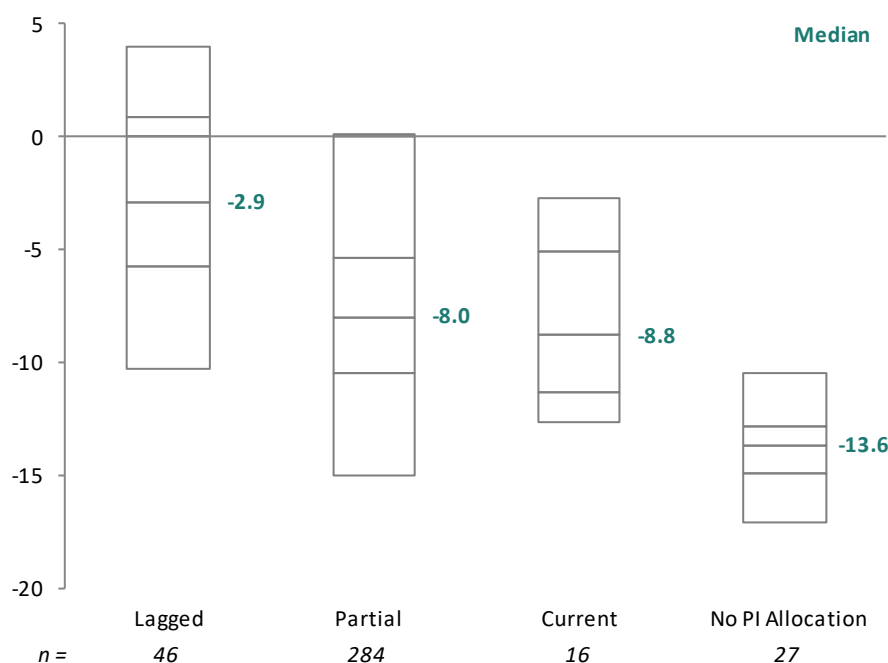
Based on Quarters Ended June 30, 2002 – June 30, 2022



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

**PRIVATE INVESTMENT REPORTING METHODOLOGIES.** In each edition of this study, we highlight the different reporting methodologies that are used to incorporate private investments into the total return calculation. Recent market volatility has made this topic particularly noteworthy when analyzing returns for the one-year period ended June 30, 2022. Figure 4 shows that the median return for institutions using the lagged methodology (-2.9%) is significantly higher than the median of the rest of the universe. In this section, we discuss how private investment reporting methodologies differ and the factors to keep in mind when conducting peer performance comparisons for this period.

**FIGURE 4 RANGE OF 1-YR RETURNS BY PRIVATE INVESTMENT REPORTING METHODOLOGY**  
As of June 30, 2022 • Percent (%)



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

Note: Excluded from this analysis are five institutions that reported reported "Other," which is typically a combination of the Partial and Current methodologies.

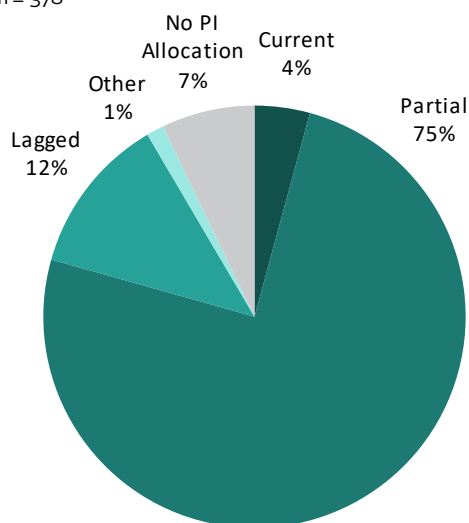
Figure 5 provides an illustration of the main reporting methodologies that institutions use to capture privates in the total return calculation. Approximately 75% of study participants use the partial basis, meaning only the first three quarters of private returns were incorporated into the one-year total portfolio return. As June 30 private valuations become available, second quarter 2022 returns will be restated to reflect actual private performance. These revisions to returns are typically reported to our peer database during October and November.

**FIGURE 5 PERFORMANCE REPORTING METHODOLOGIES: PRIVATE INVESTMENTS**

As of June 30, 2022

### All Endowments & Foundations

n = 378



#### Current Basis

Trailing one-year period includes private investment performance for July 1, 2021, to June 30, 2022.

#### Partial Basis

Trailing one-year period includes private investment performance for July 1, 2021, to March 31, 2022, and a flat return (0%) for April 1, 2022, to June 30, 2022.

#### Lagged Basis

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

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

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

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

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

The remaining institutions in the universe are already reporting a total return that either matches or closely resembles what their final fiscal year (June 30) figure will be. Under the lagged basis, which was cited by 12% of participants, private valuations are perpetually lagged by one quarter so that the one-year return represents private investment performance from April 1, 2021, to March 31, 2022. 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 July 1, 2021, to June 30, 2022. Just 4% of institutions used the current basis method when reporting returns for this study. Approximately 7% of the peer universe had little (<1%) or no allocation to private investments.

Institutions using the lagged basis for the trailing one-year return are incorporating private investment performance from second quarter 2021, which saw robust performance across all private strategies (Figure 6). Equally important, the lagged methodology does not include private performance for second quarter 2022. Preliminary index data compiled by CA already show considerable declines for venture capital strategies during this quarter. It is expected that negative index returns will be reported as well for non-venture private equity strategies when data become available. With exposure to PE/VC comprising more than three-quarters of the average private investment allocation among endowments and foundations in this study, the performance of these strategies is especially relevant to the analysis of these reporting methodologies.

**FIGURE 6 CAMBRIDGE ASSOCIATES PRIVATE INVESTMENT INDEX RETURNS**

	One Quarter End-to-End Pooled Return (%)				Preliminary
	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
US Private Equity	13.6	6.0	5.9	-0.4	NA
Global ex US Private Equity	11.4	2.9	3.6	-3.3	NA
US Venture Capital	11.8	9.4	7.3	-4.0	-9.9
Global ex US Venture Capital	9.0	2.5	0.8	-2.3	-6.3
Private Credit	5.5	2.4	1.9	1.5	-2.0
Distressed Control - Oriented	10.3	9.5	10.1	7.2	0.1
Real Estate	6.2	7.0	7.5	4.3	NA
Natural Resources	9.4	4.0	6.7	10.2	1.6

Lagged Basis

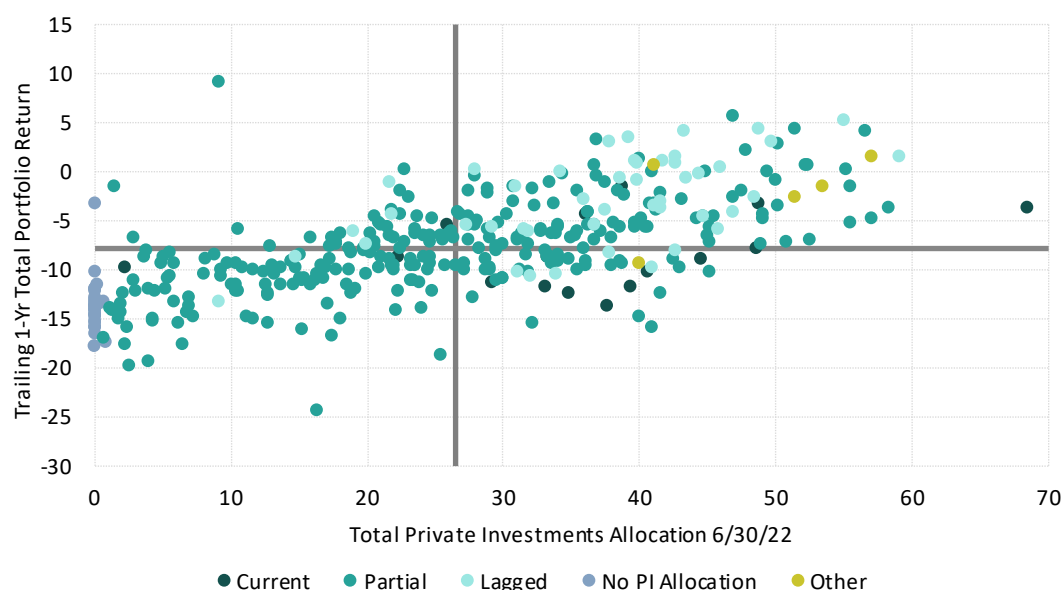
Source: Cambridge Associates LLC.

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

While institutions using the partial method do not include the robust private returns from second quarter 2021, they are not yet including the most recent markdowns for PE/VC strategies. The partial basis essentially has the effect of incorporating private investment performance with a flat (0%) return for second quarter 2022. As June 30 valuations become available over the coming months, this group of institutions will see their returns revised downward. Portfolios with lower private allocations are already experiencing a greater impact from second quarter 2022 equity markdowns by way of higher allocations to public markets (Figure 7). On the flip side, portfolios with the highest private investment allocations will experience the largest revisions to returns when final June 30 private valuations are incorporated.

**FIGURE 7 1-YR RETURNS VERSUS PRIVATE INVESTMENT ALLOCATIONS**

As of June 30, 2022 • n = 378



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

Note: The thicker lines represent where the median private investment allocation intersects with the median trailing one-year return.

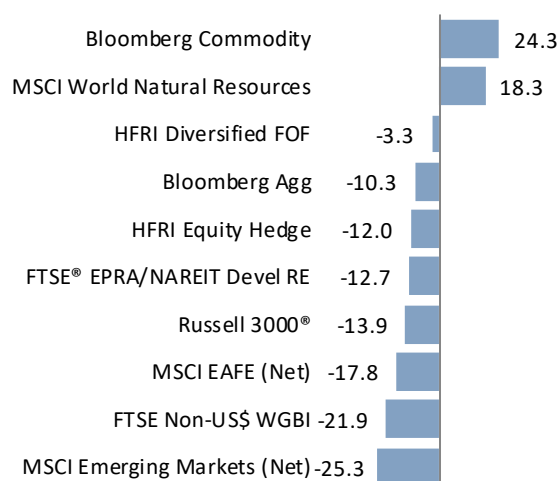
To summarize the key points on this topic, institutions using the lagged basis will generally report the best returns for fiscal year 2022 because of the robust private returns on the front end of the one-year period and the lack of markdowns on the back end. Those using the partial basis at this point in time will ultimately see revisions downward to performance, but the magnitude of revisions will be the greatest for those with the highest private allocations. Since returns from public equity markets will be lower than those reported for PE/VC strategies once final data have been reported, institutions with no private investment allocations will generally remain near the bottom end of the peer universe for the trailing one-year return.

**ONE-YEAR ASSET ALLOCATION.** The takeaways from Figure 7 lead us to further explore the relationship between peer asset allocations and performance. For the heat map analysis in Figure 8, 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.

**FIGURE 8 1-YR INDEX RETURNS AND ASSET ALLOCATION OF TOP AND BOTTOM PERFORMERS: US ENDOWMENTS AND FOUNDATIONS**

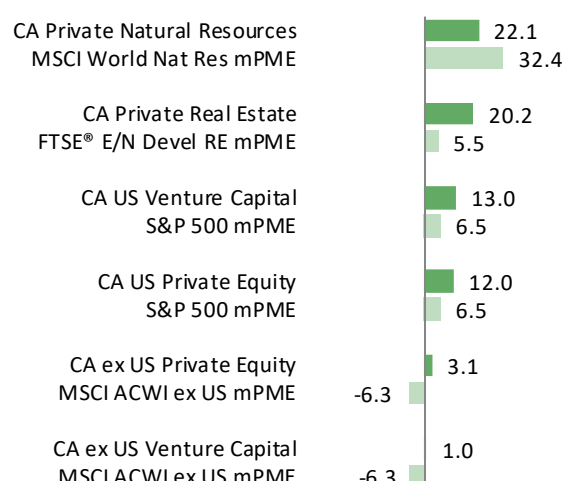
**Public Indexes**

Trailing 1 Year as of 6/30/22



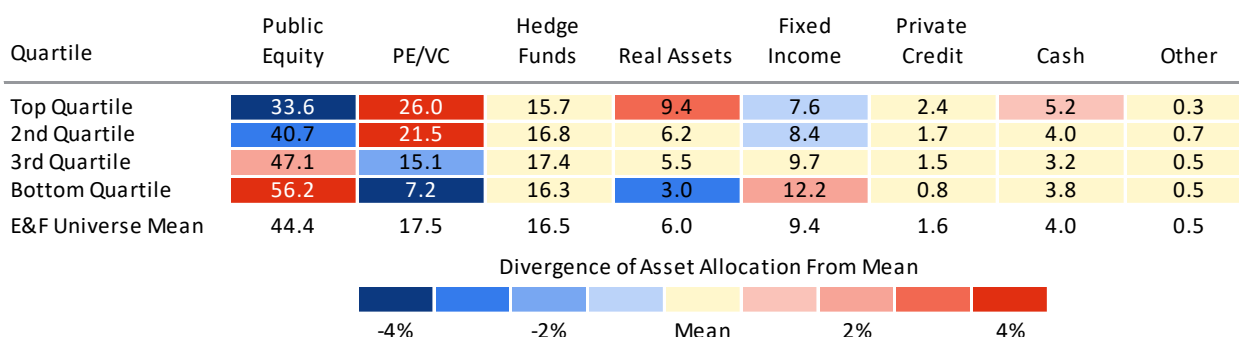
**Private Index IRRs and mPME IRRs**

Trailing 9 Months as of 3/31/22



**Mean Asset Allocation by Performance Quartile: June 30, 2021, to June 30, 2022**

*n* = 373



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.

The index returns in the top half of Figure 8 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 (mPME) basis. 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. Since final data are not yet available for second quarter 2022, the period evaluated for the private investment and mPME indexes is for the trailing nine months ended March 31, 2022.

Our previous section illustrated how private investment reporting methodologies impact performance comparisons for the trailing one-year period. Yet, the methodology issue is not the only factor that explains why institutions with high private investment allocations tended to report top performance among peers. The market backdrop in Figure 8 shows that most private investment index returns calculated by CA outperformed their mPME indexes by substantial margins over the nine-month period as of March 31, 2022. When considering this context, it is not surprising to learn that the top performance quartile had the highest average allocation to the equity-oriented strategies that produced the better relative returns (PE/VC), while the bottom performance quartile had the highest average allocation to the asset classes with the lowest returns (public equities). With second quarter 2022 private investment markdowns not anticipated to be as dramatic as the decline already reported in public equity markets, we expect portfolios with higher private allocations to continue outperforming those with little to no private allocations once final fiscal year 2022 statistics are compiled.

#### 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

**378** US endowments and foundations that participated in our quarterly survey  
**\$1.6B** Average market value of participating long-term investment portfolios  
**\$371M** Median value

Returns are reported net of external manager fees for 376 of 378 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.

Allocations to real assets and fixed income also stand out when comparing peer asset allocations. Although natural resources–related and commodities indexes took a hit in second quarter 2022, these returns for the trailing one-year period were by far the highest reported among the public benchmarks. Institutions in the top performance quartile reported an average allocation of 9.4% to real assets, which was more than triple the average allocation (3.0%) of the bottom performance quartile. In contrast, investment-grade bonds continued to produce returns that were far lower than real assets and PE/VC strategies, and institutions with the highest allocations to these asset classes tended to have the lowest overall performance.

**ONE-YEAR ATTRIBUTION.** Asset allocation is not the only driver of portfolio performance, as implementation of the allocations is another important piece to consider. Our analysis in Figure 9 estimates how much of peer performance can be attributed to asset allocation structures versus what can be attributed to the implementation of those allocations. 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 average data for the four performance quartiles shows that top performers had asset allocation structures that outperformed bottom performers by significant margins.

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 mostly 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 top performers added an average of 130 basis points (bps) through implementation while the other three performance quartiles lost value, on average.

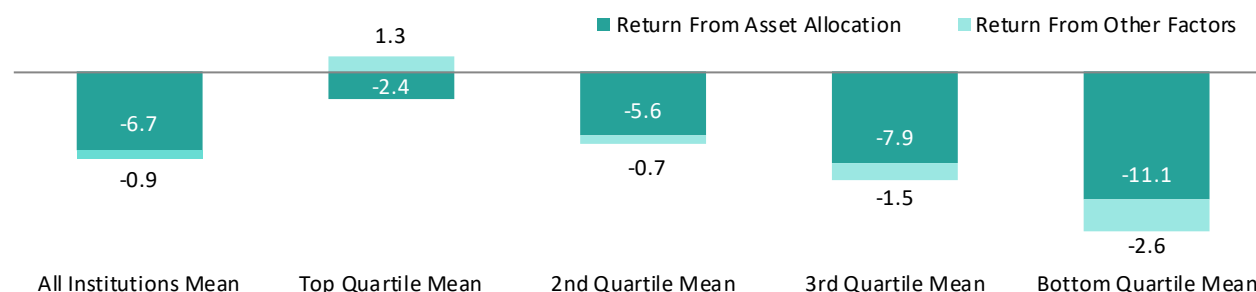
The table on the bottom of Figure 9 shows each asset class’s contribution to the average asset allocation return of the overall universe. Each category’s contribution is a function of its benchmark return for the one-year period, as well as the participant group’s average allocation to the category. This analysis also accounts for the method in which each institution incorporates private investment performance in their one-year return calculation. Since the vast majority of the peer group uses the partial basis, the private investment index returns reported in the table are for the nine-month period as of March 31, 2022. Most of the positive contributions to the average asset class return came from private investment and real assets–related strategies. However, these contributions were not enough to offset the sum of the negative contributions from long-only public equities, hedge funds, and fixed income strategies.



## FIGURE 9 1-YR RETURN ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE: US ENDOWMENTS AND FOUNDATIONS

As of June 30, 2022 • Percent (%) • n = 373

### 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
Venture Capital	7.4	12.8	1.0
Non-Venture Private Equity	6.2	11.9	0.8
Private Oil & Gas / Natural Resources	1.8	22.3	0.4
Private Real Estate	1.8	20.1	0.3
Other Private Investments	1.9	12.2	0.3
Public Energy / Natural Resources	0.9	18.3	0.2
Distressed-Private Equity Structure	0.6	21.0	0.1
Commodities	0.3	24.3	0.1
Private Credit	0.9	5.9	0.1
Cash & Equivalents	3.8	0.2	0.0
Global ex US Bonds	0.1	-21.9	0.0
Inflation-Linked Bonds	0.5	-5.1	0.0
High Yield Bonds	0.2	-12.8	0.0
Distressed-Hedge Fund Structure	1.0	-2.8	0.0
Public Real Estate	0.4	-12.7	-0.1
Global Bonds	0.4	-16.8	-0.1
Other	0.6	-13.8	-0.1
Absolute Return (ex Distressed)	8.4	-3.3	-0.3
Long/Short Hedge Funds	6.9	-12.0	-0.8
US Bonds	8.8	-10.3	-0.9
Global ex US Equity-Emerging Mkts	5.5	-25.3	-1.4
Global Equity	10.3	-15.5	-1.6
Global ex US Equity-Developed Mkts	10.7	-17.8	-1.9
US Equity	20.7	-13.9	-2.9

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

Note: Private investment benchmark returns are for the period of 7/1/21 to 3/31/22.

### TRAILING TEN-YEAR RESULTS

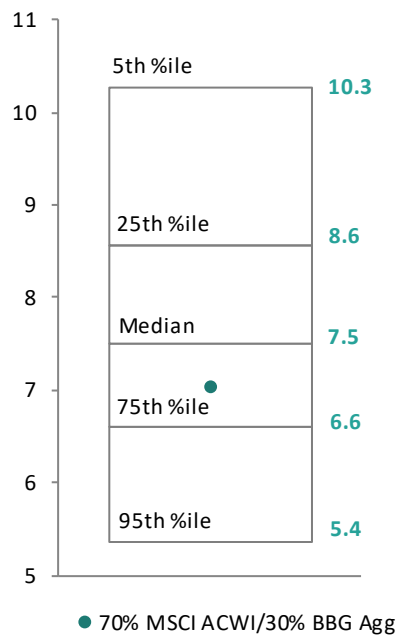
The median trailing ten-year return was 7.5% (Figure 10). Returns ranged from 10.3% at the 5th percentile to 5.4% at the 95th percentile. The simple 70/30 index return earned 7.0% and would have landed just at the 66th percentile of the respondent group for the trailing ten-year period.

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

Percent (%)

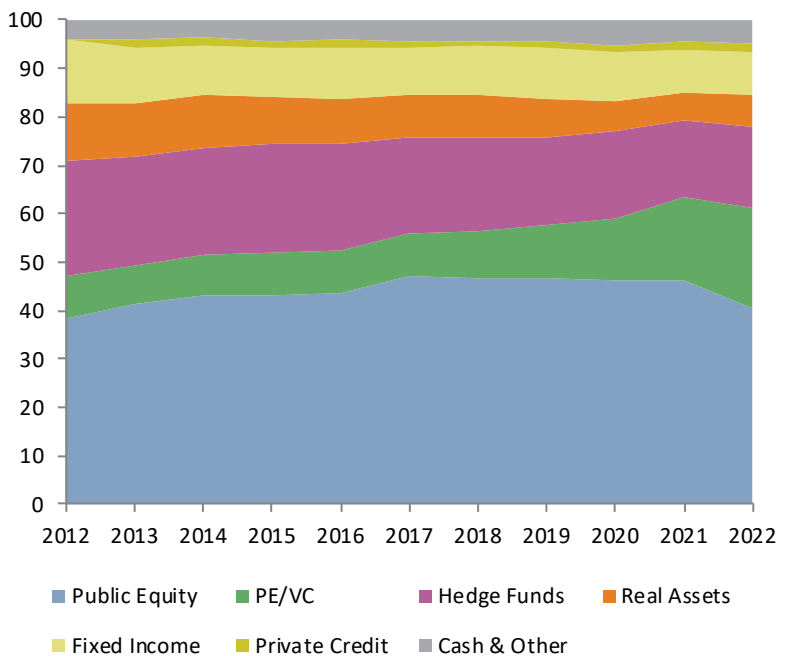
**Trailing 10-Yr Return**

Period Ending June 30, 2022 • n = 343



**Trend in Mean Average Asset Allocation**

Periods Ending June 30 • n = 250

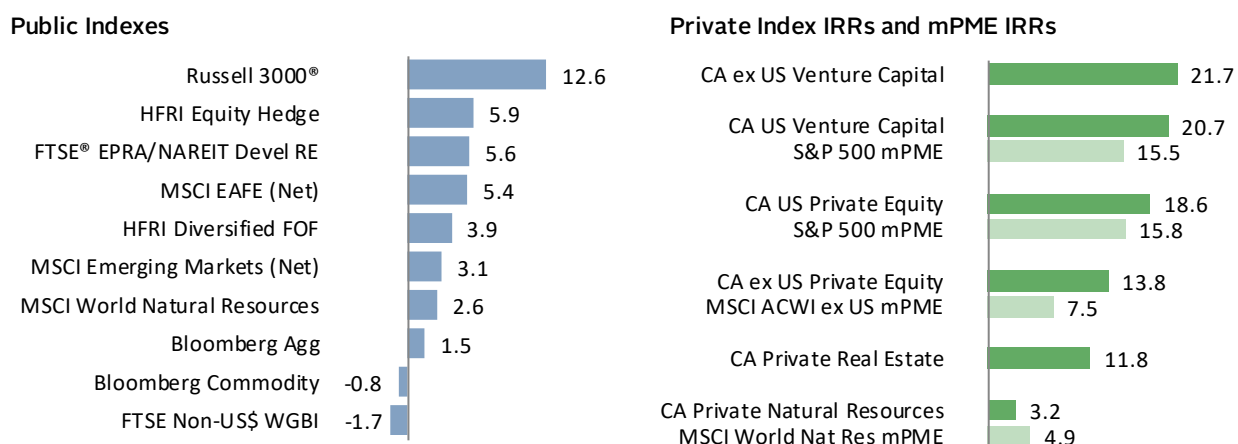


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

There have been several meaningful changes to the average asset allocation mix for participants over the past decade. Public equity allocations, which represent the largest piece of the average asset allocation of the respondent group, grew considerably over the first half of the past decade. However, these allocations have since declined and by 2022, were just 2.1 ppts higher than they were ten years ago. In contrast, PE/VC allocations changed little over the first half of this ten-year snapshot but have grown substantially since. The average PE/VC allocation in 2022 was 12.1 ppts higher than it was in 2012. Elsewhere, average allocations to hedge funds, real assets, and fixed income trended down for much of the past decade before ticking back up slightly over the most recent year.

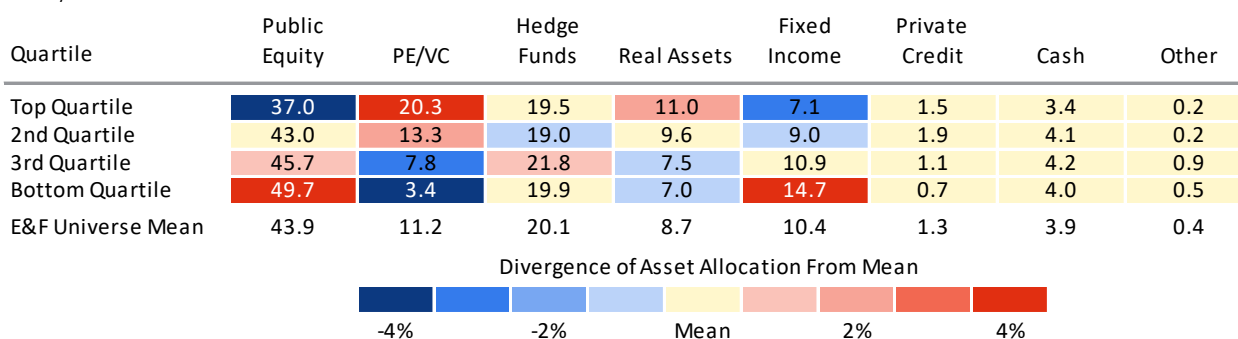
**TEN-YEAR ASSET ALLOCATION.** Figure 11 explores the relationship between peer returns and asset allocations for the trailing ten-year period. In this analysis, the participant group is broken down into four quartiles based on the trailing ten-year investment return. Each institution's asset allocation was averaged across the 11 June 30 periods from 2012 to 2022. The four quartiles in the heat map represent the average of the institutions within each quartile.

**FIGURE 11 10-YR INDEX RETURNS AND ASSET ALLOCATION OF TOP AND BOTTOM PERFORMERS: US ENDOWMENTS AND FOUNDATIONS**



**Mean Asset Allocation by Performance Quartile: June 30, 2012, to June 30, 2022**

*n* = 248



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 20.3% for the top quartile of performers over this ten-year period and just 3.4% for the bottom quartile of performers. In addition, the top quartile's average allocations to public equities (37.0%) and fixed income (7.1%) were lower than that of the bottom quartile, which were 49.7% and 14.7%, respectively.

Figure 12 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 9.8%, approximately 350 bps higher than the median return reported by portfolios with little to no private investment allocation. 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 12 RANGE OF 10-YR RETURNS BY PRIVATE INVESTMENT ALLOCATION**

As of June 30, 2022 • Percent (%)



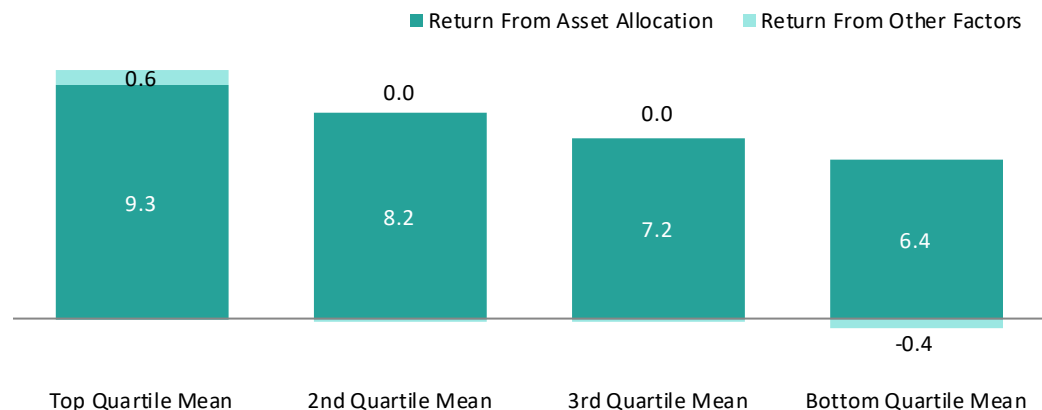
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: Each institution's private investment allocation represents the mean for the 11 June 30 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 13 shows that the top performance quartile had a mean asset allocation return of 9.3% for the trailing ten-year period, approximately 290 bps higher than the bottom performance quartile. The top performance quartile also added another 0.6% on average from other factors, while the bottom performance quartile lost an average of 0.4%.

**FIGURE 13 10-YR ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE: US ENDOWMENTS AND FOUNDATIONS**

As of June 30, 2022 • Percent (%) • n = 248



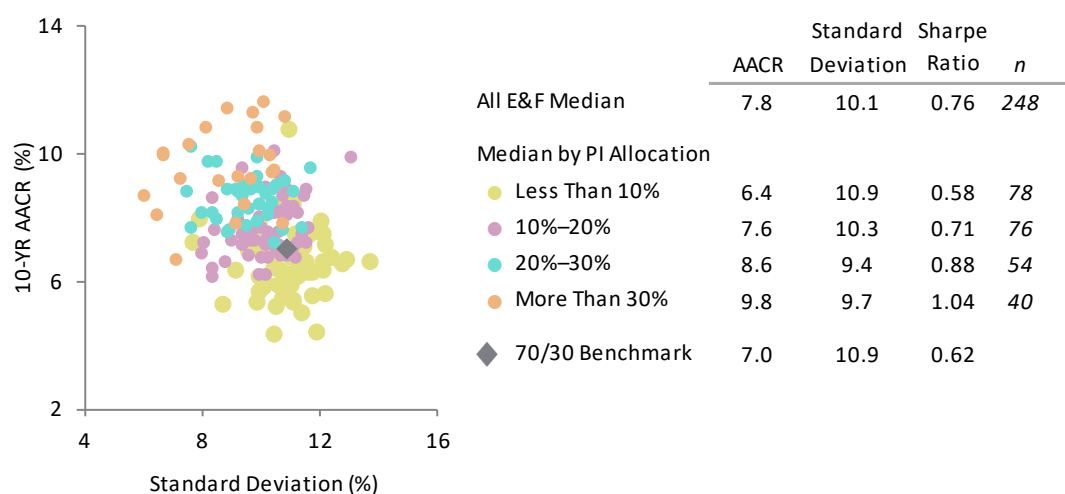
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

**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 14 shows subcategories based on an institution's private investment allocation.

**FIGURE 14 10-YR STANDARD DEVIATION AND SHARPE RATIO**

Periods Ended June 30, 2022



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

Institutions that had an allocation of more than 30% to private investments over the last ten years reported an average Sharpe ratio of 1.04, 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 5: Institutions with no significant private investment allocations (less than 1% of the total portfolio) are reflected in the No PI Allocation category.

Figure 9: 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 14: 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 June 30 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 June 30, 2022 • Percent (%)

	Colleges & Universities <i>n</i> = 123	Cultural & Environmental 48	Foundations 104	Healthcare 32	Independent Schools 29	Other Nonprofits 42
	Mean	Mean	Mean	Mean	Mean	Mean
<b>Public Equity</b>	38.8	42.3	41.0	41.3	43.4	48.5
Global	8.0	9.6	9.3	7.5	10.3	12.1
US	17.5	19.5	17.9	18.9	20.6	21.1
Global ex US Developed	8.7	9.4	8.9	10.1	8.7	11.2
Emerging Markets	4.6	3.8	4.8	4.8	3.8	4.0
<b>PE/VC</b>	24.3	17.3	20.9	15.6	15.0	11.6
Venture Capital	11.5	8.6	10.3	7.3	5.5	4.6
Non-Venture Private Equity	10.2	6.6	7.6	6.8	6.9	3.8
Other Private Investments	2.6	2.1	3.0	1.4	2.7	3.2
<b>Hedge Funds</b>	15.2	19.2	14.2	18.6	21.6	18.8
Long/Short	6.2	8.0	5.1	6.8	11.3	6.3
Absolute Return	7.9	10.2	8.4	10.3	10.0	11.1
Distressed	1.1	1.0	0.8	1.4	0.3	1.3
<b>Real Assets &amp; ILBs</b>	7.8	5.0	6.8	5.7	4.8	5.0
Private Real Estate	2.6	1.4	2.4	1.8	0.8	1.3
Public Real Estate	0.5	0.3	0.4	0.5	0.1	0.4
Commodities	0.4	0.4	0.3	0.4	0.8	0.1
Inflation Linked-Bonds	0.5	0.5	0.5	0.5	0.5	0.8
Private O&G/Nat Resources	3.1	1.9	2.4	1.6	1.6	1.3
Public Energy/Nat Resources	0.7	0.5	0.8	0.9	1.1	1.1
<b>Bonds</b>	8.0	8.9	10.0	13.1	6.8	11.4
Global	0.1	0.6	0.4	0.4	0.0	0.9
US	7.7	8.2	9.3	12.3	6.7	10.5
Global ex US	0.0	0.0	0.0	0.1	0.0	0.1
High-Yield Bonds	0.2	0.2	0.2	0.3	0.1	0.0
<b>Private Credit</b>	2.0	1.3	1.9	2.0	2.0	0.8
Distressed - Control Oriented	0.8	0.3	0.6	0.7	0.7	0.2
Private Credit ex Distressed	1.2	1.0	1.3	1.3	1.3	0.5
<b>Cash &amp; Equivalents</b>	3.2	5.9	4.9	3.3	5.5	3.8
<b>Other Assets</b>	0.6	0.0	0.4	0.6	0.7	0.2

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 June 30, 2022 • Percent (%)

	All Endow & Fdn <i>n</i> = 378	Less Than \$100M 65	\$100M– \$200M 64	\$200M– \$500M 78	\$500M– \$1B 45	\$1B– \$3B 68	More Than \$3B 58
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
<b>Public Equity</b>	41.5	50.1	44.8	43.9	40.3	35.8	32.3
Global	9.2	11.3	10.5	9.5	6.2	8.3	8.1
US	18.6	22.6	20.1	21.1	19.3	15.1	12.8
Global ex US Developed	9.3	12.1	10.2	9.0	10.3	8.3	5.8
Emerging Markets	4.4	4.2	4.1	4.3	4.6	4.1	5.5
<b>PE/VC</b>	19.6	10.8	14.8	18.7	21.9	24.7	28.2
Venture Capital	9.2	5.0	6.9	7.4	9.9	11.7	15.4
Non-Venture Private Equity	7.7	3.2	4.2	7.0	9.7	11.7	11.7
Other Private Investments	2.6	2.7	3.7	4.3	2.3	1.4	1.0
<b>Hedge Funds</b>	16.6	15.1	18.8	16.2	15.3	17.9	16.0
Long/Short	6.6	6.3	7.0	6.8	4.7	7.4	6.6
Absolute Return	9.0	8.4	11.2	8.5	9.3	8.9	8.0
Distressed	1.0	0.3	0.6	0.9	1.3	1.7	1.4
<b>Real Assets &amp; ILBs</b>	6.5	4.3	4.9	5.0	7.3	7.2	11.0
Private Real Estate	2.0	0.6	0.7	1.1	2.9	2.8	4.8
Public Real Estate	0.4	0.5	0.3	0.4	0.6	0.4	0.4
Commodities	0.4	0.3	0.3	0.3	0.4	0.2	0.8
Inflation Linked–Bonds	0.5	0.6	0.8	0.6	0.5	0.3	0.4
Private O&G/Nat Resources	2.3	1.0	1.6	2.0	2.2	2.9	4.2
Public Energy/Nat Resources	0.8	1.2	1.1	0.7	0.7	0.7	0.3
<b>Bonds</b>	9.4	12.7	10.2	10.2	9.0	7.4	6.4
Global	0.3	0.6	0.4	0.1	0.4	0.5	0.1
US	8.8	11.7	9.7	10.0	8.4	6.8	5.6
Global ex US	0.0	0.0	0.0	0.0	0.0	0.0	0.2
High-Yield Bonds	0.2	0.3	0.1	0.0	0.2	0.1	0.5
<b>Private Credit</b>	1.8	0.9	1.5	1.7	2.4	2.3	2.0
Distressed - Control Oriented	0.6	0.3	0.4	0.6	0.8	0.8	0.8
Private Credit ex Distressed	1.1	0.6	1.1	1.1	1.6	1.5	1.3
<b>Cash &amp; Equivalents</b>	4.3	5.7	4.5	3.4	3.7	4.4	3.7
<b>Other Assets</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.8</b>	<b>0.1</b>	<b>0.2</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 June 30, 2022 • Percent (%)

	Latest Qtr	Calendar YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>All Endowments &amp; Foundations</b>						
5th %ile	-3.9	-5.2	1.0	13.4	11.8	10.3
25th %ile	-6.8	-9.3	-4.5	9.7	8.7	8.6
Median	-8.2	-12.1	-7.8	7.8	7.2	7.5
75th %ile	-9.8	-14.3	-10.9	5.7	5.9	6.6
95th %ile	-12.2	-17.4	-15.3	3.3	4.3	5.4
Mean	-8.2	-11.8	-7.6	7.9	7.5	7.7
<i>n</i>	378	378	378	375	370	342
<b>Less Than \$100M</b>						
5th %ile	-6.4	-9.4	-2.7	10.7	9.3	8.5
25th %ile	-8.6	-12.2	-8.5	7.8	6.6	7.3
Median	-10.2	-15.1	-11.9	4.5	5.2	6.6
75th %ile	-11.7	-16.8	-14.5	3.7	4.5	5.7
95th %ile	-13.2	-18.4	-16.8	1.9	3.4	5.0
Mean	-9.9	-14.5	-11.1	5.5	5.6	6.6
<i>n</i>	65	65	65	64	63	53
<b>\$100M–\$200M</b>						
5th %ile	-4.8	-6.4	-1.5	9.7	8.8	8.4
25th %ile	-7.9	-11.4	-6.3	7.9	7.3	7.5
Median	-9.1	-12.9	-9.4	6.7	6.6	6.8
75th %ile	-10.3	-14.7	-11.8	5.4	5.6	6.3
95th %ile	-12.1	-16.9	-16.5	3.0	4.1	5.3
Mean	-8.9	-13.0	-9.1	6.7	6.5	6.9
<i>n</i>	64	64	64	64	63	59
<b>\$200M–\$500M</b>						
5th %ile	-6.0	-8.1	-1.6	11.2	9.8	9.0
25th %ile	-7.4	-10.1	-5.6	9.1	8.3	8.1
Median	-8.3	-12.2	-8.0	7.8	7.4	7.2
75th %ile	-9.7	-14.3	-10.8	6.3	6.0	6.4
95th %ile	-11.8	-17.1	-14.7	4.3	4.8	5.5
Mean	-8.5	-12.4	-7.9	7.7	7.2	7.3
<i>n</i>	78	78	78	78	77	75
<b>\$500M–\$1B</b>						
5th %ile	-5.6	-6.4	0.2	11.4	9.9	9.1
25th %ile	-7.0	-9.3	-4.2	9.8	8.8	8.4
Median	-7.6	-11.5	-7.2	8.3	7.4	7.7
75th %ile	-9.2	-13.6	-9.3	7.0	6.5	7.2
95th %ile	-10.5	-16.3	-14.1	5.4	5.7	6.2
Mean	-8.1	-11.5	-6.8	8.3	7.7	7.7
<i>n</i>	45	45	45	44	44	42
<b>\$1B–\$3B</b>						
5th %ile	-3.5	-4.5	1.6	15.6	12.6	10.8
25th %ile	-5.8	-8.6	-3.7	11.3	9.9	9.1
Median	-7.3	-10.8	-6.0	8.8	8.2	8.2
75th %ile	-8.6	-12.6	-9.1	6.4	6.5	7.4
95th %ile	-10.4	-15.9	-13.2	4.1	5.2	6.4
Mean	-7.2	-10.6	-6.1	9.2	8.5	8.4
<i>n</i>	68	68	68	68	67	62
<b>More Than \$3B</b>						
5th %ile	-3.1	-3.1	4.4	16.0	13.5	11.4
25th %ile	-5.2	-5.7	0.1	13.0	11.1	10.2
Median	-6.4	-8.3	-3.9	10.2	9.5	9.2
75th %ile	-7.9	-10.5	-7.6	8.2	7.7	8.3
95th %ile	-10.4	-14.4	-11.8	6.0	6.2	7.1
Mean	-6.6	-8.4	-3.7	10.7	9.5	9.2
<i>n</i>	58	58	58	57	56	51

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 June 30, 2022 • Percent (%)

	Latest Qtr	Calendar YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Colleges &amp; Universities</b>						
5th %ile	-3.6	-3.6	2.7	15.4	12.9	10.9
25th %ile	-6.3	-8.8	-2.8	11.2	9.8	8.9
Median	-7.6	-11.1	-6.0	9.1	8.4	8.1
75th %ile	-9.0	-13.1	-9.6	7.2	6.8	7.3
95th %ile	-11.8	-16.7	-13.5	4.8	5.4	6.3
Mean	-7.7	-10.8	-6.1	9.3	8.5	8.2
<i>n</i>	123	123	123	121	121	116
<b>Cultural &amp; Environmental</b>						
5th %ile	-3.8	-5.5	1.4	12.9	10.4	9.3
25th %ile	-7.1	-9.6	-4.9	9.1	7.9	8.3
Median	-9.0	-13.2	-8.2	7.1	6.7	7.3
75th %ile	-10.1	-14.8	-12.4	5.2	5.3	6.4
95th %ile	-12.1	-18.5	-17.4	3.8	4.5	5.4
Mean	-8.5	-12.5	-8.3	7.3	6.9	7.4
<i>n</i>	48	48	48	48	47	46
<b>Foundations</b>						
5th %ile	-4.0	-5.5	-0.1	13.6	11.6	10.6
25th %ile	-7.0	-9.9	-4.4	9.9	8.9	8.6
Median	-8.4	-12.3	-8.6	7.8	7.5	7.6
75th %ile	-10.1	-14.4	-10.8	5.7	6.0	6.8
95th %ile	-12.4	-17.4	-15.2	3.3	4.2	5.5
Mean	-8.3	-12.0	-7.9	8.1	7.6	7.8
<i>n</i>	104	104	104	104	102	91
<b>Healthcare</b>						
5th %ile	-4.9	-6.9	0.0	12.4	10.8	9.5
25th %ile	-6.4	-8.4	-4.6	8.5	7.9	7.6
Median	-8.6	-12.6	-9.1	6.6	6.1	7.1
75th %ile	-9.7	-13.6	-10.4	4.8	5.4	6.3
95th %ile	-11.3	-16.1	-14.2	3.6	4.7	5.6
Mean	-8.1	-11.6	-7.6	7.0	6.8	7.1
<i>n</i>	32	32	32	32	31	28
<b>Independent Schools</b>						
5th %ile	-4.6	-5.5	-0.7	10.3	9.1	8.7
25th %ile	-7.4	-10.7	-7.5	8.6	7.5	7.5
Median	-8.9	-13.5	-9.0	6.4	6.3	7.1
75th %ile	-9.9	-15.9	-13.6	5.2	5.5	6.1
95th %ile	-11.8	-18.0	-17.2	2.5	3.8	5.2
Mean	-8.6	-13.0	-9.2	6.8	6.5	7.0
<i>n</i>	29	29	29	29	28	27
<b>Other Nonprofits</b>						
5th %ile	-5.2	-6.4	-0.5	9.7	8.3	8.4
25th %ile	-7.9	-11.2	-6.7	8.0	7.2	7.4
Median	-9.5	-12.6	-8.8	5.5	5.9	6.7
75th %ile	-10.9	-15.5	-12.8	4.3	4.5	5.8
95th %ile	-11.9	-17.2	-15.1	3.1	4.1	4.7
Mean	-9.2	-12.8	-9.2	5.9	6.0	6.6
<i>n</i>	42	42	42	41	41	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 June 30, 2022

### By Asset Size

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Less Than \$100M	2%	69%	—	—	29%
<i>n</i>	1	45			19
\$100M–\$200M	—	94%	—	—	6%
<i>n</i>		60			4
\$200M–\$500M	—	94%	1%	1%	4%
<i>n</i>		73	1	1	3
\$500M–\$1B	2%	87%	11%	—	—
<i>n</i>	1	39	5		
\$1B–\$3B	6%	69%	22%	1%	2%
<i>n</i>	4	46	15	1	1
More Than \$3B	18%	35%	42%	5%	—
<i>n</i>	10	20	24	3	

### By Institution Type

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Colleges & Universities	8%	72%	15%	3%	2%
<i>n</i>	10	88	19	4	2
Cultural & Environmental	—	85%	6%	—	8%
<i>n</i>		41	3		4
Foundations	4%	73%	13%	1%	9%
<i>n</i>	4	76	14	1	9
Healthcare	—	66%	25%	—	9%
<i>n</i>		21	8		3
Independent Schools	—	97%	—	—	3%
<i>n</i>		28			1
Other Nonprofits	5%	71%	5%	—	17%
<i>n</i>	2	30	2		8

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

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