## 3RD QUARTER • 2023

# NTS QUARTERLY

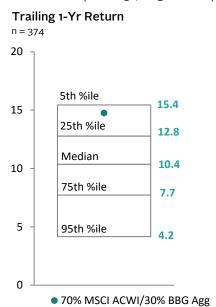
A LOOK AT ASSET ALLOCATION AND TOTAL RETURNS FOR US ENDOWMENTS AND FOUNDATIONS

#### TRAILING ONE-YEAR RESULTS

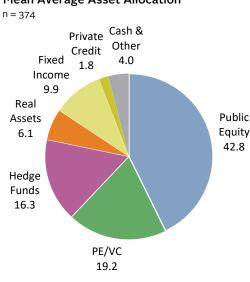
The median return of the endowment and foundation (E&F) universe was 10.4% for the trailing one-year period (Figure 1) ended September 30, 2023. A blended index return consisting of 70% MSCI ACWI and 30% Bloomberg Aggregate Bond Index earned 14.7% and would have landed in the top quartile of the overall respondent group. This was the second straight quarter that the simple benchmark fell near the top end of the peer universe's return distribution.

#### FIGURE 1 PERFORMANCE AND ASSET ALLOCATION SNAPSHOT

Period Ended September 30, 2023 • Percent (%)



## Mean Average Asset Allocation



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.

Growth-oriented investments make up the biggest chunk of E&F portfolios. The average combined allocation to public equity and private equity/venture capital (PE/ VC) exceeded 60%, although the exact breakdown across these strategies varies. Asset size continues to be the key differentiator in the variation of asset allocations across the total participant group, as larger portfolios tend to have the highest allocations to private investments. The average allocation to hedge funds was approximately 16%,

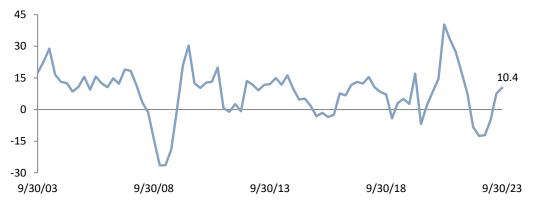


with a little more than one-third of that allocation coming from equity-oriented long/ short funds. A detailed breakdown of average asset allocations is displayed for various asset size cohorts and institution types in the appendix of this report.

Figure 2 incorporates performance data that Cambridge Associates (CA) has collected from institutions for the last 20 years and shows the median one-year return on a rolling basis. The median one-year return as of September 30, 2023, was the highest figure calculated since the end of 2021. This most recent year's median return fell right in the middle of the results from the last 20 years, ranking 41 out of the 81 periods displayed in the graph.

#### FIGURE 2 TRAILING ONE-YEAR MEDIAN RETURNS

Quarters Ended September 30, 2003 - September 30, 2023

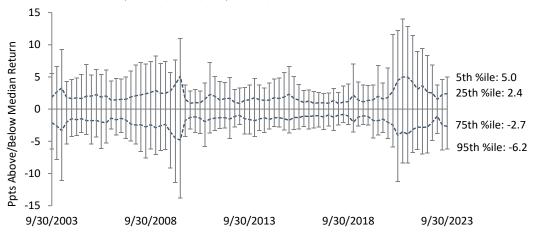


Source: Endowment and foundation data as reported to Cambridge Associates LLC.

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.

Figure 3 shows the percentage points (ppts) above or below the median that certain percentile returns were for trailing one-year periods. For example, the 5th percentile return (15.4%) for the most recent one-year period was 5.0 ppts above the median return. The spread between the 5th percentile and the 95th percentile return (4.2%) was 11.2 ppts. The overall range in returns was slightly higher compared to what was reported for the first two quarter ends of 2023, but still markedly lower than the dispersion reported throughout 2021 and 2022.

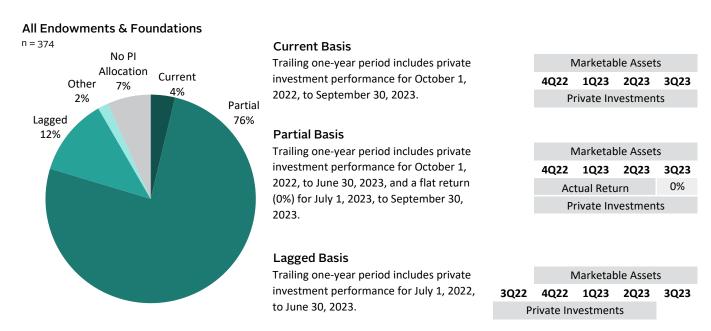
FIGURE 3 DISPERSION IN TRAILING 1-YR RETURNS RELATIVE TO THE MEDIAN RETURN Based on Quarters Ended September 30, 2003 – September 30, 2023



**PRIVATE INVESTMENT REPORTING METHODOLOGIES.** In each edition of this study, we highlight the different reporting methodologies used to incorporate private investments into the total return calculation. This issue is an important factor to keep in mind when conducting peer performance comparisons for shorter-term periods, and recent market volatility has made this topic particularly noteworthy.

Figure 4 provides an illustration of the most common reporting methodologies used across the peer universe to calculate the one-year return as of September 30. More than three-quarters (76%) of participants used the partial basis, meaning only the first three quarters of private returns were incorporated into the one-year total portfolio return. The unique feature of this methodology is that private investments get carried at a 0% return for the last quarter of the trailing one-year period. As September 30 private valuations become available, the 0% return will be replaced with actual private performance and the trailing one-year return for the total portfolio will be revised.

FIGURE 4 PERFORMANCE REPORTING METHODOLOGIES: PRIVATE INVESTMENTS
As of September 30, 2023



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

The remaining institutions in the universe are already reporting a total return that incorporates four quarters of private performance. 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 July 1, 2022, to June 30, 2023. 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 October 1, 2022, to September 30, 2023. Just 4% of institutions used the current basis method when reporting returns for this study. Approximately 7% of the peer universe has little (<1%) or no allocation to private investments.

Figure 5 uses the CA private index returns to demonstrate how each reporting methodology incorporates private investment performance for the one year ended September



30. With most of the average E&F private investment allocation coming from PE/VC, the performance of these strategies is most impactful when analyzing the different reporting methodologies. Institutions using the lagged methodology are the only peers that incorporated private returns for third quarter 2022, a period that saw flat to negative returns for PE/VC strategies. And while official benchmark statistics for third quarter 2023 are not yet available, initial fund data collected by CA point to another negative performance quarter for these strategies.

FIGURE 5 CAMBRIDGE ASSOCIATES PRIVATE INVESTMENT INDEX RETURNS

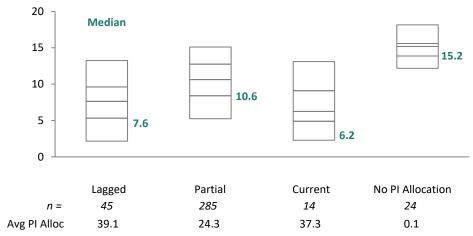
	One Quarter End-to-End Pooled Return (%)							
	Prelimin							
	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023			
US Private Equity	-0.1	1.0	2.7	2.8	NA			
Global ex US Private Equity	-5.2	5.5	3.4	1.3	NA			
US Venture Capital	-2.4	-6.8	-1.0	-0.5	NA			
Global ex US Venture Capital	-3.9	-0.4	-0.3	-1.5	NA			
Private Credit	-0.1	3.8	2.6	1.9	NA			
Distressed Control - Oriented	-0.3	2.3	1.6	1.2	NA			
Real Estate	-1.3	0.0	-0.2	-0.5	NA			
Natural Resources	1.8	3.2	-0.3	1.0	NA			
Lagge	Lagged Basis				ent Basis			

Source: Cambridge Associates LLC.

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

As Figure 6 shows, the median trailing one-year returns were lowest for institutions using the lagged methodology (7.6%) and the current methodology (6.2%). The median return for institutions using the partial methodology was considerably higher at 10.6%. This was partially attributable to the fact that the partial basis only includes three quarters of private investment performance at this point. The partial reporters will see their returns revised to the downside if private investment returns do in fact come in negative for third quarter 2023. However, asset allocation is also a factor in these comparisons as

FIGURE 6 RANGE OF 1-YR RETURNS BY PRIVATE INVESTMENT REPORTING METHODOLOGY As of September 30, 2023 • Percent (%)



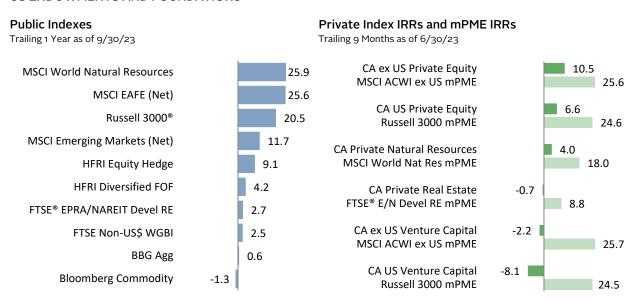
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

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

the subgroups using the lagged and current methodologies had the highest average allocations to private investments. The group of institutions with little to no private allocations had a median return (15.2%) that was by far the highest of all the cohorts.

**ONE-YEAR HEAT MAP.** The relationship between E&F performance and private investment allocation highlighted in the previous graph was a result of public equity markets broadly outperforming private markets over the past year. The index returns in the top half of Figure 7 provide context on the capital market environment for the trailing one-year period. Included alongside the private benchmarks internal rates of return (IRRs) are public market returns on a modified public market equivalent basis (mPME), which allow for appropriate comparisons of private and public market returns. The mPME benchmarks significantly outperformed the private indexes for most strategies shown in this analysis.

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



# Mean Asset Allocation by Performance Quartile: September 30, 2022, to September 30, 2023 n = 369

		Marketable Assets						Private Investments			
	Total			Public			Total		Private		
	Mktble	Public	Hedge	Real	Fixed	Cash &	Private		Real	Private	
Quartile	Assets	Equity	Funds	Assets	Income	Other	Inv	PE/VC	Assets	Credit	
Top Quartile	91.2	57.7	15.4	2.1	11.9	4.1	8.8	6.5	1.4	0.9	
2nd Quartile	78.1	44.0	17.6	2.2	10.7	3.6	21.9	17.2	3.0	1.7	
3rd Quartile	69.1	38.1	17.1	1.7	8.7	3.5	30.9	22.6	5.8	2.5	
Bottom Quartile	58.8	27.1	16.7	1.8	8.2	5.1	41.2	31.7	7.2	2.3	
E&F Universe Mean	74.4	41.8	16.7	2.0	9.9	4.1	25.6	19.4	4.3	1.8	
		Divergence of Asset Allocation From Mean									
		-4%		-2%	Mean	29	%	4%			

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.



In the heat map table on the bottom of Figure 7, each institution's asset allocation was averaged across the beginning and ending points for the trailing one-year period. The four quartiles represent the average asset allocation of the institutions within each quartile. This table captures just how large the differentials were in asset allocations between top and bottom performers over the last year. On average, the top quartile of performers had portfolios with 91% of their assets in marketable strategies and just 9% in private investments. Conversely, the bottom quartile of performers had an average allocation mix of 59% to marketable strategies and 41% to private investments. When drilling down further into private allocations, we see that by far the largest differentials across peers were reported in PE/VC.

**ONE-YEAR ATTRIBUTION.** The implementation of the asset allocation is another important piece to consider when comparing peer returns. Our analysis in Figure 8 estimates how much of peer performance can be attributed to asset allocation structures versus those that 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 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. Additionally, it will account for any decision to modify the asset allocation structure or rebalance the portfolio allocations throughout the course of the one-year period.

#### 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

**374** US endowments and foundations that participated in our quarterly survey **\$1.7B** Average market value of participating long-term investment portfolios **\$330M** Median value

Returns are reported net of external manager fees for 373 of 374 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.

Our attribution analysis points to asset allocation being the dominant factor in explaining the dispersion of peer returns for the trailing one-year period. The average asset allocation return for the top performance quartile was 13.8%, while the average for the bottom quartile was 6.4%. This differential was far greater than what our model estimated for the return from other factors. Top performers added an average of 0.9% through implementation, which was 170 basis points (bps) higher than the average for the bottom quartile (-0.8%).

The table on the bottom of Figure 8 shows the breakdown of the average asset allocation return of the overall universe. Each asset class'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. The positive effect from asset allocation over the past year was largely attributable to the performance of public equity asset classes. Venture capital was the primary asset class that detracted from portfolio returns.

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

As of September 30, 2023 • Percent (%) • n = 369

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



#### Breakdown of Return From Asset Allocation

	Mean Beginning Year Asset	Asset Class	Contribution to Asset
Asset Class	Allocation	Benchmark Return	Class Return
US Equity	18.8	20.5	3.8
Global ex US Equity-Developed Mkts	8.8	25.6	2.2
Global Equity	9.0	21.2	1.9
Long/Short Hedge Funds	6.6	9.1	0.6
Non-Venture Private Equity	7.7	6.6	0.5
Global ex US Equity - Emerging Mkts	4.1	11.7	0.5
Absolute Return (ex Distressed)	9.5	4.2	0.4
Public Energy/Natural Resources	0.8	25.9	0.2
Cash & Equivalents	3.8	4.5	0.2
Private Credit	1.2	8.5	0.1
Private Oil & Gas/Natural Resources	2.4	4.0	0.1
Other Private Investments	3.1	2.7	0.1
Other	0.4	14.7	0.1
US Bonds	9.2	0.6	0.1
Distressed - Hedge Fund Structure	1.0	4.2	0.0
Distressed - Private Equity Structure	0.6	5.2	0.0
High Yield Bonds	0.2	10.3	0.0
Public Real Estate	0.4	2.7	0.0
Inflation-Linked Bonds	0.6	1.2	0.0
Global Bonds	0.4	1.0	0.0
Global ex US Bonds	0.0	2.5	0.0
Commodities	0.3	-1.3	0.0
Private Real Estate	2.1	-0.7	0.0
Venture Capital	8.9	-8.1	-0.8

Source: Endowment and foundation data as reported to Cambridge Associates LLC. Note: Private investment benchmark returns are for the period of 10/1/22 to 6/30/23.

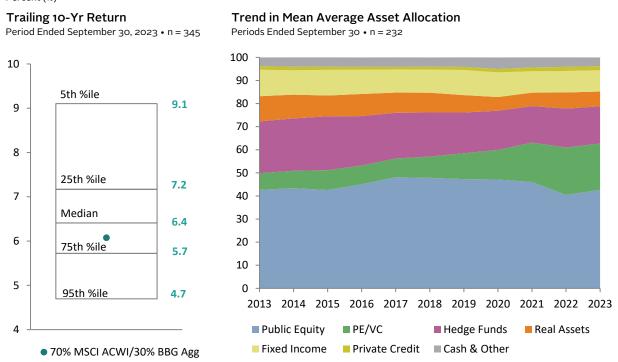


#### TRAILING TEN-YEAR RESULTS

The median E&F return for the trailing ten-year period was 6.4%, which outperformed the simple 70/30 index return of 6.1% (Figure 9). Returns for the E&F universe ranged from 9.1% at the 5th percentile to 4.7% at the 95th percentile. The average PE/VC allocation among respondents increased by almost three-fold over the last decade, going from 7% in 2013 to 20% in 2023. While allocations to public equity fluctuated quite a bit over this period, the average allocation in 2023 was practically identical to what it was ten years ago. Each of the other asset classes in Figure 10 saw a decline in allocations over the past decade, with hedge fund strategies experienced the largest decrease (23% to 16%).

**TEN-YEAR HEAT MAP.** Figure 10 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 ended June 30 that fell from 2013 to 2023. The four quartiles in the heat map represent the average of the institutions within each quartile.

FIGURE 9 10-YR PERFORMANCE AND ASSET ALLOCATION SNAPSHOT Percent (%)

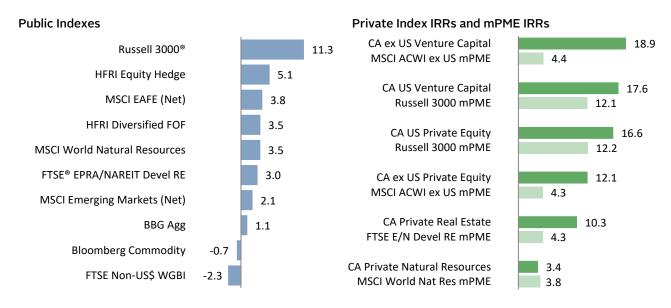


Sources: Endowment and foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Contrary to our earlier analyses in this study that highlighted the underperformance of private investments versus public markets in the shorter term, private assets have delivered superior performance over the long term. Most of the private investment indexes in Figure 10 outperformed their mPME benchmarks by significant margins over the past decade. As would be expected, given the 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 average private investment allocation was approximately 30% for the top quartile of performers over this ten-year period and just 6% for the bottom quartile of performers. Relatedly, the top quartile's average allocations to public equities (38%) and fixed income (7%) were much lower than that of the bottom quartile, which were 50% and 14%, respectively.

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



Mean Asset Allocation by Performance Quartile: September 30, 2013, to September 30, 2023 n = 230

		Marketable Assets							Private Investments			
	Total			Public			Total		Private			
	Mktble	Public	Hedge	Real	Fixed	Cash &	Private		Real	Private		
Quartile	Assets	Equity	Funds	Assets	Income	Other	Inv	PE/VC	Assets	Credit		
Top Quartile	70.5	38.3	18.7	2.7	7.4	3.5	29.5	20.0	7.7	1.8		
2nd Quartile	78.6	43.1	19.3	3.3	8.7	4.3	21.4	14.0	5.4	2.0		
3rd Quartile	86.5	47.7	18.9	4.2	11.3	4.4	13.5	9.3	3.0	1.3		
Bottom Quartile	93.6	50.1	20.3	4.8	14.0	4.4	6.4	4.3	1.3	0.7		
E&F Universe Mean	82.3	44.8	19.3	3.7	10.3	4.1	17.7	11.9	4.4	1.4		
			Dive	rgence of	Asset Allo	Mean						
		-4%	-	-2%	Mean	29	%	4%				

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.

Figure 11 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 more than 30% to private investments was 8.3%, approximately 310 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 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.

FIGURE 11 RANGE OF 10-YR RETURNS BY PRIVATE INVESTMENT ALLOCATION As of September 30, 2023 • Percent (%)



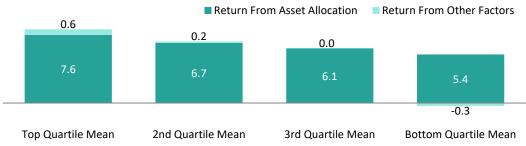
Source: Endowment and foundation data as reported to Cambridge Associates LLC.

Note: Each institution's private investment allocation represents the mean for the 11 September 30 periods from 2013 to 2023.

**TEN-YEAR ATTRIBUTION.** The attribution model also indicates asset allocation factors were the primary reason that top performers separated themselves from the rest of the peer universe over the trailing ten-year period. Figure 12 shows that the top performance quartile had a mean asset allocation return of 7.6% for the trailing ten-year period, approximately 220 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 0.3%.

FIGURE 12 10-YR ATTRIBUTION ANALYSIS BY PERFORMANCE QUARTILE: US ENDOWMENTS AND FOUNDATIONS

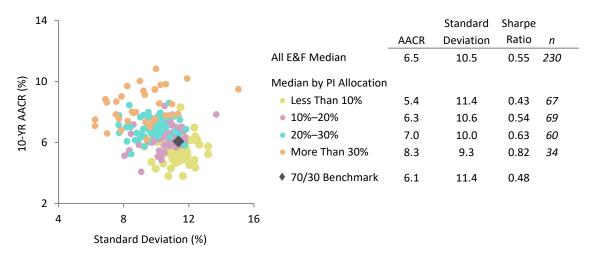
As of September 30, 2023 • Percent (%) • n = 230



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

FIGURE 13 10-YR STANDARD DEVIATION AND SHARPE RATIO Periods Ended September 30, 2023



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.

The median Sharpe ratio was 0.82 for institutions that had an allocation of more than 30% to private investments over the last ten years. This cohort's ratio was higher than that of the other subgroups with smaller private allocations, and the blended global benchmark. While the higher Sharpe ratio was partly a function of a higher median return, it was also attributable to fact that this group had the lowest median 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.

Figures 4 and 6: Institutions with no significant private investment allocations (less than 1% of the total portfolio) are reflected in the No PI Allocation category.

Figures 7 and 10: Private investment indexes are pooled horizon 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.

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 13: 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 September 30 periods from 2013 to 2023. 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 September 30, 2023 • Percent (%)

	Colleges & Universities n = 122 Mean	Cultural & Environmental 50 Mean	Foundations  100  Mean	Healthcare 32 Mean	Independent Schools 30 Mean	Other Nonprofits 40 Mean
Public Equity	40.0	43.6	41.6	42.0	46.1	51.1
Global	7.9	9.7	9.6	5.8	9.8	13.5
US	19.1	20.6	18.4	21.3	23.4	22.3
Global ex US Developed	9.3	9.7	9.0	11.0	9.6	11.4
Emerging Markets	3.8	3.6	4.5	3.9	3.4	4.0
PE/VC	23.1	16.2	22.0	15.5	14.5	11.1
Venture Capital	9.9	6.9	9.8	6.6	4.2	3.6
Non-Venture Private Equity	10.2	6.9	8.4	6.8	7.1	4.1
Other Private Investments	3.0	2.5	3.7	2.1	3.2	3.4
Hedge Funds	15.2	18.6	14.1	16.5	20.2	18.8
Long/Short	5.7	7.4	4.7	6.0	9.7	5.8
Absolute Return	8.1	10.0	8.2	8.9	9.4	10.7
Distressed	1.4	1.2	1.2	1.7	1.1	2.3
Real Assets & ILBs	7.2	5.1	6.6	5.2	4.0	4.7
Private Real Estate	2.6	1.6	2.5	1.6	0.8	1.1
Public Real Estate	0.4	0.4	0.3	0.3	0.2	0.3
Commodities	0.3	0.2	0.3	0.3	0.3	0.1
Inflation-Linked Bonds	0.4	0.6	0.6	0.7	0.7	0.9
Private O&G/Nat Resources	2.8	1.8	2.3	1.6	1.3	1.2
Public Energy/Nat Resources	0.6	0.5	0.7	0.7	0.7	1.1
Bonds	8.6	9.4	10.3	14.2	8.8	10.6
Global	0.1	0.5	0.3	0.2	0.0	0.6
US	8.3	8.7	9.8	13.6	8.6	10.0
Global ex US	0.0	0.0	0.0	0.1	0.0	0.0
High-Yield Bonds	0.2	0.1	0.1	0.1	0.2	0.0
Private Credit	2.1	1.6	1.9	2.1	1.6	0.9
Distressed - Control Oriented	0.8	0.3	0.6	0.7	0.5	0.2
Private Credit ex Distressed	1.4	1.3	1.4	1.4	1.1	0.8
Cash & Equivalents	3.0	5.4	3.3	4.2	4.4	2.4
Other Assets	0.7	0.0	0.2	0.5	0.5	0.3



FIGURE B DETAILED ASSET ALLOCATION BY ASSET SIZE: US ENDOWMENTS AND FOUNDATIONS As of September 30, 2023 • Percent (%)

	All Endow & Fdn n = 374	Less Than \$100M <i>65</i>	\$100M- \$200M <i>71</i>	\$200M- \$500M <i>79</i>	\$500M- \$1B <i>44</i>	\$1B- \$3B <i>64</i>	More Than \$3B 51
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Public Equity	42.8	51.2	46.5	46.1	40.1	35.7	32.9
Global	9.2	11.9	10.2	9.7	5.9	7.7	7.9
US	20.1	23.7	22.2	22.6	19.7	15.9	13.7
Global ex US Developed	9.7	11.5	10.6	9.8	10.1	8.6	6.6
Emerging Markets	3.9	4.1	3.4	3.9	4.4	3.5	4.8
PE/VC	19.2	12.0	15.3	17.0	23.0	24.8	27.1
Venture Capital	8.0	4.5	5.7	5.9	9.8	10.9	14.0
Non-Venture Private Equity	8.1	3.8	5.0	7.1	10.2	12.6	12.0
Other Private Investments	3.1	3.7	4.6	4.0	3.0	1.3	1.1
Hedge Funds	16.3	14.6	17.2	16.2	14.6	17.7	16.8
Long/Short	6.0	5.3	5.8	6.1	4.8	6.8	7.1
Absolute Return	8.8	8.6	9.9	8.6	7.8	9.4	8.2
Distressed	1.4	0.7	1.4	1.5	1.9	1.6	1.4
Real Assets & ILBs	6.1	4.0	4.5	4.5	7.5	6.8	11.2
Private Real Estate	2.1	0.5	0.7	1.1	3.2	2.9	5.4
Public Real Estate	0.3	0.5	0.2	0.3	0.4	0.3	0.3
Commodities	0.3	0.2	0.2	0.1	0.4	0.1	0.7
Inflation-Linked Bonds	0.6	0.7	0.9	0.5	0.5	0.3	0.6
Private O&G/Nat Resources	2.1	1.0	1.5	2.0	2.4	2.6	4.0
Public Energy/Nat Resources	0.7	1.1	0.9	0.5	0.7	0.6	0.2
Bonds	9.9	13.3	10.4	10.6	9.6	8.0	6.2
Global	0.3	0.3	0.2	0.1	0.4	0.7	0.1
US	9.4	12.9	10.1	10.4	9.0	7.2	5.6
Global ex US	0.0	0.0	0.0	0.0	0.0	0.0	0.2
High-Yield Bonds	0.1	0.1	0.1	0.0	0.2	0.1	0.4
Private Credit	1.8	1.0	1.4	1.6	2.5	2.6	2.3
Distressed - Control Oriented	0.6	0.2	0.3	0.5	0.9	0.8	0.8
Private Credit ex Distressed	1.3	0.8	1.1	1.2	1.5	1.8	1.5
Cash & Equivalents	3.6	3.7	4.2	3.4	2.5	4.3	3.0
Other Assets	0.4	0.3	0.4	0.7	0.1	0.1	0.5



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

Periods Ended September 30, 2023 • Percent (%)

r erious Ended September 30, 2023 • Fere	Latest Qtr	Calendar YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
All Endowments & Foundations						
5th %ile	0.1	8.2	15.4	11.0	9.5	9.1
25th %ile	-0.9	6.5	12.8	8.4	7.4	7.2
Median	-1.4	5.4	10.4	6.9	6.2	6.4
75th %ile	-2.1	4.4	7.7	5.4	5.3	5.7
95th %ile	-3.0	2.5	4.2	3.4	3.7	4.7
Mean	-1.5	5.4	10.2	7.0	6.4	6.5
n	<i>37</i> 5	374	374	<i>370</i>	368	345
Less Than \$100M						
5th %ile	-0.7	8.6	17.7	8.5	7.6	7.1
25th %ile	-1.2	7.0	14.9	6.4	6.0	6.2
Median	-1.9	5.6	12.2	5.5	4.9	5.7
75th %ile	-2.6	5.1	9.6	4.1	4.3	5.1
95th %ile	-3.2	4.2	6.7	2.3	3.0	4.2
Mean	-1.9	6.0	12.2	5.4	5.1	5.6
n	65	64	64	62	62	53
\$100M-\$200M		0.	0.			
5th %ile	-0.2	8.1	15.5	8.4	7.4	7.0
25th %ile	-1.0	6.8	13.7	7.3	6.4	6.4
Median	-1.6	5.7	11.4	6.2	5.9	5.9
75th %ile	-2.2	4.8	9.8	5.2	5.2	5.4
95th %ile	-2.7	3.3	6.8	3.2	3.7	4.5
Mean	-1.6	5.8	11.3	6.0	5.8	5.9
n	-1.0 71	7.6 71	71	69	69	67
	71	71	71	03	03	07
\$200M-\$500M	٥٦	9.0	15.2	0.0	0.2	7.6
5th %ile	-0.5	8.0	15.2	9.8	8.2	7.6
25th %ile	-1.1	6.7	13.1	8.1	7.0	6.8
Median	-1.6	6.1	11.4	7.0	6.1	6.2
75th %ile	-2.1	5.2	8.9	5.4	5.3	5.6
95th %ile	-2.8	3.5	7.2	3.5	4.0	4.7
Mean	-1.7	6.0	11.2	6.8	6.1	6.2
n	<i>79</i>	79	79	79	79	74
\$500M-\$1B						
5th %ile	1.0	6.7	13.5	11.3	8.6	7.8
25th %ile	-1.1	6.1	11.0	8.6	7.4	7.1
Median	-1.3	5.3	9.8	7.4	6.4	6.7
75th %ile	-1.9	4.6	8.9	6.2	5.7	6.2
95th %ile	-2.7	3.1	6.0	4.7	5.0	5.2
Mean	-1.3	5.2	9.8	7.5	6.7	6.7
n	44	44	44	44	44	44
\$1B-\$3B						
5th %ile	0.2	8.1	14.6	11.4	10.3	9.2
25th %ile	-0.6	6.1	11.4	9.2	8.2	7.9
Median	-1.1	5.2	9.4	8.0	7.3	7.0
75th %ile	-1.4	4.3	6.5	6.9	6.1	6.4
95th %ile	-2.1	2.6	3.8	3.8	4.9	5.5
Mean	-1.0	5.2	9.0	7.9	7.3	7.2
n	64	64	64	64	63	58
More Than \$3B						
5th %ile	0.6	6.4	11.2	12.0	10.5	9.9
25th %ile	-0.4	5.0	8.1	10.5	9.2	9.0
Median	-0.9	4.1	6.4	8.9	7.7	7.8
75th %ile	-1.5	2.6	4.6	6.4	6.3	6.9
95th %ile	-3.0	-1.2	1.2	5.4	5.4	6.0
Mean	-1.1	3.5	6.4	8.6	7.8	7.9
n	52	52	52	52	51	49
Source: Endowment and foundation data as repo						-



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

Periods Ended September 30, 2023 • Percent (%)

	Latest Qtr	Calendar YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Colleges & Universities						
5th %ile	0.1	6.9	15.2	11.5	9.8	9.5
25th %ile	-0.8	6.1	11.4	9.4	8.1	7.8
Median	-1.3	5.2	9.6	8.0	7.1	6.9
75th %ile	-1.9	4.3	7.6	6.7	6.0	6.2
95th %ile	-2.8	2.6	4.2	4.6	4.8	5.5
Mean	-1.3	5.0	9.4	8.1	7.2	7.1
n	123	123	123	121	120	117
Cultural & Environmental						
5th %ile	0.0	8.0	15.2	10.0	8.8	8.3
25th %ile	-1.0	6.9	14.2	7.5	6.9	7.0
Median	-1.5	5.7	10.6	6.8	6.1	6.2
75th %ile	-2.3	4.8	8.5	3.9	4.5	5.3
95th %ile	-2.9	2.4	4.0	2.8	3.6	4.7
Mean	-1.5	5.7	10.6	6.2	5.9	6.3
n	50	50	50	50	50	48
Foundations						
5th %ile	0.3	8.7	14.7	10.8	10.0	9.4
25th %ile	-1.0	6.2	12.3	8.0	7.2	7.1
Median	-1.5	5.2	10.1	6.7	6.1	6.4
75th %ile	-2.0	4.1	7.0	5.4	5.4	5.8
95th %ile	-3.1	1.9	3.6	3.3	3.8	4.9
Mean	-1.4	5.2	9.6	6.8	6.4	6.6
n	100	100	100	100	100	90
Healthcare						
5th %ile	-0.2	8.3	15.3	9.2	8.5	8.2
25th %ile	-0.7	6.5	13.5	6.8	6.3	6.4
Median	-1.2	5.5	10.5	6.1	5.6	5.8
75th %ile	-2.1	4.5	7.8	4.8	5.0	5.5
95th %ile	-2.7	1.8	4.4	3.7	3.9	4.9
Mean	-1.4	5.4	10.5	6.1	5.8	6.0
n	32	32	32	31	31	28
Independent Schools						
5th %ile	0.0	8.0	15.2	9.7	7.4	7.2
25th %ile	-0.9	7.0	12.5	7.5	6.8	6.5
Median	-1.2	6.2	12.0	6.2	6.0	6.0
75th %ile	-2.2	5.1	9.2	4.2	5.3	5.5
95th %ile	-2.7	3.9	6.1	1.9	3.1	4.5
Mean	-1.7	5.8	11.1	6.1	5.8	6.0
n	30	29	29	28	28	27
Other Nonprofits						
5th %ile	-0.5	8.6	17.9	8.3	7.3	7.1
25th %ile	-1.2	7.2	15.1	7.1	6.2	6.5
Median	-1.6	6.3	13.7	5.9	5.2	5.6
75th %ile	-2.1	5.3	10.5	4.8	4.6	5.1
95th %ile	-3.0	3.5	6.8	4.2	3.6	4.3
Mean	-1.6	6.2	12.7	6.1	5.4	5.6
n	40	40	40	40	39	35

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

As of September 30, 2023

### By Asset Size

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Less Than \$100M	_	72%	_	_	28%
n		47			18
\$100M-\$200M	_	97%	_	_	3%
n		69			2
\$200M-\$500M	_	94%	_	_	6%
n		74			5
\$500M-\$1B	2%	89%	9%	_	_
n	1	39	4		
\$1B-\$3B	9%	66%	23%	2%	_
n	6	42	15	1	
More Than \$3B	13%	27%	50%	10%	_
n	7	14	26	5	

## By Institution Type

	Current Basis	Partial Basis	Lagged Basis	Other	No PI Allocation
Colleges & Universities	6%	68%	20%	3%	2%
n	7	84	25	4	3
Cultural & Environmental	2%	82%	6%	_	10%
n	1	41	3		5
Foundations	4%	79%	10%	1%	6%
n	4	79	10	1	6
Healthcare	3%	69%	19%	3%	6%
n	1	22	6	1	2
Independent Schools	_	93%	_	_	6%
n		28			2
Other Nonprofits	3%	78%	3%	_	15%
n	1	31	1		7

Copyright © 2023 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of US and global copyright laws (e.g., 17 U.S.C. 101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages.

This report is provided for informational purposes only. The information does not represent investment advice or recommendations, nor does it constitute an offer to sell or a solicitation of an offer to buy any securities. Any references to specific investments are for illustrative purposes only. The information herein does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Information in this report or on which the information is based may be based on publicly available data. CA considers such data reliable but does not represent it as accurate, complete, or independently verified, and it should not be relied on as such. Nothing contained in this report should be construed as the provision of tax, accounting, or legal advice. PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE PERFORMANCE. Broad-based securities indexes are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Any information or opinions provided in this report are as of the date of the report, and CA is under no obligation to update the information or communicate that any updates have been made. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified.

The terms "CA" or "Cambridge Associates" may refer to any one or more CA entity including: Cambridge Associates, LLC (a registered investment adviser with the US Securities and Exchange Commission, a Commodity Trading Adviser registered with the US Commodity Futures Trading Commission and National Futures Association, and a Massachusetts limited liability company with offices in Arlington, VA; Boston, MA; Dallas, TX; Menlo Park, CA, New York, NY; and San Francisco, CA), Cambridge Associates Limited (a registered limited company in England and Wales, No. 06135829, that is authorized and regulated by the UK Financial Conduct Authority in the conduct of Investment Business, reference number: 474331); Cambridge Associates GmbH (authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin'), Identification Number: 155510), Cambridge Associates Asia Pte Ltd (a Singapore corporation, registration No. 200101063G, which holds a Capital Market Services License to conduct Fund Management for Accredited and/or Institutional Investors only by the Monetary Authority of Singapore), Cambridge Associates Limited, LLC (a registered investment adviser with the US Securities and Exchange Commission, an Exempt Market Dealer and Portfolio Manager in the Canadian provinces of Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia, Ontario, Québec, and Saskatchewan, and a Massachusetts limited liability company with a branch office in Sydney, Australia, ARBN 109 366 654), Cambridge Associates Investment Consultancy (Beijing) Ltd (a wholly owned subsidiary of Cambridge Associates (Hong Kong) Private Limited (a Hong Kong Private Limited Company licensed by the Securities and Futures Commission of Hong Kong to conduct the regulated activity of advising on securities to professional investors).

