ANNUAL REVIEW OF ENDOWMENTS

FISCAL YEAR 2024

CAMBRIDGE ASSOCIATES

This study is based on a survey that Cambridge Associates (CA) administers annually to our endowment clients. The report that follows summarizes returns, asset allocation, and other investment-related data for 323 endowed institutions for the fiscal year ended June 30, 2024. Included in this year's report are commentary and exhibits that are spread across three separate sections.

Fiscal year 2024 was the best-performing year for endowments since 2021, with most reporting double-digit returns. However, it was also the second straight year that the returns of diversified portfolios fell short of an investment option with heavier public allocations. As a result, the three-year return of the peer median underperformed a simple blended index weighted 70% global public equity and 30% fixed income. However, private investments continued to be a key return driver for the best-performing portfolios in the endowment universe over the long term. The **INVESTMENT PORTFOLIO RETURNS** section highlights these contrasting performance themes for the short-term versus long-term periods.

The primary policy benchmark for most respondents is a static-weighted blend of indexes where the weightings align exactly or closely with the asset classes and target percentages specified in the asset allocation policy. Perhaps the most consequential benchmarking decision investors have had to make in recent years is how to represent private equity in the policy benchmark. The majority of respondents use a public index for that representation, and this cohort by and large saw significant underperformance versus their benchmark in 2024. Our **BENCHMARKING** section summarizes the various approaches that endowments use for benchmarking total portfolio performance and compares endowment performance versus policy benchmark returns.

There have been some minor shifts in endowment asset allocations in recent years that have diverged from longer-term trends. For example, over the last couple of years, average allocations to public equities have increased, while those to private equity and venture capital (PE/VC) have declined. However, these shorter-term changes seem to be driven by market dynamics where strong performance from public equity markets has naturally lifted those allocations within portfolios. When looking at data from an asset allocation policy perspective, the number of endowments decreasing their long-term target to public equity was double the number that reported an increase. The **ASSET ALLOCATION AND IMPLEMENTATION** section covers this and other topics, such as the number of external investment managers and the types of investment vehicles (e.g., active versus passive) used.

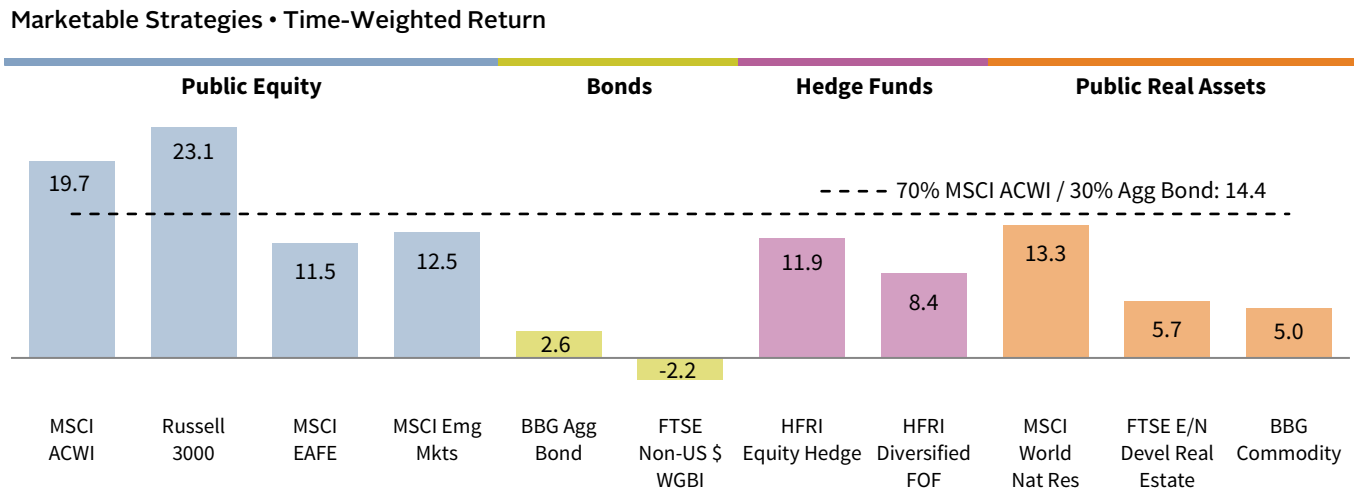
Investment Portfolio Returns

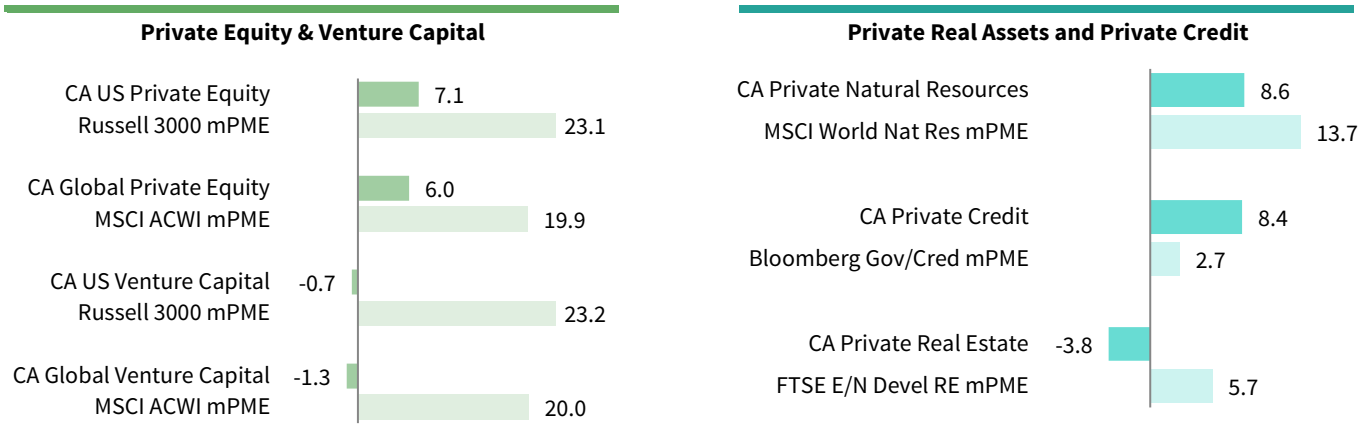
TOP-PERFORMING ENDOWMENTS IN FISCAL YEAR 2024 WERE LED BY PUBLIC EQUITIES

Public equities dominated the capital return environment in fiscal year 2024. The global equity market, as represented by the MSCI All Country World Index (ACWI), returned nearly 20%. The US stock market was the standout among the broad geographic regions, with the Russell 3000® Index returning 23%. Performance in global ex US regions was not quite as robust, but still landed in the double digits. Bond returns were more subdued, with the Bloomberg Aggregate Bond Index yielding less than 3%. Still, the strong performance from equities led a simple portfolio weighted 70% in global equities and 30% in US bonds to a healthy 14% return for the year (Figure 1).

FIGURE 1 FISCAL YEAR 2024 INDEX RETURNS

As of June 30, 2024 • Percent (%)





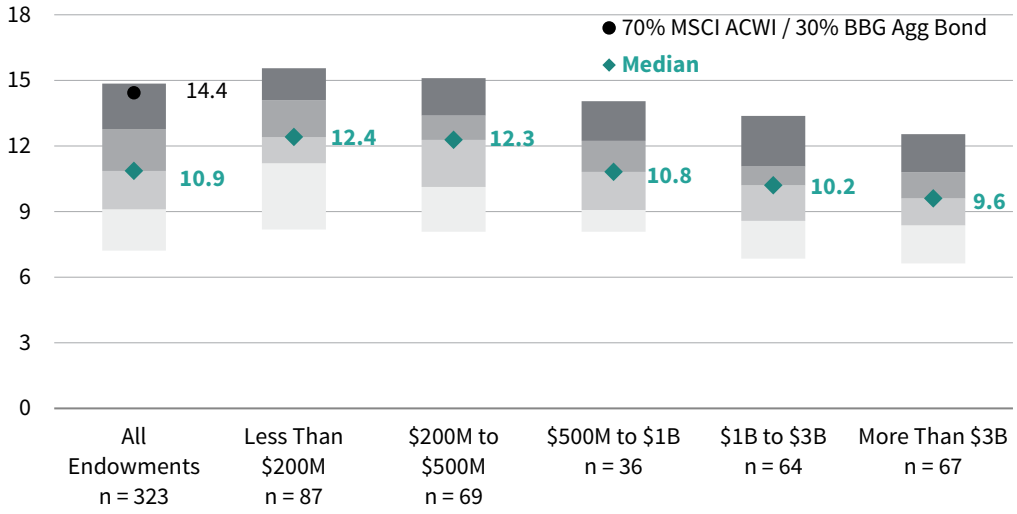
Sources: Index data are provided by Bloomberg Index Services Limited, Cambridge Associates LLC, Frank Russell Company, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., the National Association of Real Estate Investment Trusts, and Thomson Reuters Datastream. MSCI data provided "as is"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

Alternative asset classes did not keep pace with the performance of the simple index for the fiscal year. While indexes representing long/short hedge funds and public natural resource equities delivered double-digit returns, they still fell short of the 70/30 portfolio's performance. Private investments lagged further behind, with the CA Private Equity Indexes and the CA Venture Capital Indexes significantly underperforming a passive investment in the public stock market. Similarly, private real assets strategies trailed the modified public market equivalent (mPME) versions of their benchmarks for the fiscal year.

In this market environment, endowments that had diversified into alternative assets struggled to match the performance of the simple 70/30 portfolio (Figure 2). Most institutions in the CA endowment universe maintain high allocations to alternative assets, with the private investment portion representing more than one-quarter of the entire portfolio for the average endowment. The substantial allocations to private investments across most of this universe—and the weaker performance from these strategies in 2024—are the main reason that that median fiscal year peer return underperformed the simple benchmark by more than 300 basis points (bps). In fact, less than 10% (28 of 323) of endowments in this study outperformed the mark in 2024.

FIGURE 2 FISCAL YEAR 2024 TOTAL RETURN PERCENTILES

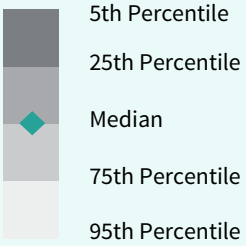
As of June 30, 2024 • Percent (%) • By Percentile Ranking



Sources: Endowment 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.

PERCENTILE RANKINGS

The percentile rankings in our analysis are in ascending order so that the highest figure in the data set is 0 and the lowest figure is 100. The graphs throughout this report that show a range of data are organized to highlight various percentile breaks as displayed here.



The median return for the endowment universe landed at 10.9% for the fiscal year. The return dispersion between top and bottom performers was not as wide as in recent years, but there were still noticeable differentials when comparing returns across subgroups based on portfolio asset sizes. The smaller endowment cohorts had higher median returns compared to endowments greater than $1 billion, and the overall range of returns tended to scale higher for smaller endowments as well. Asset allocation structures played a key role in this dynamic as the largest portfolios—which were early adopters of private investments decades ago—continued to report private allocations in 2024 that were considerably higher than their smaller counterparts.

In Figure 3, our heat map analysis illustrates the effect of different asset allocation structures on returns for the overall peer universe. Top quartile performers in 2024 had 56% of their portfolios invested in public equities, nearly double the exposure of the bottom quartile of performers. The opposite was true when it came to private investment allocations. The average private investment allocation for top performers (11%) was roughly one-fourth of what the average was for the bottom quartile (40%).

FIGURE 3 1-YR MEAN ASSET ALLOCATION BY PERFORMANCE QUARTILE
Percent (%) • n = 320

	Marketable Assets						Private Investments					
Quartile	Total Mktbl Assets	Public Equity	Hedge Funds	Public Real Assets	Fixed Income	Cash & Other	Total Private Inv	Venture Capital	Non-Venture PE	Other PI	Private Real Assets	Private Credit
Top Quartile	88.9	56.5	16.4	2.0	10.4	3.5	11.1	2.2	4.0	2.1	1.7	1.0
2nd Quartile	77.0	45.6	16.4	1.9	9.2	4.0	23.0	6.1	7.9	3.4	3.8	1.8
3rd Quartile	69.3	37.4	16.8	1.4	8.7	5.0	30.7	9.6	10.8	2.3	5.4	2.7
Bottom Quartile	60.2	28.8	18.7	1.5	6.6	4.6	39.9	14.8	11.7	3.3	7.8	2.3
All Endow Mean	73.9	42.1	17.1	1.7	8.7	4.3	26.1	8.1	8.6	2.8	4.7	2.0

Divergence of Asset Allocation From All Endowment Mean

-4% or lower | -2% | Mean | 2% | 4% or higher

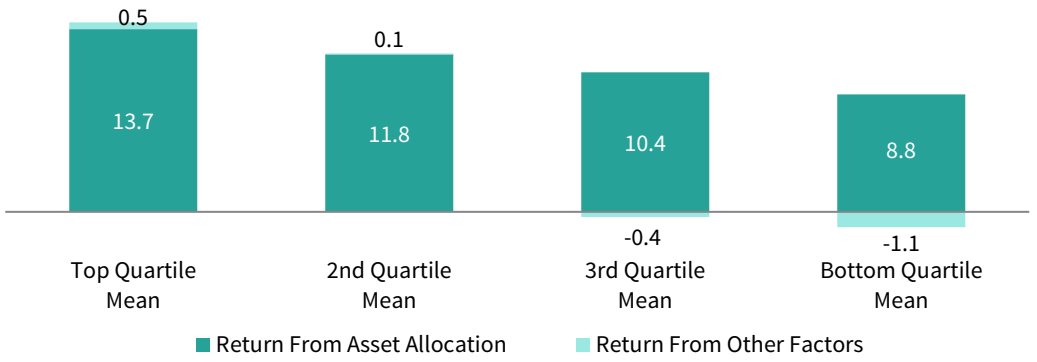
Source: Endowment data as reported to Cambridge Associates LLC.
Note: Asset allocation is averaged across the two June 30 periods from 2023 to 2024 for each institution in this analysis.

Venture capital allocations stood out most among the individual private strategies. The bottom performance quartile had 15% of their portfolios invested in venture capital, on average. For top performers, the average was just 2%. Results were similar for non-venture private equity and private real assets strategies, although the magnitude of differentials across the performance quartiles was smaller than what was reported in venture capital. This contrast in allocations between top and bottom performers ties back to the underperformance of private investments versus public markets over the past year.

Our attribution analysis confirms that differences in asset allocation structures were the primary factor driving the dispersion in peer returns in fiscal year 2024 (Figure 4). On average, top performers earned nearly 500 bps more than bottom performers due to asset allocation. Other factors such as portfolio implementation played a smaller—but still meaningful—role in the variation in returns. Our model estimates that the top quartile added an average of 50 bps to their return through implementation, whereas it detracted from the total portfolio return for most of the bottom quartile of performers.

FIGURE 4 1-YR ATTRIBUTION ANALYSIS

As of June 30, 2024 • Percent (%) • n = 320

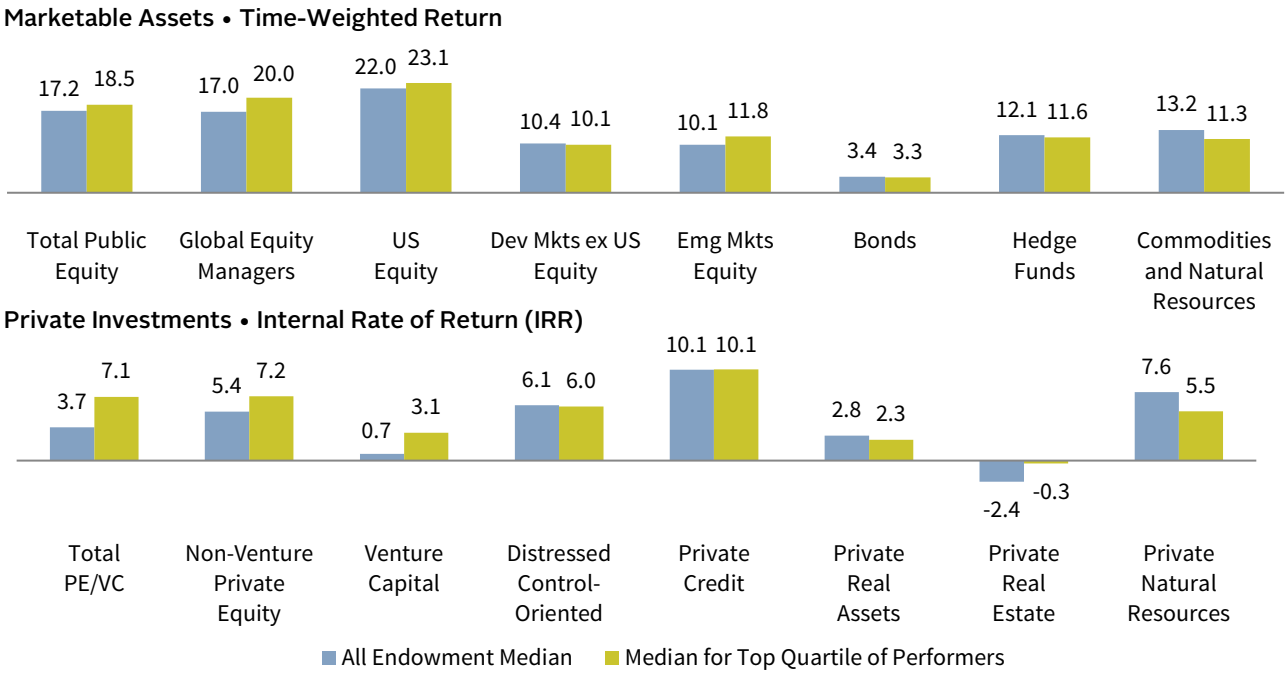


Source: Endowment data as reported to Cambridge Associates LLC.

Data on asset class returns support the notion that top performers stood out from the rest of the universe with regards to implementation in 2024 (Figure 5). The median asset class return for the top quartile of performers (based on total return) surpassed the overall endowment median in many asset classes, including the equity strategies

FIGURE 5 1-YR ASSET CLASS RETURNS

As of June 30, 2024 • Percent (%)



Source: Endowment data as reported to Cambridge Associates LLC.
Note: The top quartile of performers are based on the total portfolio return for fiscal year 2024.

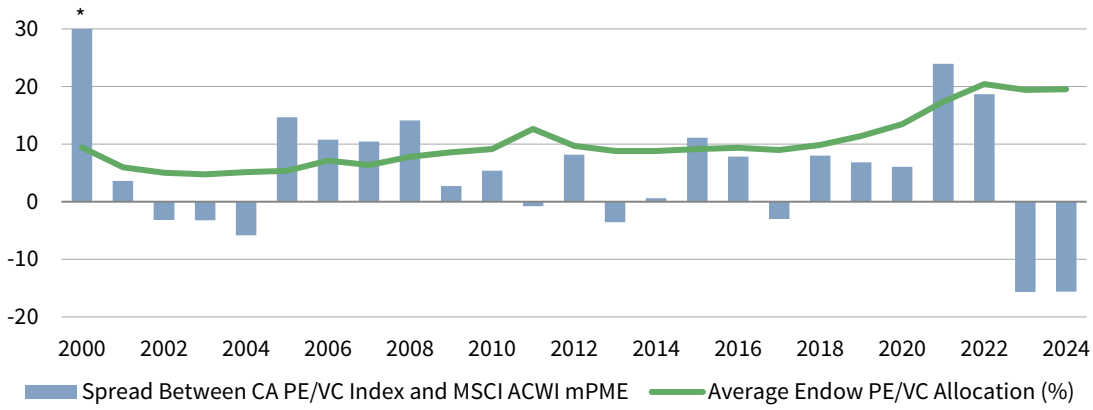
where the bulk of endowment allocations reside. At the total public equity composite level, the median return for top performers was 130 bps higher than the full universe median. This is notable, given that more than half of the average portfolio for top performers was invested in public equities. Essentially, top performers had the highest allocations to the best-performing strategies in the capital markets environment of 2024, and they also earned returns within those strategies that were higher compared to the rest of the universe.

UNDERPERFORMANCE FOR DIVERSIFIED PORTFOLIOS HAS NOW SPANNED CONSECUTIVE YEARS

In recent years, the performance gap between private equity and public equity has fluctuated significantly. The return environment in 2024 mirrored the previous fiscal year, with the global public equity market outperforming alternative asset classes and strategies (Figure 6). The CA Private Equity and Venture Capital Index has underperformed the mPME version of the MSCI ACWI by more than 1,500 bps in each of the last two years. These have been by far the largest margins of underperformance for the private benchmark over the last 25 years. The performance story was the opposite in fiscal years 2021 and 2022, when extraordinary outperformance by private investments was the key theme.

FIGURE 6 SPREAD IN FISCAL YEAR RETURNS BETWEEN CA PE/VC INDEX AND MSCI ACWI

Periods Ended June 30 • Spread Based on Trailing One-Year Returns (%)



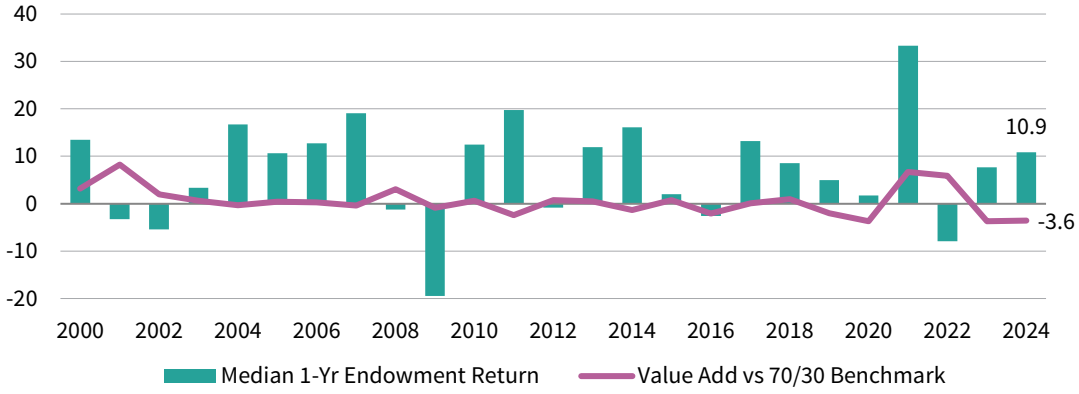
* Graph is capped for scalling purposes. The actual spread in fiscal year 2000 was 77.4 ppts.

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

The divergence in private equity and public equity performance has occurred during a period where private investment allocations among endowments have reached an all-time high. Consequently, the spread between diversified portfolios and the simple 70/30 benchmark has also reached historically high levels (Figure 7). The endowment median return was 360 bps lower than the benchmark in 2024, which was just slightly better from a comparative standpoint than the outcome of the year before. Conversely, in 2021 and 2022, endowments' outperformance of the simple benchmark was among the largest margins recorded over this past generation.

FIGURE 7 TRAILING 1-YR MEDIAN RETURNS

Periods Ended June 30 • Percent (%)



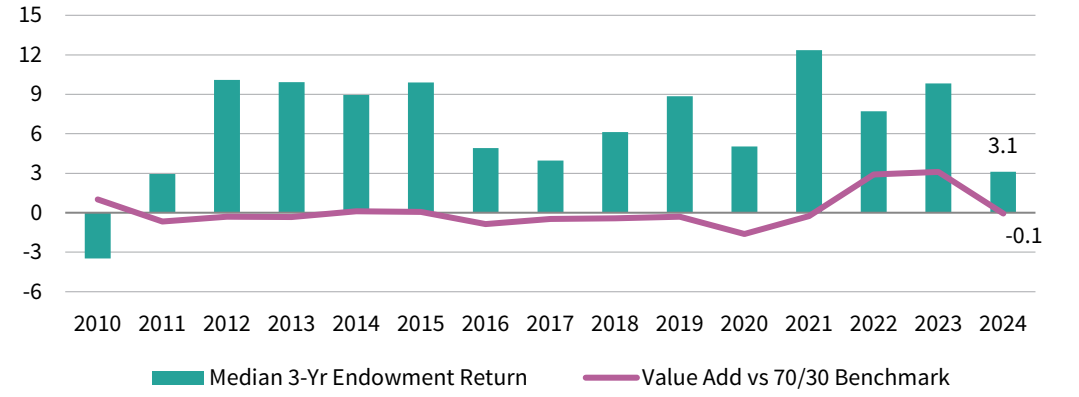
Source: Endowment data as reported to Cambridge Associates LLC.
Note: The number of institutions included in the median calculation varies by period, ranging from 202 in 2000 to 323 in 2024.

The banner year of 2021 left a lasting impact on endowments' multiyear performance track records both in absolute terms and relative to the simple benchmark. However, the 2021 results dropped out of the calculation for the most recent three-year period and this statistic has slumped dramatically compared to recent history. The median three-year endowment return of 3.1% as of June 30, 2024, was the lowest reported since the early 2010s, when trailing returns were still being weighed down by the depths of the Global Financial Crisis.

Similarly, the median peer return has slumped versus the 70/30 index as this year's results replace 2021 in the rolling calculation. The median return underperformed the simple benchmark by 10 bps for the most recent three-year period (Figure 8). Looking forward to next year, the three-year period will again contain at least two years of private investment underperformance (2023 and 2024), making it likely that the median will fall short of the simple benchmark again.

FIGURE 8 TRAILING 3-YR MEDIAN RETURNS

Periods Ended June 30 • Percent (%)



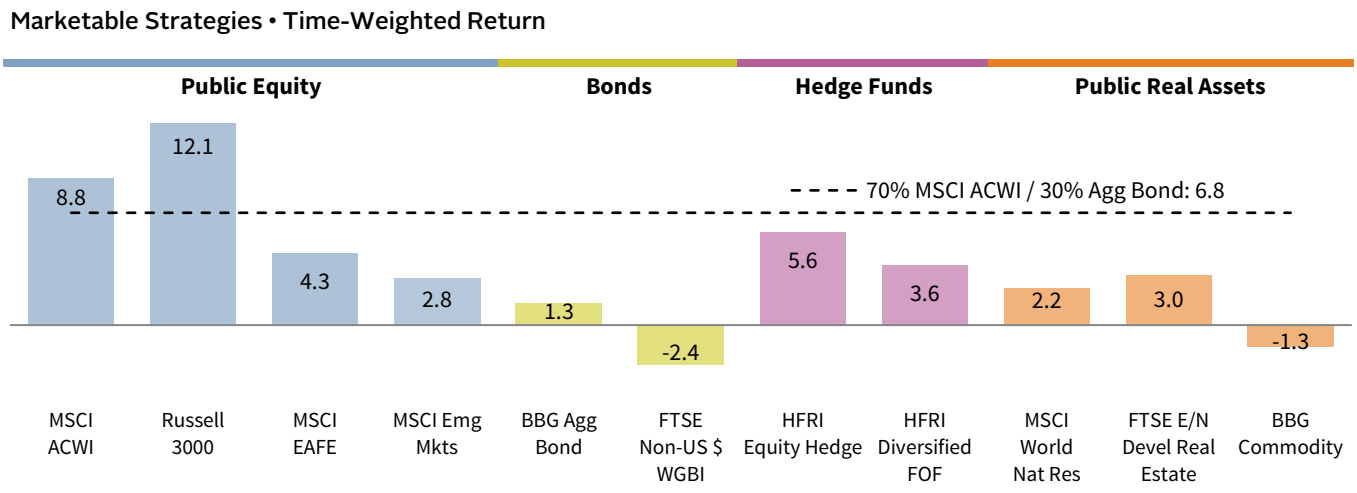
Source: Endowment data as reported to Cambridge Associates LLC.
Note: The number of institutions included in the median calculation varies by period, from 267 in 2010 to 318 in 2024.

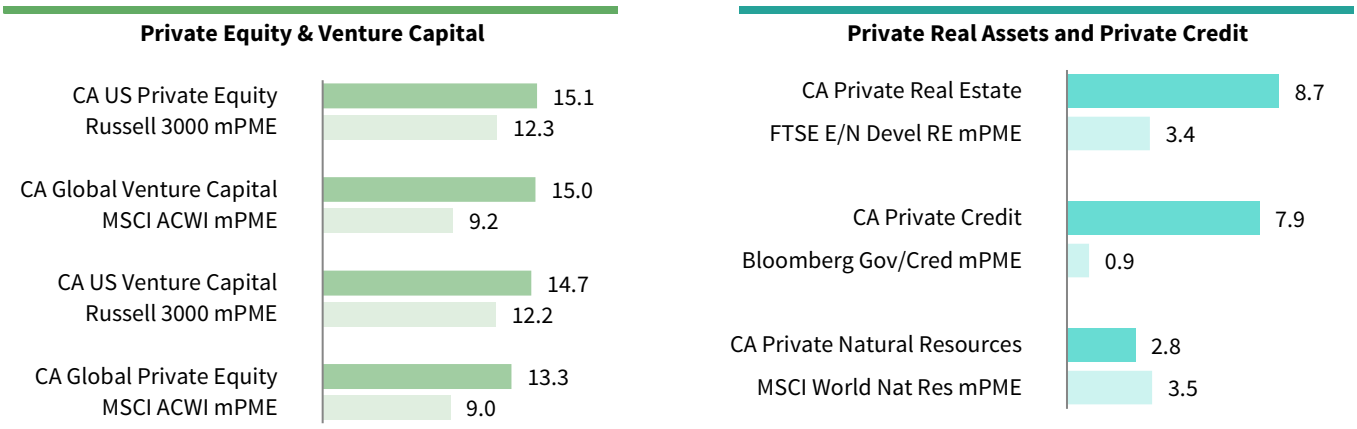
PRIVATE INVESTMENTS CONTINUE TO DRIVE LONG-TERM PERFORMANCE

The outperformance of public equity versus private equity has been the primary theme of comparative return analysis from the last two fiscal years. However, the opposite has been true looking back over a longer period of history. Although public US equities had stellar investment returns over the past decade, PE/VC performed even better (Figure 9). The mPME version of the Russell 3000® Index earned a little more than 12% on an annualized basis over the last ten years, while the US versions of the CA PE/VC indexes both posted internal rates of return (IRRs) of approximately 15%. Returns were much lower for public equities outside of the United States in US dollar terms. When those non-US regions are factored in, the performance gaps between the MSCI ACWI and the CA global versions of the private indexes were even wider than the US benchmark comparisons.

FIGURE 9 TRAILING 10-YR INDEX RETURNS

As of June 30, 2024 • Percent (%)





Sources: 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, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Meanwhile, the past decade has been a dismal return environment for bonds. The investment-grade bond market in the United States, represented by the Bloomberg Aggregate Bond Index, returned just 1% per annum over the past decade. Absolute return hedge fund strategies offered slightly more enhanced returns, while the CA Private Credit Index stood out with an 8% annualized IRR.

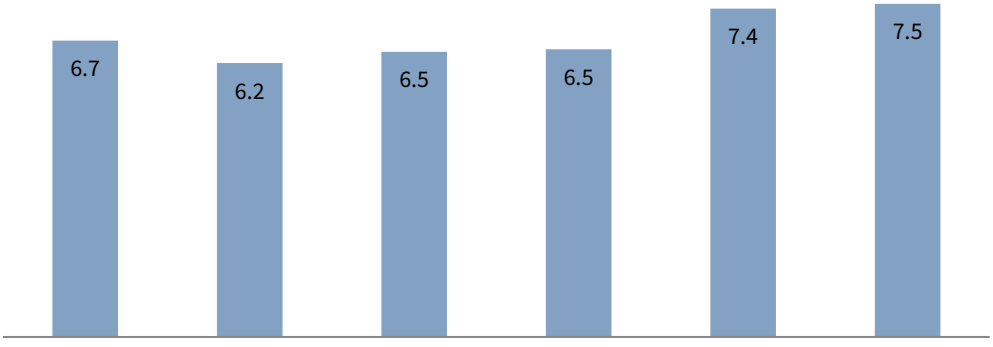
Elsewhere, the inflation spike from a couple years ago provided a short-term boon to inflation-hedging strategies. However, most of the past decade was not a conducive environment for strong returns from natural resources–related investments and commodities. In real estate, the CA Private Real Estate Index produced an annualized IRR just shy of 9% for the decade, but public markets were muted.

The median endowment return over the trailing ten-year period was 6.7%, which was 10 bps lower than the return of the 70/30 blended index (Figure 10). Splitting the universe into various asset size cohorts shows that larger endowments tended to fare better versus the simple benchmark than smaller portfolios. The median return for endowments greater than $3 billion was 7.5%, while the median for those less than $200 million was just 6.2%.

Asset allocation helps explain the return differentials across the asset size cohorts. Endowments with the best returns over the past decade had the highest allocations to the best-performing strategies across this period, namely private investments. When considering the average private investments allocation across the full ten-year period, these assets accounted for more than one-third of the average portfolio for the endowments greater than $3 billion, which was a key reason that most large endowments were able to outperform the passive portfolio option of the 70/30 benchmark. Private allocations were smaller when stepping down the asset size scale; the average for endowments less than $200 million was just 7%.

FIGURE 10 MEDIAN 10-YR RETURNS BY ASSET SIZE

As of June 30, 2024 • Percent (%)

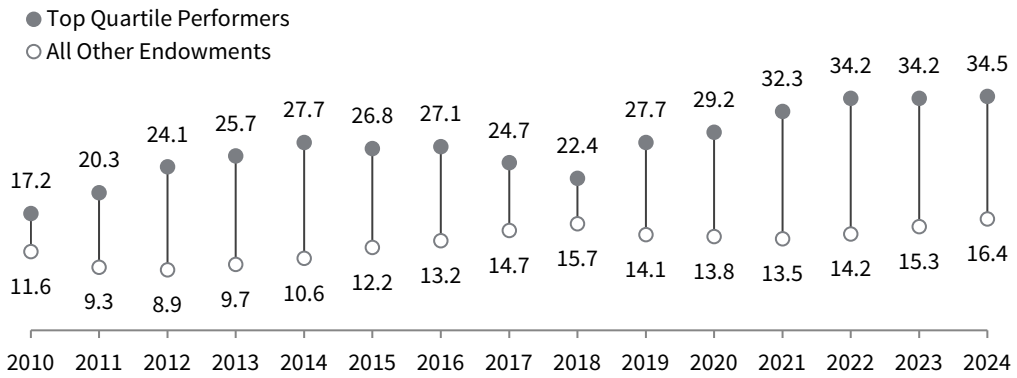


	All Endowments	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
n =	*299*	*78*	*64*	*36*	*58*	*63*
10-Yr Avg PI Alloc	21.0	7.2	13.2	19.1	26.5	35.2

Source: Endowment data as reported to Cambridge Associates LLC.
Note: The average private investment allocation statistics only include the endowments that provided asset allocation data for the full ten-year period.

The relationship between private investment allocations and longer-term endowment performance has persisted for many years. Using July 1, 2000, as a starting point, there are 15 rolling ten-year periods that we can analyze using our historical fiscal year survey data (Figure 11). In each of those rolling periods, the average private investment allocation for top-performing endowments exceeded the average for the other endowments in the peer universe. The closest differential in allocations was for the ten-year period ended in 2010, when the average for top quartile of performers was 5.6 percentage points (ppts) higher than the average for the rest of the universe. For most other years, the differential was in double-digit ppts.

FIGURE 11 ROLLING 10-YR AVERAGE PRIVATE INVESTMENT ALLOCATIONS
Periods Ended June 30 • Percent (%)



Source: Endowment data as reported to Cambridge Associates LLC.
Notes: Each institution's private investment allocation represents the mean across the respective ten-year period. For example, the 2024 data represent the average across the 11 June 30 periods from 2014 to 2024.

This historical period captures multiple market cycles and includes some individual fiscal years where private markets did not match up with public markets in terms of performance. But in more years than not, the PE/VC indexes posted returns that were higher than what could have been earned by investing in the public markets instead. The top performers in our endowment universe have been successful in tapping into the enhanced return potential of investing in private markets. And even with the last two years—where public equity performance has far exceeded private investment returns—it has not been enough to offset the comparative performance advantage that private markets offered in 2021–22. It would take a few more years of public markets continuing to top private markets in the return comparisons to reverse the trend in Figure 11.

Notes on Reporting Methodologies and the Impact on Comparative Peer Analysis

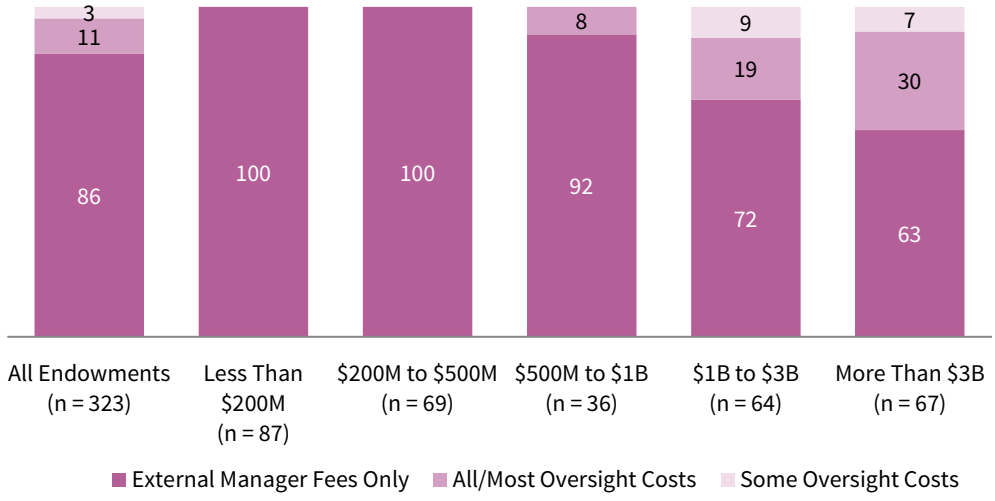
Ideally, all endowments would calculate investment performance in the same way so peer return analysis would consist of true apples-to-apples comparisons, but that is not what occurs. Regular readers of our annual studies are aware of the two main areas where reporting methods can differ across endowments.

The first issue deals with which categories are deducted when calculating investment performance net of fees. While all respondents to this survey report on a net basis, a substantial majority (86%) only net out external investment manager fees. Another 11% of endowments net out manager fees plus all or most investment oversight fees. The main drivers of oversight fees are staff compensation for endowments that have their own investment offices or advisor fees for those that rely heavily on external investment advisors. The remaining 3% of respondents net out manager fees plus some additional cost categories but are gross of the major oversight cost drivers of staff compensation/advisor fees.

Larger endowments are much more likely than smaller endowments to deduct oversight costs in their net calculation. Approximately 30% of endowments greater than $3 billion netted all/most oversight costs out of their return, while only a handful of those less than $1 billion did so. A recent survey conducted by CA showed that total oversight costs range approximately from 10 bps to 30 bps, so the exact haircut to performance can vary among the endowments netting out these costs.

TYPES OF FEES DEDUCTED IN FY 2024 NET RETURN CALCULATION

As of June 30, 2024 • Percent (%)

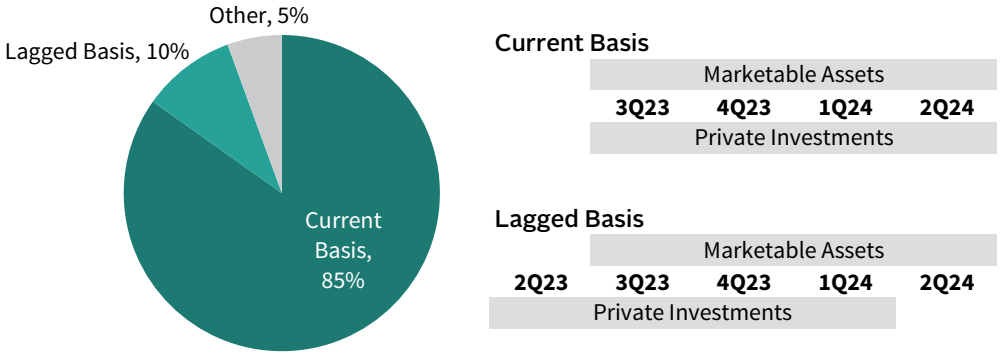


Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Institutions in the All/Most Oversight Costs category net out all or the majority of oversight costs, including the major cost drives (e.g., investment staff compensation and consultant/advisor fees). Institutions in the Some Oversight Costs category deduct external manager fees and some investment oversight costs, but are gross of the major cost drivers.

The other key reporting issue pertains to how private investments are captured in the total portfolio return calculation. The vast majority (85%) of respondents to our survey include private investment valuations through June 30 when they calculate their official fiscal year return. This group also has marked private valuations as of June 30 for previous fiscal years. In essence, the private investment data are always time-matched with the actual fiscal year period, beginning with July 1 of the previous calendar year.

ILLUSTRATION OF PRIVATE INVESTMENT REPORTING: FISCAL YEAR 2024

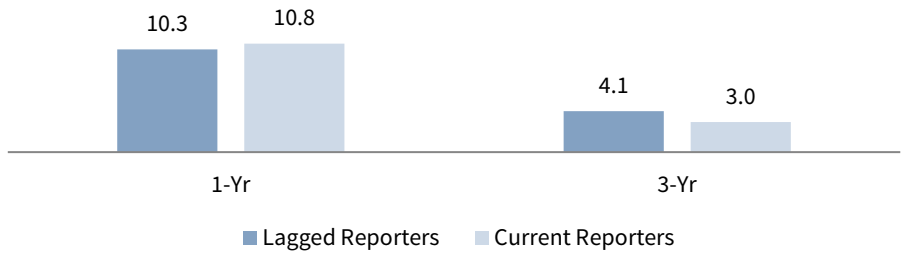


Source: Endowment data as reported to Cambridge Associates LLC.
Note: Of the 18 respondents in the Other category, 1 uses some other reporting method and 17 have no private investment allocation.

In contrast, 10% of respondents perpetually lag their private investment valuations by one quarter. For the total portfolio fiscal year return, this group of endowments captures private investment activity from April 1 of the previous calendar year through March 31 of the current year. If comparing the current and lagged calculations, there will always be one quarterly period of private returns incorporated by one method that is not included by the other method. In periods where private investment performance is volatile, this can affect peer groups with a mixture of endowments using current and lagged reporting.

For 2024 fiscal year reporting, there were not large differences in private investment returns between the out-of-sync quarters of the two methods. Hence, neither reporting method had much of a comparative advantage over the other for this particular year. The median fiscal year return for current reporters was 50 bps higher than the median for lagged reporters. However, this was mainly attributable to asset allocation factors, as current reporters have a lower average allocation to private investments compared to lagged reporters.

MEDIAN 1- AND 3-YR TOTAL PORTFOLIO RETURNS BY PRIVATE INVESTMENT REPORTING METHODOLOGY
As of June 30, 2024 • Percent (%)



Source: Endowment data as reported to Cambridge Associates LLC.

The three-year period is a different story. Lagged reporters incorporated performance from second quarter 2021, which was unique to this method. This was a quarter of exceptional private performance, with the US version of the CA PE/VC index posting an IRR of 13%. Current reporters did not include this period of performance in their three-year track record, as their private investment activity began on July 1, 2021.

Meanwhile, the current method includes private investment activity from second quarter 2024. The Cambridge Associates US Private Equity and Venture Capital Index return was just 1% for this quarter, significantly lower than the returns of second quarter 2021. Thus, a portfolio reporting under the lagged method would likely report a considerably higher three-year return than it would under the current method. With returns reported as annualized figures, the impact in raw numbers is not as great as it would be if we saw the same differences in index returns for a single fiscal year period. However, the three-year period is still short enough that the annualized return differences are significant. The median three-year return for lagged reporters was 4.1%, while the median for current reporters was just 3.0%.

ILLUSTRATION OF PRIVATE INVESTMENT REPORTING: TRAILING 3-YR PERIOD

Source: Cambridge Associates LLC.

Benchmarking

SUMMARY OF POLICY BENCHMARKING APPROACHES

Benchmarking investment performance is an essential piece of an endowment's well-functioning governance process. When selecting a benchmark, it is important for institutions to understand what they are trying to evaluate (Figure 12). There is no single benchmark that can assess every single aspect of portfolio management. Consequently, it is not uncommon for institutions to use multiple benchmarks in their performance evaluation process.[1] In our survey, we asked respondents to provide both the real return objective for the endowment and the primary benchmark used to evaluate investment performance at the total portfolio level.

FIGURE 12 BENCHMARKING TOTAL PORTFOLIO PERFORMANCE

Objective	Evaluation Tool	% of Respondents Using as Primary Benchmark
Return Target	Spending + Inflation	NA
Diversification Value Add	Simple Stock/Bond Mix	10%
Manager Value Add	Dynamic-Weighted Manager Indexes	5%
Asset Allocation Tilts + Alpha	Static-Weighted Policy Benchmark	85%

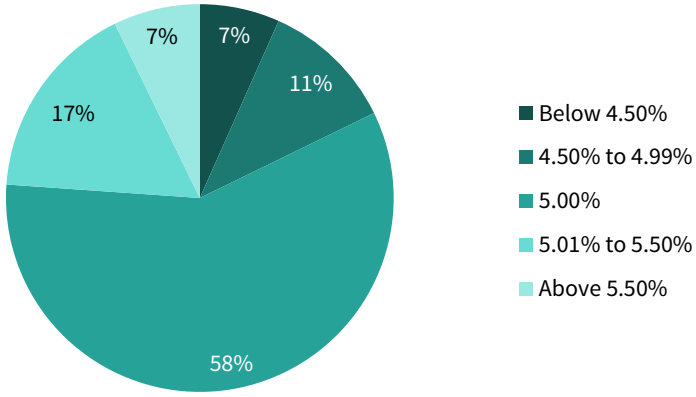
Source: Cambridge Associates LLC.

A fundamental part of an endowment's investment policy is the return objective. Most endowments use a spending policy that is connected in some way to an annual spending rate. That percentage rate serves as the basis for establishing a minimum return target that endowments aim to earn over the long term. If an endowment can generate an investment return that exceeds the sum of its spending rate and inflation, it can maintain or grow the purchasing power of its assets over time. The most common real (i.e., inflation-adjusted) return objective among endowments continues to be 5% (Figure 13).

In the Investment Portfolio Returns section, we cited the performance of a blended index weighted 70% to the MSCI ACWI and 30% to the Bloomberg Aggregate Bond Index. For endowments that are diversified across alternative asset classes, this benchmark helps to evaluate whether the decision to diversify the portfolio added value. Our comparisons of median endowment performance versus the 70/30 benchmark show how the peer universe in general measured up to a simple, passive investment option.

1 For more information, please see Grant Steele, Geoffrey Bollier, and Roberto Vasquez, "Endowment Oversight Flash Statistics: Fiscal Year 2024," Cambridge Associates LLC, December 2024.

FIGURE 13 REAL TOTAL PORTFOLIO RETURN OBJECTIVES
As of June 30, 2024 • n = 180



Source: Endowment data as reported to Cambridge Associates LLC.

In practice, just 10% of respondents reported that a simple blended index was the primary benchmark used for their total portfolio return. A majority of this subgroup used a blend weighted 70% to an equity component and 30% to a bond component. However, there were other endowments that used higher weightings for the equity index—85% was the highest reported—while there was one respondent that reported a weighting as low as 50%. The most appropriate weightings for this type of benchmark would be a blend that aligns with the targeted risk profile of the portfolio. In fact, about one-third of this subgroup also use only two categories in their target asset allocation policy, and the weightings of the equity and bond indexes matched their policy targets to the equity/growth and bond categories in their policy structure.

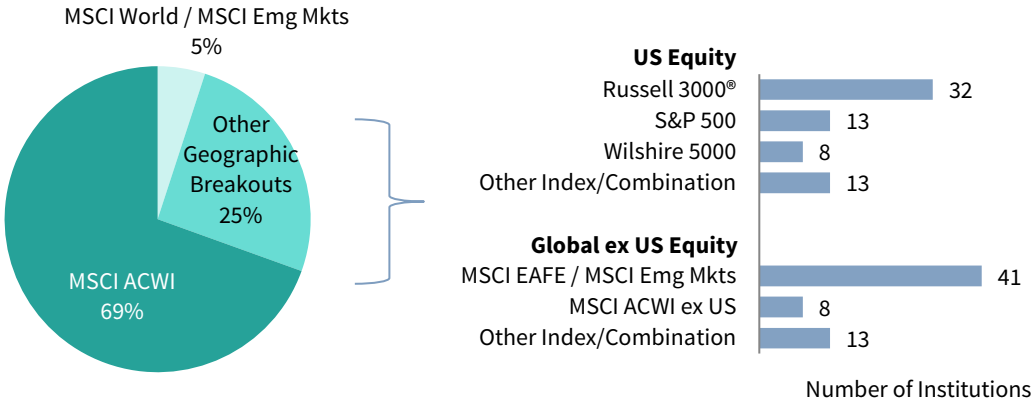
The remaining peers in the universe use a policy benchmark that had three or more components. The vast majority (85%) use a blend of indexes with static weightings that align exactly or closely with the asset classes and target percentages specified in their asset allocation policies. This type of benchmark helps an institution evaluate how its endowment performed relative to the blended index that represents its default or normative position. A handful of respondents (5%) use a blend of manager-specific indexes, where the weightings update frequently (e.g., monthly) to match each manager's allocation within the portfolio. This type of benchmark is intended to focus on manager selection decisions and neutralizes the effects of over/underweights of the actual asset allocation versus policy targets. The figures that follow provide more detail on benchmarks for the endowments that use a dynamic-weighted or static-weighted policy benchmark.

COMPONENTS OF POLICY PORTFOLIO BENCHMARKS

The MSCI ACWI continues to be the most common measure for benchmarking public equities. More than two-thirds of the respondent group use this index to represent their entire public equity allocation in the policy portfolio benchmark. The remaining respondents use a combination of indexes that are more geographically defined. For those that use a US-focused benchmark, the Russell 3000® Index was by far the most prevalent. For global ex US equities, a combination of the MSCI EAFE Index and the MSCI Emerging Markets Index was cited most often. The percentage breakdown among the peer group in Figure 14 looks almost identical to the survey responses from last year's edition of this study.

FIGURE 14 POLICY PORTFOLIO BENCHMARK: PUBLIC EQUITY

As of June 30, 2024 • n = 259

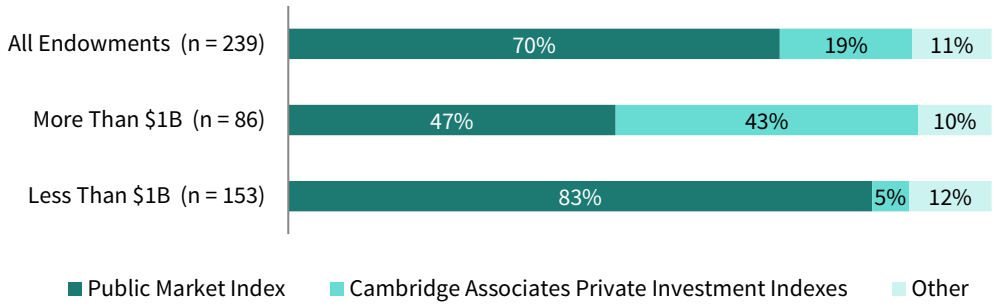


Source: Endowment data as reported to Cambridge Associates LLC.

When evaluating PE/VC in the policy benchmark, most institutions select either a public index(es) or the CA private investment indexes (Figure 15). A majority of the overall universe (70%) uses a public index, with the MSCI ACWI being the most preferred index among this cohort. The rationale for using a public index is that the public equity bucket in the portfolio was the funding source for private equity allocations. And if the portfolio did not invest in private equity, that capital would have remained with the public equity allocation. The use of a public index primarily evaluates whether the decision to invest in private markets paid off for the portfolio.

FIGURE 15 POLICY PORTFOLIO BENCHMARK: PRIVATE EQUITY

As of June 30, 2024



Source: Endowment data as reported to Cambridge Associates LLC.

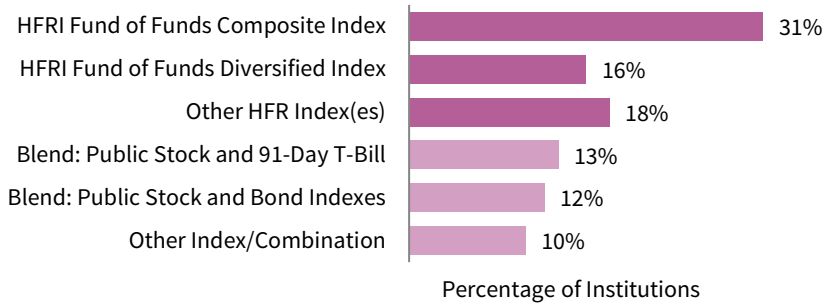
There are some shortcomings to using a public index to benchmark private equities. Most notably, the public stock market is not a universe of securities that is representative of private equity investments. Consequently, in years such as 2024, where there are large differentials between public equity and private equity performance, the spread between the portfolio return and the benchmark return can be more reflective of those market dynamics than of how well the management team implemented the private portion of the portfolio. Approximately 19% of respondents instead use the CA private investment indexes to represent private equity in the policy benchmark. These indexes do not meet the ideal properties of benchmark as they are not transparent or investable. However, they are a universe of institutional-quality private investment funds that are more representative of the asset class compared to a public index.

The remaining 11% of respondents use some other method to account for private investments in the policy benchmark. A little more than half of the endowments in this other category use the actual private investment return, which essentially neutralizes the impact of these assets in the benchmark evaluation. This approach is used by endowments that have newer private investment programs and wish to delay the inclusion of these assets until performance comparisons are more meaningful. Also included in this other category are endowments that use a public index return plus a prespecified percentage. While this practice was once the most common benchmarking approach for private equity among peers, its use began to diminish quickly in the mid-2010s and only a handful of endowments continue to include this in present-day benchmarks.

There was a noticeable difference in the breakdown of responses by asset size. For endowments less than $1 billion, a public index was by far the most common practice. In contrast, approaches were more mixed among endowments more than $1 billion, with the CA private investment indexes being cited by more than 40% of respondents. The private investment indexes can be custom weighted by vintage year and exposure across different strategies, which helps to evaluate fund selection. It is likely for this reason that the approach continues to be prevalent among larger endowments, of which many have performance-based incentive compensation programs for their investment staff.

Endowments also face similar challenges of selecting an appropriate index when accounting for hedge fund allocations in the policy benchmark. Most respondents continue to use one or more indexes produced by Hedge Fund Research® (HFR), which tracks hedge fund managers that report to their database (Figure 16). Other approaches include a beta-adjusted benchmark, although the exact method varies across a few different options. When it comes to bonds, real assets, and other strategies, benchmark combinations are even more unique across the respondent group due to the variety of strategies and exposures under these categories.

FIGURE 16 POLICY PORTFOLIO BENCHMARK: HEDGE FUNDS
As of June 30, 2024 • n = 243

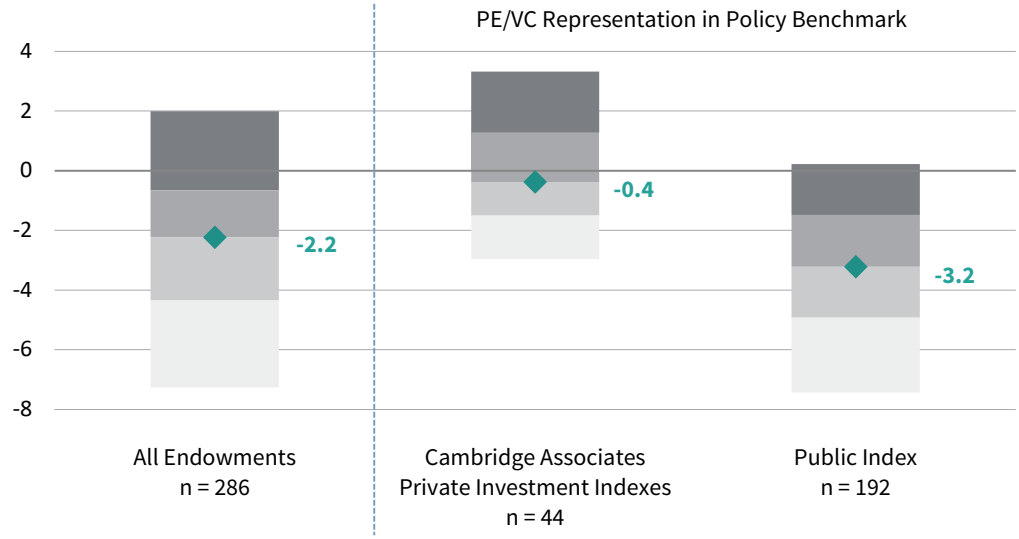


Source: Endowment data as reported to Cambridge Associates LLC.

VALUE ADD VERSUS THE POLICY BENCHMARK

Most endowments fell short of their policy portfolio benchmark in 2024. Just 16% of respondents reported that their total portfolio return beat their benchmark for the one-year period. When considering the spread between the portfolio return and the benchmark, the median across the respondent group was -220 bps for the fiscal year. Outcomes varied widely across endowments, ranging from 200 bps of outperformance at the top 5th percentile mark of the universe to underperformance of 730 bps at the bottom 5th percentile (Figure 17).

FIGURE 17 RANGE OF OUT/UNDERPERFORMANCE OF TOTAL RETURN VS POLICY PORTFOLIO BENCHMARK: FISCAL YEAR 2024
As of June 30, 2024 • Percentage Points • By Percentile Ranking



Source: Endowment data as reported to Cambridge Associates LLC.
Notes: Data points represent the difference between the total portfolio return and the policy portfolio benchmark return. The subgroups on the right side of the graph capture the endowments that used the two most common approaches for representing PE/VC in the benchmark. Those using a simple equity/bond benchmark are included in the Public Index cohort. Excluded from this analysis are subgroups that used some other method for benchmarking PE/VC.

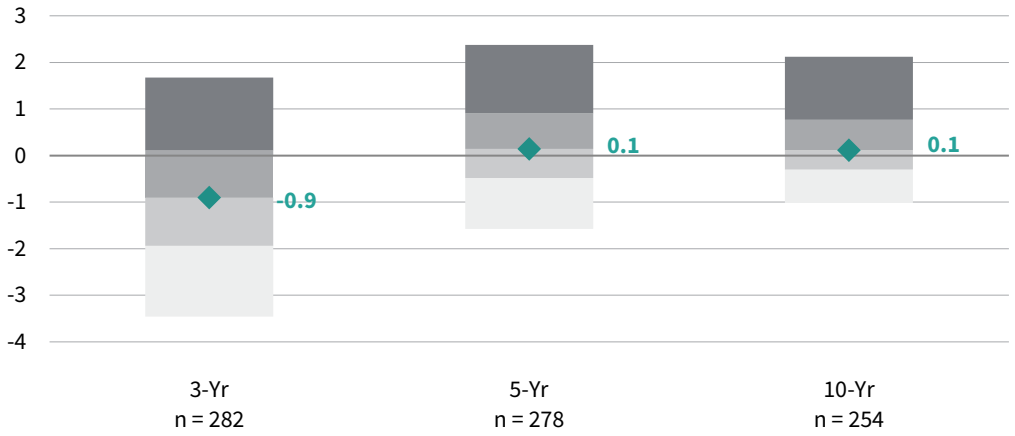
When breaking the peer universe down further, it is clear that the type of benchmark used for private equity was a big factor in how well an endowment performed versus its overall policy benchmark in 2024. For endowments that used the CA private investment indexes, the median value add was -40 bps. More than 40% (18 of 44) of the institutions in this cohort actually outperformed their policy benchmark over the past year. In contrast, the median value add for endowments using a public index was significantly lower at -320 bps. Less than 10% (15 of 192) of the endowments in this subgroup outperformed their policy benchmark in 2024.

The different experiences of these two subgroups tie back to the relationship between public equity and private equity returns in 2024. The one-year horizon IRR of the CA Private Equity and Venture Capital Index was significantly lower than the mPME version of the MSCI ACWI (4% versus 20%). Therefore, an endowment using the CA private equity indexes would calculate a lower benchmark return than it would if using a public index. The difference becomes even more magnified the higher an endowment's allocation is to private investments. Most endowments in our universe have 20% or more of their portfolios invested in PE/VC, so the index choice is consequential in the policy benchmark calculation.

The different benchmarking approaches were less impactful on the value add statistics for the trailing three-year period (Figure 18). The distribution of value adds across peers was similar regardless of the benchmarking practice, and just slightly more than one-quarter of both subgroups outperformed their benchmark over this period. For the overall respondent group, the median spread between the portfolio return and the benchmark return was -90 bps. Endowments did fare better over the longer term, with most respondents outperforming their benchmarks over the trailing five-year and ten-year periods.

FIGURE 18 RANGE OF OUT/UNDERPERFORMANCE OF TOTAL RETURN VS POLICY PORTFOLIO BENCHMARK: TRAILING 3-, 5-, AND 10-YRS

Years Ended June 30, 2024 • Percentage Points • By Percentile Ranking



Source: Endowment data as reported to Cambridge Associates LLC.

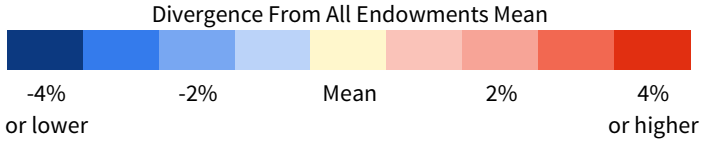
Note: Data points represent the difference between the total portfolio return and the policy portfolio benchmark return.

Asset Allocation and Implementation

At most endowments, the majority of the long-term portfolio is invested in public equity and PE/VC. On average for the overall endowment universe, about 61% of the long-term investment portfolio (LTIP) was allocated across these categories at the end of fiscal year 2024. The combined average allocation does not vary much across different asset sizes, ranging from a high of 64% for the $200 million to $500 million cohort to a low of 60% for a couple other subgroups. However, the breakdown of allocations between public and private equities does look quite different when going up or down the portfolio size spectrum (Figure 19).

FIGURE 19 MEAN ASSET ALLOCATION BY ASSET SIZE
As of June 30, 2024 • Percent (%)

Asset Size	Public Equity	PE/VC	Hedge Funds	Private Credit	Fixed Income	Real Assets & ILBs	Cash
Less Than $200M *n = 87*	49.3	11.6	18.2	1.3	10.9	3.8	4.5
$200M to $500M *n = 69*	47.9	16.1	16.2	1.6	10.4	3.7	3.0
$500M to $1B *n = 36*	40.2	19.9	19.5	1.8	8.2	6.9	3.3
$1B to $3B *n = 64*	36.4	24.7	17.4	2.8	6.7	7.5	4.3
More Than $3B *n = 67*	31.7	28.1	17.2	2.6	6.2	10.4	3.4
All END Mean *n = 323*	41.8	19.5	17.6	2.0	8.7	6.2	3.8



Source: Endowment data as reported to Cambridge Associates LLC.

Generally, smaller endowments continue to have the highest public equity allocations, while larger endowments have higher private allocations. For endowments less than $200 million, public equities made up 49% of portfolios, on average, while PE/VC accounted for just 12%. In contrast, the average breakdown was nearly even across the two categories for endowments greater than $3 billion. The largest endowments allocated an average of 32% to public equity and slightly less to PE/VC (28%).

There were also distinct differences elsewhere when comparing asset allocation structures across the asset size groups. Smaller endowments tend to allocate more to bonds, with an average allocation of nearly 11% for endowments less than $200 million. This was almost double what the average fixed income allocation was for endowments greater than $3 billion. Conversely, the largest endowments allocate more to real assets and inflation-hedging strategies, with an average of 10% invested, compared

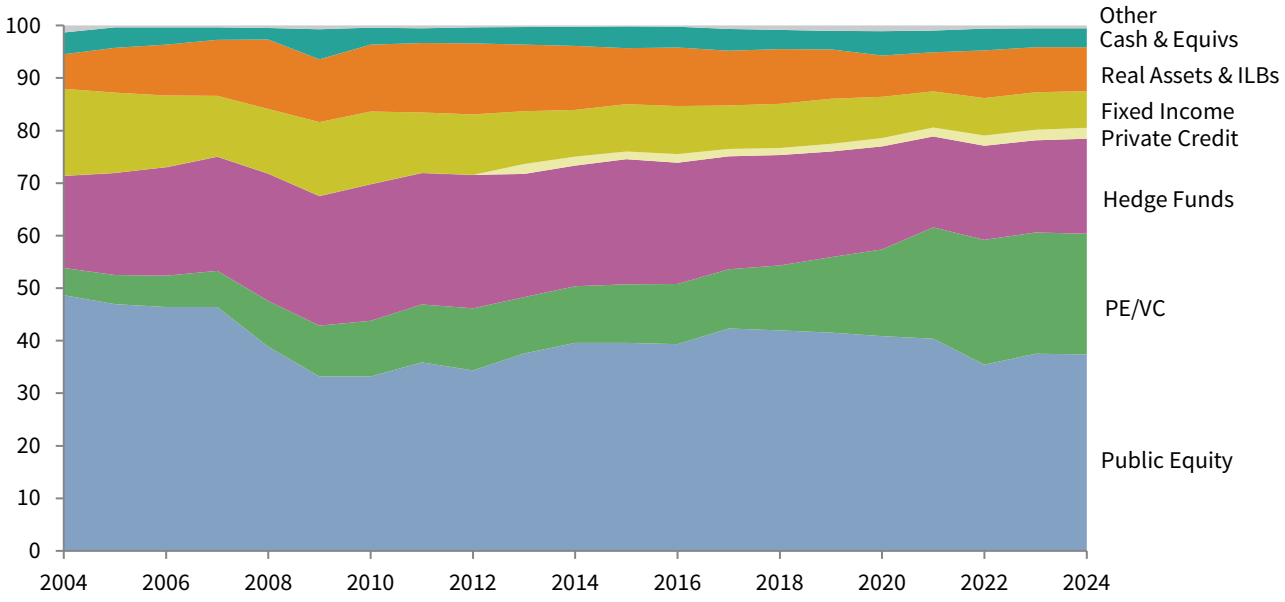
to less than 4% for the smallest endowments. The bulk of real assets allocations for larger endowments came from private investment strategies. Hence, the differential in illiquid allocations between large and small endowments is even wider than what is shown in the PE/VC category alone.

ASSET ALLOCATION TRENDS

Over the long term, the key trend in endowment investing has been the increase in private equity allocations. Figure 20 tracks the trend in average portfolio allocations for a group of 135 endowments that have participated in each of our annual surveys over the past two decades. The average PE/VC allocation for this constant group has more than quadrupled, rising from 5% in 2004 to 23% in 2024. This shift has largely been funded by diversifying out of public equities, with average allocations declining from 49% in 2004 to 37% in 2024. However, the decrease in public equities alone does not account for the entire increase in PE/VC. Average fixed income allocations have declined substantially over this period from 17% to 7%. The result is that the portfolio risk profile at most endowments is more equity-oriented today than it was two decades ago.

FIGURE 20 HISTORICAL MEAN ASSET ALLOCATION TRENDS

Years Ended June 30 • Percent (%) • n = 135



Source: Endowment data as reported to Cambridge Associates LLC.

Examining only the beginning and ending points of this period overlooks changes that occurred in between. For instance, allocations to hedge funds and real assets in 2024 are within a couple of percentage points of their 2004 levels. However, both categories experienced steady increases in the early years of this era before trending downward for most of the remaining years. The average hedge fund allocation peaked at 26% in 2010, while real assets allocations reached a high of 14% in 2012.

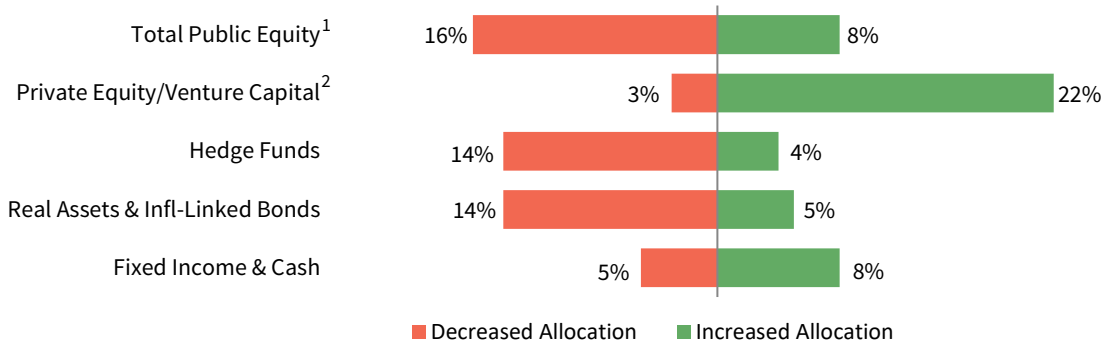
Notably, there have been some shifts in allocations in recent years that diverged from the long-term trends. The average PE/VC allocation peaked at just more than 24% in 2022 but has since declined slightly. Meanwhile, public equity and hedge

fund allocations saw minor increases over the last couple of years. One challenge in analyzing short-term asset allocation trends is distinguishing between changes driven by market movements and those resulting from intentional allocation adjustments. For example, the outperformance of public equities compared to private equities in recent years could naturally lead to some shifts in the weightings of those strategies, as already noted. Are these changes primarily driven by the market dynamics or are endowments reducing new private equity commitments and perhaps even selling off existing investments?

While the precise details are difficult to ascertain through our survey data, information we collect on target asset allocations can be insightful in understanding where endowments might be modifying their policies going forward. Despite the slight decrease in actual PE/VC allocations over the past two years, a significant number of endowments continue to raise their targets in this category (Figure 21). Over the past year, 22% of respondents increased their target to PE/VC, while only a small proportion (3%) reported a decrease. In contrast, for public equity and hedge funds—where actual allocations have recently ticked up slightly—more endowments reported decreases to their targets in 2024 than increases. These data suggest that the recent changes in average asset allocations are mostly attributable to market dynamics and the natural effects those have on portfolio holdings.

FIGURE 21 CHANGES IN TARGET ASSET ALLOCATION

June 30, 2023 – June 30, 2024 • Percentage of Institutions Increasing or Decreasing Targets



[1] Total Public Equity excludes institutions that combine public equity together with PE/VC in a single equity category.

[2] Private Equity/Venture Capital includes institutions that include PE/VC together with other private investments in a single category.

Source: Endowment data as reported to Cambridge Associates LLC.

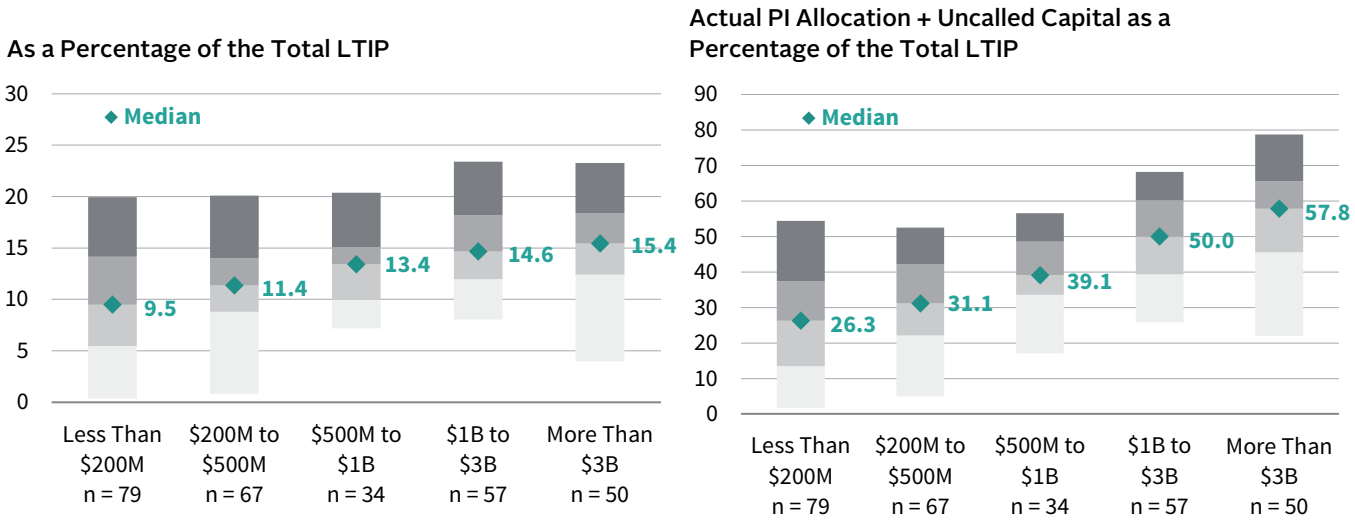
PORTFOLIO LIQUIDITY

Liquidity management is a key issue that endowments need to be cognizant of. Traditionally, the biggest liquidity need for endowment portfolios has been meeting their annual spending policy distributions. The median effective spending rate for endowments tends to be between 4.5% and 5% in most years. While new gifts and inflows can help offset some of this spending from a liquidity management perspective, ensuring adequate liquidity for annual distributions remains a key objective for endowments.

Approximately half of respondents have formal liquidity policies outlined in their investment policy statements. Another 20% of respondents have informal guidelines for liquidity considerations. Liquidity policies often include requirements for how much of the portfolio can be converted to cash within a specified number of days. Additionally, liquidity guidelines may establish limits on the percentage of the portfolio that can be invested in assets deemed illiquid. It is not uncommon for endowments to include unfunded commitments in these liquidity measures. Unfunded commitments represent capital that has been committed but not yet paid into private investment funds (Figure 22).

FIGURE 22 UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of June 30, 2024 • Percent (%) • By Percentile Ranking



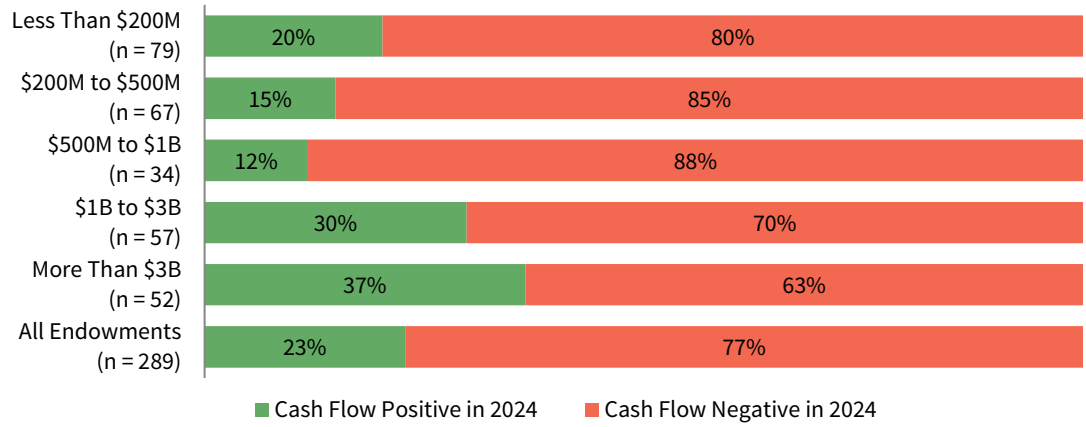
Source: Endowment data as reported to Cambridge Associates LLC.

The dollar amount of unfunded commitments can be equivalent to as much as 25% or more of the portfolio's current asset size at some endowments. On the other hand, at some smaller endowments, these commitments can be relatively small compared to the size of the investment portfolio. For endowments with assets greater than $3 billion, the median ratio of uncalled capital–to-LTIP market value was 15% at the end of fiscal year 2024. The median ratio was lowest (9%) at endowments with assets less than $200 million. When considering a measure that combines unfunded commitments with actual private allocations, these ratios were generally much higher at larger endowments than their smaller peers.

Distributions from existing private investment funds can serve as a source of funding for new capital calls. However, when these distributions fall short, institutions must find additional liquidity to meet new capital calls. This was a common experience among endowments in fiscal year 2024. More than three-quarters (77%) of respondents reported that their private investment programs were cash flow negative, meaning the amount of distributions from private funds was insufficient to cover the new capital paid in (Figure 23). The experience was similar across both larger and smaller endowments, with the majority of respondents in each asset size cohort reporting the same outcome.

FIGURE 23 PRIVATE INVESTMENT PROGRAM CASH FLOW BY ASSET SIZE

As of June 30, 2024



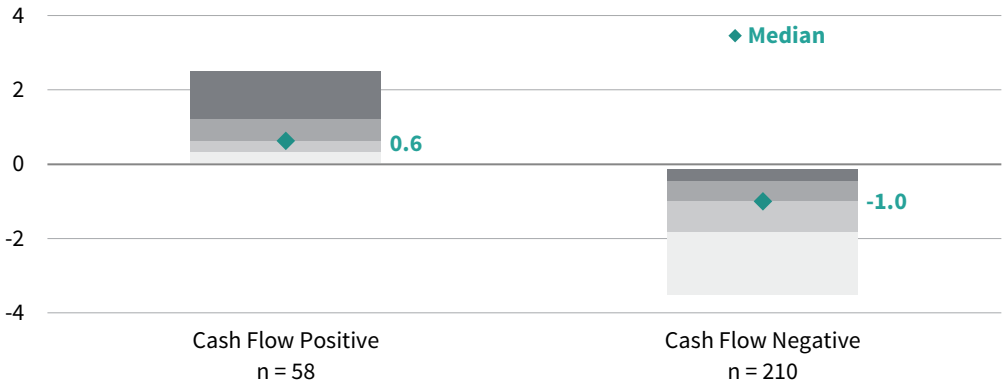
Source: Endowment data as reported to Cambridge Associates LLC.

Note: Private investment fund programs were considered cash flow positive if fund distributions were higher than paid-in capital calls in fiscal year 2024.

The net private investment cash flow is the amount left over after paid-in capital calls are subtracted from fund distributions. This net amount was equivalent to a relatively small percentage of the total portfolio value at most endowments (Figure 24). For the subgroup of endowments that reported cash flow negative private programs, the median ratio of net cash flow–to-total portfolio value was -1.0%. However, some endowments reported net cash flow ratios that were considerably lower. The bottom 5th percentile of respondents in the same subgroup reported ratios of -3.5% or lower.

FIGURE 24 NET PRIVATE INVESTMENT CASH FLOW AS A PERCENTAGE OF TOTAL LTIP

As of June 30, 2024 • Percent (%) • By Percentile Ranking



Source: Endowment data as reported to Cambridge Associates LLC.

Note: Universe is split into two subgroups based on the net combined amount of paid-in capital calls to and distributions from private investment funds.

Fiscal year 2024 was the second consecutive fiscal year that endowments have faced this tighter liquidity environment with respect to private investment cash flows. In 2023, a nearly identical percentage of respondents (76%) reported that new capital calls were greater than distributions. This ongoing challenge underscores the importance of establishing appropriate liquidity management guidelines and strategies, particularly when it comes to tracking and monitoring the illiquid bucket of the portfolio.

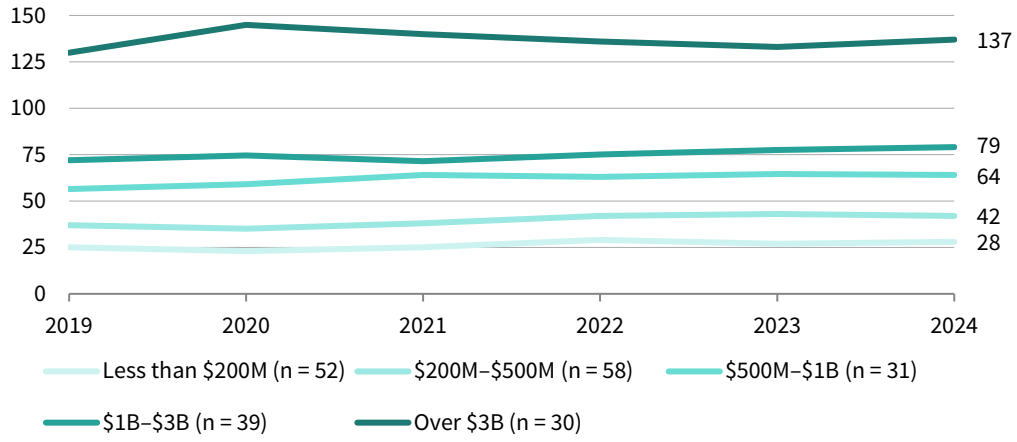
PORTFOLIO IMPLEMENTATION

Endowments primarily use external investment managers to implement their portfolio allocations. The number of managers employed by an endowment is largely influenced by the scale of total assets under management. Larger endowments—which have more capital to deploy—naturally maintain more manager relationships compared to smaller portfolios. In addition, allocations to private managers are typically less concentrated than manager allocations in public asset classes, leading to a greater number of manager relationships for portfolios where private allocations are higher. The median number of managers employed by endowments greater than $3 billion was 134 at the end of fiscal year 2024. In contrast, the median was 29 managers for the subgroup of respondents with assets less than $200.[2]

Some interesting trends emerged from a constant group of endowments that provided manager data going back to 2019 (Figure 25). For each asset size cohort, the median number of managers in 2024 was higher than the median from five years ago. However, the trend has not steadily increased across time. For endowments greater than $3 billion, the median in 2024 remained below the peak number reported in 2020. Similarly, the median for endowments with assets less than $200 million was slightly lower compared to 2022. Looking back over the past year for all endowments in this analysis, exactly half of endowments reported more managers in 2024 compared to 2023.

FIGURE 25 TREND IN MEDIAN NUMBER OF EXTERNAL MANAGERS

Years Ended June 30



Source: Endowment data as reported to Cambridge Associates LLC.
Note: Analysis only includes endowments that report data for each year from 2019 to 2024.

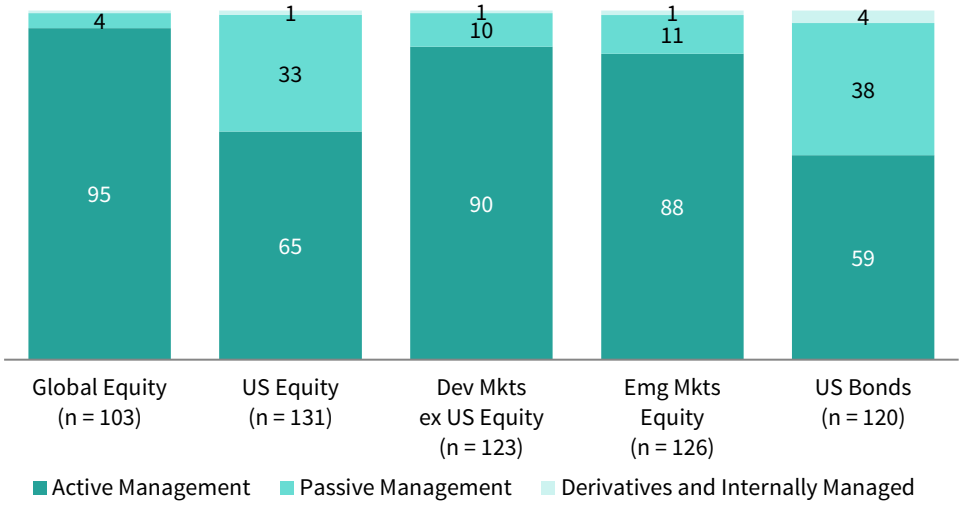
The overwhelming majority of allocations to public asset classes are invested via external managers, while just a small percentage of these strategies are internally managed. Most external allocations are implemented through actively managed funds and strategies, and this experience is consistent across different asset sizes. However, US equity and US bonds are two asset classes where the use of passive management and index funds has gained more traction over time (Figure 26). On average, 33%

2 Further data on the number of managers used for specific asset classes can be found in the Appendix section of this study.

of US equity allocations were managed through passive vehicles in 2024, jumping up from 30% the previous year. Ten years ago, the average for our survey group was considerably lower at 20%. Similarly, passive management for US bonds accounted for an average of 38% of endowments' asset class exposure at the end of fiscal year 2024. This represents a substantial increase from 23% in 2014.

FIGURE 26 MEAN BREAKDOWN OF ASSET CLASS EXPOSURE: TRADITIONAL EQUITIES AND BONDS

As of June 30, 2024 • Equal-Weighted Means (%)



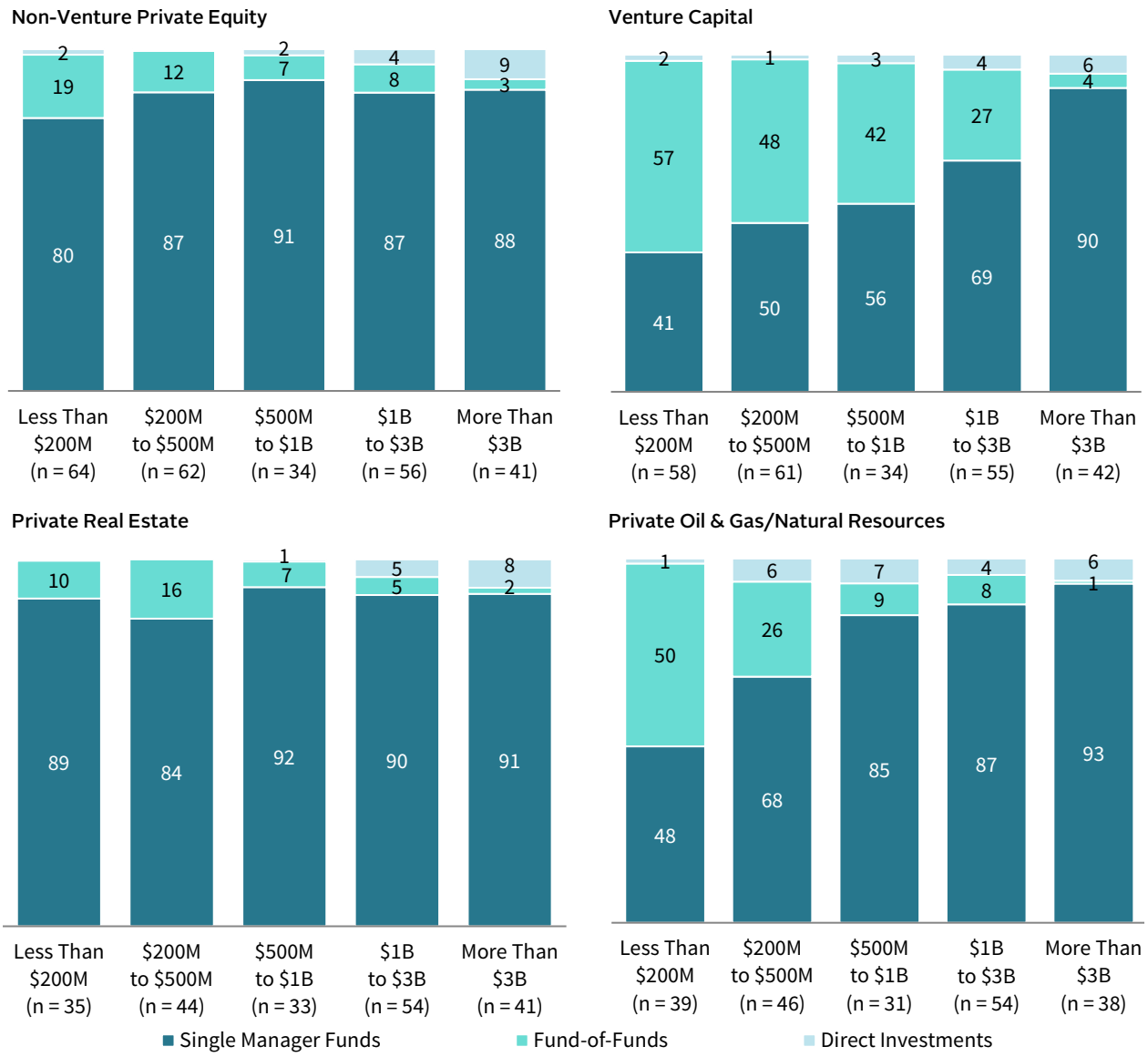
Source: Endowment data as reported to Cambridge Associates LLC.
Note: Analysis shows the average allocation of assets across the implementation categories for each peer group.

In private investments, endowments also implement most of their allocations through external managers (Figure 27). However, the types of funds used can vary based on the portfolio's asset size. Smaller institutions tend to rely more on fund-of-funds compared to larger peers, particularly in venture capital and private natural resources. For endowments with assets less than $200 million, fund-of-funds make up the majority of the average allocation to these strategies. In contrast, fund-of-funds represent only a small fraction of the average allocations for endowments with assets greater than $3 billion.

Larger endowments are more likely to have direct private investments, although these typically account for 10% or less of average asset class exposure. Endowments that have the resources and expertise to manage direct investments effectively can take advantage of deals they find particularly attractive and save on the higher fees that are charged through the traditional limited partner (LP) fund structure. Most direct investments reported by endowments are actually co-investments made alongside a general partner. Some endowments also engage in direct "solo" investments, where the transaction is originated and managed independently by the endowment itself.

FIGURE 27 MEAN BREAKDOWN OF ASSET CLASS EXPOSURE: PRIVATE INVESTMENTS

As of June 30, 2024 • Equal-Weighted Means (%)



Source: Endowment data as reported to Cambridge Associates LLC.

Note: Analysis shows the average allocation of assets across the implementation categories for each peer group.

Notes on the Data

The notation of *n* denotes the number of institutions included in each analysis.

Returns for periods greater than one-year are annualized.

The simple portfolio benchmark consisting of 70% MSCI ACWI/30% Bloomberg Aggregate Bond Index is 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 unless otherwise noted.

Private indexes are pooled horizon IRRs, net of fees, expenses, and carried interest.

PROFILE OF RESPONDENTS

This report includes data for 323 endowed institutions. When the overall group is broken out by industry type, 159 are colleges and universities, 54 are cultural or environmental institutions, 35 are hospitals, 31 are independent schools, and 44 are other endowed institutions. All participants provided investment pool return and asset allocation data as of June 30, 2024.

The 323 participants reported long-term investment portfolio (LTIP) assets totaling $941 billion as of June 30, 2024. The mean LTIP size was $2.9 billion and the median was $524.7 million.

The breakdown of institutions by LTIP size is: 131 institutions have an asset size greater than $1 billion, 105 between $200 million and $1 billion, and 87 with less than $200 million. The participants with LTIP sizes greater than $1 billion controlled 94% of the aggregate LTIP assets.

MODIFIED PUBLIC MARKET EQUIVALENT INDEXES

Under Cambridge Associates' modified public market equivalent (mPME) methodology, the public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund and mPME NAV is a function of mPME cash flows. The mPME analysis evaluates what return would have been earned had the dollars invested in private investments been invested in the public market instead.

Appendix: Investment Portfolio Returns

TOTAL RETURNS SUMMARY BY ASSET SIZE: TRAILING 1-, 3-, 5-, 10-, AND 20-YR

Years Ended June 30, 2024 • Percent (%)

	Nominal AACRs				
	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
All Endowments					
5th %ile	14.9	5.5	10.7	8.7	9.3
25th %ile	12.8	4.2	9.3	7.4	7.8
Median	10.9	3.1	8.4	6.7	7.0
75th %ile	9.1	2.0	7.6	6.1	6.5
95th %ile	7.2	0.4	6.1	5.2	5.8
Mean	10.9	3.1	8.4	6.8	7.2
n	*323*	*318*	*314*	*299*	*245*
Less Than $200M					
5th Percentile	15.6	5.4	9.5	7.3	7.6
25th Percentile	14.1	3.9	8.4	6.7	6.9
Median	12.4	2.9	7.7	6.2	6.6
75th Percentile	11.2	1.9	7.0	5.7	6.1
95th Percentile	8.2	-0.1	5.4	4.7	5.3
Mean	12.3	2.9	7.6	6.1	6.5
n	*87*	*84*	*82*	*78*	*51*
$200M–$500M					
5th Percentile	15.1	5.3	10.1	7.5	7.8
25th Percentile	13.4	4.4	9.0	7.0	7.2
Median	12.3	3.5	8.3	6.5	6.8
75th Percentile	10.1	2.5	7.5	6.0	6.4
95th Percentile	8.1	0.9	6.5	5.2	5.7
Mean	11.6	3.4	8.2	6.5	6.8
n	*69*	*68*	*68*	*64*	*54*
$500M–$1B					
5th Percentile	14.1	5.0	10.0	7.7	8.0
25th Percentile	12.2	4.2	9.2	7.0	7.1
Median	10.8	3.0	8.2	6.5	6.8
75th Percentile	9.1	2.1	7.8	6.1	6.4
95th Percentile	8.1	0.5	6.3	5.4	6.0
Mean	10.8	3.0	8.4	6.5	6.8
n	*36*	*36*	*36*	*36*	*30*
$1B–$3B					
5th Percentile	13.4	5.9	11.2	8.8	8.7
25th Percentile	11.1	4.5	9.9	8.0	8.0
Median	10.2	3.5	9.0	7.4	7.3
75th Percentile	8.6	2.3	8.1	6.4	7.0
95th Percentile	6.8	0.6	6.8	5.8	6.1
Mean	9.9	3.4	9.0	7.3	7.5
n	*64*	*64*	*62*	*58*	*53*
More Than $3B					
5th Percentile	12.5	5.3	11.2	9.5	9.9
25th Percentile	10.8	3.7	9.9	8.6	9.1
Median	9.6	2.6	9.2	7.5	8.0
75th Percentile	8.4	1.5	8.1	6.9	7.4
95th Percentile	6.6	0.2	7.2	6.1	6.8
Mean	9.6	2.7	9.1	7.7	8.2
n	*67*	*66*	*66*	*63*	*57*

Source: Endowment data as reported to Cambridge Associates LLC.

PARTICIPANTS' 1-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 1-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Public Equity	Global Equity Managers	US Equity	Dev Mkts ex US Equity	Emg Mkts Equity	Bonds	Hedge Funds	Commodities and Natural Resources	Public Real Estate
All Endowments									
5th %ile	21.6	27.3	26.4	17.8	22.0	6.0	18.7	35.6	9.6
25th %ile	18.9	21.0	23.8	12.6	14.4	4.4	14.1	20.7	6.9
Median	17.2	17.0	22.0	10.4	10.1	3.4	12.1	13.2	5.5
75th %ile	15.2	13.2	18.9	8.9	5.7	2.6	9.7	6.4	4.8
95th %ile	11.4	0.6	11.5	5.8	1.7	0.0	7.2	0.1	-5.6
Mean	16.7	16.3	20.8	11.0	10.5	3.3	12.2	15.3	5.2
n	*275*	*206*	*266*	*252*	*255*	*266*	*275*	*82*	*42*
Median by Asset Size									
Less Than $200M	17.6	19.2	21.9	10.5	10.0	3.3	11.7	9.3	4.8
n	*87*	*64*	*83*	*75*	*78*	*83*	*80*	*26*	*9*
$200M to $500M	17.3	16.2	22.8	10.0	8.7	3.2	12.1	15.5	4.8
n	*69*	*55*	*67*	*63*	*63*	*66*	*66*	*19*	*8*
$500M to $1B	16.6	16.8	23.2	9.6	9.3	2.9	14.5	17.1	5.5
n	*32*	*25*	*31*	*32*	*32*	*32*	*33*	*12*	*4*
$1B to $3B	17.1	16.5	21.1	10.3	10.2	3.9	11.2	11.3	5.5
n	*48*	*33*	*45*	*46*	*44*	*44*	*52*	*13*	*9*
More Than $3B	16.5	16.6	20.9	12.4	11.9	3.6	12.6	14.4	6.3
n	*39*	*29*	*40*	*36*	*38*	*41*	*44*	*12*	*12*
Median by Total Performance Quartile									
Top Quartile	18.5	20.0	23.1	10.1	11.8	3.3	11.6	11.3	4.8
n	*77*	*55*	*79*	*74*	*70*	*76*	*76*	*27*	*5*
2nd Quartile	17.1	16.4	21.9	10.8	10.1	3.7	12.6	17.3	5.5
n	*73*	*59*	*71*	*66*	*70*	*71*	*72*	*21*	*13*
3rd Quartile	16.3	16.8	20.9	9.8	9.9	3.5	12.1	16.3	5.5
n	*63*	*49*	*63*	*61*	*63*	*60*	*60*	*15*	*14*
Bottom Quartile	14.4	16.0	19.9	10.9	7.9	3.5	11.6	9.3	6.0
n	*62*	*43*	*53*	*51*	*52*	*59*	*67*	*19*	*10*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their trailing one-year total portfolio return.

PARTICIPANTS' 3-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 3-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Public Equity	Global Equity Managers	US Equity	Dev Mkts ex US Equity	Emg Mkts Equity	Bonds	Hedge Funds	Commodities and Natural Resources	Public Real Estate
All Endowments									
5th %ile	6.4	9.8	11.3	5.9	1.8	1.8	7.6	23.4	2.6
25th %ile	4.9	5.7	9.0	2.8	-1.6	-0.6	5.4	15.7	-0.4
Median	3.5	2.0	7.3	1.3	-3.7	-1.9	3.9	9.1	-2.6
75th %ile	1.8	-1.5	4.9	-0.2	-6.6	-2.8	1.9	5.2	-4.0
95th %ile	-1.7	-8.0	-3.0	-3.4	-10.9	-4.4	-1.6	1.4	-4.2
Mean	3.1	1.8	6.4	1.2	-4.2	-1.7	3.5	10.7	-1.9
n	*259*	*181*	*248*	*237*	*242*	*249*	*262*	*77*	*32*
Median by Asset Size									
Less Than $200M	3.3	3.4	7.5	1.2	-3.5	-2.2	3.9	8.1	-2.6
n	*80*	*57*	*76*	*69*	*71*	*78*	*75*	*25*	*7*
$200M to $500M	3.9	2.1	8.0	1.1	-3.0	-1.9	3.8	12.1	-3.3
n	*63*	*47*	*59*	*57*	*60*	*59*	*60*	*17*	*6*
$500M to $1B	3.5	1.9	7.9	0.0	-3.1	-2.3	4.8	8.6	-4.0
n	*31*	*24*	*30*	*31*	*31*	*30*	*32*	*12*	*4*
$1B to $3B	3.5	2.7	7.4	1.8	-4.8	-1.6	3.4	8.1	-1.4
n	*46*	*25*	*43*	*44*	*42*	*42*	*51*	*11*	*6*
More Than $3B	1.3	1.0	6.4	2.0	-5.5	-1.0	3.9	12.1	-0.8
n	*39*	*28*	*40*	*36*	*38*	*40*	*44*	*12*	*9*
Median by Total Performance Quartile									
Top Quartile	5.1	5.8	8.5	1.6	-3.2	-1.7	4.5	8.3	-0.8
n	*63*	*40*	*61*	*58*	*58*	*63*	*65*	*15*	*5*
2nd Quartile	4.3	4.4	7.7	1.0	-4.1	-1.8	4.2	13.1	-4.0
n	*66*	*42*	*63*	*64*	*61*	*61*	*67*	*28*	*9*
3rd Quartile	2.9	1.4	6.5	0.8	-3.0	-2.0	4.0	7.4	-2.6
n	*64*	*47*	*61*	*59*	*62*	*60*	*64*	*18*	*10*
Bottom Quartile	1.0	-1.3	4.9	1.7	-4.3	-2.0	1.7	8.7	-2.2
n	*66*	*52*	*63*	*56*	*61*	*65*	*66*	*16*	*8*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their trailing three-year total portfolio return.

PARTICIPANTS' 5-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 5-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Public Equity	Global Equity Managers	US Equity	Dev Mkts ex US Equity	Emg Mkts Equity	Bonds	Hedge Funds	Commodities and Natural Resources	Public Real Estate
All Endowments									
5th %ile	11.7	13.7	16.4	10.0	7.5	2.1	10.4	14.5	4.4
25th %ile	10.4	10.5	14.5	7.7	5.2	1.0	8.0	11.7	3.0
Median	9.5	8.7	13.2	6.5	3.7	0.3	6.5	8.9	2.8
75th %ile	8.3	7.0	11.6	5.2	2.2	-0.2	5.3	6.8	0.1
95th %ile	6.2	3.0	7.7	2.4	-0.5	-1.4	2.9	1.5	-1.4
Mean	9.3	8.6	12.8	6.5	3.6	0.4	6.5	9.4	2.0
n	*244*	*157*	*234*	*224*	*227*	*232*	*248*	*70*	*26*
Median by Asset Size									
Less Than $200M	9.4	8.8	12.9	6.5	3.8	0.1	6.2	8.0	3.0
n	*71*	*43*	*67*	*61*	*62*	*68*	*66*	*22*	*7*
$200M to $500M	9.9	8.1	13.7	6.2	3.4	0.3	6.3	9.2	1.5
n	*62*	*41*	*58*	*56*	*59*	*56*	*59*	*16*	*4*
$500M to $1B	9.2	9.2	13.4	6.0	4.4	0.2	7.2	9.4	0.1
n	*30*	*21*	*29*	*30*	*30*	*29*	*31*	*12*	*3*
$1B to $3B	9.9	9.3	13.6	6.9	4.0	0.8	6.2	7.1	3.0
n	*42*	*25*	*40*	*41*	*38*	*39*	*48*	*8*	*5*
More Than $3B	8.6	8.7	12.6	7.0	3.8	0.9	6.8	9.8	1.8
n	*39*	*27*	*40*	*36*	*38*	*40*	*44*	*12*	*7*
Median by Total Performance Quartile									
Top Quartile	10.6	9.4	14.2	6.7	4.3	0.9	7.0	9.8	3.3
n	*57*	*37*	*59*	*54*	*56*	*56*	*66*	*20*	*8*
2nd Quartile	9.9	9.3	13.1	7.0	4.4	0.3	6.7	9.0	2.8
n	*60*	*39*	*59*	*59*	*57*	*58*	*62*	*12*	*4*
3rd Quartile	9.6	8.6	13.0	6.2	3.8	0.1	6.3	8.0	0.1
n	*66*	*38*	*61*	*60*	*59*	*63*	*64*	*25*	*7*
Bottom Quartile	8.5	7.8	12.7	6.1	2.8	0.3	5.8	7.8	2.9
n	*60*	*42*	*54*	*50*	*54*	*55*	*56*	*13*	*7*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their trailing five-year total portfolio return.

PARTICIPANTS' 10-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 10-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Public Equity	Global Equity Managers	US Equity	Dev Mkts ex US Equity	Emg Mkts Equity	Bonds	Hedge Funds	Commodities and Natural Resources	Public Real Estate
All Endowments									
5th %ile	9.5	11.7	13.5	7.2	6.1	2.5	7.7	5.8	5.3
25th %ile	8.4	9.1	12.5	5.6	4.0	1.6	5.9	2.6	4.4
Median	7.8	8.3	11.5	4.9	3.1	1.3	4.7	0.6	3.4
75th %ile	7.2	7.1	10.1	4.2	2.1	1.0	3.9	-1.3	2.3
95th %ile	6.0	4.4	7.9	2.9	0.5	0.2	2.7	-3.4	-1.5
Mean	7.8	8.2	11.1	5.0	3.0	1.4	4.9	1.0	2.8
n	*226*	*97*	*213*	*195*	*193*	*201*	*224*	*59*	*10*
Median by Asset Size									
Less Than $200M	7.9	7.7	11.3	4.7	2.8	1.3	4.3	0.7	5.3
n	*61*	*20*	*58*	*47*	*45*	*53*	*53*	*18*	*1*
$200M to $500M	8.1	7.8	12.1	4.9	3.0	1.2	4.4	0.5	2.2
n	*58*	*23*	*53*	*51*	*53*	*49*	*55*	*14*	*1*
$500M to $1B	7.7	8.8	11.2	4.7	3.0	1.1	5.5	0.0	2.0
n	*30*	*16*	*28*	*28*	*28*	*27*	*30*	*11*	*2*
$1B to $3B	7.9	8.3	11.7	5.0	2.9	1.4	4.8	0.6	4.4
n	*41*	*20*	*37*	*38*	*34*	*36*	*46*	*7*	*2*
More Than $3B	7.4	8.2	10.2	5.5	4.1	1.6	5.1	-0.6	3.1
n	*36*	*18*	*37*	*31*	*33*	*36*	*40*	*9*	*4*
Median by Total Performance Quartile									
Top Quartile	8.3	8.6	11.3	5.2	4.0	1.4	5.1	0.0	2.4
n	*46*	*26*	*50*	*48*	*48*	*47*	*54*	*12*	*3*
2nd Quartile	8.2	8.4	12.2	5.1	2.8	1.4	4.8	1.5	4.9
n	*57*	*21*	*53*	*47*	*44*	*48*	*57*	*13*	*2*
3rd Quartile	7.7	8.2	11.1	4.7	3.1	1.2	4.8	-1.3	2.0
n	*57*	*26*	*50*	*45*	*48*	*49*	*52*	*17*	*2*
Bottom Quartile	7.6	7.4	11.5	4.9	2.6	1.2	4.2	0.8	3.8
n	*61*	*22*	*57*	*54*	*52*	*55*	*58*	*17*	*2*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their trailing ten-year total portfolio return.

DISPERSION OF PARTICIPANTS' 1-YR ASSET CLASS IRRs: PRIVATE INVESTMENTS

Trailing 1-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Private Equity	Non-Venture Private Equity	Venture Capital	Private Distressed Securities	Private Credit	Total Private Real Assets	Private Real Estate	Private Natural Resources
All Endowments								
5th %ile	11.2	11.8	14.5	27.3	18.5	20.7	12.5	30.8
25th %ile	7.0	8.0	4.7	14.7	12.6	8.8	2.6	15.3
Median	3.7	5.4	0.7	6.1	10.1	2.8	-2.4	7.6
75th %ile	1.0	2.7	-3.5	4.3	5.9	-1.1	-7.4	1.4
95th %ile	-3.3	-2.5	-10.0	-6.8	-6.6	-11.7	-24.9	-6.4
Mean	3.6	4.9	0.9	9.1	8.9	4.1	-3.7	9.2
n	*251*	*250*	*227*	*110*	*188*	*205*	*188*	*192*
Median by Asset Size								
Less Than $200M	3.7	5.2	-1.2	12.0	10.6	2.6	1.7	6.6
n	*71*	*71*	*53*	*18*	*45*	*48*	*32*	*34*
$200M to $500M	4.2	5.3	1.0	6.4	10.3	1.9	-2.2	9.5
n	*64*	*65*	*58*	*26*	*50*	*53*	*42*	*45*
$500M to $1B	3.8	6.4	0.1	6.0	9.7	3.8	1.2	3.9
n	*32*	*31*	*31*	*23*	*26*	*31*	*32*	*31*
$1B to $3B	3.2	5.2	0.2	6.1	10.3	2.8	-4.2	9.2
n	*48*	*45*	*46*	*26*	*38*	*43*	*45*	*46*
More Than $3B	4.1	5.4	1.9	6.0	9.6	3.1	-3.8	8.1
n	*36*	*38*	*39*	*17*	*29*	*30*	*37*	*36*
Median by Total Performance Quartile								
Top Quartile	7.1	7.2	3.1	6.0	10.1	2.3	-0.3	5.5
n	*65*	*65*	*49*	*23*	*42*	*48*	*36*	*35*
2nd Quartile	4.7	6.2	1.3	5.3	11.1	3.9	-2.4	8.7
n	*67*	*67*	*59*	*29*	*54*	*55*	*47*	*50*
3rd Quartile	3.3	5.1	0.1	7.9	10.1	3.1	-3.1	10.1
n	*57*	*60*	*61*	*31*	*53*	*51*	*53*	*57*
Bottom Quartile	2.1	3.5	-1.5	5.2	8.5	2.4	-2.9	5.3
n	*62*	*58*	*58*	*27*	*39*	*51*	*52*	*50*

Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their trailing one-year total portfolio return. Private investment return statistics are reported as horizon IRRs.

DISPERSION OF PARTICIPANTS' 3-YR ASSET CLASS IRRs: PRIVATE INVESTMENTS

Trailing 3-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Private Equity	Non-Venture Private Equity	Venture Capital	Private Distressed Securities	Private Credit	Total Private Real Assets	Private Real Estate	Private Natural Resources
All Endowments								
5th %ile	11.5	13.4	7.3	25.5	14.8	24.9	15.2	28.9
25th %ile	6.8	9.0	2.1	19.6	10.3	14.3	8.3	19.7
Median	3.1	5.7	-1.3	12.2	8.1	9.9	5.2	13.2
75th %ile	0.4	2.9	-4.0	6.1	5.0	5.5	0.5	8.6
95th %ile	-3.6	-2.5	-10.7	-6.4	-3.0	-3.8	-14.4	-0.2
Mean	3.5	5.7	-1.1	11.9	7.7	9.8	3.0	14.1
n	*241*	*241*	*218*	*97*	*173*	*196*	*182*	*188*
Median by Asset Size								
Less Than $200M	4.2	5.8	-0.7	17.5	8.7	8.6	3.5	11.7
n	*64*	*64*	*47*	*13*	*37*	*43*	*27*	*32*
$200M to $500M	4.2	6.0	1.2	12.4	7.8	9.6	4.2	13.6
n	*63*	*64*	*56*	*22*	*46*	*51*	*41*	*44*
$500M to $1B	2.9	6.1	-2.8	13.3	9.2	10.0	6.1	13.9
n	*32*	*31*	*30*	*22*	*25*	*31*	*32*	*31*
$1B to $3B	2.4	5.6	-1.9	9.8	7.7	10.2	5.7	14.8
n	*46*	*44*	*46*	*24*	*36*	*41*	*45*	*45*
More Than $3B	1.2	5.5	-1.5	7.7	6.9	8.7	4.9	12.7
n	*36*	*38*	*39*	*16*	*29*	*30*	*37*	*36*
Median by Total Performance Quartile								
Top Quartile	6.1	8.2	-0.5	12.1	8.1	14.0	7.4	19.1
n	*62*	*62*	*54*	*30*	*46*	*56*	*47*	*52*
2nd Quartile	3.8	5.7	-1.3	13.6	8.2	10.1	4.7	11.4
n	*61*	*61*	*54*	*22*	*45*	*51*	*43*	*47*
3rd Quartile	2.5	5.1	-1.5	13.5	8.2	8.5	5.6	11.9
n	*54*	*55*	*47*	*27*	*42*	*44*	*40*	*44*
Bottom Quartile	0.5	4.3	-2.4	10.3	7.7	7.8	2.4	12.7
n	*63*	*62*	*62*	*17*	*39*	*44*	*51*	*45*

Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their trailing three-year total portfolio return. Private investment return statistics are reported as horizon IRRs.

DISPERSION OF PARTICIPANTS' 5-YR ASSET CLASS IRRs: PRIVATE INVESTMENTS

Trailing 5-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Private Equity	Non-Venture Private Equity	Venture Capital	Private Distressed Securities	Private Credit	Total Private Real Assets	Private Real Estate	Private Natural Resources
All Endowments								
5th %ile	22.0	22.4	25.1	23.9	16.1	15.6	15.8	16.6
25th %ile	17.2	18.2	18.6	14.5	11.8	10.2	9.4	10.9
Median	15.5	15.4	14.9	11.1	9.5	7.5	6.8	7.3
75th %ile	13.1	12.8	11.0	6.7	6.9	3.7	2.2	3.6
95th %ile	9.6	7.9	6.6	-4.3	1.7	-3.1	-12.9	-1.7
Mean	15.3	15.4	15.1	10.6	8.9	7.0	5.0	7.5
n	*230*	*229*	*205*	*81*	*150*	*193*	*179*	*186*
Median by Asset Size								
Less Than $200M	14.1	14.4	14.9	10.3	10.1	5.3	5.2	5.5
n	*56*	*56*	*40*	*8*	*26*	*41*	*25*	*32*
$200M to $500M	15.1	15.1	13.2	11.2	10.2	7.3	6.1	7.9
n	*61*	*61*	*51*	*18*	*40*	*50*	*40*	*42*
$500M to $1B	15.1	16.4	14.0	12.5	10.3	8.7	7.2	8.0
n	*32*	*31*	*30*	*18*	*23*	*31*	*32*	*31*
$1B to $3B	15.9	16.2	14.7	11.5	8.5	7.3	7.1	6.3
n	*46*	*44*	*46*	*21*	*34*	*41*	*45*	*45*
More Than $3B	16.2	15.2	17.1	8.7	7.9	7.6	6.2	7.8
n	*35*	*37*	*38*	*16*	*27*	*30*	*37*	*36*
Median by Total Performance Quartile								
Top Quartile	17.0	16.9	17.4	13.2	10.0	8.5	7.2	7.2
n	*61*	*61*	*61*	*26*	*42*	*53*	*56*	*58*
2nd Quartile	15.7	16.5	14.8	9.7	10.0	7.3	7.8	7.4
n	*60*	*61*	*54*	*24*	*38*	*52*	*51*	*49*
3rd Quartile	14.9	15.2	14.4	12.3	10.0	5.8	5.7	6.0
n	*62*	*60*	*53*	*16*	*36*	*52*	*39*	*48*
Bottom Quartile	13.0	13.1	10.7	8.2	7.5	7.5	5.2	9.9
n	*44*	*45*	*34*	*13*	*31*	*34*	*30*	*29*

Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their trailing five-year total portfolio return. Private investment return statistics are reported as horizon IRRs.

DISPERSION OF PARTICIPANTS' 10-YR ASSET CLASS IRRs: PRIVATE INVESTMENTS

Trailing 10-Yr as of June 30, 2024 • Percent (%) • By Percentile Ranking

	Total Private Equity	Non-Venture Private Equity	Venture Capital	Private Distressed Securities	Private Credit	Total Private Real Assets	Private Real Estate	Private Natural Resources
All Endowments								
5th %ile	18.5	19.9	20.7	22.5	16.3	11.6	13.3	10.2
25th %ile	16.3	16.4	18.3	11.8	10.4	7.8	10.6	5.7
Median	14.5	13.8	15.2	8.5	8.4	5.1	8.4	2.8
75th %ile	12.4	11.5	11.9	6.3	6.3	2.7	6.0	-0.1
95th %ile	8.8	7.4	7.4	1.6	4.2	-3.7	0.8	-5.7
Mean	14.2	13.8	15.0	9.5	9.3	4.8	7.7	2.7
n	*201*	*202*	*163*	*55*	*91*	*167*	*147*	*153*
Median by Asset Size								
Less Than $200M	12.7	11.2	14.8	5.7	6.0	3.9	7.4	1.5
n	*44*	*44*	*23*	*4*	*7*	*31*	*19*	*21*
$200M to $500M	14.6	13.9	14.3	9.0	8.6	4.0	5.9	3.0
n	*50*	*50*	*35*	*7*	*23*	*39*	*24*	*32*
$500M to $1B	14.7	15.4	15.0	8.5	9.0	4.5	8.9	1.5
n	*31*	*30*	*25*	*11*	*14*	*29*	*27*	*27*
$1B to $3B	14.2	15.6	15.4	8.5	8.2	5.7	9.2	2.9
n	*44*	*42*	*44*	*18*	*26*	*39*	*42*	*40*
More Than $3B	15.7	14.2	17.7	8.8	7.4	6.4	8.3	4.0
n	*32*	*36*	*36*	*15*	*21*	*29*	*35*	*33*
Median by Total Performance Quartile								
Top Quartile	16.2	15.4	17.9	9.1	8.6	6.3	8.8	3.7
n	*51*	*53*	*54*	*22*	*30*	*44*	*51*	*48*
2nd Quartile	14.6	15.0	14.5	7.3	8.6	5.6	9.7	2.5
n	*53*	*54*	*42*	*16*	*25*	*41*	*35*	*35*
3rd Quartile	14.0	13.1	14.0	7.3	8.3	4.0	6.5	2.4
n	*50*	*50*	*37*	*8*	*18*	*43*	*34*	*41*
Bottom Quartile	12.2	11.7	11.5	9.0	6.7	4.1	7.2	1.7
n	*40*	*40*	*26*	*6*	*16*	*34*	*23*	*26*

Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their trailing ten-year total portfolio return. Private investment return statistics are reported as horizon IRRs.

PRIVATE INVESTMENT PERFORMANCE REPORTING METHODOLOGIES BY ASSET SIZE

As of June 30, 2024

By Asset Size

	Current Basis	Lagged Basis	Other	No PI Allocation
Less Than $200M	85%	—	—	15%
n	*74*			*13*
$200M to $500M	93%	—	1%	6%
n	*64*		*1*	*4*
$500M to $1B	94%	6%	—	—
n	*34*	*2*		
$1B to $3B	81%	19%	—	—
n	*52*	*12*		
More Than $3B	75%	25%	—	—
n	*50*	*17*		

Source: Endowment data as reported to Cambridge Associates LLC.

1-YR ATTRIBUTION ANALYSIS: ALL ENDOWMENT MEAN

As of June 30, 2024 • Percent (%) • n = 320

	Breakdown of Return From Asset Allocation			
Asset Class	Beginning Year Mean Asset Allocation	Asset Class Benchmark Return	Contribution to Asset Class Return	Index
US Equity	19.8	23.1	4.6	Russell 3000®
Global Equity	8.9	19.7	1.8	MSCI ACWI
Global ex US Equity-Developed Mkts	9.6	11.5	1.1	MSCI EAFE (N)
Absolute Return (ex Distressed)	8.9	8.4	0.8	HFRI FOF Diversified
Long/Short Hedge Funds	6.2	11.9	0.7	HFRI Equity Hedge
Non-Venture Private Equity	8.6	7.1	0.6	CA US Private Equity
Global ex US Equity-Emerging Mkts	3.9	12.5	0.5	MSCI Emg Mkts (N)
US Bonds	8.3	2.6	0.2	BBG Agg Bond
Cash & Equivalents	3.9	5.4	0.2	91-Day T-Bill
Private Oil & Gas/Natural Resources	2.4	8.6	0.2	CA Natural Resources
Distressed-Hedge Fund Structure	1.5	10.3	0.2	HFRI ED: Dist/Rest
Other Private Investments	2.7	5.2	0.1	CA US PE/VC
Private Credit	1.4	8.4	0.1	CA Private Credit
Public Energy/Natural Resources	0.6	13.3	0.1	MSCI World Nat Res (N)
Other	0.4	14.4	0.1	70% Global Eq/30% Bond
Public Real Estate	0.4	5.7	0.0	FTSE NAREIT Composite
High-Yield Bonds	0.2	10.4	0.0	BBG High Yield
Distressed-Private Equity Structure	0.6	2.8	0.0	CA Distressed Securities
Inflation-Linked Bonds	0.6	2.7	0.0	BBG US TIPS
Commodities	0.3	5.0	0.0	Bloomberg Commodity
Global ex US Bonds	0.0	-2.2	0.0	FTSE Non-US$ WGBI
Global Bonds	0.2	-0.6	0.0	FTSE WGBI
Venture Capital	8.2	-0.7	-0.1	CA US Venture Capital
Private Real Estate	2.4	-4.1	-0.1	CA Real Estate
Return From Asset Allocation (Sum of Contributions)			*11.2*	
+/- Return From Other Factors			*-0.2*	
Mean Total Portfolio Return			**10.9**	

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

Appendix: Asset Allocation and Implementation

MEAN ASSET ALLOCATION BY ASSET SIZE

As of June 30, 2024 • Percent (%)

		Asset Size				
	All Endowments	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
	(n = 323)	*(n = 87)*	*(n = 69)*	*(n = 36)*	*(n = 64)*	*(n = 67)*
Public Equity	**41.8**	**49.3**	**47.9**	**40.2**	**36.4**	**31.7**
Global	9.7	12.3	11.3	8.1	8.3	7.0
US	19.3	22.8	23.0	18.8	16.7	13.8
Global ex US Developed	9.1	10.8	10.0	9.7	8.4	6.2
Emerging Markets	3.7	3.4	3.6	3.7	3.0	4.7
PE/VC	**19.5**	**11.6**	**16.1**	**19.9**	**24.7**	**28.1**
Non-Venture Private Equity	8.6	4.0	6.2	9.7	12.2	13.1
Venture Capital	8.1	3.8	5.6	7.0	11.3	13.5
Other Private Investments	2.9	3.8	4.3	3.1	1.2	1.5
Hedge Funds	**17.6**	**18.2**	**16.2**	**19.5**	**17.4**	**17.2**
Long/Short	7.1	7.7	6.4	7.8	6.5	7.2
Absolute Return	8.6	8.7	8.1	8.9	8.7	8.7
Distressed	1.9	1.8	1.6	2.8	2.3	1.2
Private Credit	**2.0**	**1.3**	**1.6**	**1.8**	**2.8**	**2.6**
Distressed - Control Oriented	0.5	0.3	0.4	0.7	0.7	0.9
Private Credit ex Distressed	1.4	1.0	1.3	1.0	2.1	1.7
Fixed Income	**8.7**	**10.9**	**10.4**	**8.2**	**6.7**	**6.2**
Global	0.3	0.4	0.3	0.3	0.3	0.2
US	8.2	10.4	10.1	7.9	6.1	5.4
Global ex US	0.0	0.0	0.0	0.0	0.0	0.2
High-Yield Bonds	0.2	0.1	0.0	0.1	0.3	0.4
Real Assets & ILBs	**6.2**	**3.8**	**3.7**	**6.9**	**7.5**	**10.4**
Private Real Estate	2.4	0.5	1.1	2.5	3.5	5.1
Public Real Estate	0.3	0.4	0.2	0.3	0.2	0.4
Commodities	0.3	0.2	0.1	0.3	0.2	0.5
Inflation-Linked Bonds	0.6	1.0	0.4	0.8	0.2	0.4
Private O&G/Nat Resources	2.2	1.0	1.4	2.5	3.0	3.7
Public Energy/Nat Resources	0.5	0.8	0.5	0.5	0.5	0.3
Cash & Equivalents	**3.8**	**4.5**	**3.0**	**3.3**	**4.3**	**3.4**
Other Assets	**0.5**	**0.4**	**1.1**	**0.3**	**0.2**	**0.5**

Source: Endowment data as reported to Cambridge Associates LLC.

MEAN ASSET ALLOCATION BY INSTITUTION TYPE

As of June 30, 2024 • Percent (%)

		Institution Type				
	All Endowments	C&Us	Cultural and Environmental	Independent Schools	Healthcare	Other Endowments
	(n = 323)	*(n = 159)*	*(n = 54)*	*(n = 31)*	*(n = 35)*	*(n = 44)*
Public Equity	**41.8**	**38.3**	**43.1**	**46.4**	**43.4**	**48.1**
Global	9.7	8.9	11.6	12.4	6.4	11.4
US	19.3	17.2	19.6	22.1	22.5	22.1
Global ex US Developed	9.1	8.4	8.7	8.8	10.8	10.8
Emerging Markets	3.7	3.9	3.3	3.1	3.7	3.8
PE/VC	**19.5**	**24.3**	**17.0**	**14.9**	**14.8**	**12.5**
Non-Venture Private Equity	8.6	10.9	6.9	7.4	6.8	4.6
Venture Capital	8.1	10.6	6.9	4.2	6.4	4.3
Other Private Investments	2.9	2.8	3.2	3.3	1.5	3.6
Hedge Funds	**17.6**	**16.5**	**19.4**	**19.4**	**15.4**	**19.5**
Long/Short	7.1	6.4	8.6	8.9	5.8	7.5
Absolute Return	8.6	8.3	9.3	9.0	7.7	9.2
Distressed	1.9	1.8	1.5	1.5	1.9	2.8
Private Credit	**2.0**	**2.3**	**1.6**	**1.7**	**2.6**	**1.1**
Distressed - Control Oriented	0.5	0.7	0.3	0.5	0.6	0.2
Private Credit ex Distressed	1.4	1.6	1.2	1.3	1.9	0.9
Fixed Income	**8.7**	**7.1**	**9.2**	**7.4**	**13.5**	**10.6**
Global	0.3	0.1	0.6	0.1	0.3	0.5
US	8.2	6.7	8.6	7.3	12.7	10.0
Global ex US	0.0	0.0	0.0	0.0	0.2	0.0
High-Yield Bonds	0.2	0.2	0.1	0.0	0.3	0.0
Real Assets & ILBs	**6.2**	**7.7**	**4.4**	**5.2**	**5.5**	**4.2**
Private Real Estate	2.4	3.4	1.3	1.8	1.8	1.0
Public Real Estate	0.3	0.3	0.3	0.1	0.4	0.4
Commodities	0.3	0.3	0.2	0.4	0.4	0.1
Inflation-Linked Bonds	0.6	0.4	0.6	1.0	0.7	0.6
Private O&G/Nat Resources	2.2	2.9	1.7	1.3	1.5	1.3
Public Energy/Nat Resources	0.5	0.4	0.4	0.5	0.6	0.8
Cash & Equivalents	**3.8**	**3.2**	**4.8**	**4.4**	**4.4**	**3.6**
Other Assets	**0.5**	**0.6**	**0.4**	**0.5**	**0.4**	**0.4**

Source: Endowment data as reported to Cambridge Associates LLC.

HISTORICAL MEAN ASSET ALLOCATION TRENDS

Years Ended June 30 • Percent (%)

	Constant Universe (n = 135)							
	Public Equity	PE/VC	Hedge Funds	Real Assets & ILBs	Fixed Income	Private Credit	Cash	Other
2004	48.7	5.1	17.5	6.6	16.6	--	4.1	1.3
2005	46.9	5.5	19.4	8.5	15.3	--	3.9	0.3
2006	46.4	6.0	20.6	9.7	13.6	--	3.3	0.3
2007	46.4	6.9	21.7	10.7	11.6	--	2.4	0.3
2008	38.9	8.7	24.2	13.2	12.3	--	2.2	0.5
2009	33.2	9.7	24.7	12.0	14.0	--	5.7	0.7
2010	33.2	10.6	26.0	12.7	13.9	--	3.2	0.5
2011	35.8	11.1	25.0	13.2	11.5	--	2.8	0.5
2012	34.3	11.8	25.4	13.5	11.5	--	3.1	0.3
2013	37.6	10.7	23.5	12.7	10.0	1.9	3.4	0.3
2014	39.6	10.8	23.0	12.2	8.9	1.7	3.6	0.2
2015	39.6	11.2	23.8	10.7	9.0	1.5	4.1	0.2
2016	39.3	11.5	23.1	11.2	9.1	1.6	3.9	0.2
2017	42.3	11.3	21.5	10.4	8.3	1.4	4.1	0.7
2018	42.0	12.4	21.0	10.5	8.4	1.3	3.6	0.9
2019	41.5	14.4	20.1	9.3	8.6	1.5	3.5	1.0
2020	40.9	16.5	19.6	7.8	7.9	1.6	4.6	1.1
2021	40.4	21.2	17.3	7.4	6.9	1.7	4.1	1.0
2022	35.4	23.8	17.9	9.1	7.2	1.9	4.1	0.6
2023	37.5	23.0	17.6	8.6	7.1	2.0	3.6	0.5
2024	37.4	22.9	18.1	8.4	7.0	2.1	3.6	0.5

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Analysis is based on a constant universe that includes 135 institutions that provided asset allocation data for each year from 2004 to 2024.

UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of June 30, 2024 • Percent (%) • By Percentile Ranking

Uncalled Capital Commitments as a Percentage of the Total LTIP

	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
5th %ile	19.9	20.1	20.4	23.4	23.3
25th %ile	14.2	14.0	15.1	18.2	18.4
Median	9.5	11.4	13.4	14.6	15.4
75th %ile	5.5	8.8	10.0	12.0	12.4
95th %ile	0.3	0.8	7.2	8.0	4.0
Mean	10.0	11.5	13.8	15.4	15.9
n	*79*	*67*	*34*	*57*	*50*

Actual PI Allocation + Uncalled Capital Commitments as a Percentage of the Total LTIP

	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
5th %ile	54.4	52.5	56.6	68.2	78.7
25th %ile	37.3	42.2	48.5	60.1	65.5
Median	26.3	31.1	39.1	50.0	57.8
75th %ile	13.4	22.1	33.6	39.3	45.6
95th %ile	1.7	5.0	17.1	25.8	22.1
Mean	25.8	31.9	40.0	49.1	55.5
n	*79*	*67*	*34*	*57*	*50*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Uncalled capital is the amount committed, but not yet paid in, to private investment funds.

EXTERNAL MANAGERS AND VEHICLES BY STRATEGY

As of June 30, 2024

	Median Number of Managers					Median Number of Vehicles				
Strategy	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
Traditional Equity										
Global Equity	3	3	3	3	6	3	3	3	3	6
US Equity	3	3	3	4	6	4	4	4	4	7
Developed ex US Equity	3	3	3	3	3	3	3	3	3	3
Emerging Markets Equity	2	2	3	2	5	2	2	3	2	5
Traditional Bonds										
Global Bonds	1	1	1	1	2	1	1	1	1	2
US Bonds	2	2	2	2	2	2	2	2	2	2
Global ex US Bonds	--	--	--	1	2	--	--	--	1	2
High-Yield Bonds	1	--	2	1	2	1	--	2	1	3
Hedge Funds										
Long/Short Hedge Funds	3	3	4	5	7	3	3	4	6	7
Absolute Return	3	5	6	5	8	4	5	6	6	10
Distressed Securities	1	2	2	2	3	1	2	2	3	3
Private Credit										
Distressed - Control Oriented	1	1	2	2	4	1	1	2	3	5
Private Credit ex Distressed	2	2	3	6	7	2	3	3	9	12
Private Equity										
Non-Venture Private Equity	5	7	13	18	32	7	12	23	33	69
Venture Capital	3	5	9	13	29	6	10	19	31	107
Other Private Investments	3	4	4	3	7	4	7	8	5	11
Real Assets & ILBs										
Private Real Estate	1	2	5	7	14	2	2	6	12	30
Public Real Estate	1	1	1	1	1	1	1	1	1	1
Commodities	1	1	1	1	3	1	1	1	1	6
Inflation-Linked Bonds (TIPS)	1	1	1	1	1	1	1	1	1	1
Private Oil & Gas/Nat Res	2	3	5	5	12	3	4	8	10	25
Public Energy/Nat Res	1	1	1	1	1	1	1	1	1	1
Cash	1	1	1	1	1	1	1	1	1	1
Other	1	1	1	2	1	1	1	1	2	2

Source: Endowment data as reported to Cambridge Associates LLC.

Notes: Only those institutions with an allocation to the specific asset class are included in each category. As a result, the sum of the individual asset classes should not be assumed to equal the total number of managers or vehicles.

NUMBER OF EXTERNAL MANAGERS AND INVESTMENT VEHICLES

As of June 30, 2024 • Percent (%) • By Percentile Ranking

Number of External Managers

	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
5th %ile	55	71	87	116	264
25th %ile	40	54	79	92	178
Median	29	42	65	76	134
75th %ile	22	33	53	59	101
95th %ile	13	20	36	45	51
Mean	31	43	65	78	141
n	*87*	*69*	*34*	*55*	*44*

Number of Investment Vehicles

	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
5th %ile	82	106	150	293	695
25th %ile	58	80	126	210	421
Median	41	62	99	147	286
75th %ile	26	46	75	107	219
95th %ile	15	26	55	70	88
Mean	43	64	101	159	332
n	*87*	*69*	*34*	*54*	*43*

Source: Endowment data as reported to Cambridge Associates LLC.

DISPERSION IN NUMBER OF MANAGERS FOR SELECTED ASSET CLASSES

As of June 30, 2024 • By Percentile Ranking

	Global Equity	US Equity	DM ex US Equity	EM Equity	US Bonds	Long/Short Hedge Funds	Ab Return Hedge Funds	Private Equity	Venture Capital
5th %ile	9	9	6	6	4	10	12	39	38
25th %ile	5	5	4	3	3	7	7	19	15
Median	3	4	3	2	2	4	5	11	8
75th %ile	2	2	2	1	1	2	3	6	4
95th %ile	1	1	1	1	1	1	1	2	1
Mean	4	4	3	3	2	5	6	15	13
n	*233*	*276*	*261*	*253*	*259*	*254*	*270*	*259*	*251*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Only those institutions with an allocation to the specific asset class have been included.

MEAN BREAKDOWN OF ASSET CLASS EXPOSURE: TRADITIONAL EQUITIES AND BONDS

As of June 30, 2024 • Percent (%)

	Less Than $200M	$200M to $500M	$500M to $1B	$1B to $3B	More Than $3B
Global Equity					
Active Management	94.1	95.3	95.4	97.5	92.8
Passive Management	5.9	4.6	1.1	2.5	5.4
Derivatives & Internally Managed	0.0	0.2	3.4	0.1	1.8
n	*73*	*60*	*29*	*40*	*29*
US Equity					
Active Management	60.1	63.5	67.8	70.2	71.0
Passive Management	39.5	36.1	29.8	27.5	27.4
Derivatives & Internally Managed	0.4	0.4	2.3	2.3	1.6
n	*85*	*67*	*34*	*54*	*40*
Global ex US Equity Developed					
Active Management	89.9	91.4	89.4	88.2	88.5
Passive Management	9.4	8.7	9.6	10.2	11.1
Derivatives & Internally Managed	0.8	-0.1	1.0	1.6	0.4
n	*75*	*63*	*34*	*53*	*37*
Emerging Markets Equity					
Active Management	83.7	93.9	92.3	82.7	88.2
Passive Management	15.7	4.8	6.8	15.3	9.5
Derivatives & Internally Managed	0.5	1.3	0.9	2.0	2.3
n	*73*	*60*	*30*	*52*	*37*
US Bonds					
Active Management	62.0	50.3	57.1	57.7	68.5
Passive Management	35.5	48.5	38.2	35.8	25.7
Derivatives & Internally Managed	2.5	1.2	4.7	6.5	5.8
n	*85*	*65*	*34*	*44*	*34*

Source: Endowment data as reported to Cambridge Associates LLC.

Note: Analysis shows the average allocation of assets across the implementation categories for each peer group.