# FOUNDATION ANNUAL INVESTMENT POOL RETURNS

# CALENDAR YEAR 2023





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This study is based on a survey that Cambridge Associates (CA) administers annually to our foundation clients. The report that follows summarizes returns, asset allocation, and other investment-related data for 110 institutions for the calendar year ended December 31, 2023. Included in this year's report are commentary and exhibits that are spread across five separate sections.

A rebound in equity and bond markets propelled foundation returns in 2023, with the majority of participants in our universe reporting double-digit returns. However, performance for illiquid asset classes lagged public strategies by significant margins. Most foundations underperformed a simple public equity/bond blended index for the year, with the spreads being greatest for those with larger and more diversified portfolios. The story was the opposite when the evaluation periods are extended across multiple years, as foundations with higher allocations to private investments continued to outperform over the long term. Our **INVESTMENT PORTFOLIO RETURNS** section highlights these and other topics related to investment performance results.

A public equity index is the most common approach to representing private equity and venture capital (PE/VC) in the policy portfolio benchmark. In a year such as 2023, where public markets produced much higher returns than private markets, it is difficult for foundations to outperform their benchmarks. Our **INVESTMENT POLICY** section touches on this topic and includes a breakdown of the most commonly used indexes in policy benchmarks. This section also touches on asset allocation strategies among foundations and how those can differ from a policy perspective.

A review of foundation asset allocation trends over the past decade shows that PE/ VC allocations have risen dramatically, while allocations to most other strategies have declined. The **PORTFOLIO ASSET ALLOCATION** section highlights these asset allocation trends and incorporates data on recent changes in target asset allocations.

The number of managers that foundations use for their overall portfolio and within specific asset classes can vary widely. Our **INVESTMENT MANAGER STRUCTURES** section explores data on this topic, as well as implementation strategies for traditional assets (i.e., active versus passive management) and alternative assets.

Meanwhile, the **PAYOUT FROM THE LONG-TERM INVESTMENT PORTFOLIO** section contains a set of analyses that look at spending objectives and policies of private nonoperating foundations. These types of foundations are required under the Federal tax code to distribute approximately 5% of their assets each year.

Finally, the former Investment Office Staffing and Governance section will now be available as a standalone publication. Data collection for the biennial Organization and Staffing for Endowment Management survey and publication will begin in summer 2024. This publication will explore all facets of investment office resourcing and governance structure.

### Section 1: Investment Portfolio Returns

#### 2023 RETURNS

The easing of inflation in the latter half of the prior year set the stage for equity and bond markets to rebound in 2023. After producing dismal returns in 2022, public equity markets delivered strong performance across most global regions this past year. The MSCI All Country World Index returned 23%, which was its best-performing year since 2019. The Bloomberg Aggregate Bond Index, which tracks the investment-grade bond market in the United States, topped 5% in 2023. This was a significant improvement over the previous year, when the bond index earned the lowest annual return across its entire history. A simple benchmark consisting of 70% global equities and 30% bonds rode the upswing of calendar year 2023 to a 17% return (Figure 1).



FIGURE 1 TRAILING 1-YR RETURNS FOR 70% EQUITY/30% BOND BENCHMARK Calendar Years 2003–2023 • Periods Ended December 31 • Percent (%)

Sources: Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Note: The equity component of the benchmark is represented by the MSCI ACWI with US Gross and the bond component is represented by the Bloomberg Aggregate Bond Index.

Returns for foundations have followed the same directional path as the general market trends over time. The median foundation return also bounced back into positive territory in 2023, landing at 11.3%. However, since most foundations in our study are diversified across various investment strategies including alternative assets, there is typically some degree of tracking error when comparing the median peer return against the simple benchmark. In 2023, private investments underperformed public markets by substantial margins, which led to the largest negative differential between the median return and the benchmark from the last two decades (Figure 2). The inverse was true in 2021 and 2022, when private investments performed much better relative to public markets. Those two years saw the largest positive spreads for the median return versus the benchmark from this historical period.



Calendar Years 2003-23 • Periods Ended December 31



Source: Foundation data as reported to Cambridge Associates LLC. Note: The number of foundations included in the median calculation varies by period, ranging from 72 in 2003 to 110 in 2023.

The 70/30 benchmark return landed toward the top end of the return distribution for the foundation universe in 2023 (Figure 3). While each of the asset size subgroups underperformed the simple benchmark, it was an atypical year compared to most of our prior annual studies in that smaller foundations outperformed larger foundations by significant margins. When the universe is broken down into various asset size subgroups, foundations with assets less than \$100 million reported the highest median return at 12.5%. The outperformance of smaller portfolios relative to the overall universe was mainly attributable to the fact that this group of foundations had the highest allocation to public equities in a year where those assets delivered excellent returns. In contrast, foundations with assets more than \$1 billion—which have the lowest allocations to public equities—reported a median return of just 9.4%.

#### FIGURE 3 CALENDAR YEAR 2023 TOTAL RETURN PERCENTILES



Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties. Note: For more information, see page 44 in the Appendix.





Figure 4 looks at the dispersion in returns across our foundation universe over the last two decades. In 2023, the 5th percentile return was 5.1 percentage points (ppts) above the median, while the 95th percentile return was 5.7 ppts below the median. This range in returns was slightly lower than what was reported the previous year and down significantly from the results of 2020 and 2021. However, the level of dispersion was still greater than what was reported throughout much of the 2010s, a decade where the variations in peer returns were historically low.

FIGURE 4 DISPERSION IN TRAILING 1-YR RETURNS RELATIVE TO THE MEDIAN RETURN Calendar Years 2003–2023 • Periods Ended December 31



Note: The number of institutions included in the universe varies by period, ranging from 72 in 2003 to 110 in 2023.

#### IMPACT OF PERFORMANCE REPORTING METHODOLOGIES ON PEER COMPARISONS

The illiquid nature of private investments means that valuations for these assets are not readily available at the end of a quarter. It can take several months for managers to report valuations, which delays the timing for when a foundation can calculate a calendar year return with December 31 private marks. Some foundations choose to close out their investment reporting shortly after calendar year end, while others have the flexibility to wait until later in the spring to calculate their final calendar year return. Consequently, the methodology for capturing private investments in the total portfolio return is not apples to apples across all foundations. Foundations using the lagged basis methodology mark private investments as of September 30 for the calendar year return. Private valuations are perpetually lagged by one quarter under this method, resulting in a one-year return that captures private investment performance from October 1, 2022, to September 30, 2023. Just 14% of participants in this study used the lagged basis for their calendar year return calculation (Figure 5). In contrast, the majority of participants (75%) incorporated private investment marks into the return on a current basis. For these foundations, private investment performance is time-matched with the actual trailing one-year period and reflects investment activity from January 1, 2023, to December 31, 2023. Approximately 6% of foundations reported some other reporting method, while another 5% reported little-to-no private exposure in their portfolios.



#### FIGURE 5 PERFORMANCE REPORTING METHODOLOGIES: PRIVATE INVESTMENTS As of December 31, 2023

Basis Other Allocation Basis Less Than \$100M 71% 6% 24% \_ 12 1 4 \$100M-\$300M 85% 12% \_ 3% 29 4 1 \$300M-\$1B 83% 13% 4% 3 19 1 More Than \$1B 64% 33% 3% 23 12 1

Current

Lagged

No PI

Source: Foundation data as reported to Cambridge Associates LLC.

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

# PERFORMANCE METHODOLOGY DESCRIPTIONS

#### **Current Basis**

Total investment pool return for the trailing one-year period includes marketable asset performance and private investment performance for January 1, 2023, to December 31, 2023.

#### Lagged Basis

Total investment pool return for the trailing one-year period includes marketable asset performance for January 1, 2023, to December 31, 2023, and private investment performance for October 1, 2022, to September 30, 2023.

Marketable Assets 1Q23 2Q23 3Q23 4Q23 **Private Investments** 

Marketable Assets 4Q22 1Q23 2Q23 3Q23 4Q23 **Private Investments** 

When assessing the impact of using the current basis methodology or the lagged basis methodology, it is important to focus on the returns of private strategies for fourth quarter 2022 and fourth quarter 2023. The lagged basis incorporates performance for the former period but not the latter, and vice versa for the current basis. The comparison of returns across these two quarters shows mixed results, with some strategies reporting higher returns in fourth quarter 2022 versus fourth quarter 2023, and other strategies showing the opposite (Figure 6).





Source: Cambridge Associates LLC.

Note: Private investment return statistics are reported as horizon internal rates of return.

The bulk of private exposure for most foundations comes from US PE/VC strategies. These strategies produced better returns in 4Q23 compared to 4Q22, so a foundation would likely calculate a higher return under the current basis than the lagged basis. In fact, Figure 7 shows that the median return for current reporters (11.3%) was higher than the median for the lagged group (10.3%). The lagged reporters in the bottom quartile of that cohort's return distribution had a one-year return that was significantly lower than the rest of the foundation universe. Each of those bottom quartile foundations had venture capital allocations that were much higher than the peer group average.

# FIGURE 7 RANGE OF CALENDAR YEAR 2023 RETURNS BY PRIVATE INVESTMENT REPORTING METHODOLOGY

As of December 31, 2023 • Percent (%) • By Percentile Ranking



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Excluded from this analysis are five foundations that had little to no private investment allocation (i.e., < 1%) and seven foundations that used some other type of reporting methodology.

All except one foundation in this study provided performance on a net-of-fees basis. More than 90% of net reporters deduct solely investment manager fees in the net return calculation. Just 3% of participants—all of which have assets greater than \$1 billion—deduct external manager fees plus all or most of investment oversight expenses. The main drivers of oversight costs tend to be investment office staff compensation. Another remaining 6% of respondents deduct external manager fees plus some additional costs but are gross of staff compensation.





Source: Foundation 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. Analysis excludes one foundation that reports gross of investment manager fees and oversight fees.

# RELATIONSHIP BETWEEN ASSET ALLOCATION AND PERFORMANCE IN 2023

Asset allocation has traditionally been a key factor that helps explain the dispersion in returns reported among foundations. Our analysis on this topic begins with an overview of the capital market environment for calendar year 2023. On the public side, global developed equities fared the best with the Russell 3000<sup>®</sup> and the MSCI EAFE (Net) indexes returning 26% and 18%, respectively (Figure 9). The HFRI Equity Index, which represents long/short hedge fund strategies, also produced double-digit returns. Meanwhile, the Bloomberg Commodity Index was the only marketable strategy in our analysis with a negative return for the year.

Returns for private indexes were substantially lower than the modified public market equivalent (mPME) benchmarks in almost every category.<sup>1</sup> The CA US Private Equity Index produced the highest return among the private strategies at 9% but was still far lower than the Russell 3000<sup>®</sup> mPME (26%). Venture capital and private real estate produced the lowest returns, with each of the related indexes in our analysis being down approximately 4% in 2023.



<sup>1</sup> The mPME analysis computes public market performance, which is traditionally reported as a time-weighted return, on an internal rate of return (IRR) basis and allows for a direct comparison of returns between the public and private markets. The results of the mPME calculation are the return that would have been earned if the capital invested in the private strategy had been invested in the public market index instead.

The market backdrop provides important context as we explore the differences in asset allocation structures among foundations. The heat map analysis in Figure 10 breaks the participant group into four quartiles based on calendar year 2023 performance and displays the average allocation across the one-year period for the foundations within each quartile. We typically find that the top-performing portfolios had the highest allocations to the strategies that produced the best returns.

Private Index IRRs and mPME IRRs

FIGURE 9 1-YR INDEX RETURNS

As of December 31, 2023 • Percent (%)

#### **Public Indexes**



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, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

#### FIGURE 10 1-YR MEAN ASSET ALLOCATION BY PERFORMANCE QUARTILE Percent (%) • n = 109

	Marketable Assets					Private Investments						
	Total			Public			Total	Total Non-			Private	
	Mktbl	Public	Hedge	Real	Fixed	Cash &	Private	Venture	Venture	Other	Real	Private
Quartile	Assets	Equity	Funds	Assets	Income	Other	Inv	Capital	PE	PI	Assets	Credit
Top Quartile	86.3	56.7	12.9	1.4	10.2	5.2	13.7	4.4	4.7	2.3	1.2	1.1
2nd Quartile	76.5	44.8	15.4	1.8	11.3	3.2	23.5	6.2	7.4	4.0	3.8	2.1
3rd Quartile	64.6	36.6	15.2	1.7	8.4	2.7	35.4	12.5	11.3	3.5	6.1	2.0
Bottom Quartile	57.3	27.4	14.0	2.2	9.9	3.9	42.6	17.7	11.2	3.8	7.5	2.4
All FDN Mean	71.3	41.5	14.4	1.8	9.9	3.7	28.7	10.2	8.6	3.4	4.6	1.9

#### Divergence of Asset Allocation From All FDN Mean

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

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Asset allocation is averaged across the two December 31 periods from 2022 to 2023 for each foundation in this analysis.



This relationship held true in 2023 as top performers had the highest allocations to public equities. On average, the top quartile of foundations had a 56.7% allocation to long-only public equities, more than double what the average was for the bottom quartile (27.4%). On the flip side, top performers had the lowest average allocation to private investments (13.7%), while the bottom quartile had 42.6% allocated to these strategies. Allocations to venture capital stood out the most as the bottom quartile had 17.7% allocated to the asset class, on average. In contrast, the average venture allocation for top performers was just 4.4%.

The results from the 2023 heat map analysis were strikingly different than the performance story of most years. Strong performance from private investments, particularly PE/VC, has led to portfolios with the highest private allocations reporting the best returns more often than not. In 14 of the last 20 years, the top quartile of performers reported the highest average allocation to private investments (Figure 11). The rolling heat map analysis also illustrates just how wide the gap in private allocations was in 2023 compared to prior years. Despite private allocations increasing substantially across the entire peer group in recent years, the differential in allocations between top and bottom performers has never been greater than it was in 2023.

FIGURE 11	1 ROLLING 1-YEAR HEAT MAP: MEAN	PRIVATE INVESTMENT ALLOCATIONS
Trailing One-Y	-Year Periods as of December 31	

	Тор	2nd	3rd	Bottom	All	
	Quartile	Quartile	Quartile	Quartile	E&F	n
2023	13.7	23.5	35.4	42.6	28.7	109
2022	34.1	26.4	24.2	24.4	27.4	108
2021	37.2	29.2	18.2	13.5	24.7	100
2020	30.4	21.1	22.0	12.2	21.6	98
2019	13.8	19.2	23.0	28.6	21.3	88
2018	36.2	17.7	14.1	7.1	19.0	83
2017	10.6	17.1	16.5	26.3	17.7	81
2016	13.2	13.8	21.2	22.9	17.8	76
2015	33.1	19.2	12.3	4.5	17.5	72
2014	30.8	19.2	11.1	5.7	16.9	67
2013	20.6	15.5	13.2	17.2	16.8	67
2012	14.5	20.5	17.2	12.8	16.4	64
2011	30.8	11.5	8.8	6.6	14.8	62
2010	16.4	11.0	12.4	10.3	12.7	60
2009	2.4	8.4	15.6	20.6	11.9	52
2008	17.9	13.9	8.6	3.8	11.2	47
2007	14.3	10.3	6.6	4.1	9.0	46
2006	12.5	6.8	5.4	4.9	7.4	41
2005	12.0	6.4	5.4	2.3	6.5	41
2004	9.9	5.4	7.3	2.7	6.1	39

#### Divergence From All FDN Mean

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

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Performance quartiles are calculated separately for each one-year period.

Our attribution analysis in Figure 12 estimates the performance impact in 2023 of the different asset allocation structures among foundations. This analysis assigns a specific index return to represent each asset class in our framework. For each foundation in our universe, we have calculated a blended index return based on the portfolio's beginning year asset allocation.<sup>2</sup> The result of this calculation is the "Return From Asset Allocation," which represents what the foundation would have earned if it was managed passively throughout the year. For 2023, high public equity allocations propelled the top quartile of performers to an average asset allocation return of 15.2%. This was considerably stronger than the experience of the bottom quartile, which reported an average of 8.3%.







Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 44 in the Appendix.

Our attribution model also estimates the performance impact from the implementation of the asset allocations across foundations. Implementation can be driven by a few factors such as active management, or alpha. In addition, this category will capture the effects of style tilts that result in asset class exposure that is meaningfully different than the broad market benchmarks we use in the model. Finally, there is a performance impact if an asset allocation structure is altered or rebalanced in the middle of the year. Our attribution analysis aggregates these effects into the "Return From Other Factors" category in Figure 12. The analysis estimates that the top quartile of performers added an average of 0.4% to their returns from these other factors this past year. In contrast, the average for the bottom quartile of performers was -1.5%. While the other factors do contribute to overall performance, the main takeaway from the attribution analysis is that asset allocation was the dominant factor that explains the variation in foundation returns in 2023.

Figure 13 shows the range of returns reported by participating institutions across various asset class categories. As is typically the case, the range of returns varies widely in several categories. However, the median returns largely align with the index returns we summarized earlier in the capital markets overview. The best returns were reported in long-only developed public equities, with the highest median being in US equity (25.8%). The lowest median return reported among respondents was -5.4% in private real estate.



<sup>2</sup> See the Appendix of this report for a list of asset class indexes used and an example of how the analysis is conducted using the participant group's mean asset allocation.

#### FIGURE 13 1-YR ASSET CLASS RETURNS

As of December 31, 2023 • Percent (%) • By Percentile Ranking



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: The top quartile of performers are based on the total portfolio return for calendar year 2023. Marketable asset classes are reported as time-weighted returns while private investments are horizon IRRs. For more information, including the number of participants, see pages 45 and 46 in the Appendix.

#### LONGER-TERM RETURNS

Despite the underperformance that foundations experienced versus a blended 70% global equity/30% bond index in 2023, most foundations have fared well versus the simple benchmark over the longer term. The outperformance of private investments versus public markets over the prior two years helped foundations by and large exceed the benchmark by margins that more than made up for the underperformance from 2023. As a result, the median return over the trailing three-year period (4.7%) was significantly higher than the simple benchmark return of 3.3% (Figure 14). More than 80% (90 of 110) of participating foundations exceeded this three-year mark.

The median participant return (9.2%) for the trailing five-year period outperformed the simple benchmark by 20 basis points (bps). The margins of outperformance for the median were similar over the trailing ten- and 20-year periods at 10 bps and 20 bps, respectively. Nearly two-thirds (63%) of foundations outperformed the simple benchmark over the 20-year period.

#### FIGURE 14 TOTAL RETURNS SUMMARY: TRAILING 3-, 5-, 10-, AND 20-YR

Years Ended December 31, 2023 • Percent (%) • By Percentile Ranking



Sources: Foundation data as reported to Cambridge Associates LLC. Index data are provided by Bloomberg Index Services Limited and MSCI Inc. MSCI data provided "as is" without any express or implied warranties. Note: For more information, please see page 47 in the Appendix.

When considering rolling three-year returns from the past decade, the median foundation return as of year-end 2023 was the second *lowest* across this historical period. However, it was one of best outcomes relative to the simple benchmark return. The value add of the median three-year return over the benchmark was the second *highest* spread from the last decade, behind only the spread from the previous year end. The charts on Figure 15 show the same trend data for rolling five-, ten-, and 20-year periods.



Years Ended December 31 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC.

Note: The number of institutions included in the median calculation varies by period and is smaller in earlier years.

While smaller foundations earned the best returns in 2023, it was the largest foundations that outperformed over multiyear trailing periods (Figure 16). The differentials between the asset size cohorts were actually greatest for the longer trailing periods. The median 20-year return for foundations more than \$1 billion (7.7%) was 190 bps higher than the median for foundations less than \$100 million (5.8%). The spread for the trailing ten-year returns was similar at 7.8% versus 6.0%.





Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, please see page 47 in the Appendix.

#### PERFORMANCE DRIVERS FOR THE TEN-YEAR PERIOD

The market backdrop for the trailing ten-year period shows that most private investment strategies outperformed their public market counterparts by substantial margins. Among the indexes listed in Figure 17, the Cambridge Associates ex US Venture Capital index performed best, earning a horizon IRR of 17%. The US versions of the PE/VC indexes were not far behind at approximately 15%. Among public indexes, the US stock market as represented by the Russell 3000<sup>®</sup> Index was by far the top-performing strategy. Meanwhile, the return environment over much of the last decade has been dismal for bonds, with the Bloomberg Aggregate Bond Index returning just shy of 2% on an annualized basis.

Private Index IRRs and mPME IRRs



As of December 31, 2023 • Percent (%)

#### **Public Indexes**



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, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.



The analysis of peer asset allocation structures over the last ten years aligns with the takeaways from the index comparisons. The heat map analysis in Figure 18 averages asset allocation data of participating foundations across the 11 December periods from 2013 to 2023 and places each foundation into the performance quartile that aligns with its ten-year total return ranking. The top quartile of performers had the highest average allocation across the past decade to private investments (34.2%). The average allocations gradually decline when stepping down the quartile categories, with the bottom quartile reporting the lowest allocations to private investments (11.8%). The inverse was true in traditional bonds and equities, with top performers reporting the lowest combined average allocation to these strategies.

	Marketable Assets						Private Investments					
	Total	Total Public				Total Non-				Private		
	Mktbl	Public	Hedge	Real	Fixed	Cash &	Private	Venture	Venture	Other	Real	Private
Quartile	Assets	Equity	Funds	Assets	Income	Other	Inv	Capital	PE	PI	Assets	Credit
Top Quartile	65.8	34.7	17.5	1.6	6.8	5.1	34.2	15.1	9.4	0.6	7.6	1.5
2nd Quartile	76.3	43.6	16.8	3.5	9.5	3.0	23.7	8.2	6.3	1.4	5.9	1.9
3rd Quartile	80.5	47.0	16.0	3.3	9.9	4.2	19.5	4.9	5.7	3.4	3.5	1.9
Bottom Quartile	88.2	48.0	18.6	4.3	12.9	4.3	11.8	3.2	2.5	2.4	2.6	1.1
All FDN Mean	77.7	43.3	17.3	3.2	9.8	4.1	22.3	7.9	6.0	2.0	4.9	1.6
			Diverge	ence of A	sset Alloc	ation Fror	n All FDN	Mean				
		-4%		-2%	Me	an	2%	4	%			

#### FIGURE 18 10-YR MEAN ASSET ALLOCATION BY PERFORMANCE QUARTILE Percent (%) • n = 66

Sources: Foundation data as reported to Cambridge Associates LLC.

or lower

Note: Asset allocation is averaged across the 11 December 31 periods from 2013 to 2023 for each foundation in this analysis.

Our earlier analysis of shorter-term returns showed that while private investment allocations are a key driver of peer group outperformance in most years, there can still be years, such as 2023, where top performers are the portfolios with lower private allocations. The story is different when looking at peer comparisons across longer-term periods, where higher private investment allocations have consistently been a characteristic of top performers. Figure 19 repeats the heat map analysis on a rolling ten-year basis going back to 2014. The top quartile of performers had the highest average allocation to private investments in each of the separate rolling periods. The differential in average allocations versus the bottom performance quartile has been at least 20 ppts since 2020.

or higher

	Тор	2nd	3rd	Bottom	All	
	Quartile	Quartile	Quartile	Quartile	E&F	n
2023	34.2	23.7	19.5	11.8	22.3	66
2022	33.7	22.3	18.8	8.6	21.1	66
2021	33.6	20.6	14.7	9.7	19.6	63
2020	27.9	21.3	15.4	7.4	18.5	61
2019	23.7	18.0	13.6	9.3	17.2	58
2018	21.4	13.5	17.3	13.3	15.7	50
2017	22.7	15.0	15.1	10.2	15.4	45
2016	21.3	18.5	13.0	9.1	15.1	42
2015	20.1	17.7	13.1	7.5	14.6	38
2014	18.8	15.4	10.7	8.3	13.4	39

#### FIGURE 19 ROLLING 10-YEAR HEAT MAP: MEAN PRIVATE INVESTMENT ALLOCATIONS Trailing Ten-Year Periods as of December 31

**Divergence From All FDN Mean** 



Source: Foundation data as reported to Cambridge Associates LLC. Note: Performance quartiles are calculated separately for each ten-year period.

The attribution model estimates the impact of different asset allocation structures on the most recent trailing ten-year return. The average asset allocation return over this period for the top quartile of performers was 8.0% (Figure 20). For the bottom quartile of performers, the average asset allocation return was 210 bps lower at 5.9%. This was wider than the gap in the portion of return that is explained by other factors such as implementation. The model estimates the average return from other factors for top performers was 0.6%, which was 90 bps higher than the average of the bottom quartile (-0.3%).





Source: Foundation data as reported to Cambridge Associates LLC.

The foundations that reported the highest total returns over the past decade not only had the largest allocations to private investments, but they also reported performance that was higher than the overall universe median returns in these strategies (Figure 21). For the total PE/VC composite, the median ten-year IRR for the top quartile of foundations (17.7%) was 270 bps higher than the median for the overall universe, which is notable, given that this category captures the majority of the average private investment allocation. Elsewhere, top quartile foundations had higher median returns than the overall universe across most of the marketable asset classes as well.

#### FIGURE 21 10-YR ASSET CLASS RETURNS

As of December 31, 2023 • Percent (%) • By Percentile Ranking



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: The top quartile of performers are based on the total portfolio return for the trailing ten-year period. Marketable asset classes are reported as time-weighted returns while private investments are horizon IRRs. For more information, including the number of participants, see pages 48 through 51 in the Appendix.

#### INFLATION-ADJUSTED RETURNS

The rate of inflation slowed down significantly in 2023 compared to the prior two years. The Consumer Price Index – All Urban Consumers rose at a 3.4% rate in 2023 versus 6.5% from 2022. When adjusting nominal returns to account for inflation, the real median return for participating foundations was 7.7% in 2023. This was well above the 5% annual spending requirement that private nonoperating foundations in the United States must abide by. Most foundations aim to earn a real return that matches or exceeds this 5% spending requirement. The volatile nature of investment markets makes this task impossible to achieve on a year-to-year basis, so institutions establish return targets that they aim to meet over the long term.<sup>3</sup>

The task of earning 5% on a real basis has become much more challenging than it once was. The median ten-year real return has exceeded this threshold just five times since 2007, with the most recent instance being for the period ended December 31, 2021 (Figure 22). At the end of 2023, the median figure of the participant group was just

3 See the Investment Policy section of this report, and Figure 24 specifically, for more information on this topic.

3.8%. The median 20-year real return was slightly higher at 4.4%, but still below the minimum spending requirement. This implies that most foundations have not been able to preserve the purchasing power of their investment assets, which has hindered their ability to provide, in constant dollars, the same amount of financial support to their missions that they did a generation ago.







Annualized Inflation Rate

Rolling 20 Years

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: The number of institutions included in the median calculation varies by period and is smaller in earlier years. The inflation rate is represented by the Consumer Price Index - All Urban Consumers.

#### **RISK-ADJUSTED RETURNS**

Figure 23 plots the trailing ten-year nominal return versus the standard deviation of returns for participating foundations. The standard deviations are based on quarterly returns and are a measure of how much volatility there was in a foundation's returns across the full period. The Sharpe ratio statistic quantifies how much return above the risk-free rate (T-bills) the investor has earned compared its standard deviation. The higher the Sharpe ratio, the more the investor has been compensated for the volatility it has experienced.



Periods Ended December 31, 2023



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

A foundation's allocation to private investments can impact the level of volatility it experiences in returns. Although private investing entails a number of risks, the lower frequency and delayed timing of private investment valuations usually results in less volatility in returns for these assets compared to what is realized by public equities. For this reason, we have split foundations into subcategories based on their average allocations to private investments over the trailing ten-year period.

The cohort of foundations that had an allocation of 30% or more to private investments had the highest median return and the lowest standard deviation across this ten-year period. The inverse was true for the group that had less than 10% allocated to private investments. As a result, the median Sharpe ratio for the high private allocation group, at 0.78, was much greater than the ratio for the low private allocation group (0.45).

### Section 2: Investment Policy

An investment policy provides guidelines for trustees, investment committee members, investment staff, advisors, and other relevant parties involved in an institution's investment management and governance processes. The investment policy statement (IPS) is the formal document that outlines the important components of this policy. Some institutions may have additional informal guidelines that are considered in the investment management process but are not documented in the IPS. Our survey touched on several issues related to foundation investment policies/guidelines and the following section summarizes these responses.

#### **RETURN OBJECTIVE**

Most foundations in this study are private, nonoperating foundations and are required by law to distribute approximately 5% of their assets on an annual basis. To comply with this requirement and maintain purchasing power over time, a foundation must achieve a real return (i.e., adjusted for inflation) that offsets their payout rate. Since investment returns are volatile from year to year, return objectives should be evaluated from the long-term perspective instead of a goal that must be met every year. Nearly two-thirds (62%) of foundations providing a real return objective reported that their target was 5% (Figure 24). Most of the remaining respondents have a real return objective above 5%. Of the three foundations that reported a target below 5%, two were private operating foundations and one was a community foundation.

#### FIGURE 24 REAL TOTAL PORTFOLIO RETURN OBJECTIVES As of December 31, 2023 • n = 81



Source: Foundation data as reported to Cambridge Associates LLC.

#### ASSET ALLOCATION POLICY

The asset allocation component of the investment policy specifies the asset classes allowed in the portfolio and assigns target allocations and/or ranges for those asset class categories. The categories and targets chosen are based on the portfolio's risk tolerance, liquidity needs, and performance objectives. Our survey requests that respondents provide the asset class categories used in their asset allocation policy. There are differences in the policy frameworks reported among respondents, with some foundations having more detailed policies than others. Most foundations use separate categories in their framework to distinguish between equities, hedge funds, real assets, and fixed income. Figure 25 shows the distribution of the number of categories that foundations cited in their overall asset allocation policy. The greatest concentration was within a range of four to six categories, with more than half (54%) of respondents falling within this range. Slightly less than one-third (30%) of respondents reported that they used anywhere from seven to nine categories, while 12% of foundations use ten or more categories. Just 4% of respondents cited three categories or fewer in their policy framework.



FIGURE 25 NUMBER OF CATEGORIES IN THE POLICY ALLOCATION FRAMEWORK As of December 31, 2023 • n = 98

Source: Foundation data as reported to Cambridge Associates LLC.

A broad policy approach for public equities was most common in 2023, with 62% of foundations reporting a single category that captures their entire public equity allocation (Figure 26). The remaining respondents used multiple public equity targets based on geographic regions. The trend in recent years has seen more foundations switching to the broad approach. Five years ago, most respondents (57%) were still using multiple categories at that time. A single-category approach provides the investment management team more flexibility, while the multi-category approach puts more constraints on how the public allocations are implemented.

A relatively small percentage (11%) of respondents roll PE/VC together with public equity into a single category in their policy framework. In these instances, a name such as "Growth" or simply "Equity" is used to capture the combined exposure. However, most foundations separate categories for public and private equity when constructing their asset allocation policy. The most common approach, which was cited by 49% of respondents, is to have either a dedicated target for PE/VC or break out non-venture PE/VC into two separate categories. Another 40% of foundations include PE/VC together with other private strategies into a single category called "Private Investments" in their framework.



#### FIGURE 26 CAPTURING EQUITIES IN THE ASSET ALLOCATION POLICY

Source: Foundation data as reported to Cambridge Associates LLC.

Elsewhere, a majority of foundations (57%) continue to have at least one category to represent real assets and/or inflation-linked bonds in their asset allocation policy (Figure 27). However, this is far fewer than the 77% of respondents that reported using such categories back in our 2018 survey. For those that do formally capture these assets in the policy, the most common practice is to use a single bucket. The term "real assets" was cited most often, while some foundations use "inflation-sensitive" or "inflation-hedging." Several foundations use multiple categories that are distinguished between public and private assets, natural resources and real estate, or some other combination.





Source: Foundation data as reported to Cambridge Associates LLC.

The vast majority of foundations use one or more target categories for hedge funds (Figure 28). Just under half (45%) of respondents use the term "Diversifiers" or some derivation of that word. Some foundations use their diversifiers bucket to combine hedge funds with other types of strategies such as private credit, although it is difficult to discern from the data exactly how many respondents do so. A relatively small proportion of respondents (8%) formally distinguish between public diversifiers and private diversifiers in their policy framework. Finally, many respondents continue to use traditional terminology, such as "Hedge Funds" and/or "Absolute Return" (30%) or "Marketable Alternatives" (8%).



#### FIGURE 28 TERMINOLOGY USED FOR HEDGE FUNDS IN THE ASSET ALLOCATION POLICY As of December 31, 2023 • n = 98

Source: Foundation data as reported to Cambridge Associates LLC.

#### BENCHMARKING

Benchmarking investment performance is an essential piece of a well-functioning governance process for a foundation. The purpose of benchmarking is to answer the question "How are we doing?" in ways that are both accurate and relevant to the objectives of the portfolio being measured. No single benchmark can answer every aspect of that question, so institutions may use a variety of benchmarks in this process.

Participants provided the components of what they consider to be their primary policy portfolio benchmark. The vast majority (85%) of respondents use a static-weighted policy benchmark that matches or aligns closely with the categories and target weightings in the asset allocation policy framework (Figure 29). This approach can help a foundation evaluate whether it has outperformed a mix of indexes that represents its default or normative position. Such an evaluation not only captures the impact of manager selection decisions, but also the effect of differences between the portfolio's actual asset allocation and the policy targets. A much smaller percentage (7%) of respondents use a dynamically weighted policy benchmark, where the weightings of the indexes update frequently (e.g., monthly) to match the actual asset allocation of the portfolio. This type of benchmark is intended to focus solely on manager selection decisions and neutralizes the effect of over/underweights of asset allocation versus policy targets.

The remaining 8% of respondents use a simple benchmark that incorporates a blend of a broad-based equity benchmark and a bond index. Assuming that a portfolio has diversified into alternative asset classes, a simple benchmark evaluates whether the decision to diversify and actively manage the portfolio paid off for the foundation. The MSCI All Country World Index was used for the equity component by five of the eight foundations that cited this type of benchmark. The Bloomberg Aggregate Bond Index was used by the same number of foundations for the bond component.



#### FIGURE 29 TYPES OF POLICY PORTFOLIO BENCHMARKS

Source: Foundation data as reported to Cambridge Associates LLC.

Figure 30 narrows the universe down to the respondents that cited a static-weighted or dynamically weighted policy benchmark and shows the indexes that are most frequently used to represent public equity. More than half (58%) of this group use a version of the MSCI All Country World Index, which tracks stocks across developed and emerging markets countries worldwide. One foundation uses a blend of the MSCI World Index, which tracks stocks in developed countries, and the MSCI Emerging Markets Index. The remaining 40% of respondents cited indexes for a more granular regional basis. The Russell 3000<sup>®</sup> Index was overwhelmingly the most common benchmark for those that cited a US-specific index. Similarly, a combination of the MSCI EAFE and MSCI Emerging Markets indexes was by far the most prevalent practice used to represent global ex US equity.



FIGURE 30 COMPONENTS OF THE POLICY PORTFOLIO BENCHMARK: PUBLIC EQUITY As of December 31, 2023 • n = 89

Source: Foundation data as reported to Cambridge Associates LLC.

Accounting for private equity in the policy benchmark can be challenging because there is no single index that meets all the standards of a valid benchmark. Hence, we see different approaches used across foundations in this study. For the overall respondent group, the use of a public index is by far the most common approach as 71% of respondents use this method (Figure 31). The public index is most prevalent among foundations less than \$1 billion as it was cited by 83% of this group. The rationale for using this approach is that the capital would have been invested in public equity markets if it was not invested in private equity. Therefore, the public index can help evaluate whether the decision to invest in private equity paid off for the foundation. The use of a public index can also be a straightforward approach when a portfolio is still in a phase of building its private program and there is an underweight in current private allocations versus the long-term target.



FIGURE 31 COMPONENTS OF THE POLICY PORTFOLIO BENCHMARK: PRIVATE EQUITY As of December 31, 2023

Source: Foundation data as reported to Cambridge Associates LLC.

While the use of a public equity index in this way can capture the opportunity cost of investing in private equity, it does not evaluate how well those private allocations are implemented. Approximately 19% of the total participant group uses the CA private investment indexes, which are calculated by pooling together all of the cash flows and valuation changes for the underlying private funds included in a specific strategy's index. These indexes are not investable, nor is there transparency into the names and weightings of the private companies included, and consequently, they do not satisfy the requirements sought for an ideal benchmark. However, these indexes can be custom weighted by vintage year and provide a better evaluation of private investment fund selection compared to what a public index offers. It is likely for this reason that the approach continues to be most prevalent among larger foundations, some of which have performance-based incentive compensation programs for their investment staff.

Foundations also face similar challenges of selecting an appropriate index when accounting for hedge fund allocations in the policy benchmark (Figure 32). Hedge Fund Research® (HFR) produces indexes that broadly track hedge fund managers that report to their database. The HFR indexes may be defined more granularly by investment substrategies, geographic regions, and other criteria. While foundations may use this approach to evaluate their own manager selection versus a broad universe of hedge funds, these indexes lack some of the desired qualities of a valid benchmark, such as being investable and transparent. Still, 60% of foundations use one or more of the indexes calculated by HFR. This percentage was down from the results of five years ago, when 71% of the respondent group cited the HFR indexes.

# FIGURE 32 FREQUENTLY USED COMPONENTS OF POLICY PORTFOLIO BENCHMARKS: HEDGE FUNDS

As of December 31, 2023 • n = 83



Source: Foundation data as reported to Cambridge Associates LLC.

With the percentage of foundations using the HFR indexes declining, the proportion of respondents using a beta adjusted benchmark has been increasing. However, the exact method of how the beta adjustment is applied varies across a few different options. The most common method was to use a blend of a public stock market index and a bond index. The percentage weighting given to the stock index ranges from 25% to 50% for this subgroup. A similar approach used by other foundations uses blend of a public stock market index and the 91-Day Treasury Bill Index. Just a handful of respondents simply multiply a public index return by a prespecified percentage.

The Bloomberg Aggregate Bond Index was the most common benchmark for fixed income but was cited by just under half (46%) of foundations (Figure 33). A US Treasury or US government bond index was the next most commonly cited benchmark (23%), followed by the Bloomberg Government/Credit Bond Index (14%). There are different versions for each of these indexes based on range of maturity and many foundations use the specific version that reflects their portfolio's underlying fixed income exposure. The remaining 17% of respondents use some other type of index or a combination of multiple indexes. For real assets, benchmark combinations are even more unique across the participant group due to the wide variety of strategies employed under this category.

# FIGURE 33 FREQUENTLY USED COMPONENTS OF POLICY PORTFOLIO BENCHMARKS: FIXED INCOME

As of December 31, 2023 • n = 87

Bloomberg Aggregate Bond Index US Treasury or Government Bond Index\* Bloomberg Government/Credit Bond Index\* Other Index/Combination



\*Includes subindexes of the overall strategy that have various ranges of maturity. Source: Foundation data as reported to Cambridge Associates LLC.



#### INVESTMENT PERFORMANCE VERSUS POLICY PORTFOLIO BENCHMARKS

The various approaches to benchmarking we have covered in this section are important to keep in mind when analyzing peer performance relative to policy benchmarks. This is most evident with the benchmarking of PE/VC. As we detailed in the Investment Portfolio Returns section of this report, public equity indexes performed substantially better compared to the returns of the CA PE/VC indexes in 2023. Foundations that use the public indexes calculated a policy benchmark return that was considerably higher compared to what it would have been if the CA indexes were used to represent PE/VC, thus making it harder to outperform the benchmark.

The impacts of those benchmarking decisions are displayed in Figure 34. Among all respondents, the median spread between the actual return and the policy benchmark return was -4.0 ppts in 2023. The median spread for the subgroup of foundations that used the CA indexes in their benchmark was still negative at -1.2 ppts. However, it was considerably better in relative terms compared to the subgroup of respondents that used a public equity index to represent PE/VC in the benchmark. For that cohort of institutions, the median value add versus the policy benchmark was -4.7 ppts. Although the number of respondents using a public index plus a percentage was not robust enough to include in the graph, that group as a whole had the worst relative performance versus the policy benchmark in 2023.



#### FIGURE 34 RANGE OF OUT/UNDERPERFORMANCE OF TOTAL RETURN VS POLICY PORTFOLIO BENCHMARK: CALENDAR YEAR 2023 As of December 31, 2023 • Percentage Points • By Percentile Ranking

Source: Foundation 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 foundations that used the two most common approaches for representing PE/VC in the policy benchmark. Excluded are subgroups that used some other method for benchmarking PE/VC, those that do not have an allocation to PE/VC, and those that did not provide detail on the components of the policy benchmark.

n = 15

It was a tough year as far as performance versus the policy benchmark for most foundations regardless of how PE/VC was represented. Just 15% of respondents earned a return that outperformed their benchmark in 2023. Even among those using the CA indexes, less than half (seven of 15) outperformed. This was in contrast to what



most foundations experienced the prior two years, which were periods where private investments performed better than public markets. Among the overall universe of foundation, 65% outperformed their policy benchmarks in 2022 and 74% outperformed in 2021.

Strong performance from private investments in prior years helped offset the underperformance from 2023. Among all respondents, the median spread between the actual return and the policy benchmark return was 0.2 ppts over the trailing threeyear period, with 60% of respondents outperforming the benchmark over this period (Figure 35). The median value add was 0.0 ppts and 0.2 ppts for the five- and ten-year periods, respectively.





Source: Foundation data as reported to Cambridge Associates LLC.

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

# Section 3: Portfolio Asset Allocation

#### **2023 ASSET ALLOCATION**

Most foundations in our universe have established an investment portfolio with the intention that it support their mission over the long term. Having a long-term time horizon gives foundations the ability to take on risk in their portfolios. At the same time, exposure to assets that generate asset growth is necessary to replenish the annual spending from portfolios and make up for the loss in purchasing power from inflation. For these reasons, most participating foundations tend to allocate a large percentage of their portfolio to equity-oriented strategies.

On average, 42.1% of the long-term investment portfolio (LTIP) was invested in longonly public equities and 22.2% was allocated to PE/VC at the end of calendar year 2023 (Figure 36). However, the range in allocations reported across respondents was extremely wide within these categories. Even after removing the top and bottom 5% of outliers, public equity allocations were as high as 66% at the top end of the universe and as low as 21% at the bottom end. For PE/VC, allocations ranged from 42% at the 5th percentile to 1% at the 95th percentile.



FIGURE 36 SUMMARY ASSET ALLOCATION DISTRIBUTION

As of December 31, 2023 • Percent (%) • n =110 • By Percentile Ranking

Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 52 in the Appendix.

Figure 37 shows the breakdown of detailed categories that fall under public equity and PE/VC in our asset allocation framework. On the public side, we collect data based on the primary geographic region that each fund/manager is invested.<sup>4</sup> The highest allocations among the public categories tend to be in US-focused funds, with 18.5% of the average LTIP invested in these strategies. Foundations also have meaningful



<sup>4</sup> We reference investment managers and their funds in our review of asset allocations in this section. However, some foundations gain exposure to these asset classes via internally managed holdings or derivatives. The Investment Manager Structures section of this report contains analysis on how asset allocations are implemented across various strategies.

allocations to equities outside of the United States, with an average of 8.9% allocated to funds that primarily invested in global ex US developed regions and another 4.3% invested with dedicated emerging markets funds. Funds that are invested across multiple geographic regions are included in our global category and make up 10.4% of the average LTIP.

The largest average allocation on the private side was to venture capital (9.9%), while the average allocation to non-venture private equity was slightly lower at 8.7%. Non-venture private equity in our framework consists of buyouts and growth equity, which is aligned with the way these strategies are combined in the CA private equity indexes. There is a third category called "Other PI," which is reserved for multi-strategy fund-of-funds, secondaries, and other private funds that cannot be allocated solely to either of the aforementioned categories. The average allocation to other private investments was just 3.6%.





Source: Foundation data as reported to Cambridge Associates LLC.

The total asset size of the LTIP has long been a key factor in the variation of asset allocations among foundations. Smaller foundations continue to maintain higher allocations to fixed income and public equities, while larger foundations have the highest allocations to alternative assets. The differences are most noticeable in the breakdown of public equity versus private equity. Foundations with assets less than \$100 million had an average allocation of 50.6% to public equity, while those with assets greater than \$1 billion had an average of 34.3% (Figure 38). For PE/VC, the largest foundations had an average allocation of 27.9%, while the smallest foundations had an average of 14.7%.

#### FIGURE 38 MEAN ASSET ALLOCATION BY ASSET SIZE

As of December 31, 2023 • Percent (%)

Asset Size	Public Equity	PE/VC	Hedge Funds	Private Credit	Fixed Income	Real Assets & ILBs	Cash
Less Than \$100M	50.6	14.7	11.5	1.3	12.9	3.4	5.5
n = 17							
\$100M-\$300M	46.3	19.1	15.6	1.2	9.6	4.5	3.8
n = 34							
\$300M-\$1B	41.9	23.2	11.3	2.6	10.5	6.7	3.4
n = 23							
More Than \$1B	34.3	27.9	15.0	2.6	8.4	8.7	2.9
n = 36							
All Foundation Mean n = 110	42.1	22.2	13.9	1.9	9.9	6.2	3.7
			Divergence I	From All Fou	ndation Me	an	
		-4%	-2%	Mean	2%	4%	
	c	or lower				or high	er

Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 52 in the Appendix.

#### ASSET ALLOCATION TRENDS

The increased exposure to private equities was the biggest takeaway from the asset allocation trends over the past decade. For a constant group of 66 foundations that provided data going back to 2013, the average PE/VC allocation increased from 10% at the beginning of the period to 24% in 2023. This increase was offset by decreases in allocations in most of the other categories listed in Figure 39. Hedge funds saw the biggest decline, with the average allocation in 2023 being 5 ppts lower than it was ten years ago. The average asset allocations to real assets, fixed income, and public equity also fell over this historical period.

#### FIGURE 39 HISTORICAL MEAN ASSET ALLOCATION TRENDS



Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 53 in the Appendix.



The trends were mostly the same when looking at different asset size cohorts. Foundations of all asset sizes saw substantial increases to PE/VC, with those between \$300 million and \$1 billion reporting the highest average increase (Figure 40). Likewise, each of the subgroups saw decreases in the average allocations to hedge funds and real assets. The smallest foundations were an outlier when it came to public equity allocations, where they reported an average increase of 4 ppts.

	Public Equity	PE/VC	Hedge Funds	Private Credit	Fixed Income	RA & ILBs	Cash				
Less Than \$100M (n = 9)											
2013	45.1	4.9	19.8	1.6	14.0	8.5	3.2				
2023	49.2	18.1	13.8	1.3	10.5	2.7	4.3				
\$100M-\$300M (n = 20)											
2013	45.1	7.1	19.8	1.2	11.7	10.4	4.8				
2023	44.1	20.8	15.2	1.4	9.1	5.2	4.2				
\$300M–\$1B (n = 15)											
2013	47.8	6.4	17.5	2.0	12.7	10.4	3.1				
2023	41.0	23.5	11.2	2.2	9.9	7.3	4.2				
More Than \$1B (n = 22)											
2013	36.4	16.3	21.2	1.7	7.3	12.0	4.8				
2023	32.4	30.2	16.6	2.1	6.1	9.1	3.3				
	2023 Mean Asset Allocation Relative to 2013										

#### FIGURE 40 TRENDS IN MEAN ASSET ALLOCATION BY ASSET SIZE Means as of December 31 • Percent (%)

Source: Foundation data as reported to Cambridge Associates LLC.

-8% or lower -6%

-4%

Notes: Analysis only includes respondents that provided data for the last ten years. Analysis does not include allocations to the "Other" asset class category.

-2%

0%

2%

4%

6%

8%

or higher

Figure 41 shows the percentage of foundations that increased or decreased their target allocations in fiscal year 2023 across some of these same asset class strategies. Changes reported over the past year are similar to the longer-term trends for the most part. PE/VC continues to be the category where foundations are most likely to increase their policy allocations. Nearly one-quarter (23%) of respondents increased their target, while none reported a decrease. For hedge funds, 22% of foundations reported a decrease and just 3% increased their target. The percentage of foundations that increased (15%) their public equity targets was almost double the amount that reported a decrease (8%).

#### FIGURE 41 CHANGES IN TARGET ASSET ALLOCATION

December 31, 2022 – December 31, 2023 • Percentage of Institutions Increasing or Decreasing Targets



Source: Foundation data as reported to Cambridge Associates LLC.

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

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

#### UNCALLED CAPITAL COMMITMENTS TO PRIVATE INVESTMENTS

One of the core principles of the endowment model of investing is the use of private investments that, in part due to their illiquid nature, offer the potential for higher long-term returns than those of public or marketable assets. As our analysis in this section has shown, foundations allocate a significant portion of their portfolios to private investments. As of the end of calendar year 2023, the average total private investment allocation for the overall participant group was 29%. For foundations greater than \$1 billion, the average allocation was even larger at 38%.

Uncalled capital commitments represent the amount of capital that foundations have agreed to pay into private investment funds in the future. While annual spending distributions have traditionally made up the biggest liquidity need for foundations, growing allocations to private assets have resulted in uncalled capital also representing an important piece of the liquidity picture. Whether a foundation is ramping up private allocations or simply maintaining an already high allocation, the amount of uncalled capital is significant when measured versus the total value of the portfolio for most participants in this study.

The median ratio of uncalled capital commitments to the total LTIP was 12.6% as of December 31, 2023. The median was smallest for foundations less than \$100 million (9.2%), although the range of experiences was quite large for this cohort. Foundations with assets between \$300 million to \$1 billion reported the highest median ratio at 14.4%. The percentage gets significantly higher when combining the amount of uncalled capital with the actual private investment allocation. For this particular ratio, foundations greater than \$1 billion reported the highest median at 52.5%.

FIGURE 42 UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of December 31, 2023 • Percent (%) • By Percentile Ranking

As a Percentage of the Total LTIP



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



Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 53 in the Appendix.

Figure 43 shows the trend in these two ratios for the group of foundations that reported data over the last five years. Across each of the asset size groups, the ratio of uncalled capital-to-LTIP in 2023 was not that much different compared to five years ago. However, the ratio that combines the actual private investment allocation was noticeably higher in 2023 compared to 2018. For most foundations, the actual private allocations make up the majority of the combined amount that represents the numerator in this ratio's equation. The boom in illiquid allocations in the prior few years continued to push this ratio higher, with the exception of this most recent year when it dropped slightly.

#### FIGURE 43 TREND IN UNCALLED CAPITAL COMMITMENTS TO PRIVATE INVESTMENT FUNDS Years Ended December 31 • Percent (%)







Source: Foundation data as reported to Cambridge Associates LLC.

Nearly two-thirds of respondents (62%) reported their private investment program was cash flow negative in 2023, meaning that the amount of distributions from private funds was not enough to offset the amount of new capital paid in (Figure 44). The experience was similar for the smaller asset size cohorts, while the split was almost 50-50 for foundations greater than \$1 billion. This was the second straight year that a majority of the participant group reported that their programs were cash flow negative.

#### FIGURE 44 PRIVATE INVESTMENT PROGRAM CASH FLOW BY ASSET SIZE

Was Your Private Investment Program Cash Flow Positive in 2023?



Source: Foundation 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 calendar year 2023.



### Section 4: Investment Manager Structures

#### NUMBER OF EXTERNAL MANAGERS

Most of the assets under management at foundations are invested via external investment managers. There are multiple factors that contribute to the number of managers employed within a foundation's portfolio. The scale of total assets under management is the primary factor, as larger foundations generally spread their assets across a greater number of managers compared to smaller foundations. Among foundations greater than \$1 billion, the median number of investment managers was 95 (Figure 45). At the opposite end of the asset size spectrum, the median for foundations less than \$100 million was just 17 managers.

Our survey also asked about the number of vehicles invested in by foundations. For the purposes of our analysis, an investment vehicle represents a fund, product, or separate account that is managed by an investment manager. Foundations often invest in multiple investment vehicles of the same manager, particularly when it comes to private investment funds. Therefore, the number of vehicles foundations are invested in is much higher than the number of managers. The median number of vehicles ranged dramatically from 198 for foundations greater than \$1 billion to 27 for foundations less than \$200 million.



#### FIGURE 45 NUMBER OF EXTERNAL MANAGERS AND INVESTMENT VEHICLES As of December 31, 2023 • Percent (%) • By Percentile Ranking

Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 54 in the Appendix.

Even within the broad asset size groups, the range of managers employed can be wide. Among the smallest foundations, the number of managers employed at the 25th percentile (38) was more than three times the number used at the 75th percentile (12). For portfolios greater than \$1 billion, 293 managers are employed at the 5th percentile, compared to just 63 at the 95th percentile. Much of the variation can be attributed to the management of alternative asset classes. Figure 46 shows the range in number of managers across foundations for a several asset classes. The dispersion in the number

### FIGURE 46 DISPERSION IN NUMBER OF MANAGERS FOR SELECTED ASSET CLASSES





Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Only those institutions with an allocation to the specific asset class have been included. Funds-of-funds are counted as one manager. For more information, see page 54 in the Appendix.

of alternative asset managers employed, particularly within private investments, is much wider than that of the more traditional equity and bond asset classes. Further detail on these and other asset classes are provided for the five broad asset size groups on page 55 in the Appendix.

#### ASSET CLASS IMPLEMENTATION

**HEDGE FUNDS.** There are two primary types of investment vehicles that foundations use when implementing their hedge fund allocations. A single manager fund is a type of investment vehicle where the investment manager makes the decisions for the securities and assets held within the fund. In contrast, a fund-of-funds is a type of strategy where the investment manager invests in a collection of other investment funds. On average, more than 90% of the average hedge fund allocation is implemented via single manager funds. The implementation approach for hedge funds varies little across the various asset sizes, as both larger and smaller foundations alike overwhelmingly use single manager hedge funds.

**PRIVATE INVESTMENTS.** Foundations also have single manager funds and fund-offunds at their disposal when implementing private investment allocations. In addition, some foundations make direct investments in private strategies. Direct investments can take the form of co-investments that are made alongside a general partner or solo investments that are originated by the foundation itself. Compared to hedge funds, implementation practices are a little more varied across private investment asset classes. This is most evident in venture capital and private natural resources, where fund-of-funds are far more common among smaller foundations than they are for larger foundations. On average for foundations less than \$100 million, 45% of the average venture capital and 56% of the average natural resources allocations are implemented via fund-of-funds. In contrast, fund-of-funds make up just a small percentage of the average allocations for foundations greater than \$1 billion. Figure 47 shows the average breakdown of allocations by implementation category for other private strategies. Private credit strategies are not included in this exhibit, as foundations across all asset sizes rely almost exclusively on single manager funds to implement these allocations.

#### FIGURE 47 PORTFOLIO IMPLEMENTATION: PRIVATE INVESTMENTS As of December 31, 2023 • Equal-Weighted Means (%)







39

45

Less Than \$100M-\$300M-More Than \$100M \$300M \$1B \$1B (n = 10)(n = 32) (n = 29) (n = 21)

Venture Capital

60

1

34

90

Private Oil & Gas/Natural Resources



Source: Foundation data as reported to Cambridge Associates LLC.

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



**PUBLIC EQUITIES AND BONDS.** For traditional bonds and equities, foundations primarily use external managers to implement their allocations. These assets are invested either through active or passively managed investment vehicles. Some foundations also manage assets internally or use derivatives to achieve desired exposures.

When considering the average breakdown of US equity allocations, the majority of assets are invested via active managers (Figure 48). The proportion of US allocations invested through active managers is similar across all asset size groups. For global ex US equities, the average proportion of allocations invested through active managers is higher. In bonds, active management was most common among the two cohorts below \$300 million.



#### FIGURE 48 PORTFOLIO IMPLEMENTATION: TRADITIONAL EQUITIES AND BONDS As of December 31, 2023 • Equal-Weighted Means (%)

Source: Foundation data as reported to Cambridge Associates LLC.

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



### Section 5: Payout From the Long-term Investment Portfolio

#### SPENDING REQUIREMENTS

While all foundations are charitable organizations, specific characteristics and objectives help to distinguish foundations into three broad classification types.

Private foundations, which generally receive funding from a single donor, are defined by the IRS as one of two types: operating or nonoperating. Though both must meet an annual spending requirement, each is subject to different conditions that determine the minimum spending amount.

**PRIVATE NONOPERATING FOUNDATIONS.** Private nonoperating foundations, which make up the majority of participants in this study, are required to make qualifying distributions that amount to approximately 5% of their asset value every year. They function primarily as grant-making organizations, providing funding and support to other charitable organizations.

**PRIVATE OPERATING FOUNDATIONS.** In contrast, private operating foundations are not established with the intention to fund grants to outside organizations, but to provide funding and support to the foundation's own programs and activities. Bound by an annual spending requirement, private operating foundations are subject to specific guidelines that determine their minimum amount.

**COMMUNITY FOUNDATIONS.** Community foundations are a type of public charity, deriving funds from many donors rather than a single source. They mainly function as grant-making organizations, funding charitable support in the immediate region or locality where they are located. Community foundations are not subject to a minimum spending requirement.

#### **PAYOUT RATES**

Annual spending distributions are withdrawn from investment assets to fund grants, direct charitable programs, program-related investments, and administrative expenses. The payout rate in this study is calculated as the total spending from the LTIP for the year as a percentage of the portfolio's beginning year market value. In contrast, the IRS-mandated 5% is based on the average asset value over the course of the foundation's tax year. As a result, the payout rates in our study will not always tie exactly back to the rate that a private nonoperating foundation reports on its tax filing.

This was likely the case in 2023 as the median payout rate for participating foundations spiked to 5.5% (Figure 45). For the participants that provided year-over-year data, the median beginning year portfolio value declined by 14%, while the median change in spending was flat. Hence, the effect was the significant increase in the payout rate.

#### FIGURE 49 TREND IN MEDIAN ANNUAL PAYOUT RATE



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Analysis only includes data for private nonoperating foundations. The number for foundations included varies from year to year. There were 26 foundations in the 2023 median calculation.

**COMPONENTS OF PAYOUT.** Figure 50 takes a detailed look at the different components that make up the annual payout distribution for private nonoperating foundations. Grants are the single largest component of annual payout, making up an average of 80%. Administrative expenses were the next largest component, representing about 13% of total payout.



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Analysis included data for 21 private nonoperating foundations.

#### **PAYOUT OBJECTIVES**

More than half of the private nonoperating foundations that provided information about their payout objective indicated that their objective was to either meet the minimum IRS requirement or slightly exceed that amount. Another 28% had an objective shaped mainly by program goals, while 10% reported their objective was something other or a combination of the aforementioned objectives (Figure 51).

#### FIGURE 51 PAYOUT POLICY OBJECTIVES FOR PRIVATE NONOPERATING FOUNDATIONS As of December 31, 2023 • n = 29



Source: Foundation data as reported to Cambridge Associates LLC.



### 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 Index/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.

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

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

#### **PROFILE OF RESPONDENTS**

This report includes data for 110 foundations. 93 are private nonoperating foundations, five are private operating foundations, and 12 are community foundations. All participants provided investment pool return and asset allocation data as of December 31, 2023.

The 110 participants in this study reported long-term investment portfolio (LTIP) assets as of December 31, 2023, totaling \$235 billion. The mean LTIP size was \$2.1 billion, and the median was \$412 million. 17 participants have an LTIP size less than \$100 million, while 36 have an asset size greater than \$1 billion. The remaining 57 participants have an LTIP size between \$100 million and \$1 billion. The participants with LTIP sizes greater than \$1 billion controlled 91% of the aggregate LTIP assets.

#### CALCULATION OF THE SHARPE RATIO

The Sharpe ratio shows how much return above the risk-free rate (T-bills) the investor has earned per unit of risk (defined as standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken. The ratio is a measure of reward relative to total volatility. The formula is:

$$\frac{R_p - R_f}{S_p} = \text{Sharpe Ratio}$$

Where:

- R<sub>p</sub> is the arithmetic average of composite quarterly returns,
- R<sub>f</sub> is the arithmetic average of T-bill (risk-free) quarterly returns, and
- S<sub>n</sub> is the quarterly standard deviation of composite quarterly returns.

#### MODIFIED PUBLIC MARKET EQUIVALENT (MPME) INDEXES

Under Cambridge Associates' 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**

#### CALENDAR YEAR 2023 TOTAL RETURN PERCENTILES

Trailing 1-Yr as of December 31, 2023 • Percent (%) • By Percentile Ranking

	All FDNs	Less Than \$100M	\$100M-\$300M	\$300M-\$1B	More Than \$1B
5th %ile	16.2	19.2	16.4	14.8	15.3
25th %ile	13.9	15.6	14.6	13.8	11.1
Median	11.3	12.5	12.4	11.9	9.4
75th %ile	9.0	11.5	10.8	9.8	7.8
95th %ile	5.6	9.6	8.5	7.2	4.8
Mean	11.3	13.4	12.4	11.1	9.4
n	110	17	34	23	36

Source: Foundation data as reported to Cambridge Associates LLC.

#### **1-YR ATTRIBUTION ANALYSIS: ALL FOUNDATION MEAN**

As of December 31, 2023 • Percent (%) • n = 109

	Br	eakdown of Re	eturn	
	Fro	om Asset Alloc	ation	_
	Beginning Year	Asset Class	Contribution to	_
	Mean Asset	Benchmark	Asset Class	
Asset Class	Allocation	Return	Return	Index
US Equity	18.0	26.0	4.7	Russell 3000
Global Equity	10.0	22.6	2.3	MSCI ACWI
Global ex US Equity-Developed Mkts	8.6	18.2	1.6	MSCI EAFE (N)
Non-Venture Private Equity	8.5	9.3	0.8	CA US Private Equity
Long/Short Hedge Funds	5.5	11.4	0.6	HFRI Equity Hedge
US Bonds	9.2	5.5	0.5	BBG Agg Bond
Absolute Return (ex Distressed)	8.7	5.5	0.5	HFRI FOF Diversified
Global ex US Equity-Emerging Mkts	4.4	9.8	0.4	MSCI Emg Mkts (N)
Other Private Investments	3.2	6.1	0.2	CA US PE/VC
Cash & Equivalents	3.2	5.0	0.2	91-Day T-Bill
Private Credit ex Distressed	1.3	9.2	0.1	CA Private Credit
Private Oil & Gas/Natural Resources	2.4	3.0	0.1	CA Natural Resources
Other	0.4	17.3	0.1	70% Global Eq / 30% Bond
Distressed-Hedge Fund Structure	0.7	7.9	0.1	HFRI ED: Dist/Rest
High Yield Bonds	0.3	13.4	0.0	BBG High Yield
Distressed-Control Oriented	0.6	5.3	0.0	CA Distressed Securities
Public Real Estate	0.3	10.9	0.0	FTSE NAREIT Composite
Public Energy/Natural Resources	0.7	4.1	0.0	MSCI World Nat Res (N)
Global Bonds	0.5	5.2	0.0	FTSE WGBI
Inflation-Linked Bonds	0.5	3.9	0.0	BBG US TIPS
Global ex US Bonds	0.0	5.8	0.0	FTSE Non-US\$ WGBI
Commodities	0.4	-7.9	0.0	Bloomberg Commodity
Private Real Estate	2.4	-4.0	-0.1	CA Real Estate
Venture Capital	10.4	-3.5	-0.4	CA US Venture Capital
Return From Asset Allocation (Sum of a	Contributions)		11.6	
+/- Return From Other Factors			-0.3	_
Mean Total Portfolio Return			11.3	

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

Notes: To be consistent with the methodology in which private investment returns are incorporated into the total portfolio composite calculation, private investment benchmark returns are linked quarterly horizon returns. For foundations using the lagged reporting method for private investments, the analysis adjusts the privte benchmarks so that the mesurment period is aligned with that method (i.e., October 1, 2022, to September 30, 2023).



#### PARTICIPANTS' 1-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 1-Yr as of December 31, 2023 • 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 Foundations									
5th %ile	25.3	32.7	30.9	21.9	19.3	7.7	17.2	19.5	14.3
25th %ile	22.7	24.6	28.2	19.4	13.9	6.2	11.0	12.3	13.2
Median	21.2	22.3	25.8	18.0	9.6	5.6	9.2	4.7	11.8
75th %ile	19.9	19.8	23.8	15.9	6.4	4.9	6.9	3.2	11.7
95th %ile	17.2	14.5	18.1	12.5	-2.1	3.7	2.3	-6.2	-4.9
Mean	21.0	22.1	25.2	17.6	9.6	5.5	9.3	8.6	9.8
n	93	73	91	81	85	93	93	28	15
Median by Asset S	ize								
Less Than \$100M	21.0	22.1	24.8	18.4	9.1	5.8	9.2	4.6	11.8
n	17	14	17	14	14	16	17	5	3
\$100M-\$300M	21.5	22.7	26.1	17.7	10.2	5.8	9.3	3.3	13.2
n	33	30	34	30	31	32	33	8	3
\$300M-\$1B	20.5	19.7	26.5	18.0	9.5	5.4	9.0	3.6	12.5
n	20	13	20	19	20	20	19	9	8
More Than \$1B	21.1	24.1	26.9	17.7	9.9	5.3	9.5	14.7	13.2
n	23	16	20	18	20	25	24	6	1
Median by Total Pe	erformand	e Quartile							
Top Quartile	21.5	23.1	25.2	17.3	9.1	5.9	9.6	3.4	11.8
n	24	20	25	22	22	23	23	6	2
2nd Quartile	21.2	22.3	25.9	18.2	11.9	5.5	8.8	8.8	11.8
n	25	21	25	22	23	26	26	9	7
3rd Quartile	21.1	22.3	26.8	16.9	9.0	5.3	9.1	8.4	6.6
n	23	17	21	20	21	23	23	9	4
Bottom Quartile	20.8	20.9	26.1	18.0	9.8	5.3	9.4	3.1	14.0
n	21	15	20	17	19	21	21	4	2

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their calendar year 2023 total portfolio return.



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

Trailing 1-Yr as of December 31, 2023 • Percent (%)• By Percentile Ranking

		Non-						
	Total	Venture		Private		Total		Private
	Private	Private	Venture	Distressed	Private	Private Real	Private Real	Natural
	Equity	Equity	Capital	Securities	Credit	Assets	Estate	Resources
All Foundations								
5th %ile	9.4	12.1	8.0	37.2	17.8	10.3	7.7	17.3
25th %ile	4.6	8.1	0.1	14.4	10.3	3.3	0.0	7.4
Median	1.5	5.7	-3.7	6.8	7.9	0.0	-5.4	2.4
75th %ile	-0.9	3.4	-7.3	3.8	4.6	-7.0	-12.8	-5.3
95th %ile	-4.6	-1.9	-14.0	-9.5	-9.3	-19.8	-33.1	-17.1
Mean	2.0	5.7	-3.3	11.9	7.0	-2.2	-7.3	1.6
n	83	82	79	44	63	69	64	69
Median by Asset Si	ze							
Less Than \$100M	1.5	6.5	-3.2	-1.8	10.0	-2.5	-9.5	-8.2
n	11	11	10	5	9	8	6	5
\$100M-\$300M	1.4	5.1	-3.9	5.4	7.9	-1.7	-13.3	1.7
n	32	32	31	13	27	27	19	26
\$300M–\$1B	3.6	6.7	-3.6	8.8	7.8	0.2	-1.1	3.7
n	19	19	19	13	15	17	18	18
More Than \$1B	0.8	5.9	-2.7	8.9	5.9	-0.5	-5.1	2.7
n	21	20	19	13	12	17	21	20
Median by Total Pe	erformance C	Quartile						
Top Quartile	3.9	5.4	-2.8	4.7	8.5	0.6	0.0	1.1
n	19	19	18	9	13	12	7	13
2nd Quartile	3.2	6.3	-4.1	9.8	9.2	-3.8	-8.5	0.9
n	23	22	20	12	19	21	20	18
3rd Quartile	1.1	5.5	-3.3	6.1	6.0	0.0	-5.4	4.9
n	23	22	22	11	15	19	20	19
Bottom Quartile	-0.6	6.6	-3.9	8.8	7.4	-1.3	-4.7	2.5
n	18	19	19	12	16	17	17	19

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their calendar year 2023 total portfolio return. Private investment return statistics are reported as horizon IRRs.

#### TOTAL RETURNS SUMMARY: TRAILING 3-, 5-, 10-, AND 20-YR

Years Ended December 31, 2023 • Percent (%) • By Percentile Ranking

		Nomina	al AACRs	
	3-Yr	5-Yr	10-Yr	20-Yr
All Foundations 5th %ile	8.2	11.7	9.4	9.1
25th %ile	5.7	10.0	7.5	7.7
Median	4.7	9.2	6.6	7.0
75th %ile	3.6	8.4	6.0	6.4
95th %ile	1.9	7.1	5.3	5.3
Mean	4.7	9.3	6.9	7.1
n	110	110	101	75
Less Than \$100M				
5th Percentile	6.5	11.4	6.8	7.3
25th Percentile	4.9	9.7	6.5	6.5
Median	3.9	8.5	6.0	5.8
75th Percentile	3.3	7.9	5.4	5.5
95th Percentile	0.2	6.8	4.6	5.2
Mean	3.8	8.8	5.9	6.0
n	17	17	13	7
\$100M-\$300M				
5th Percentile	6.1	10.4	7.2	7.7
25th Percentile	4.9	9.6	6.6	7.4
Median	4.6	9.0	6.2	6.7
75th Percentile	3.7	8.6	5.7	6.1
95th Percentile	2.7	7.0	5.4	5.2
Mean	4.4	9.0	6.2	6.7
n	34	34	32	23
\$300M-\$1B				
5th Percentile	8.6	11.3	8.8	8.7
25th Percentile	6.3	9.9	7.2	7.5
Median	5.0	9.6	6.7	6.8
75th Percentile	4.0	8.6	6.3	6.3
95th Percentile	0.6	8.1	5.2	5.5
Mean	5.0	9.5	6.8	6.9
n	23	23	23	18
More Than \$1B				
5th Percentile	9.7	12.4	9.7	9.3
25th Percentile	6.0	10.7	8.8	8.3
Median	5.2	9.7	7.8	7.7
75th Percentile	3.5	8.7	7.0	7.3
95th Percentile	2.0	7.3	6.4	6.5
Mean	5.2	9.7	7.9	7.9
n	36	36	33	27

Source: Foundation data as reported to Cambridge Associates LLC.

PARTICIPANTS' 3-YR ASSET CL	ASS RETURNS: MARKETAB	LE INVESTMENTS
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Trailing 3-Yr as of December 31, 2023 • 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
7.5 5.7 4.6 3.4 -0.3 4.4	9.6 7.5 4.3 1.1 -9.8 3.3	10.9 9.3 8.1 6.8 1.9 7.4	7.8 5.1 3.0 0.1 -4.0 2.6	2.6 -0.7 -2.7 -5.4 -8.8 -2.9	1.8 -0.6 -1.8 -2.9 -5.1 -1.8	7.6 5.3 3.3 0.9 -4.0 2.6	26.6 17.1 10.4 6.3 3.6 11.8	7.5 5.0 4.2 2.2 0.5 4.0
91 e	66	80	//	81	88	89	27	14
4.9 <i>17</i> 4.5	5.1 <i>13</i> 3.9	8.7 <i>16</i> 8.0	3.7 14 2.7	-2.4 14 -3.4	-2.0 16 -1.4	2.0 16 3.2	9.6 5 7.6	5.0 3 2.2
31 4.6 20 4.5	28 5.6 12 4.7	31 8.4 20 8.1	27 1.9 <i>19</i> 3.8	28 -1.1 20 -2.1	30 -2.3 20 -1.8	31 4.1 19 2.3	8 12.3 9 12.8	2 4.2 8 2.2
	Total Public Equity 7.5 5.7 4.6 3.4 -0.3 4.4 91 re 4.9 17 4.5 31 4.6 20 4.5 22	Total         Global           Public         Equity           Equity         Managers           7.5         9.6           5.7         7.5           4.6         4.3           3.4         1.1           -0.3         -9.8           4.4         3.3           91         66           re         4.9           4.5         3.9           31         28           4.6         5.6           20         12           4.5         4.7	Total Public         Global Equity         US Equity           7.5         9.6         10.9           5.7         7.5         9.3           4.6         4.3         8.1           3.4         1.1         6.8           -0.3         -9.8         1.9           4.4         3.3         7.4           91         66         86           re           4.9         5.1         8.7           17         13         16           4.5         3.9         8.0           31         28         31           4.6         5.6         8.4           20         12         20           4.5         4.7         8.1	Total Public         Global Equity         Dev Mkts Wanagers           Fquity         US         ex US           Equity         Managers         Equity           7.5         9.6         10.9           5.7         7.5         9.3           4.6         4.3         8.1           -0.3         -9.8         1.9           4.4         3.3         7.4           2.6         91         66           91         66         86           77         13         16           4.5         3.9         8.0         2.7           31         28         31         27           4.6         5.6         8.4         1.9           20         12         20         19           4.5         4.7         8.1         3.8	Total PublicGlobal EquityDev Mkts ex USEmg Mkts EquityEquityUSex USEmg MktsEquityManagersEquityEquityEquity7.59.6 $10.9$ 7.82.65.77.59.3 $5.1$ $-0.7$ 4.64.3 $8.1$ $3.0$ $-2.7$ 3.41.1 $6.8$ $0.1$ $-5.4$ $-0.3$ $-9.8$ $1.9$ $-4.0$ $-8.8$ 4.4 $3.3$ $7.4$ $2.6$ $-2.9$ $91$ $66$ $86$ $77$ $81$ re4.9 $5.1$ $8.7$ $3.7$ $17$ $13$ $16$ $14$ $14$ $4.5$ $3.9$ $8.0$ $2.7$ $-3.4$ $31$ $28$ $31$ $27$ $28$ $4.6$ $5.6$ $8.4$ $1.9$ $-1.1$ $20$ $12$ $20$ $19$ $20$ $4.5$ $4.7$ $8.1$ $3.8$ $-2.1$	Total PublicGlobal EquityDev Mkts ex USEmg Mkts EquityBondsEquityManagersEquityEquityEquityBonds7.59.6 $10.9$ $7.8$ $2.6$ $1.8$ 5.7 $7.5$ $9.3$ $5.1$ $-0.7$ $-0.6$ 4.6 $4.3$ $8.1$ $3.0$ $-2.7$ $-1.8$ $3.4$ $1.1$ $6.8$ $0.1$ $-5.4$ $-2.9$ $-0.3$ $-9.8$ $1.9$ $-4.0$ $-8.8$ $-5.1$ $4.4$ $3.3$ $7.4$ $2.6$ $-2.9$ $-1.8$ $91$ $66$ $86$ $77$ $81$ $88$ $91$ $66$ $8.7$ $3.7$ $-2.4$ $-2.0$ $17$ $13$ $16$ $14$ $14$ $16$ $4.5$ $3.9$ $8.0$ $2.7$ $-3.4$ $-1.4$ $31$ $28$ $31$ $27$ $28$ $30$ $4.6$ $5.6$ $8.4$ $1.9$ $-1.1$ $-2.3$ $20$ $12$ $20$ $19$ $20$ $20$ $4.5$ $4.7$ $8.1$ $3.8$ $-2.1$ $-1.8$	Total PublicGlobal EquityDev Mkts USEmg MktsHedge EquityPublic EquityEquityUSex USEmg MktsHedgeEquityManagersEquityEquityBondsFunds7.59.6 $10.9$ 7.82.6 $1.8$ 7.65.77.59.3 $5.1$ $-0.7$ $-0.6$ $5.3$ 4.64.3 $8.1$ $3.0$ $-2.7$ $-1.8$ $3.3$ 3.4 $1.1$ $6.8$ $0.1$ $-5.4$ $2.9$ $0.9$ $-0.3$ $-9.8$ $1.9$ $-4.0$ $-8.8$ $-5.1$ $-4.0$ $4.4$ $3.3$ $7.4$ $2.6$ $-2.9$ $-1.8$ $2.6$ $91$ $66$ $86$ $77$ $81$ $88$ $89$ re4.9 $5.1$ $8.7$ $3.7$ $-2.4$ $-2.0$ $2.0$ $17$ $13$ $16$ $14$ $14$ $16$ $16$ $4.5$ $3.9$ $8.0$ $2.7$ $-3.4$ $-1.4$ $3.2$ $31$ $28$ $31$ $27$ $28$ $30$ $31$ $4.6$ $5.6$ $8.4$ $1.9$ $-1.1$ $-2.3$ $4.1$ $20$ $12$ $20$ $19$ $20$ $20$ $19$ $4.5$ $4.7$ $8.1$ $3.8$ $-2.1$ $-1.8$ $2.3$	Total Public         Global Equity         Dev Mkts US         Emg Mkts ex US         Emg Mkts Equity         Hedge Bonds         Tends         Resources           7.5         9.6         10.9         7.8         2.6         1.8         7.6         26.6           5.7         7.5         9.3         5.1         -0.7         -0.6         5.3         17.1           4.6         4.3         8.1         3.0         -2.7         -1.8         3.3         10.4           3.4         1.1         6.8         0.1         -5.4         -2.9         0.9         6.3           -0.3         -9.8         1.9         -4.0         -8.8         -5.1         -4.0         3.6           4.4         3.3         7.4         2.6         -2.9         -1.8         2.6         11.8           91         66         86         77         81         88         89         27           re         4.9         5.1         8.7         3.7         -2.4         -2.0         2.0         9.6           17         13         16         14         14         16         16         5           3.1         2.8         31         2

Source: Foundation data as reported to Cambridge Associates LLC.

#### PARTICIPANTS' 5-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 5-Yr as of December 31, 2023  $\bullet$  Percent (%)  $\bullet$  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 Foundations									
5th %ile	12.5	14.7	17.0	10.8	8.4	3.1	9.2	13.3	8.2
25th %ile	11.6	11.7	15.4	9.0	6.1	2.1	7.0	11.5	5.2
Median	10.8	10.6	14.6	7.8	4.5	1.6	5.8	9.1	3.8
75th %ile	9.9	8.7	13.5	6.6	3.1	1.0	4.7	6.8	3.6
95th %ile	8.6	4.5	9.5	4.7	-0.6	0.1	2.8	5.4	1.9
Mean	10.6	10.3	13.9	7.8	4.5	1.6	5.9	9.1	4.5
n	88	53	82	74	77	83	83	25	7
Median by Asset Si	ize								
Less Than \$100M	10.9	10.5	14.6	8.6	3.8	1.5	5.5	8.1	
n	<i>17</i>	<i>12</i>	<i>16</i>	<i>14</i>	14	<i>16</i>	<i>14</i>	5	
\$100M–\$300M	10.6	10.6	14.5	7.8	4.5	1.6	5.1	8.3	2.5
n	<i>31</i>	<i>23</i>	<i>30</i>	<i>27</i>	<i>27</i>	<i>29</i>	<i>31</i>	7	<i>2</i>
\$300M–\$1B	10.3	11.3	14.4	8.1	4.5	1.4	6.1	10.1	5.2
n	<i>19</i>	<i>8</i>	<i>19</i>	<i>18</i>	<i>19</i>	<i>19</i>	<i>18</i>	<i>8</i>	<i>4</i>
More Than \$1B	10.9	9.8	14.6	7.8	5.3	1.7	6.7	11.5	3.8
<i>n</i>	<i>21</i>	<i>10</i>	<i>17</i>	15	<i>17</i>	<i>19</i>	20	5	1

Source: Foundation data as reported to Cambridge Associates LLC.

	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 Foundations									
5th %ile 25th %ile Median 75th %ile 95th %ile	8.9 8.5 7.5 7.0 6 3	10.4 9.2 7.4 6.7 5 3	12.7 11.9 11.0 10.3 8 9	6.8 5.4 4.9 3.9 2.9	5.6 4.0 3.1 2.2 0.9	3.2 2.1 1.7 1.3 1.0	5.9 4.8 3.7 2.9 1.6	5.7 3.1 0.7 0.0 -2.0	7.4 7.3 7.0 6.5
Mean	7.6	7.8	10.7	4.8	3.0	1.9	3.8	1.4	6.8
n	75	26	<i>69</i>	62	<i>61</i>	70	66	19	3
Median by Asset Siz	ze								
Less Than \$100M	7.3	7.8	10.8	5.2	2.7	1.7	3.2	1.6	
n	13	6	<i>12</i>	<i>11</i>	10	14	9	2	
\$100M–\$300M	7.5	8.2	10.9	4.4	3.1	1.8	2.9	0.5	
n	28	<i>12</i>	<i>26</i>	23	<i>21</i>	26	27	<i>6</i>	
\$300M–\$1B	7.3	9.2	10.7	4.9	2.9	1.7	3.9	-0.2	7.0
n	18	<i>3</i>	<i>18</i>	<i>17</i>	<i>17</i>	16	<i>16</i>	7	3
More Than \$1B	8.0	6.8	11.1	5.2	4.1	1.3	4.9	3.2	
n	<i>16</i>	<i>5</i>	<i>13</i>	<i>11</i>	<i>13</i>	<i>14</i>	14	4	
Median by Total Pe	rformanc	e Quartile							
Top Quartile	8.3	6.8	11.1	5.2	4.1	1.3	4.2	2.2	7.5
<i>n</i>	<i>12</i>	<i>3</i>	<i>12</i>	<i>9</i>	<i>11</i>	<i>12</i>	<i>12</i>	4	1
2nd Quartile	7.8	9.1	11.9	4.9	2.9	1.7	4.5	-0.2	7.0
n	21	<i>9</i>	<i>18</i>	<i>17</i>	<i>17</i>	<i>19</i>	<i>18</i>	5	1
3rd Quartile	7.8	9.4	11.0	5.0	2.9	1.8	3.2	1.7	6.0
n	22	5	<i>20</i>	<i>18</i>	<i>16</i>	<i>19</i>	<i>18</i>	6	1

4.0

18

2.9

17

1.7

19

2.8

18

0.7

4

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#### PARTICIPANTS' 10-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 10-Yr as of December 31, 2023 • Percent (%) • By Percentile Ranking

Source: Foundation data as reported to Cambridge Associates LLC.

7.2

20

Bottom Quartile

n

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

10.4

19

6.9

9



	Total	Non-Venture		Private		Total	Private	Private
	Private	Private	Venture	Distressed	Private	Private Real	Real	Natural
	Equity	Equity	Capital	Securities	Credit	Assets	Estate	Resources
All Foundations								
5th %ile	18.7	21.0	16.4	29.5	20.3	31.2	16.7	40.3
25th %ile	13.7	15.7	10.5	22.9	11.1	17.9	10.3	26.4
Median	10.7	13.1	7.0	17.6	9.4	12.7	6.1	18.3
75th %ile	8.6	10.8	3.3	8.6	7.1	7.2	-0.7	11.8
95th %ile	2.6	4.8	-8.0	-6.9	-0.3	-3.1	-10.5	0.0
Mean	11.0	13.0	6.6	15.3	10.8	12.8	4.5	19.1
n	81	80	76	40	59	68	62	67
Median by Asset Siz	e							
Less Than \$100M	9.5	15.3	1.8	17.6	9.9	11.8	5.4	15.9
n	11	10	10	5	8	8	6	5
\$100M-\$300M	10.8	12.6	7.9	18.7	9.3	10.6	1.8	14.4
n	31	31	28	13	24	26	18	25
\$300M–\$1B	10.4	13.4	6.3	16.2	9.1	15.7	9.3	18.6
n	19	19	19	9	15	17	18	18
More Than \$1B	11.1	13.1	7.2	18.4	9.7	12.5	7.2	22.4
n	20	20	19	13	12	17	20	19

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

Trailing 3-Yr as of December 31, 2023 • Percent (%) • By Percentile Ranking

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Private investment return statistics are reported as horizon IRRs.

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

Trailing 5-Yr as of December 31, 2023 • Percent (%) • By Percentile Ranking

	Total	Non-Venture		Private		Total	Private	Private
	Private	Private	Venture	Distressed	Private	Private Real	Real	Natural
	Equity	Equity	Capital	Securities	Credit	Assets	Estate	Resources
All Foundations								
5th %ile	21.7	23.1	25.6	37.0	18.0	14.4	12.4	15.5
25th %ile	19.2	18.0	20.3	19.7	11.0	7.5	8.2	9.5
Median	16.6	16.4	17.2	12.6	9.3	4.7	5.1	5.2
75th %ile	14.3	14.4	11.7	6.4	6.5	1.4	-0.1	0.8
95th %ile	10.6	9.9	-3.6	-3.3	-3.1	-2.1	-8.2	-4.0
Mean	16.5	16.3	15.4	13.8	8.7	5.1	3.0	5.5
n	77	75	72	34	54	64	59	66
Median by Asset Siz	ze							
Less Than \$100M	16.7	17.0	15.1	15.4	9.8	0.6	0.9	-0.2
n	9	9	8	4	7	7	6	5
\$100M-\$300M	16.4	16.2	17.9	12.5	9.6	4.3	-0.1	4.9
n	30	29	28	11	20	24	16	24
\$300M–\$1B	16.6	15.2	16.3	8.0	8.0	4.8	7.1	6.2
n	19	18	18	7	15	17	17	18
More Than \$1B	16.6	16.5	17.5	13.5	9.9	5.4	5.2	6.8
n	19	19	18	12	12	16	20	19

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Private investment return statistics are reported as horizon IRRs.

	Total	Non-Venture		Private		Total	Private	Private
	Private	Private	Venture	Distressed	Private	Private Real	Real	Natural
	Equity	Equity	Capital	Securities	Credit	Assets	Estate	Resources
All Foundations								
5th %ile	19.3	20.8	22.0	20.9	12.1	10.4	13.3	9.2
25th %ile	17.2	16.3	19.1	13.5	8.8	7.1	11.0	4.2
Median	15.0	14.7	16.2	7.3	7.5	3.9	8.8	2.2
75th %ile	13.2	12.9	12.4	4.1	6.6	2.0	6.0	0.0
95th %ile	10.4	9.5	3.9	-3.1	3.4	0.0	3.6	-4.0
Mean	15.1	14.6	15.0	8.5	8.6	4.4	8.2	1.8
n	62	61	52	22	25	51	48	52
Median by Asset Si	ze							
Less Than \$100M	15.1	15.0	17.1	1.7	4.3	1.2	5.1	1.0
n	8	7	6	3	1	5	4	5
\$100M-\$300M	14.8	13.7	15.9	5.7	7.5	3.9	9.1	2.4
n	23	22	16	5	7	21	14	19
\$300M–\$1B	16.2	15.1	15.7	6.8	7.8	5.2	9.8	3.5
n	17	17	15	6	8	13	14	13
More Than \$1B	15.5	14.8	16.4	13.5	8.6	4.2	8.2	1.5
n	14	15	15	8	9	12	16	15
Median by Total Pe	erformance	Quartile						
Top Quartile	17.7	14.9	18.3	16.8	8.7	4.7	8.9	3.5
n	12	13	13	5	6	10	13	13
2nd Quartile	15.5	14.8	17.7	7.2	7.5	3.7	9.1	2.3
n	18	18	16	7	11	16	14	16
3rd Quartile	14.5	14.1	14.4	4.2	8.4	3.8	7.4	1.2
n	17	16	15	7	7	14	14	13
Bottom Quartile	14.7	15.0	11.3	-2.6	7.5	3.5	8.6	-1.3
n	13	13	6	2	1	10	6	9

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

Trailing 10-Yr as of December 31, 2023 • Percent (%) • By Percentile Ranking

Source: Foundation 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.

# **Appendix: Portfolio Asset Allocation**

#### SUMMARY ASSET ALLOCATION DISTRIBUTION

As of December 31, 2023 • Percent (%) • n =110 • by Percentile Ranking

	Public		Hedge	Real	Fixed	Private		
	Equity	PE/VC	Funds	Assets	Income	Credit	Cash	Other
5th %ile	65.7	42.0	24.6	14.3	16.4	6.6	11.7	1.1
25th %ile	51.2	30.3	18.4	9.1	12.6	2.7	4.7	0.0
Median	41.5	22.3	13.8	5.1	9.2	1.2	2.7	0.0
75th %ile	31.1	13.8	9.2	2.3	5.5	0.1	1.1	0.0
95th %ile	20.9	0.5	2.8	0.0	1.8	0.0	0.0	0.0
Mean	42.1	22.2	13.9	6.2	9.9	1.9	3.7	0.2

Source: Foundation data as reported to Cambridge Associates LLC.

#### MEAN ASSET ALLOCATION BY ASSET SIZE

As of December 31, 2023 • Percent (%)

			Asset	: Size	
	All Foundations	Less Than \$100M	\$100M– \$300M	\$300M– \$1B	More Than \$1B
	(n = 110)	(n = 17)	(n = 34)	(n = 23)	(n = 36)
Public Equity	42.1	50.6	46.3	41.9	34.3
Global	10.4	12.3	11.5	9.1	9.4
US	18.5	22.9	21.7	19.3	12.9
Global ex US Developed	8.9	10.8	9.3	9.0	7.4
Emerging Markets	4.3	4.5	3.7	4.5	4.6
PE/VC	22.2	14.7	19.1	23.2	27.9
Non-Venture Private Equity	8.7	4.3	6.4	8.9	12.8
Venture Capital	9.9	6.1	7.1	10.4	13.9
Other Private Investments	3.6	4.3	5.6	3.9	1.2
Hedge Funds	13.9	11.5	15.6	11.3	15.0
Long/Short	4.5	2.8	5.5	3.2	5.1
Absolute Return	7.8	7.2	8.4	6.3	8.5
Distressed	1.6	1.6	1.7	1.8	1.4
Private Credit	1.9	1.3	1.2	2.6	2.6
Distressed - Control Oriented	0.6	0.3	0.4	0.9	0.7
Private Credit ex Distressed	1.4	1.0	0.8	1.6	1.9
Fixed Income	9.9	12.9	9.6	10.5	8.4
Global	0.4	0.0	0.3	0.1	0.9
US	9.3	12.7	9.3	10.2	7.3
Global ex US	0.0	0.0	0.0	0.0	0.1
High-Yield Bonds	0.1	0.1	0.1	0.2	0.2
Real Assets & ILBs	6.2	3.4	4.5	6.7	8.7
Private Real Estate	2.3	0.5	0.9	2.6	4.4
Public Real Estate	0.3	0.5	0.2	0.6	0.2
Commodities	0.3	0.2	0.2	0.1	0.6
Inflation Linked-Bonds	0.5	0.2	0.5	0.5	0.6
Private O&G/Nat Resources	2.1	0.9	2.0	2.4	2.6
Public Energy/Nat Resources	0.6	1.2	0.6	0.5	0.4
Cash & Equivalents	3.7	5.5	3.8	3.4	2.9
Other Assets	0.2	0.1	0.0	0.5	0.2

Source: Foundation data as reported to Cambridge Associates LLC.



#### HISTORICAL MEAN ASSET ALLOCATION TRENDS

Years Ended December 31 • Percent (%)

			C	onstant Uni	verse (n = 6	56)		
						Real		
	Public		Hedge	Private	Fixed	Assets &		
	Equity	PE/VC	Funds	Credit	Income	ILBs	Cash	Other
2013	42.8	9.7	19.8	1.6	10.8	10.7	4.2	0.5
2014	43.0	10.4	20.5	1.5	10.1	10.0	4.5	0.1
2015	42.9	11.5	20.8	1.4	10.2	8.9	4.2	0.0
2016	43.6	11.6	19.3	1.4	9.9	9.6	4.6	0.0
2017	47.2	11.7	17.5	1.2	9.8	8.8	3.6	0.3
2018	42.9	14.5	17.1	1.6	11.0	8.4	4.0	0.4
2019	45.8	15.3	15.4	1.6	10.6	7.1	3.9	0.2
2020	45.2	18.9	15.1	1.7	9.5	5.8	3.5	0.2
2021	43.1	22.2	14.6	1.8	8.5	6.0	3.4	0.4
2022	39.5	24.2	15.2	2.0	8.7	7.0	3.1	0.3
2023	40.2	24.2	14.6	1.8	8.5	6.6	3.9	0.2

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Analysis is based on a constant universe that includes 66 institutions that provided asset allocation data for each year from 2013 to 2023.

#### UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of December 31, 2023 • Percent (%) • By Percentile Ranking

#### Uncalled Capital Commitments as a Percentage of the Total LTIP

	All Foundations	Less Than \$100M	\$100M-\$300M	\$300M-\$1B	More Than \$1B
5th %ile	22.3	27.2	17.0	23.6	23.7
25th %ile	16.0	17.2	14.5	17.6	16.0
Median	12.6	9.2	12.3	14.4	13.5
75th %ile	9.7	7.1	9.5	11.3	10.4
95th %ile	4.8	1.1	5.4	5.8	6.2
Mean	13.0	12.3	11.8	14.2	13.7
n	93	12	32	20	29

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

	All Foundations	Less Than \$100M	\$100M-\$300M	\$300M-\$1B	More Than \$1B
5th %ile	67.2	67.3	54.5	71.9	66.3
25th %ile	54.1	52.6	45.0	54.4	58.0
Median	44.6	37.3	33.9	45.3	52.5
75th %ile	30.7	22.8	28.8	37.3	45.1
95th %ile	13.8	3.9	18.4	19.9	22.1
Mean	42.7	36.6	36.1	45.6	50.6
n	93	12	32	20	29

Source: Foundation data as reported to Cambridge Associates LLC.

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

# **Appendix: Investment Manager Structures**

#### NUMBER OF EXTERNAL MANAGERS AND INVESTMENT VEHICLES

As of December 31, 2023 • Percent (%) • By Percentile Ranking

#### Number of External Managers

	Less Than \$100M	\$100M-\$300M	\$300M-\$1B	More Than \$1B
5th %ile	47	63	92	160
25th %ile	38	49	68	117
Median	17	44	55	95
75th %ile	12	38	45	64
95th %ile	10	26	34	39
Mean	25	44	59	96
n	17	33	21	30

#### Number of Investment Vehicles

	Less Than \$100M	\$100M-\$300M	\$300M-\$1B	More Than \$1B
5th %ile	73	94	176	293
25th %ile	65	77	118	225
Median	27	66	93	198
75th %ile	15	52	72	115
95th %ile	13	32	50	63
Mean	38	64	98	182
n	17	33	21	27

Source: Foundation data as reported to Cambridge Associates LLC.

#### DISPERSION IN NUMBER OF MANAGERS FOR SELECTED ASSET CLASSES

As of December 31, 2023 • By Percentile Ranking

							Ab Return		
	Global	US	DM ex US	EM	US	Long/Short	Hedge	Private	Venture
	Equity	Equity	Equity	Equity	Bonds	Hedge Funds	Funds	Equity	Capital
5th %ile	7	7	6	6	4	9	12	30	32
25th %ile	4	5	4	3	3	6	7	16	16
Median	3	3	3	2	2	3	4	10	8
75th %ile	2	3	2	2	1	2	3	6	4
95th %ile	1	1	1	1	1	1	1	1	2
Mean	3	4	3	3	2	4	5	12	12
n	89	99	93	91	93	83	91	94	93

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Only those institutions with an allocation to the specific asset class have been included. Funds-of-funds are counted as one manager.

#### EXTERNAL MANAGERS AND VEHICLES BY STRATEGY

As of December 31, 2023

	Median Number				Median Number of Vehicles			
<u>.</u>	Less Than	\$100M-	\$300M-	More Than	Less Than	\$100M-	\$300M-	Than
Strategy	\$100M	\$300M	\$1B	\$1B	\$100M	\$300M	\$1B	\$1B
Traditional Equity								
Global Equity	2	3	3	4	2	4	3	4
US Equity	2	4	4	4	2	4	4	5
Developed ex US Equity	2	3	3	4	2	3	3	4
Emerging Markets Equity	2	2	2	3	2	2	2	3
Traditional Bonds								
Global Bonds		1	1	1		1	1	1
US Bonds	3	3	3	2	3	3	3	2
Global ex US Bonds	3	4		1	3	4		
High-Yield Bonds	1	1	1	1	1	2	1	1
Hedge Funds								
Long/Short Hedge Funds	2	3	3	5	2	3	3	5
Absolute Return	3	4	5	7	3	4	5	7
Distressed Securities	2	2	2	2	2	2	2	2
Private Credit								
Distressed - Control Oriented	1	2	2	2	1	2	2	3
Private Credit ex Distressed	2	2	3	7	2	2	5	8
Private Equity								
Non-Venture Private Equity	8	6	11	19	10	9	19	41
Venture Capital	3	6	9	18	7	10	17	47
Other Private Investments	4	4	4	4	7	9	8	8
Real Assets & ILBs								
Private Real Estate	2	2	4	8	4	2	6	13
Public Real Estate	1	1	1	1	1	1	1	1
Commodities	1	1	1	2	1	1	1	1
Inflation-Linked Bonds (TIPS)	1	1	1	1	1	1	1	1
Private Oil & Gas/Nat Res	1	2	6	7	1	3	9	15
Public Energy/Nat Res	2	1	1	1	2	1	1	1
Cash	1	2	1	1	1	2	1	1
Other	1		1	1	1		1	1

Source: Foundation 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.

#### PARTICIPANTS

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