FOUNDATION ANNUAL INVESTMENT POOL RETURNS

CALENDAR YEAR 2020





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his 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 112 foundations for the calendar year ended December 31, 2020. Included in this year's report are commentary and figures that are spread across six separate sections.

Our **INVESTMENT PORTFOLIO RETURNS** section highlights performance results for select trailing periods. It was a volatile year for capital markets in 2020, and the dispersion in returns among participating foundations was much wider than normal. This section investigates some of the factors that contributed to the variation of peer returns and what made top performers stand out.

Performance results of peers can be informative, but they are not necessarily the most effective benchmark for evaluating a foundation's investment performance. Differences in investment policies across foundations lead to a wide range of performance objectives as defined by policy portfolio benchmarks. As a result, many foundations that underperformed the peer median in this study fared well when evaluated against their own policy portfolio benchmark. Our **INVESTMENT POLICY** section examines this and other related topics.

The **PORTFOLIO ASSET ALLOCATION** section looks back at changes over the last decade and incorporates data on target asset allocations to lend insights into how foundations are altering their portfolios heading into the future. The 2020 observations are mostly a continuation of longer-term trends, which show that foundations in general are increasing allocations to growth assets decreasing exposure to hedge funds and real assets strategies.

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 non-operating foundations. These types of foundations are required under the Federal tax code to distribute approximately 5% of their assets each year. While most of these foundations' payout objectives are tied closely to this requirement, some also use smoothing-type spending rules like those used more commonly among endowments.

Finally, our **INVESTMENT OFFICE STAFFING AND GOVERNANCE** section of the report looks at topics such as the number of personnel in the investment office and investment committee structure. Also included are analyses on who has decision making responsibility for asset allocation policy development and manager selection.

Section 1: Investment Portfolio Returns

RETURNS IN CALENDAR YEAR 2020

The onset of the COVID-19 pandemic caused steep declines in risk markets in first quarter of calendar year 2020. Large-scale intervention by both monetary and fiscal authorities eventually put a floor under risk markets, driving rapid recoveries and pushing equity markets to new highs. The investment performance of participating foundations by and large followed the same trajectory over the course of the year. The average foundation return was down by double digits after the first quarter, but steadily rose throughout the rest of the year and was 15.7% for the full trailing one-year period (Figure 1). Of the various asset size groups in this study, those with assets greater than \$1 billion reported the highest average return (17.6%).

FIGURE 1 CALENDAR YEAR 2020 TOTAL RETURN SUMMARY





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 48 in the Appendix.

The mean return for participants was almost 200 basis points (bps) higher than the median return (15.7% versus 13.9%). This occurred because the returns of foundations on the top end of the distribution extended out farther from the median compared to those at the bottom end. When looking at the dispersion in 2020 returns across the overall participant group, the 5th percentile return of 27.3% was 13.4 percentage points higher than the median return. This amount of dispersion in returns above the median was the largest reported over the last 20 years (Figure 2).

There are several factors that contributed to that variation in returns reported across foundations in this study. These factors include portfolio asset allocations and how well foundations implemented those allocations. The commentary and analysis that follow in this section explore these factors and the impact on comparative returns in calendar year 2020.



FIGURE 2 DISPERSION OF ANNUAL RETURNS RELATIVE TO THE MEDIAN RETURN Based on Trailing 1-Yr Returns as of December 31

Source: Foundation data as reported to Cambridge Associates LLC.

ASSET ALLOCATION. Our analysis of comparative peer performance begins with examining the relationship between asset allocation and total portfolio returns. Understanding the context of the market environment for 2020 is critical to this analysis. Among the marketable strategies in Figure 3, the indexes representing US equities (Russell 3000[®] Index), emerging market equities (MSCI Emerging Markets Index), and long/short equity hedge funds (HFRI Equity Hedge Index) produced the best returns. Natural resources–related assets suffered after economic activity was reduced in 2020, and the indexes representing these assets and commodities were negative for the year. In private investments, each of the main strategies outperformed their modified public market equivalent (mPME) indexes. Venture capital performance was exceptional in 2020, with both the US and global ex US indexes posting horizon internal rates of returns (IRRs) of approximately 50%.

Differences in asset allocations among foundations correlate with the backdrop of the 2020 market environment. In Figure 4, the participant group is broken out into four quartiles based on investment performance and each foundation's asset allocation was averaged across the beginning and ending points for the trailing one-year period. The four quartiles in the heat map table represent the average asset allocation of the foundations within each quartile.

FIGURE 3 1-YR INDEX RETURNS

As of December 31, 2020 • Percent (%)



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

FIGURE 4 1-YR MEAN ASSET ALLOCATION BY PERFORMANCE QUARTILE

Percent (%) • n = 111

Quartile	US Equity	Dev Mkts ex US Equity	Emg Mkts Equity	Bonds	Hedge Funds	Dist Sec	PE/VC	Private Real Assets	Public Real Assets & ILBs	Cash	Other
Top Quartile	21.0	12.6	7.9	7.7	14.1	2.2	24.4	4.4	1.4	4.0	0.4
2nd Quartile	25.0	16.4	7.8	11.0	14.7	2.2	13.6	3.5	2.5	2.9	0.3
3rd Quartile	26.0	16.7	7.2	12.9	11.5	2.1	12.3	5.1	2.4	3.4	0.5
Bottom Quartile	25.3	16.5	7.5	14.3	13.0	2.1	8.2	3.6	4.2	4.7	0.7
All Foundation Mean	24.3	15.5	7.6	11.5	13.3	2.1	14.7	4.1	2.6	3.8	0.5

Divergence of Asset Allocation from All Foundation Mean

-4%	-2%	Mean	2%	4%

Sources: Foundation data as reported to Cambridge Associates LLC.

Note: Asset allocation is averaged across the two December 31 periods from 2019 to 2020 for each institution in this analysis.

Given the index returns for private equity and venture capital in 2020, it is not surprising that foundations in the top quartile reported the highest average allocations to these asset classes. In fact, the top quartile's average allocation to private equity and venture capital (PE/VC) (24.4%) was nearly three times greater than the average allocation of the bottom quartile of performers (8.2%). This differential was mostly balanced out by the contrast in allocations to public equities and bonds. The average allocation to public equities was 49.3% for the bottom quartile of performers and just 41.5% for the top quartile of performers. Likewise, the bottom quartile's average allocation to bonds (14.3%) was higher than the average allocation reported by the top quartile (7.7%).

ATTRIBUTION. While asset allocation is a key driver of investment performance, it does not fully account for a portfolio's overall return. The execution or implementation of an asset allocation strategy also contributes to the total return that a portfolio earns. Our attribution model attempts to quantify how much each foundation's return can be explained by its beginning year asset allocation and how much comes from other factors. The results can be insightful in understanding the variation in total returns that are reported across different foundations.

In the model, an index return is assigned to each asset class. A foundation's return from asset allocation is calculated using a blend of these index returns weighted according to its beginning year asset allocation.¹ This is the return that would have been earned if the foundation's portfolio was invested passively throughout the year. The model estimates that the average return from asset allocation across all participants was 14.4% for the fiscal year (Figure 5). The average asset allocation structure of the top quartile of performers (17.7%) significantly outperformed the average of the bottom quartile of performers (11.9%).

1 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 5 1-YR ATTRIBUTION ANALYSIS

Trailing 1-Yr as of December 31, 2020 • Percent (%) • n = 111

Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 48 in the Appendix.



The return from other factors is the difference between the portfolio's actual return and its asset allocation return. This other portion of return is mostly driven by the effects of active management, or alpha. In addition, this portion accounts for any decision to modify the asset allocation structure or rebalance the portfolio allocations through the course of the calendar year. The average return from other factors across all participants was 1.3% for 2020. Top performers added substantial value from other factors, with the top quartile earning an average of 6.3%.

Compared to the rest of the participant group, the top quartile's average return for both components of the attribution model was significantly higher especially when considered in the historical context. Figure 6 shows the results of the attribution analysis for each of the last ten years. The differential in the average asset allocation return between top and bottom performers (580 bps) was the second highest from this past decade. For the return from other factors, the average for the top quartile of performers was 780 bps higher than the average for the bottom quartile of performers. This differential was much wider than any of the past ten years and is a key factor in explaining why the top quartile performed so much better than the rest of the peer group in 2020.

FIGURE 6 ANNUAL ATTRIBUTION ANALYSIS: 2011–2020

Periods as of December 31, 2020

Mean Asset Allocation Return: Top Quartile versus Bottom Quartile*



Mean Return From Other Factors: Top Quartile versus Bottom Quartile*



* Performance quartiles are calculated separately for each fiscal year. Source: Foundation data as reported to Cambridge Associates LLC. **ASSET CLASS RETURNS.** The attribution analysis establishes that there can be wide differentials among foundations in the performance impact from the implementation of the portfolio. A key driver of these differentials is the relative returns that participants earn for the asset class strategies in their portfolios. More than 90% of respondents (102 of 112) provided asset class returns for at least a portion of their portfolio for calendar year 2020. The marketable asset class returns are reported as time-weighted returns, and the private investment data are horizon IRRs.

The average participant returns across asset classes follow a similar pattern to that of the index returns previewed earlier in this section. Among marketable asset classes, the highest average return was to US equity at 19.3% (Figure 7). For private investments, the highest average participant return was to VC at 38.0% (Figure 8). In both public and private categories, the lowest returns generally were to the real assets strategies which produced negative returns for most foundations in 2020. With the exception of public and private real estate, the range of returns from the 5th to 95th percentile across all asset classes was considerably wider compared to the previous year.



FIGURE 7 DISPERSION OF PARTICIPANTS' 1-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS Trailing 1-Yr as of December 31, 2020 • Percent (%)

*Graph is capped for scaling purposes. For the exact percentile ranges, see page 49 in the Appendix. Notes: For more information, see page 49 in the Appendix.





Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Private investment return statistics are reported as horizon IRRs. For more information, see page 49 in the Appendix.

Figure 9 breaks the participant group out into four quartiles based on the total portfolio return and shows the median marketable asset class returns for the foundations that fall within each respective quartile. Outperformance for foundations with the best total returns in fiscal year 2020 was not limited to a specific asset class. The top quartile of performers had the highest median return for most of the marketable asset class categories. For the total public equity composite, the median return for the top quartile of performers (19.8%) was 390 bps higher than that of the overall participant group (15.9%). The spread of 390 bps was the same for hedge funds, where the top quartile median return was 13.8% while the overall participant median was 9.9%. The magnitude of outperformance is notable considering that the average combined allocation to public equities and hedge represented more than half of the portfolio for top quartile foundations.

FIGURE 9 1-YR MEDIAN ASSET CLASS RETURNS BY TOTAL PERFORMANCE QUARTILE: MARKETABLE INVESTMENTS

Median Return	Total Public Equity	Global Equity Managers	US Equity	Devel Markets ex US Equity	Emerging Markets Equity	Bonds	Hedge Funds	Total Public Real Assets	Comm and Nat Res	Public Real Estate
Top Quartile	19.8	19.5	22.3	11.0	18.4	8.1	13.8	5.4	-1.2	-4.7
n	21	14	20	18	19	21	21	11	8	3
2nd Quartile	18.4	18.7	22.4	10.6	16.5	7.5	11.1	-3.6	-9.0	-8.4
n	27	19	26	26	25	26	26	16	14	4
3rd Quartile	15.6	9.1	19.1	11.7	11.7	5.3	6.6	-8.3	-5.7	-6.8
n	25	20	24	21	21	24	20	14	10	2
Bottom Quartile	13.5	5.8	16.9	10.5	15.7	6.3	9.4	-3.6	-3.2	-4.7
п	27	18	27	26	26	25	23	19	19	7
All Foundation Median	15.9	14.5	19.0	10.6	15.5	6.6	9.9	-3.2	-6.4	-5.8
п	100	71	97	91	91	96	90	60	51	16

Trailing 1-Yr as of December 31, 2020 • Percent (%)

Divergence of Asset Allocation from All Foundation Median

Median

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their calendar year 2020 total portfolio return.

-2%

-4%

As Figure 10 shows, top-performing foundations at the total return level also tended to outperform the rest of the participant group in PE/VC strategies. The top quartile's median return for the total PE/VC composite (39.2%) was 940 bps higher than the overall universe median return (29.8%). This magnitude of outperformance is also key to understanding why the top quartile of foundations outperformed on the total return level, as the average PE/VC allocation for this group represented nearly one-quarter of the overall portfolio. The private real asset strategies were the only categories where

2%

4%

the top quartile of foundations reported a median return that was lower than the overall universe. However, this was not as consequential on total portfolio comparative returns as these assets accounted for less than 5% of the average portfolio for top-performing foundations.

FIGURE 10 1-YR MEDIAN ASSET CLASS RETURNS BY TOTAL PERFORMANCE QUARTILE: PRIVATE INVESTMENTS

Trailing 1-Yr as of December 31, 2020 • Percent (%)

Median Return	Total Private Equity	Non-Venture Private Equity	Venture Capital	Total Private Real Assets	Private Real Estate	Private Natural Resources
Top Quartile	39.2	26.9	45.2	-14.3	-3.7	-15.2
n	19	16	17	13	17	17
2nd Quartile	32.6	18.8	46.4	-7.5	-0.6	-10.6
n	24	24	23	22	18	21
3rd Quartile	29.3	19.1	28.9	-10.7	-0.6	-15.2
n	17	16	16	15	12	14
Bottom Quartile	20.9	20.0	27.6	-0.9	3.4	-9.2
n	20	19	14	14	13	15
All Foundation Median	29.8	20.4	41.8	-8.5	-0.2	-12.6
n	100	71	97	91	91	96
	D	vivergence of As	set Allocatio	n from All Foun	dation Media	n

Source: Foundation data as reported to Cambridge Associates LLC.

-4%

Notes: Institutions are assigned to performance quartiles based on their calendar year 2020 total portfolio return. Private investment return statistics are reported as horizon IRRs.

Median

-2%

RETURN CALCULATION METHODOLOGIES. The methodology foundations use to account for private investments in their total portfolio return calculation is important to consider when evaluating investment performance over shorter time periods. The most frequently used approach among all participants was to report private investment returns on a current basis. The second-most frequently used methodology was the lagged basis.

Under the current basis, the total portfolio return incorporates all investment activity for private investments for the entire calendar year. In contrast under the lagged basis, private investment valuations lag other assets in the portfolio by one quarter. In essence, the private investment portion of the 2020 total return represents performance for the period of October 1, 2019, to September 30, 2020. When assessing the impact of these two methodologies, it is important to consider private investment returns for both fourth quarter 2019 and fourth quarter 2020. With the lagged basis methodology, performance for the former period will be included in the one-year total return calculation, and performance for the latter period will be excluded.

4%

2%

PERFORMANCE REPORTING METHODOLOGIES

Current Basis

Total investment pool return for trailing one-year period includes marketable asset performance and private investment performance for January 1, 2020, to December 31, 2020.

Marketable Assets										
1Q20	2Q20	3Q20	4Q20							
	Private	Investments								

Lagged Basis

Total investment pool return for the trailing one-year period includes marketable asset performance for January 1, 2020, to December 31, 2020, and private investment performance for October 1, 2019, to September 30, 2020.

4Q19	1Q20	2Q20	3Q20	4Q20

Methodologies Used by Participants

Asset Size	Current Basis	Lagged Basis	Other	No PI Allocation
Less than \$100M	61%	0%	0%	39%
n	17	0	0	11
\$100M – \$300M	100%	0%	0%	0%
n	29	0	0	0
\$300M – \$1B	87%	9%	0%	4%
<u>n</u>	20	2	0	1
More than \$1B	56%	41%	3%	0%
n	18	13	1	0
All Institutions	75%	13%	1%	11%
n	84	15	1	12

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Private investments include non-venture private equity, venture capital, distressed securities (private equity structure), private oil & gas/natural resources, timber, private real estate, and other private investments. Institutions with no significant private investment allocations (<1% of their total investment portfolios) are reflected in the right-hand column.

Private investment index returns for fourth quarter 2020 were significantly stronger than they were for the same quarter from one year prior (Figure 11). For foundations with large allocations to private investments, the lagged reported methodology will result in a lower total portfolio return compared to the current basis for calendar 2020. Among foundations with assets greater than \$1 billion, 41% (13 of 32) use the lagged basis of reporting. The current basis was used by nearly all participating foundations with assets less than \$1 billion with private investment allocations.

Another reporting issue that can impact peer returns is the method in which net returns are calculated. All except one participant in this study provided performance on a net-of-fee basis. Of the foundations that report net of fees, the vast majority (89%) deduct solely external manager fees in their net calculation (Figure 12). Another 8% of foundations deduct some investment oversight costs, but are gross of the major expense categories. The main drivers of these costs tend to be staff compensation for those institutions that have internal investment offices or consultant/advisor fees for those that rely heavily on external investment advisors. Just 3% of respondents deduct external manager fees plus all or most oversight costs, including the major cost drivers. The practice of deducting oversight costs is most likely to be carried out by larger foundations.



FIGURE 11 CAMBRIDGE ASSOCIATES' PRIVATE INVESTMENT INDEX RETURNS
Percent (%)

Source: Cambridge Associates LLC.

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





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). Institutions in the Some Oversight Costs category deduct external manager fees and some investment oversight costs, but are gross of the major cost drivers.

LONGER-TERM RETURNS

The average foundation return was 7.7% for the trailing ten-year period. A simple benchmark consisting of 70% MSCI ACWI and 30% Bloomberg Barclays Aggregate Bond outperformed the mean return by 40 bps over this period and would have landed just outside the top quartile of the overall participant group. The simple benchmark outperformed the average foundation return by 50 bps for the trailing three-year period and 70 bps for the trailing five-year period (Figure 13).



Source: 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 50 in the Appendix.

Foundations greater than \$1 billion reported the highest average return out of all the asset size groups for the trailing three-, five-, and ten-year periods (Figure 14). Compared to the 70/30 simple benchmark, the average return of the largest foundations was 80 bps higher over both the trailing three- and ten-year periods. For the trailing five years, the average return of the largest foundations equaled the return of the simple benchmark.

FIGURE 14 RETURNS BY ASSET SIZE: TRAILING 3-, 5-, AND 10-YR

Years Ended December 31, 2020 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 50 in the Appendix. Figure 15 shows the rolling average ten-year return for the overall participant group over the last decade along with the simple 70/30 returns. The average foundation return for the ten-year period ending December 31, 2020 was the third highest reported from the last decade and the return for the simple benchmark was the second highest for that series. From a comparative standpoint, 2020 was the third straight year in which that the ten-year average participant return underperformed the simple 70/30 benchmark. In the next part of this section, we will examine the portfolios of the top quartile foundations—all of which outperformed the simple benchmark over the last decade—and contrast them with the rest of the participant group.



FIGURE 15 ROLLING 10-YR AVERAGE ANNUAL COMPOUND RETURNS Years Ended December 31 • Percent (%) • n = 60

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.

TEN-YEAR ASSET ALLOCATION. Almost all foundations in this study have diversified beyond a simple 70/30 portfolio to some degree and into what are considered alternative asset classes. Assessing the returns of alternative asset strategies is important when evaluating the overall performance of foundations relative to the simple benchmark. The US public stock market has accounted for more than half of the equity component (MSCI ACWI) in the 70/30 index in recent years and has been the primary driver of this the simple portfolio's return over the last decade. Yet the Cambridge Associates US Private Equity and US Venture Capital indexes performed even better for the trailing ten years, posting a higher return than the mPME version of the S&P 500 Index over this period. The global ex US PE and VCl indexes also performed significantly better than the mPME index that represents global stock market performance outside the United States.

This market backdrop helps to shed light on the differences in asset allocations among participants over the last decade and the impact on comparative returns. The top quartile of performers, all of which outperformed the 70/30 benchmark, had an average allocation of 20.0% to PE/VC over this period. In contrast, endowments in the bottom performance quartile had an average allocation of 4.7% to these strategies (Figure 17). The second-largest differential was to bonds, where the average allocation for top performers (7.2%) was less than half of the average for the bottom quartile of performers (15.6%).

FIGURE 16 10-YR INDEX RETURNS

As of December 31, 2020 • Percent (%)



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

Quartile	US Equity	DM ex US Eqty	EM Equity	Bonds	Hedge Funds	Dist Sec	PE/VC	Priv RA	Pub RA & ILBs	Cash	Other
Top Quartile	18.3	11.0	8.0	7.2	16.2	3.0	20.0	8.3	2.7	5.0	0.3
2nd Quartile	21.7	15.0	7.3	10.7	17.5	3.3	11.8	5.7	3.9	2.8	0.2
3rd Quartile	21.7	15.5	7.0	13.0	16.9	3.4	9.1	3.4	6.1	3.9	0.1
Bottom Quartile	21.8	17.0	7.7	15.6	16.9	2.4	4.7	2.2	6.5	4.1	1.0
All Foundation Mean	20.9	14.6	7.5	11.6	16.9	3.0	11.4	4.9	4.8	4.0	0.4

FIGURE 17 10-YR MEAN ASSET ALLOCATION BY PERFORMANCE QUARTILE Percent (%) • n = 71

Divergence of Asset Allocation from All Foundation Mean

-4%	-2%	Mean	2%	4%

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Asset allocation is averaged across the 11 December 31 periods from 2010 to 2020 for each institution in this analysis.

ATTRIBUTION. The attribution model further illustrates the impact of different asset allocation structures on the trailing ten-year return. The average asset allocation return over this period for the top quartile of performers was 8.5% (Figure 18). For the bottom quartile of performers, the average asset allocation return was 200 bps lower at 6.5%. The top quartile of performers also added an average of 120 bps in value from other factors—mainly implementation decisions—while the bottom quartile of performers lost an average of 30 bps.





As of December 31, 2020 • Percent (%) • n = 71

ASSET CLASS RETURNS. The range of participants' trailing ten-year asset class returns for marketable asset class strategies are displayed in Figure 19. The total public equity composite return averaged 9.5%, with US equity have the highest average among the geographic regions (13.3%). On average, the hedge fund composite return was 4.7% while bonds was slightly lower (3.6%). The average total public real assets composite, which is a combination of several substrategies, was negative (-2.4) for the trailing ten-year period. Commodities and natural resources–related investments typically make up the largest component of public real assets allocations and was also negative (-3.7%), on average.





Source: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 51 in the Appendix.

Source: Foundation data as reported to Cambridge Associates LLC.

Within private investment strategies, the average participant return over the last decade to the total private equity composite was 15.1% (Figure 20). The average return for venture capital (14.7%) was just slightly higher than for non-venture private equity (13.6%). However, the relatively small spread between these two categories was attributable to a handful of outliers at the bottom end of the venture capital distribution which dragged the average return for that category down. When comparing percentile statistics, the median participant return for venture capital (18.0%) was actually higher than the top quartile return for non-venture private equity (16.2%).

FIGURE 20 DISPERSION OF PARTICIPANTS' 10-YR ASSET CLASS RETURNS: PRIVATE INVESTMENTS

Trailing 1-Yr as of December 31, 2020



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Private investment return statistics are reported as horizon internal rates of return. For more information, see page 52 in the Appendix.

In Figure 21, the participant group is again broken out into four quartiles based on the ten-year total portfolio return. The table shows the median asset class returns for the foundations that provided data for this same period. Foundations in the top quartile based on total returns outperformed the overall participant group median in most of the marketable asset classes.

The top-performing foundations also outperformed other participants in most private investment asset classes. The median IRR for the top quartile of performers for total private equity (17.2%) was 230 bps higher than that of the overall participant group (Figure 22). When considering the higher allocations that this group has to private investments, the magnitude of outperformance in these categories was a key factor in explaining how the top quartile of performers stood out from other foundations over the last decade.

FIGURE 21 10-YR MEDIAN ASSET CLASS RETURNS BY TOTAL PERFORMANCE QUARTILE: MARKETABLE INVESTMENTS

Median Return	Total Public Equity	Global Equity Managers	US Equity	Devel Markets ex US Equity	Emerging Markets Equity	Bonds	Hedge Funds	Total Public Real Assets	Comm and Nat Res	Public Real Estate
Top Quartile	9.9	11.5	13.5	7.6	4.8	3.3	5.3	2.9	1.0	7.6
п	18	4	13	12	13	16	16	5	3	2
2nd Quartile	9.6	11.1	14.0	6.6	4.3	3.9	4.4	-2.6	-6.1	10.0
п	20	6	18	17	15	19	18	9	9	1
3rd Quartile	9.6	9.1	13.6	6.5	2.6	3.2	4.4	-4.2	-5.7	8.7
п	24	5	23	20	18	21	18	15	11	1
Bottom Quartile	8.9	6.9	13.0	6.1	3.5	3.5	4.6	-2.0	-2.2	
n	22	5	21	21	19	20	17	12	10	0
All Foundation Median	9.4	10.3	13.5	6.5	3.9	3.5	4.7	-2.5	-4.3	8.5
n	84	20	75	70	65	76	69	41	33	4

Trailing 10-Yr as of December 31, 2020 • Percent (%)

Divergence of Asset Allocation from All Foundation Median

4%	-2%	Mediar	า	2%	4%	

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Institutions are assigned to performance quartiles based on their total portfolio return for the ten-year period ending December 31, 2020.

FIGURE 22 10-YR MEDIAN ASSET CLASS RETURNS BY TOTAL PERFORMANCE QUARTILE: **PRIVATE INVESTMENTS**

Trailing 10-Yr as of December 31, 2020 • Percent (%)

Median Return	Total Private Equity	Non-Venture Private Equity	Venture Capita	Total Private Il Real Assets	Private Real Estate	Private Natural Resources
Top Quartile	17.2	12.9	20.2	6.1	10.6	-1.2
п	15	13	12	12	15	12
2nd Quartile	14.7	12.4	18.0	3.1	8.9	0.9
п	16	17	15	13	14	16
3rd Quartile	15.3	13.5	17.6	3.3	10.0	0.6
п	16	15	11	13	11	11
Bottom Quartile	13.9	11.3	16.8	3.3	10.9	-2.3
п	12	11	11	8	6	7
All Foundation Median	14.9	12.5	18.0	3.3	9.8	-0.6
п	62	58	50	48	47	48
		Divergence o	of Asset Allocatio	on from All Founda	ation Median	
	-4%	-2%	% N	Median	2%	4%

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Institutions are assigned to performance quartiles based on their total portfolio return from the ten-year period ending December 31, 2020. Private investment return statistics are reported as horizon IRRs.



RETURNS AFTER SPENDING. A common objective when managing a long-term pool of capital is to preserve the purchasing power of the pool. To achieve this goal a foundation must earn a return that offsets or exceeds its spending rate and the inflation rate. Most of the foundations in this study that provided returns and spending rates over the last decade have fared well in this objective. The average real return after spending was 1.3% over the trailing ten-year period, with 90% of responding foundations reporting a positive return (Figure 23).

FIGURE 23 10-YR REAL RETURNS AFTER SPENDING

As of December 31, 2020 • Percent (%) • n = 20



RISK-ADJUSTED RETURNS. Risk-adjusted performance is important to evaluate, as it measures the total return relative to the total amount of risk taken by the portfolio. The most common approach to measuring risk-adjusted performance is by the Sharpe ratio, which shows how much return above the risk-free rate (T-bills) the investor has earned per unit of risk (defined as the standard deviation of returns). The higher the Sharpe ratio, the more the investor has been compensated for each unit of risk taken.

Risk-adjusted performance comparisons can be complicated when portfolios have significant allocations to private investments. The frequency and timing of private investment valuations can lead to a lower standard deviation for the returns of these assets. Thus, a portfolio with high allocations to private investments can yield a lower volatility statistic relative to portfolios that have higher public equity allocations. For this reason, we have split foundations out into subcategories in Figure 24 based on their allocations to private investments.

The average Sharpe ratio for foundations that had an allocation of 20% or more to private investments over the last ten years was 0.98. In comparison, the average Sharpe ratio was 0.70 for participants that had a private allocation between 10% and 20% and 0.62 for those with a private allocation below 10%. Although the better Sharpe ratio for the group with the highest private allocations is partly a function of this group's higher average returns, it is also attributable to their lower average standard deviation.



FIGURE 24 10-YR STANDARD DEVIATION AND SHARPE RATIO Periods Ended December 31, 2020

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.

Section 2: Investment Policy

An investment policy provides guidelines for trustees, investment committee members, investment staff, advisors, and other relevant parties that are involved in the foundation'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 that are related to foundation investment policies and the following section summarizes these responses.

RETURN OBJECTIVE

Most foundations in this study are private non-operating 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 this 5% spending 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 each and every year. Among participants reporting a real return objective, almost two-thirds of foundations reported that their real return objective was 5%. Another one-third of participants have a real return objective above 5%, while just one community foundation reported an objective below 5% (Figure 25).





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 chosen categories and targets are based on the portfolio's risk tolerance, liquidity needs, and performance objectives. In this year's survey, we asked foundations to provide the asset classes categories used in their asset allocation policy.

There are differences in the policy frameworks reported among respondents, with some foundations using more detailed categories than others. This is most evident in equity categories, where there are contrasting approaches to the inclusion of geographic regions and private investments into the policy framework. The level of granularity used in the asset allocation framework should be determined by the overall investment approach and how much latitude is given to those responsible for implementing the portfolio. A broader framework is appropriate where there is a more opportunistic strategy that allows the management team wider latitude in implementing the portfolio.

A broad approach was reported by nearly half of respondents for public equities, with 48% of respondents reporting a single category that captures their entire public equity allocation (Figure 26). The next most common approach (27%) was to assign separate targets based on geographic regions to US, global ex US developed, and emerging markets categories. The remaining 25% or respondents use some other combination of categories. Most of the foundations in this last group use the aforementioned geographic categories as well as a dedicated global category.





Source: Foundation data as reported to Cambridge Associates LLC.

Approximately two-thirds (65%) of foundations have a dedicated target to private equity and venture capital in their asset allocation policy. Most of these institutions with a dedicated PE/VC target use a single category for the combined allocations, while a smaller proportion assigns a target for non-venture private equity and a separate target for venture capital. Another 25% of respondents use a private investments category which combined PE/VC together with other private strategies. The remaining 10% respondents use a single equity category to capture public equity and PE/VC together in their target asset allocation framework.

POLICY PORTFOLIO BENCHMARKS

When done well, benchmarking is all about answering the question, "How are we doing?" in ways that are both accurate and relevant to the objectives of the portfolio being measured. The comparison of a foundation's return to its policy portfolio benchmark is the best measure to evaluate whether the portfolio is being successfully implemented according to its investment policy. The policy benchmark is typically a blend of indexes that represent the desired portfolio risk exposures without any expression of more active alternatives.² Measuring performance relative to the policy benchmark captures the impact not only of manager selection decisions, but also the differences between the portfolio's actual asset allocation and the target asset allocation policy.

Performance results of peers can be informative, but they are not necessarily the most effective benchmark for evaluating a foundation's investment performance. Despite the 5% payout requirement that most respondents must abide by, differing objectives on how much to spend, as well as other factors can lead to different asset allocation policies among foundations. The difference in asset allocation structures among foundations can translate to different performance objectives and results as defined by the policy portfolio benchmark return. Figure 27 shows the range of policy benchmark returns among the respondent group for select trailing periods. For 2020, the difference in policy benchmark returns from the 5th percentile to the 95th percentile was a whopping 810 bps. The range between the same percentiles was 320 bps and 370 bps for the trailing five- and ten-year periods, respectively.



FIGURE 27 DISPERSION IN POLICY PORTFOLIO BENCHMARK RETURNS Periods as of December 31, 2020 • Percent (%)

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

For the trailing ten-year period, the range of actual foundation returns from the 5th to 95th percentile (430 bps) was similar to the range of of policy benchmark returns (370 bps). Foundations at the bottom end of the policy benchmark return distribution for

2 In certain alternative asset classes, there are often no investable proxies and other types of benchmarks are used.



this period did not have portfolios that were as well positioned from an asset allocation perspective to outperform other peers over the last decade. It is possible for a foundation to underperform the peer group median, but still outperform its policy benchmark return. In fact, as illustrated in Figure 28, 20% of respondents experienced this exact scenario for the trailing ten-year period.



FIGURE 28 EVALUATING INVESTMENT PERFORMANCE: 10-YR RETURN VS POLICY BENCHMARK AND FOUNDATION MEDIAN RETURN

Source: Foundation data as reported to Cambridge Associates LLC.

A majority (57%) of respondents outperformed their policy benchmark return for this trailing ten-year period. The median spread between the actual ten-year return and the policy benchmark return was 0.2 ppts (Figure 29). The median spread was -0.1 ppts for the trailing five-year periods, which means a majority of the peer group underperformed their policy benchmark for that period. For calendar year 2020, the median spread was positive (0.8 ppts) and the full range from the 5th to 95th percentile was much wider compared to the trailing five- and ten-year periods.

POLICY PORTFOLIO BENCHMARK COMPONENTS. More than 90% of the respondents that provided a policy portfolio benchmark use a detailed, asset class–specific benchmark to evaluate the performance of the total portfolio. The remaining foundations use a simple benchmark that typically incorporates a broad-based equity market index and a bond index weighted in proportion to the overall risk profile of the portfolio. The analysis that follows includes only the data of the respondents that use a detailed policy portfolio benchmark.

FIGURE 29 RANGE OF OUT/UNDERPERFORMANCE OF TOTAL RETURN VS POLICY PORTFOLIO BENCHMARK

As of December 31, 2020 • Percentage Points



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.

The components of a detailed policy benchmark usually align with the asset classes or categories stated in the portfolio's asset allocation policy. Since policy allocations can be set at varying levels of granularity, approaches to benchmarking vary among institutions. One area where this is noticeable is in the benchmarking of public equities, where slightly less than half (45%) of foundations use a global equity index for all or most of their public equity allocation. The use of the MSCI ACWI for the entire public equity allocation was by far the most common approach for this group of foundations. A couple of respondents used a combination of the MSCI World Index, which represents global developed markets, and the MSCI Emerging Markets Index (Figure 28).

Among the foundations that use more granular public equity indexes based on geographic orientation, the Russell 3000[®] Index was cited by 62% for US equity. For global ex US equities, 76% of respondents used a blend of the MSCI EAFE and MSCI Emerging Markets indexes. This approach is appropriate for foundations that have separate targets to global ex US developed and emerging markets, particularly if the targets are out of proportion to the weightings of the MSCI ACWI ex US Index.

The use of a public index(es) is the most common practice for benchmarking private equity in the policy portfolio benchmark, as 57% of respondents use the actual public index return. Another 11% add a prespecified percentage or premium to the public index return. The Cambridge Associates private indexes were cited by 24% of respondents, while 8% of foundations used the actual private equity portfolio return in the policy benchmark. The approach of using the actual private returns effectively neutralizes the performance of the private allocation in the benchmark calculation and can be appropriate for foundations with immature private investment programs that are deep in the J-curve effect.

FIGURE 30 FREQUENTLY USED COMPONENTS OF POLICY PORTFOLIO BENCHMARKS: PUBLIC EQUITY

As of December 31, 2020

Institutions That Use a Global Index for All or Most of the Public Equity Allocation (n = 41)



Institutions That Use Separate Geographic Indexes for the Public Equity Allocation (n = 50)



Percentage of Institutions

Source: Foundation data as reported to Cambridge Associates LLC.

FIGURE 31 FREQUENTLY USED COMPONENTS OF POLICY PORTFOLIO BENCHMARKS: PRIVATE EQUITY

As of December 31, 2020 • n = 79



Source: Foundation data as reported to Cambridge Associates LLC.

The use of solely the Bloomberg Barclays Aggregate Bond Index was the most common benchmarking approach for bonds and was reported by 38% of foundations (Figure 32). However, many respondents use unique index combinations to better reflect their underlying bond exposure. Often in practice, benchmarks depend on whether allocations are made domestically or globally, as well as the type of issuer (sovereign versus corporate or both). Some foundations also used indexes that only include bonds of a certain range of maturities. In hedge funds, most respondents use an HFRI index for hedge funds, with the Fund-of-Funds Diversified Index being the most common. For real assets, benchmark combinations are unique across most participants due to the wide variety of strategies employed under this category.

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

As of December 31, 2020

Bonds (*n* = 90)



Percentage of Institutions

Source: Foundation data as reported to Cambridge Associates LLC.



Section 3: Portfolio Asset Allocation

Nearly half (47.4%) of the average long-term investment portfolio (LTIP) consisted of public equities at December 31, 2020. On average, the allocation to US equities (25.0%) was slightly higher than global ex US equities (22.4%). Portfolios continue to have significant exposure to alternative assets, with 16.3% allocated to private equity and venture capital and 13.2% allocated to hedge funds, on average. Another 2.1% was allocated, on average, to distressed securities, which are invested through either a hedge fund or private equity–type investment vehicle. Real assets, which consist of a diversified group of public and private assets, made up 6.1% of portfolios, on average. Average allocations to bonds and cash were 10.9% and 3.7%, respectively (Figure 33).





As Figure 34 shows, allocations to some of these broad asset classes vary considerably. A key factor in the variation of asset allocations continues to be the total value of assets under management. Portfolios with asset sizes less than \$100 million continue to maintain higher allocations to traditional bonds and equities, while those with assets greater than \$1 billion have the highest allocations to alternative assets. The differences are most noticeable in the breakdown of public equity versus private equity. The smallest foundations in this study had an average allocation of 55.4% to public equity, while the largest foundations had an average of 38.3%. For private equity and venture capital, the largest foundations had an average allocation of 24.9%, while the smallest foundations had an average allocations for a more granular asset allocation framework are included in the appendix of this report.

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

FIGURE 34 MEAN ASSET ALLOCATION BY ASSET SIZE

As of December 31, 2020 • Percent (%)

Asset Size	US Equity	Global ex US Equity	Bonds	Hedge Funds	Distressed Securities	PE & VC	Real Assets & ILBs	Cash & Equivalents	Other
Under \$100M	30.0	25.4	15.4	11.7	1.0	7.8	4.4	3.6	0.7
n = 28 \$100M - \$300M n = 29	26.6	22.9	10.8	14.7	2.3	13.7	5.3	3.3	0.3
\$300M – \$1B n = 23	26.4	20.9	11.7	10.2	2.5	17.8	6.0	3.9	0.5
Over \$1B <i>n</i> = 32	18.0	20.3	6.4	15.2	2.7	24.9	8.2	4.2	0.2
All Foundation Mean <i>n</i> = 112	25.0	22.4	10.9	13.2	2.1	16.3	6.1	3.7	0.4
				Diverge	nce from All	Foundatio	n Mean		
			-4%	-2%	Mean	20	%	4%	

Sources: Foundation data as reported to Cambridge Associates LLC. Note: For more information, see page 55 in the Appendix.

HISTORICAL ASSET ALLOCATION

Institutional investors that have adopted the "endowment model" of investing have seen significant shifts in their asset allocation policies over the last few decades. Exposure to bonds has decreased while the larger equity allocation has become more diversified. The largest endowments and foundations pioneered this transition in the 1980s, with the trend spreading among other institutions in the 1990s and then accelerating throughout much of the first decade of the new millennium. By 2010, most foundations in this study had already built diversified portfolios with significant allocations to alternative assets.

Figure 35 picks up at the end of 2010 and shows how average asset allocations have changed for participating foundations over the last ten years. The biggest change across the asset allocation framework was to PE/VC, which increased by an average of 8.8 ppts over the decade. The greatest extent of this change has occurred since 2017 and is a result of a couple of factors. First, the average target allocation to private equity and venture capital has steadily increased over the last several years. Second, strong performance relative to other asset classes, particularly in calendar year 2020, has led to these strategies consuming a larger piece of the pie in terms of portfolio allocations.

Across the rest of the framework, average allocations to US equity also increased considerably (4.0 ppts) with most of the increase occurring in the last two years. The largest decrease was to real assets, which declined by 6.3 ppts, on average. Other notable decreases were to hedge funds (-4.4 ppts) and bonds (-2.2 ppts).



FIGURE 35 HISTORICAL MEAN ASSET ALLOCATION TRENDS

Years Ended December 31, 2020 • Percent (%) • n = 71

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

Foundations of various asset sizes followed the same overall trends (Figure 36). Each asset size group saw significant increases to PE/VC, with foundations between \$300 million and \$1 billion reporting the highest average increase (11.8 ppts). Among US equities, each of the asset size groups under \$1 billion reported average increases of at least 5.0 ppts. All asset size groups reported decreases to real assets and hedge funds, while all except for the smaller foundations reported a decrease to bonds.

FIGURE 36 TRENDS IN ASSET ALLOCATION BY ASSET SIZE

Means as of December 31. 2020 • Percent (%)

Thearis as of December 31, 2	US	Global	ex US		Hedge	Dist	Dist		Cash
	Equity	Dev	EM	Bonds	Funds	Sec	PE/VC	& ILBs	& Equiv
Under \$100M (n = 17)									
2010	21.9	16.4	5.6	16.7	17.8	1.8	4.8	10.9	3.3
2020	27.0	18.8	6.9	17.2	10.1	1.0	9.9	4.9	3.8
Change (ppt)									
2010-2020	5.0	2.4	1.3	0.5	-7.7	-0.8	5.1	-6.0	0.5
\$100M to \$300M (n = 17))								
2010	21.2	16.4	5.9	14.6	16.5	3.6	6.7	11.2	3.9
2020	27.3	13.2	7.2	10.7	15.9	2.6	14.0	5.2	3.8
Change (ppt)									
2010-2020	6.1	-3.3	1.3	-3.9	-0.6	-1.0	7.3	-6.0	-0.1
\$300M to \$1B (n = 13)									
2010	21.1	15.9	6.4	15.3	18.6	4.0	3.6	13.2	1.6
2020	27.3	13.7	8.6	11.2	11.3	2.7	15.4	5.7	3.6
Change (ppt)									
2010-2020	6.2	-2.2	2.2	-4.1	-7.3	-1.3	11.8	-7.4	2.0
Over \$1B (n = 24)									
2010	17.4	10.4	7.9	8.7	18.7	4.0	15.5	13.2	4.0
2020	18.1	11.4	7.8	6.7	15.6	2.9	26.4	7.1	3.8
Change (ppt)									
2010-2020	0.7	1.0	-0.1	-2.0	-3.2	-1.1	10.9	-6.1	-0.2
			Change ir	n Mean Asse	et Allocatio	on from 201	L0 to 2020		
-4	4% or lower	-3%	-2%	-1%	0%	1%	2%	3%	4% or higher

Source: Foundation data as reported to Cambridge Associates LLC.

TARGET ASSET ALLOCATION

Target asset allocation data can be insightful for evaluating whether foundations are altering their long-term asset allocation policies going forward. Our survey requests that participants provide their asset allocation policy exactly as stated in their investment policy statements. While there are differences in how policy frameworks are structured across institutions, we can make some general observations as to where foundations are tilting toward increasing or decreasing their allocations in the future.

The trend in target asset allocations for calendar year 2020 was mostly similar those that have been reported in recent years. Over the last year, 21% of foundations have increased their target allocation to private equity and venture capital (Figure 37). Just 3% of respondents have decreased their target to this category. The trend was the opposite for hedge funds, where 23% of foundations have lowered their target and just 4% reported an increase. Similarly in real assets, 22% of foundations reported a decrease to their target allocation in 2020, while not one reported an increase. For both total public equities and bonds & cash, the proportion of foundations reporting an increase was higher than the proportion reporting a decrease.



FIGURE 37 CHANGES IN TARGET ASSET ALLOCATION

December 31, 2019 - December 31, 2020 • Percentage of Institutions Increasing or Decreasing Targets

¹ Total public equity excludes institutions that combine public equity together with PE/VC in a single equity category. ² Private equity/venture capital includes institutions that include PE/VC together with private real assets in a single private investments category.

Source: Foundation data as reported to Cambridge Associates LLC.

PRIVATE INVESTMENTS AND UNCALLED CAPITAL COMMITMENTS

One of the core principles of the "endowment model" 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 equities. Participating foundations have been allocating an increasingly significant portion of their portfolios to these assets. For the constant group of participants that have provided data for the last ten years, the average asset allocation to private investments has increased from 13.4% to 22.8% over this past decade.

Investors should be mindful of the liquidity implications of investing in and funding a private investments program. Uncalled capital represents a commitment of capital to be funded in the future. Although annual spending distributions usually represent the biggest liquidity need of a portfolio, foundations with private investment programs must also consider the potential impact of uncalled capital commitments.

Some foundations have long had significant allocations to private investments while others have just recently begun to invest in these assets. Therefore, the amount of uncalled capital commitments as a percentage of the total LTIP varies widely among participating foundations. However, the median ratio for year-end 2020 across the various asset size group was quite similar (Figure 38). Foundations between \$300 million and \$1 billion had the highest median ratio (12.4%) while the smallest foundations had the lowest (8.9%).

FIGURE 38 UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of December 31, 2020 • Percent (%)



As a Percentage of the Total LTIP

As a Percentage of the Total LTIP's Liquid Assets

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

Differences between the asset size groups begin to show when considering the ratio of uncalled capital commitments to the LTIP's total liquid assets, which exclude hedge funds and private investments. The largest foundations have historically had the lowest allocations to traditional strategies and have a lower asset base proportionally when it comes to looking at this second ratio. For foundations greater than \$1 billion, the median ratio of uncalled capital commitments-to-liquid assets was 24.8%. In contrast, the median ratio was 13.4% for foundations with assets less than \$100 million.

Figure 39 shows the trend over the last five years for these two ratios. While neither trend has followed a linear pattern from the beginning to ending points of the period, the ratios are higher at the end of 2020 than they were five years prior for most foundations. This is a result of uncalled capital commitments growing at a higher rate than the value of the LTIP and its liquid assets. Among all foundations in this analysis, the median dollar amount of uncalled capital commitments increased by 44% over the last five years. Over this same period, the median change in the market value of the LTIP and the portfolio's liquid assets were 27% and 23%, respectively.

FIGURE 39 TREND IN UNCALLED CAPITAL COMMITMENTS TO PRIVATE INVESTMENT FUNDS

Years Ended December 31 • Percent (%)



Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Uncalled capital is the amount committed, but not yet paid in, to private investment funds. Liquid assets consist of all LTIP assets excluding hedge funds and private investments.

Despite the strong performance of private investments in 2020, most foundations (55%) reported that their private investment programs were cash flow negative for the year (Figure 40). This is likely because foundations have been ramping up their private investment allocations, resulting in a phase where paid-in capital was higher than fund distributions. The exception to this was among foundations greater than \$1 billion, which tend to have more mature private programs compared to the rest of the participant group. For this group of largest foundations, 62% reported that their private investment programs were cash flow positive. For foundations whose private investment fund distributions are not enough to offset new capital calls, the remaining funding of capital calls must come from cash reserves or other liquidity sources, which could include proceeds from sales of other investment assets in the LTIP.

FIGURE 40 PRIVATE INVESTMENT PROGRAM CASH FLOW BY ASSET SIZE As of December 31, 2020



Was Your Private Investment Program Cash Flow Positive in 2020?

Note: Private investment fund programs were considered cash flow positive if fund distributions were higher than paid-in capital calls in 2020.



Source: Foundation data as reported to Cambridge Associates LLC.

Secton 4: Investment Manager Structures

NUMBER OF EXTERNAL MANAGERS

Many factors contribute to the number of managers employed within an investment portfolio. The scale of total assets under management is a primary factor, as portfolios with more assets generally spread their assets across a greater number of managers. On average, foundations with assets greater than \$1 billion employed 96 external investment managers in 2020 (Figure 41). At the opposite end of the asset size spectrum, foundations with assets less than \$100 million averaged just 22 managers.

FIGURE 41 NUMBER OF EXTERNAL MANAGERS





Notes: Funds-of-funds are counted as one separate investment manager. For more information, see page 56 of 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 (30) is more than double the number used at the 75th percentile (12). For portfolios greater than \$1 billion, 168 managers are employed at the 5th percentile compared to just 28 at the 95th percentile. Much of the variation can be attributed to the management of alternative asset classes. As Figure 42 shows, the dispersion in the number 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 four broad asset size groups in the Appendix of this report.

ASSET CLASS IMPLEMENTATION

HEDGE FUNDS. There are two primary types of investment vehicles that foundations use when implementing their hedge funds 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. Figure 43 shows the average breakdown of hedge funds allocations across the two implementation categories. While single manager funds make up most hedge fund allocations for all asset size groups, foundations less than \$300 million tend to have the highest exposure to fund-of-funds managers.

FIGURE 42 DISPERSION IN NUMBER OF MANAGERS FOR SELECTED ASSET CLASSES

As of December 31, 2020



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 56 in the Appendix.

FIGURE 43 PORTFOLIO IMPLEMENTATION: HEDGE FUNDS



As of December 31, 2020 • Equal-Weighted Means (%)

Single Manager Funds Fund-of-Funds

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.

PRIVATE INVESTMENTS. Single manager funds and fund-of-funds are also common investment vehicles used to implement private investment allocations. In addition, some foundations use direct investments to implement some of their private investment allocations. Direct investments can take the form of co-investments that are made along-side a general partner or solo investments that are originated by the foundation itself.

Compared to hedge funds, implementation practices are more varied across private investment asset classes. The average breakdown of allocations by implementation category shows how experiences differ by asset size. Once again, the largest foundations primarily use single manager funds while the use of fund-of-funds is more common among foundations less than \$1 billion (Figure 44). Interestingly, foundations less than \$100 million in this study are less reliant on fund-of-funds for their private investment allocations compared to those with assets between \$100 million and \$300 million.

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. The use of these implementation methods is most common among the foundations greater than \$300 million.

FIGURE 44 PORTFOLIO IMPLEMENTATION: PRIVATE INVESTMENTS







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.

When considering the average breakdown of US equity allocations, most assets are invested via active managers (Figure 45). The proportion of assets 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 even higher. Similar to US equity, the proportion of assets invested through active managers varies little when looking across asset size groups.

Passive management tends to be more common among bonds than it is in the public equity categories. For the three asset size subgroups less than \$1 billion, approximately one-third of the average allocation is implemented passively. The proportion is lower for larger foundations, where an average of 19.6% of the bond allocation is invested through passive funds.



FIGURE 45 PORTFOLIO IMPLEMENTATION: TRADITIONAL EQUITIES AND BONDS As of December 31, 2020 • 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 non-operating. Though both must meet an annual spending requirement, each is subject to different conditions that determine the minimum spending amount.

PRIVATE NON-OPERATING FOUNDATIONS. Private non-operating 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 established not 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 related to charitable purposes. The payout rate in this study is calculated as the total spending from the long-term investment portfolio for the year as a percentage of the portfolio's beginning year market value.

For the 47 private non-operating foundations that provided data in 2020, the median payout rate was 5.1%. When looking at a constant universe of 20 foundations that provided data from 2011 to 2020, the median payout for 2020 was down slightly from 2019 (Figure 46).

COMPONENTS OF PAYOUT. Figure 47 takes a detailed look at the different components that comprise the annual payout distribution for private non-operating foundations. Grants are the single largest component of annual payout, making up an average of 78%. Administrative expenses were the next largest component, representing about 15% of total payout.

FIGURE 46 MEDIAN ANNUAL PAYOUT RATE



Source: Foundation data as reported to Cambridge Associates LLC.

Note: Data represent the average of 20 private non-operating foundations that provided payout rates for each year from 2011 to 2020.



FIGURE 47 COMPONENTS OF PAYOUT DISTRIBUTION

Source: Foundation data as reported to Cambridge Associates LLC. Note: Analysis included data for 41 private non-operating foundations.

PAYOUT OBJECTIVES

Of the 49 private non-operating foundations that provided information about their payout objective, 41% indicated that their objective is to pay out a maximum of the legal requirement. An additional 29% reported an objective of paying out slightly more than the legal requirement, 12% had an objective shaped mainly by program goals, and 18% reported their objective was something other or a combination of the aforementioned objectives (Figure 48).

SMOOTHING RULE. In an effort to avoid fluctuations in their annual spending budget, some foundations will employ a smoothing rule, usually spending a targeted percentage of a moving average of market values. This helps to bring a level of stability to annual spending distributions, allowing foundations to better forecast future

expenditures without the risk of compromising the long-term viability of the portfolio. Foundations have some flexibility in managing the annual distributions required by the IRS. In years where qualified distributions are less than 5%, foundations have one year to spend any undistributed amounts. In addition, carryover credits are created by having qualified distributions for a taxable year that exceed the required spending amount. These credits can be applied to spending requirements in any of the next five years from when they are created.

Of the 49 private non-operating foundations that provided information on their payout objectives, just 21 indicated that they use of a market value—based smoothing rule to help contain year-to-year spending. A target spending rate of 5.0% was used by two-thirds of these foundations, while the remaining foundations reported a target rate above 5.0%. Smoothing periods ranged from three to five years.



FIGURE 48 PAYOUT POLICY OBJECTIVES FOR PRIVATE NON-OPERATING FOUNDATIONS 2020 • n = 49

Source: Foundation data as reported to Cambridge Associates LLC.



Section 6: Investment Office Staffing and Governance

STAFFING AND OUTSIDE RESOURCES

The primary mission of an investment office is to assume day-to-day responsibility for the foundation's investment assets. This mission will be defined by the set of functions that internal investment office staff will carry out or oversee. Since both the investment philosophy and the demands on the office will vary among foundations, each office will have its own unique profile. Therefore, when evaluating the current structure or anticipated growth of an investment office, it is important to consider not only the size of the asset base, but also the portfolio complexity (whether handled by internal or external resources), the secondary demands on the staff (i.e., treasury functions), the usage of outside consultants or advisors, and the level of involvement by boards and committees. Both the number of internal professional investment staff and the depth of specialization required to successfully manage the asset base will fluctuate based on these characteristics.

CHIEF INVESTMENT OFFICER. The presence of a dedicated chief investment officer (CIO) correlates with asset size and is most common at larger foundations. Nearly all (94%) of the respondents with assets greater than \$1 billion have a full-time CIO, while 50% of respondents with assets between \$500 million and \$1 billon indicated they had a CIO in place. The percentage is much lower for foundations less than \$500 million, where only 20% of respondents have a CIO. Where there is a CIO, it is most common for the position to report directly to the CEO or president of the foundation (Figure 49).

FIGURE 49 CHIEF INVESTMENT OFFICER REPORTING LINES

Calendar Year 2020 • n = 22



Source: Foundation data as reported to Cambridge Associates LLC.

INVESTMENT OFFICE STAFFING AND GOVERNANCE RESPONSES

Forty-two foundations responded to this section of our survey including 12 foundations with assets greater than \$3 billion, 8 that fall between \$1 billion and \$3 billion, 4 that fall between \$500 million and \$1 billion, and 18 less than \$500 million. Some foundations chose not to respond to every question within this section or the question was not applicable to them. The universe size for each analysis is noted in the subsequent figures.



Foundations with smaller asset sizes rely more heavily on outside advisors or a chief financial officer to oversee investment assets. In these cases, the chief financial officer might work closely with external investment advisors to develop an investment strategy and monitor investment managers. It is also becoming more common place for foundations of this size to outsource some or the entire portfolio to an OCIO.

STAFFING LEVELS. Investment office personnel are typically divided into investment management and investment operations. Investment management staff is responsible for implementing the investment policy of the committee and can include: a chief investment officer, risk officer(s), investment director(s), investment officer(s), portfolio manager(s), and analyst(s). Investment operations staff is responsible for the management of custodian and broker relationships, transaction processing, capital call management, accounting, performance measurement, and in some cases conducting operational due diligence on investment managers.

Our survey shows that investment office staffing typically correlate with asset size. This is perhaps not surprising as larger portfolios tend to invest with more fund managers and favor a more active investment approach, which can require more resources. On average, foundations that oversee more than \$1 billion in assets employ a total of 8.2 full-time equivalent (FTE) split between investment management and operations, while foundations under \$1 billion have much smaller in-house investment resources (if any) and use outside professionals to manage or assist in managing the investment portfolio. Foundations with assets under \$1 billion are at 2.7 total FTEs (Figure 50).





Calendar Year 2020 • Number of FTEs

Source: Foundation data as reported to Cambridge Associates LLC.

Personnel consisted of a mixture of senior-, mid-, and junior-level positions. Senior investment professionals typically carry the title of investment director or managing director, and have more than ten years of professional experience. Mid-level professionals can hold the titles of investment officer or associate and bring five to ten years of experience. Junior-level positions are usually recent graduates or those with a few years of experience. Junior positions usually carry the title of investment analyst or Associate. Figure 51 provides the average FTEs for those offices that manage greater than \$1 billion and have investment staff.

FIGURE 51 AVERAGE INVESTMENT STAFF BY FUNCTION

Calendar Year 2020 • Number of FTEs

	Investment Management			Inve	Investment Operations			
	Senior	Mid	Junior	Senior	Mid	Junior		
More than \$1B	2.4	1.5	2.9	0.9	0.9	1.6		
n	18	8	15	6	10	10		

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Office leadership positions (CFO/CIO), IT, and Legal support are not included in the analysis. Only institutions with personnel at the specific staffing level are included in each category. Therefore, the sum of the personnel across each category will not equal the total investment office FTEs.

RELIANCE ON OUTSIDE ADVISORS AND CONSULTANTS. Foundations engage external advisors and consultants in varying degrees and across a wide variety of functions. Based on survey responses and our understanding of how each survey participant engages with Cambridge Associates, Figure 52 broadly illustrates how the 112 participants in this study work with outside advisors or consultants. Foundations, with assets less than \$1 billion rely more heavily on external advisors to manage or help manage their investment portfolios, while larger foundations will seek outside support in the form of research, data, or asset class specialization.



FIGURE 52 USE OF EXTERNAL ADVISORS AND CONSULTANTS

Calendar Year 2020 • n = 112

Source: Foundation data as reported to Cambridge Associates LLC and CA's service contract records.

Of the foundations in this study, 7% use Cambridge Associates for discretionary portfolio management services. Also known as OCIO, this management model allows a foundation to fully delegate portfolio management decision making to an outside firm. These firms are accountable for portfolio strategy, implementation, day-to-day management, and operations. Managing the portfolio within agreed upon policy guide-lines, the outsourced investment team makes manager selection, manager termination, tactical asset allocation, and portfolio rebalancing decisions.

Another 44% of foundations in our study use advisors for non-discretionary portfolio management services for the total foundation. These foundations work with an outside team of investment professionals who provide day-to-day oversight of their portfolios, while retaining final decision making on portfolio investments. This model provides resources and expertise to contribute to portfolio management alongside a foundation's staff.

Approximately 30% of survey participants use external resources for a range of traditional consulting services, including asset allocation reviews, manger searches, alternative assets management, ESG/MRI (environmental, social, governance/mission-related investment) consulting, and performance reporting. The remaining 19% of participants use outside support for research, manager, peer, and benchmarking data. These foundations tend to be larger and have built their own internal investment teams to manage their portfolios. The average market value of foundations using consultants for data and research is \$5.3 billion.

GOVERNANCE

Good governance is one key factor to a successful investment program. To create the conditions for good governance, foundations should assess whether they have in place the appropriate model for portfolio oversight and management, are upholding their fiduciary responsibilities, and are learning about peer best practices in committee structure, process, and policies.

GOVERNING BODY/OVERSIGHT COMMITTEE. Regardless of the foundation's size, an investment committee of the board most often has oversight over the investment office and/or outside advisors who manage the portfolio. In much smaller numbers, other governing bodies cited by respondents were a finance committee of the board, and the board of trustees/directors (Figure 53).



FIGURE 53 GOVERNING BODY OF OVERSIGHT COMMITTEE BY ORGANIZATION TYPE Calendar Year 2020 • Percent of Institutions (%)

Source: Foundation data as reported to Cambridge Associates LLC.



DECISION-MAKING RESPONSIBILITY. To help quantify the dynamic between the governing body (hereafter referred to as simply investment committee) and those managing the foundation (internal investment office or outside advisor), we asked who possessed decision-making responsibility for four integral investment functions: asset allocation policy development, portfolio rebalancing, manager selection, and manager termination. The resulting data show certain trends in the balance of authority between investment committees, staff, and advisors.

For foundations greater than \$1 billion, the majority of asset allocation policy is developed by committees acting on staff recommendations, while foundations under \$1 billion depend far more on the recommendations of outside advisors (Figure 54). A very similar trend is observed when looking at who is responsible for rebalancing the portfolio (Figure 55).

FIGURE 54 DECISION-MAKING AND IMPLEMENTATION RESPONSIBILITY FOR KEY INVESTMENT FUNCTIONS: ASSET ALLOCATION POLICY DEVELOPMENT



Calendar Year 2020 • Percent of Institutions (%)

Source: Foundation data as reported to Cambridge Associates LLC. Note: Investment committee (IC) is shorthand for governing body.

FIGURE 55 DECISION-MAKING AND IMPLEMENTATION RESPONSIBILITY FOR KEY INVESTMENT FUNCTIONS: PORTFOLIO REBALANCING

Calendar Year 2020 • Percent of Institutions (%)



Source: Foundation data as reported to Cambridge Associates LLC. Note: Investment committee (IC) is shorthand for governing body. The process of manager selection and termination also involves committees, advisors, and staff, but with different degrees of discretion (Figure 57). Advisors play a significant role in both selection and termination of investment managers at foundations less than \$1 billion. Among the investment committees involved in manager selection, the predominant role is to approve managers, but not interview them. Staff recommendations are increasingly relied upon at foundations greater than \$1 billion accounting for most of the decision-making.





Calendar Year 2020 • Percent of Institutions (%)

Notes: Investment committee (IC) is shorthand for governing body. "Other" includes IC approval based on staff and advisor recommendations.



FIGURE 57 PROFILE OF INVESTMENT COMMITTEE MEMBERS

Source: Foundation data as reported to Cambridge Associates LLC. Note: Investment Committee is shorthand for governing body.



In some cases, CIOs or advisors will have guidelines in place that allow them to independently make hire/fire decisions without formal approval from the investment committee. They are usually based around a percentage of market value or dollar amount. Guidelines can vary by asset type, e.g., marketable versus private investments. Another broad-based guideline is based around "negative consent." In these cases, the management team can hire and fire managers at their discretion but must inform the investment committee of their intentions prior to implementation. There is usually a short period (a few days to a week) to allow the investment committee to raise objections or concerns.

INVESTMENT COMMITTEE COMPOSITION. Two types of committees emerged from our survey data. We found that most investment committees (29 of 39) are fully composed of voting members, while the ten investment committees also include nonvoting member. While mandatory voting encourages accountability, there can be good reasons to include nonvoting members. Organizations should weigh the benefit of these advisory members against the prospects of an oversized committee.

The average size of voting committees is 6.0 members, which on average consist of 4.1 trustees, 1.7 non-trustees, and 0.3 ex officio members. Examples of ex officio committee members include the president of the foundation or chairman of the board or of another committee, whose investment committee membership is included in the official duties of the position. Committees including non-voting members averaged 7.1 people (Figure 57).

Investment committee members can bring a diverse set of experiences to assist in overseeing institutional investment assets. At least some committee members should have professional, institutional investment experience—not just experience managing their own money—and if the organization lacks sufficient trustees with such qualifications, many times the committee includes non-trustee members with investment expertise to fulfill this role.

On average, respondents indicated that 50.5% of their committee members have investment experience. This composition does change slightly when viewed by asset size, with larger foundations having a higher percentage of members with investment experience (Figure 58).



FIGURE 58 PERCENT OF INVESTMENT COMMITTEE WHO ARE INVESTMENT PROFESSIONALS

Source: Foundation data as reported to Cambridge Associates LLC.

Calendar Year 2020 • Percent of Institutions (%)



COMMITTEE TERM LENGTH AND LIMITS. Setting guidelines for terms can help manage member turnover and mitigate committee stagnation. Responses regarding term length and limit policy indicated that guidelines are generally more common for committee members than chairs: for committee members, term lengths (an average of 2.9 years) were specified by 36% of foundations, while term limits (an average of 3.1 terms) were mandated by 36% of foundations (Figure 59). Term length and limit policies applied similarly to committee chairmanship. The lack of policies around term limits and lengths at some foundations could suggest that these foundations value the stability of a long-standing committee and view turnover as disruptive to long-term investment policy.

FIGURE 59 INVESTMENT COMMITTEE TERM LENGTHS AND LIMITS

As of December 31, 2020



Investment Committee Member

Source: Foundation data as reported to Cambridge Associates LLC.

INVESTMENT COMMITTEE MEETINGS. Our survey responses show that most foundations (82%) hold quarterly meetings. Other foundations cited meeting 2 or 3 times per year with ad hoc conference calls in between formal meetings. Regular attendance of investment committee members is critical to proper oversight. Participants indicated that average attendance was strong, at 95%.

REIMBURSEMENT AND CONFLICT OF INTEREST POLICY. 83% of respondents provide committee members with expense reimbursement, which generally includes travel-related and other out-of-pocket expenses. Most (66%) respondents offer their committee members some sort of compensation other than expense reimbursement. This compensation most often comes in the form of charitable gifts and honorariums.

Except for one respondent, all participants have a conflict of interest policy for investment committee members. These policies can require disclosure, recusal, or both disclosure and recusal. Policies may differ by asset class, with foundations requiring disclosure for long-only equity conflicts and recusal for private equity conflicts, for example. Most foundations (85%) also have a conflict of interest policy in place for investment staff.



Notes on the Data

PROFILE OF RESPONDENTS

This report includes data for 112 foundations. Most participants are private foundations, 98 of which are classified as non-operating foundations and four as operating foundations. Of the remaining participants, ten are community foundations.

All participants provided data on their long-term investment portfolio (LTIP) as of December 31, 2020. The LTIP size of participating foundations ranged from \$8.9 million to \$50.0 billion. The mean LTIP size was \$1.8 billion, and the median was \$295 million. Throughout the report, the notation of n denotes the number of foundations included in each analysis.

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:

$$\frac{R_{p} - R_{f}}{S_{p}} = Sharpe Ratio$$

Where:

R_n is the arithmetic average of composite quarterly returns,

R_f is the arithmetic average of T-bill (risk-free) quarterly returns, and

S_n is the quarterly standard deviation of composite quarterly returns.

BLENDED PORTFOLIO BENCHMARKS

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

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



Appendix: Investment Portfolio Returns

CALENDAR YEAR 2020 TOTAL RETURN SUMMARY

Trailing 1-Yr as of December 31, 2020 • Percent (%)

	All Foundation	Under \$100M	\$100M – \$300M	\$300M – \$1B	Over \$1B
5th %ile	27.3	22.9	17.4	27.9	33.3
25th %ile	16.9	14.3	16.3	16.4	19.7
Median	13.9	12.4	14.7	14.2	16.2
75th %ile	11.6	11.0	12.4	12.1	13.1
95th %ile	9.2	8.7	10.3	11.4	10.2
Mean	15.7	14.3	14.2	16.6	17.6
n	112	28	29	23	32
70/30 Index	15.2				

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.

EXAMPLE OF 1-YR ATTRIBUTION ANALYSIS: ALL FOUNDATIONS MEAN

As of December 31, 2020 • Percent (%) • n = 111

Breakdown of Return from Asset Allocation

	Beginning Year	Asset Class	Contribution to	
	Mean Asset	Benchmark	Asset Class	
Asset Class	Allocation	Return	Return	Index
US Equity	23.7	20.9	4.9	Russell 3000 [®]
Venture Capital	6.6	51.0	3.0	CA US Venture Capital
Global ex US Equity: Emg Mkts	7.7	18.3	1.4	MSCI Emg Mkts (N)
Global ex US Equity: Dev Mkts	16.3	7.8	1.3	MSCI EAFE (N)
Non-Venture Private Equity	4.7	27.8	1.2	CA US Private Equity
Long/Short Hedge Funds	4.8	17.9	0.9	HFRI Equity Hedge
US Bonds	11.2	7.5	0.8	BBG Barc Agg Bond
Other Private Investments	1.8	33.7	0.6	CA US PE/VC
Absolute Return (ex Distressed)	8.6	6.5	0.6	HFRI FOF Conservative
Distressed-HF Structure	0.9	11.8	0.1	HFRI ED: Dist/Rest
Distressed-PE Structure	1.2	8.1	0.1	CA Distressed Securities
Inflation-Linked Bonds	0.5	11.0	0.1	BBG Barc US TIPS
Private Real Estate	2.2	1.5	0.0	CA Real Estate
High Yield Bonds	0.4	7.1	0.0	BBC Barc High Yield
Cash & Equivalents	3.7	0.7	0.0	91-Day T-Bill
Global ex US Bonds: Dev Mkts	0.2	10.8	0.0	FTSE Non-US\$ WGBI
Global ex US Bonds-Emg Mkts	0.2	5.3	0.0	JPM EMBI Glob Div
Other	0.5	0.7	0.0	70% Global Eq / 30% Bond
Timber	0.1	0.8	0.0	NCREIF Timberland
Public Real Estate	0.3	-6.0	0.0	FTSE NAREIT Composite
Commodities	0.6	-3.1	0.0	Bloomberg Commodity
Public Energy / Nat Res	1.6	-18.4	-0.3	MSCI World Nat Res (N)
Private Oil & Gas / Nat Res	2.2	-13.6	-0.3	CA Natural Resources
Return from Asset Allocation (Sum	of Contributions)		14.4	
+/- Return from Other Factors			1.3	
Mean Total Portfolio Return			15.7	

Mean Total Portfolio Return

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., National Association of Real Estate Investment Trusts, and the National Council of Real Estate Investment Fiduciaries. MSCI data provided "as is" without any express or implied warranties.

Note: 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.



DISPERSION OF PARTICIPANTS' 1-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

Trailing 1-Yr as of December 31, 2020 • Percent (%)

								Total		
	Total	Global		Dev Mkts	Emg			Public	Commodities	Public
	Public	Equity	US	ex US	Mkts		Hedge	Real	and Natural	Real
	Equity	Managers	Equity	Equity	Equity	Bonds	Funds	Assets	Resources	Estate
5th %ile	24.9	73.6	30.0	19.6	35.1	14.4	22.3	16.7	19.4	0.7
25th %ile	19.4	21.9	22.7	13.2	21.7	8.2	15.1	4.9	3.7	-4.7
Median	15.9	14.5	19.0	10.6	15.5	6.6	9.9	-3.2	-6.4	-5.8
75th %ile	13.5	5.4	16.3	7.6	10.5	4.9	5.2	-17.0	-24.6	-7.8
95th %ile	10.1	-2.4	11.2	1.0	0.7	1.9	0.5	-34.2	-34.4	-11.4
Mean	17.0	19.1	19.3	10.8	16.3	6.9	10.8	-5.9	-8.0	-5.9
п	100	71	97	91	91	96	90	60	51	16
Median by Asset	Size									
Less than \$100M	15.0	9.9	18.0	12.9	12.9	6.4	13.0	-3.1	-2.5	-5.1
n	28	22	28	26	25	27	21	16	14	2
\$100M – \$300M	18.4	18.5	18.5	11.2	17.4	7.4	9.4	0.2	-5.1	-6.2
n	28	24	28	28	27	27	28	19	17	6
\$300M – \$1B	15.7	13.8	22.2	10.3	13.8	6.6	8.1	-7.3	-8.7	-3.0
n	22	12	21	19	21	22	21	16	12	4
More than \$1B	16.3	13.3	22.0	9.6	17.4	6.2	12.6	-8.2	-16.6	-7.8
n	22	13	20	18	18	20	20	9	8	4

Source: Foundation data as reported to Cambridge Associates LLC.

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

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

Trailing 1-Yr as of December 31, 2020 • Percent (%)

		Non-		Total		
	Total	Venture		Private	Private	Private
	Private	Private	Venture	Real	Real	Natural
	Equity	Equity	Capital	Assets	Estate	Resources
5th %ile	77.5	53.0	74.7	5.3	9.6	5.6
25th %ile	37.5	27.0	54.2	-1.1	3.3	-5.1
Median	29.8	20.4	41.8	-8.5	-0.2	-12.6
75th %ile	21.5	13.6	28.4	-13.6	-9.2	-19.2
95th %ile	10.7	8.1	-14.4	-26.7	-19.3	-34.1
Mean	31.7	23.4	38.0	-8.6	-3.2	-13.0
n	80	75	70	64	60	67
Median by Asset	Size					
Less than \$100M	30.0	21.2	28.4	-6.7	-5.7	-16.5
n	16	14	13	12	9	10
\$100M - \$300M	30.3	21.4	48.4	-8.8	-8.9	-13.8
n	26	26	24	23	17	22
\$300M – \$1B	28.6	19.2	40.0	-4.7	2.9	-8.4
n	18	18	18	16	16	17
More than \$1B	30.0	19.6	36.6	-9.4	0.4	-14.9
n	20	17	15	13	18	18

Source: Foundation data as reported to Cambridge Associates LLC.

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



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

Years Ended December 31, 2020 • Percent (%)

	Nominal AACRs					
	3 Yr	5 Yr	10 Yr			
All Foundation						
5th %ile	13.8	13.1	10.3			
25th %ile	9.7	10.3	8.4			
Median	8.4	9.6	7.5			
75th %ile	7.4	8.9	6.8			
95th %ile	6.1	7.8	6.0			
Mean	9.0	9.8	7.7			
п	110	106	99			
70/30 Index	9.5	10.5	8.1			

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: The Global 70/30 Benchmark is composed of 70% MSCI ACWI Index/30% Bloomberg Aggregate Bond Index.

RETURNS BY ASSET SIZE: TRAILING 3-, 5-, AND 10-YR

Years Ended December 31, 2020 • Percent (%)

	3 Yr			5 Yr				10 Yr				
-	Under	\$100M	\$300M	Over	Under	\$100M	\$300M	Over	Under	\$100M	\$300M	Over
	\$100M	– \$300M	– \$1B	\$1B	\$100M	– \$300M	– \$1B	\$1B	\$100M	– \$300M	– \$1B	\$1B
5th %ile	9.5	10.5	16.6	16.2	10.2	10.7	14.8	14.4	7.5	8.3	10.4	11.2
25th %ile	8.5	9.3	9.7	11.1	9.6	10.3	10.2	11.1	7.1	7.7	8.3	9.5
Median	7.3	8.4	8.4	9.8	8.7	9.6	9.3	10.1	6.5	7.1	7.6	8.7
75th %ile	6.3	7.6	7.8	8.5	8.0	8.8	9.2	9.3	6.1	6.8	7.0	8.0
95th %ile	4.8	6.8	6.6	6.9	6.9	8.5	8.4	8.2	5.4	6.5	6.0	7.4
Mean	7.4	8.5	9.6	10.3	8.8	9.6	10.1	10.5	6.5	7.2	7.8	8.9
n	26	29	23	32	23	28	23	32	19	28	22	30

Source: Foundation data as reported to Cambridge Associates LLC. Note: Three-, five-, and ten-year returns are annualized.



DISPERSION OF PARTICIPANTS' 5-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

As of December 31, 2020

								Total		
	Total	Global		Dev Mkts	Emg			Public	Commodities	Public
	Public	Equity	US	ex US	Mkts		Hedge	Real	and Natural	Real
	Equity	Managers	Equity	Equity	Equity	Bonds	Funds	Assets	Resources	Estate
5th %ile	14.3	24.8	17.2	10.9	15.4	6.4	8.1	8.6	8.3	8.2
25th %ile	12.9	13.5	15.8	10.0	13.2	4.7	6.6	6.0	5.2	5.7
Median	12.2	10.7	14.9	8.9	11.2	4.1	5.4	2.9	2.4	4.3
75th %ile	11.3	8.5	13.7	8.0	10.2	3.3	4.2	-1.4	-2.4	4.1
95th %ile	10.3	5.4	12.2	6.0	7.1	2.1	2.1	-6.5	-7.0	2.2
Mean	12.2	12.2	14.6	8.8	11.5	4.1	5.3	2.3	1.4	4.8
n	93	50	87	81	80	88	79	52	43	12
Median by Asset	Size									
Less than \$100M	11.8	9.3	14.3	9.1	11.1	4.2	5.6	2.8	2.7	4.3
n	24	13	23	22	20	24	15	14	11	1
\$100M – \$300M	12.8	12.7	15.1	9.0	11.4	4.1	4.7	2.9	2.7	4.3
n	27	17	26	25	24	25	26	16	14	5
\$300M – \$1B	12.0	10.5	15.2	8.6	11.2	4.0	5.2	1.7	1.0	5.5
n	20	8	19	17	19	20	18	13	10	3
More than \$1B	11.9	10.9	14.8	8.4	12.6	4.0	6.4	3.2	0.6	3.4
п	22	12	19	17	17	19	20	9	8	3

Source: Foundation data as reported to Cambridge Associates LLC.

DISPERSION OF PARTICIPANTS' 10-YR ASSET CLASS RETURNS: MARKETABLE INVESTMENTS

As of December 31, 2020

								Total		
	Total	Global		Dev Mkts	Emg			Public	Commodities	Public
	Public	Equity	US	ex US	Mkts		Hedge	Real	and Natural	Real
	Equity	Managers	Equity	Equity	Equity	Bonds	Funds	Assets	Resources	Estate
5th %ile	11.7	13.5	16.0	8.4	8.3	5.2	6.6	4.5	1.7	9.8
25th %ile	10.3	11.5	14.4	6.9	5.1	4.0	5.5	-0.6	-1.2	9.0
Median	9.4	10.3	13.5	6.5	3.9	3.5	4.7	-2.5	-4.3	8.5
75th %ile	8.7	8.9	12.2	6.1	2.6	3.0	4.0	-4.5	-6.1	8.0
95th %ile	7.7	4.6	10.5	5.3	1.1	2.3	2.7	-7.7	-8.5	7.1
Mean	9.5	10.1	13.3	6.6	4.2	3.6	4.7	-2.4	-3.7	8.5
n	84	20	75	70	65	76	69	41	33	4
Median by Asset S	Size									
Less than \$100M	8.7	7.9	12.9	6.4	2.6	3.4	5.3	-2.6	-2.3	
n	19	8	18	17	15	19	12	10	7	0
\$100M – \$300M	9.6	11.0	13.4	6.5	3.9	3.5	4.3	-2.6	-3.6	8.7
n	27	4	25	22	19	25	23	13	12	1
\$300M – \$1B	9.7	15.2	13.9	6.3	4.2	3.3	4.5	-3.7	-6.1	8.5
n	19	2	16	16	16	16	17	10	8	2
More than \$1B	9.6	11.0	14.0	6.8	4.0	3.4	5.5	-1.3	-3.9	8.3
п	19	6	16	15	15	16	17	8	6	1

Source: Foundation data as reported to Cambridge Associates LLC.



	Total Private Equity	Non-Venture Private Equity	Venture Capital	Total Private Real Assets	Private Real Estate	Private Natural Resources
5th %ile	25.1	24.1	30.3	8.7	13.0	7.8
25th %ile	20.4	17.2	23.6	4.6	8.8	1.3
Median	16.9	13.9	19.5	1.4	7.3	-1.0
75th %ile	13.7	11.6	14.7	-1.2	3.3	-3.9
95th %ile	8.6	7.8	-4.3	-4.3	-2.2	-10.9
Mean	16.7	14.6	18.3	1.8	10.7	-1.2
n	72	66	57	58	55	58
Median by Asset Size						
Less than \$100M	19.2	14.8	22.7	1.7	7.9	0.6
n	13	10	9	10	7	9
\$100M – \$300M	16.9	14.1	19.6	1.2	4.1	-0.4
n	23	23	18	21	15	18
\$300M – \$1B	16.6	13.5	22.1	1.7	8.0	-1.7
n	16	16	15	14	15	13
More than \$1B	17.0	13.2	19.4	2.3	7.5	-1.8
n	20	17	15	13	18	18

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

As of December 31, 2020

Source: Foundation data as reported to Cambridge Associates LLC.

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

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

As of December 31, 2020

	Total Private Fquity	Non-Venture Private Equity	Venture Capital	Total Private Real Assets	Private Real Estate	Private Natural Resources
Trailing 10-Yr	-40.09					
5th %ile	22.5	21.6	25.7	9.9	14.3	7.4
25th %ile	17.2	16.2	21.2	6.0	11.4	3.0
Median	14.9	12.5	18.0	3.3	9.8	-0.6
75th %ile	12.9	10.8	12.9	1.8	7.8	-2.5
95th %ile	9.4	8.6	-7.8	-2.0	3.0	-7.1
Mean	15.1	13.6	14.7	4.0	9.3	0.2
n	62	58	50	48	47	48
Median by Asset Siz	ze					
Less than \$100M	15.9	13.7	17.6	3.3	12.1	-0.2
n	10	8	7	8	6	6
\$100M – \$300M	14.5	12.4	17.9	3.2	7.7	1.5
n	19	18	15	15	11	14
\$300M – \$1B	15.4	13.1	20.9	4.1	9.8	-0.9
n	15	15	13	12	13	11
More than \$1B	15.9	12.6	18.0	3.3	10.7	-0.9
n	18	17	15	13	17	17

Source: Foundation data as reported to Cambridge Associates LLC.

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

REAL RETURNS AFTER SPENDING: TRAILING 3-, 5-, AND 10-Yr

Years Ended December 31, 2020 • Percent (%)

	3 Yr	5 Yr	10 Yr
All Foundation			
5th %ile	5.3	4.4	3.0
25th %ile	3.0	3.0	2.2
Median	1.7	2.4	0.9
75th %ile	0.8	1.7	0.4
95th %ile	-0.6	0.9	-0.4
Mean	2.0	2.5	1.3
n	36	29	20

Source: Foundation data as reported to Cambridge Associates LLC.

Appendix: Investment Policy

DISPERSION IN POLICY PORTFOLIO BENCHMARK RETURNS

Periods as of December 31, 2020 • Percent (%)

	1-Yr	5-Yr	10-Yr
5th %ile	17.5	11.2	9.3
25th %ile	14.5	10.2	7.8
Median	13.5	9.5	7.4
75th %ile	11.9	8.9	6.5
95th %ile	9.4	8.0	5.6
Mean	13.4	9.6	7.4
п	103	95	86

Source: Foundation data as reported to Cambridge Associates LLC.

Appendix: Portfolio Asset Allocation

ASSET ALLOCATION DISTRIBUTION BY ASSET CLASS

As of December 31, 2020 • Percent (%) • n = 112

	US Equity	Global ex US Equity	Bonds	Hedge Funds	Distressed Securities	Priv Equity & Ven Capital	Real Assets & ILBs	Cash & Equivs
5th %ile	41.8	33.5	26.2	23.0	6.3	39.3	12.9	9.1
25th %ile	30.9	27.2	13.7	17.8	3.2	24.2	8.2	5.5
Median	24.9	23.1	9.9	13.6	1.5	15.0	5.5	3.2
75th %ile	18.9	17.5	6.5	9.0	0.1	4.5	3.2	1.5
95th %ile	8.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0
Mean	25.0	22.4	10.9	13.2	2.1	16.3	6.1	3.7

Source: Foundation data as reported to Cambridge Associates LLC.



HISTORICAL MEAN ASSET ALLOCATION TRENDS

Years Ended December 31, 2020 • Percent (%)

					Cons	tant Uni	verse				
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
US Equity	20.1	19.4	19.1	20.3	21.1	20.7	20.7	21.1	20.1	22.8	24.1
Global ex US Equity Devel Mkts	14.3	12.6	13.4	15.0	14.4	15.0	15.0	16.8	14.9	15.6	14.0
Emerging Markets Equity	6.6	6.2	7.0	7.2	7.7	7.1	7.8	9.3	8.1	7.8	7.6
Bonds	13.3	13.5	12.8	10.8	10.3	10.8	10.4	10.5	12.3	12.1	11.0
Hedge Funds	17.9	18.2	17.7	17.9	18.5	18.9	17.3	16.1	15.6	13.9	13.6
Distressed Securities	3.4	3.1	3.4	3.5	3.4	3.2	3.2	2.4	2.7	2.4	2.3
PE/VC	8.6	10.2	9.8	9.6	9.9	10.8	10.8	11.0	13.5	14.2	17.5
Real Assets & Infl-Linked Bonds	12.2	12.4	12.0	11.0	9.9	9.0	9.7	8.8	8.4	7.2	5.9
Cash & Equivalents	3.4	3.7	4.1	4.2	4.6	4.3	4.6	3.5	3.9	3.7	3.8
Other	0.3	0.6	0.6	0.5	0.2	0.2	0.4	0.5	0.5	0.3	0.3

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Analysis is based on a constant universe that includes 71 institutions that provided asset allocation data for each year from 2010 to 2020.

UNCALLED CAPITAL COMMITTED TO PRIVATE INVESTMENT FUNDS

As of December 31, 2020 • Percent (%)

Uncalled Capital Commitments as a Percentage of the Total LTIP

	Under \$100M	\$100M – \$300M	\$300M – \$1B	Over \$1B
5th %ile	38.2	14.5	24.2	18.2
25th %ile	15.4	11.9	16.6	14.1
Median	8.9	9.6	12.4	11.9
75th %ile	7.1	7.4	9.1	10.4
95th %ile	3.4	5.1	3.2	4.8
Mean	14.1	9.9	12.8	11.9
п	12	24	18	27

Uncalled Capital Commitments as a Percentage of the LTIP's Liquid Assets

	Under \$100M	\$100M – \$300M	\$300M – \$1B	Over \$1B
5th %ile	53.8	25.3	50.0	53.8
25th %ile	25.4	19.5	25.3	31.2
Median	13.4	15.4	19.7	24.8
75th %ile	11.3	9.9	14.5	18.4
95th %ile	4.8	6.1	4.0	7.6
Mean	20.8	16.2	24.8	26.4
п	12	24	18	27

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: Uncalled capital is the amount committed, but not yet paid in, to private investment funds. Liquid assets consist of all LTIP assets excluding hedge funds and private investments.



MEAN ASSET ALLOCATION BY ASSET SIZE

As of December 31, 2020 • Percent (%)

		Asset Size					
	All	Less than	\$100M -	\$300M –	More than		
	Foundations	\$100M	\$300M	\$1B	\$1B		
	(n = 112)	(n = 28)	(n = 29)	(n = 23)	(n = 32)		
US Equity	25.0	30.0	26.6	26.4	18.0		
Global ex US Equity	22.4	25.4	22.9	20.9	20.3		
Developed Markets	14.8	18.7	15.1	13.3	12.3		
Emerging Markets	7.5	6.7	7.7	7.5	8.0		
Bonds	10.9	15.4	10.8	11.7	6.4		
US Bonds	10.3	14.2	10.5	11.4	5.8		
Global ex US Bonds (DM)	0.1	0.2	0.1	0.1	0.2		
Global ex US Bonds (EM)	0.1	0.2	0.1	0.0	0.2		
High-Yield Bonds	0.3	0.8	0.1	0.3	0.2		
Hedge Funds	13.2	11.7	14.7	10.2	15.2		
Long/Short Hedge Funds	5.4	5.2	5.0	3.7	7.0		
Absolute Return (ex Distressed)	7.8	6.5	9.7	6.5	8.2		
Distressed Securities	2.1	1.0	2.3	2.5	2.7		
Hedge Fund Structure	0.8	0.3	0.7	1.2	1.0		
Private Equity Structure	1.3	0.7	1.6	1.3	1.7		
PE/VC	16.3	7.8	13.7	17.8	24.9		
Non-Venture Private Equity	5.7	1.8	4.2	5.1	10.9		
Venture Capital	8.5	3.7	5.6	11.4	13.4		
Other Private Investments	2.0	2.3	3.9	1.4	0.6		
Real Assets & Infl-Linked Bonds	6.1	4.4	5.3	6.0	8.2		
Private Real Estate	2.0	0.9	1.0	1.6	4.3		
Public Real Estate	0.4	0.5	0.5	0.5	0.4		
Commodities	0.4	0.4	0.5	0.2	0.5		
Public Energy/Nat Resources	0.9	1.5	0.8	0.9	0.3		
Private O&G/Nat Resources	1.7	0.4	1.8	2.1	2.4		
Timber	0.1	0.1	0.1	0.0	0.1		
Infl-Linked Bonds	0.6	0.7	0.6	0.7	0.3		
Cash & Equivalents	3.7	3.6	3.3	3.9	4.2		
Other	0.4	0.7	0.3	0.5	0.2		

Source: Foundation data as reported to Cambridge Associates LLC.

Appendix: Investment Manager Structures

NUMBER OF EXTERNAL MANAGERS

As of December 31, 2020

	Less than \$100M	\$100M — \$300M	\$300M — \$1B	More than \$1B	
5th %ile	44	61	88	168	
25th %ile	30	46	66	119	
Median	17	40	55	91	
75th %ile	12	35	38	59	
95th %ile	9	24	22	28	
Mean	22	41	55	96	
n	28	29	22	28	

Source: Foundation data as reported to Cambridge Associates LLC.

Note: Funds-of-funds are counted as one separate investment manager.

DISPERSION IN NUMBER OF MANAGERS FOR SELECTED ASSET CLASSES

As of December 31, 2020

Venture Capital	Private Equity	Ab Return Hedge Funds	Long/Short Hedge Funds	US Bonds	EM Equity	DM ex US Equity	US Equity	
33	29	15	10	4	6	6	7	5th %ile
11	16	9	6	2	4	4	4	25th %ile
5	8	6	3	2	3	3	3	Median
3	5	3	2	1	2	2	2	75th %ile
1	2	2	1	1	1	1	1	95th %ile
9 87	11 82	7 93	4 80	2 98	3 102	3 103	4 106	Mean
	16 8 5 2 11 82	9 6 3 2 7 93	6 3 2 1 4 80	2 2 1 1 2 98	4 3 2 1 3 102	4 3 2 1 3 <i>103</i>	4 3 2 1 4 106	25th %ile Median 75th %ile 95th %ile Mean <i>n</i>

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 BY STRATEGY

As of December 31, 2020

	Less than \$100M		\$100M – \$300M		\$300M – \$1B		More than \$1B	
	Average Number of		Average Number of		Average Number of		Average Number of	
Strategy	Managers	n	Managers	п	Managers	n	Managers	n
Traditional Equity								
Global Equity	2	22	3	27	3	16	3	18
US Equity	2	28	4	29	4	21	5	28
Developed ex US Equity	2	26	3	29	3	20	5	28
Emerging Markets Equity	2	26	3	28	3	20	4	28
Traditional Bonds								
Global Bonds	1	4	1	2	1	6	2	4
US Bonds	2	25	2	26	2	18	2	29
Developed ex US Bonds	1	1	-	0	-	0	-	0
Emerging Markets Bonds	1	1	-	0	-	0	-	0
High-Yield Bonds	3	5	1	1	4	4	2	2
Hedge Funds								
Long/Short Hedge Funds	4	23	5	23	4	14	4	20
Absolute Return (ex Distressed)	7	27	7	25	7	16	6	25
Distressed Securities								
Distressed (HF Structure)	2	13	2	15	2	11	2	9
Distressed (PE Structure)	2	12	3	24	4	18	6	18
Private Investments								
Non-Venture Private Equity	14	22	11	24	13	13	8	23
Venture Capital	3	15	4	26	9	21	19	25
Other Private Investments	2	14	3	26	3	16	5	11
Real Assets & ILBs								
Private Real Estate	2	10	2	20	5	20	10	27
Public Real Estate	1	5	1	6	1	6	1	7
Commodities	1	3	1	5	1	2	3	3
Inflation-Linked Bonds (TIPS)	1	3	1	6	1	6	1	3
Private Oil & Gas / Nat Res	2	8	3	23	6	18	9	24
Timber	3	1	2	2	1	5	1	8
Public Energy/Nat Res	1	11	2	14	2	8	1	4
Multi-Strategy Funds	1	2	1	5	1	2	-	1
Cash	1	25	2	28	2	19	1	19
Tactical Asset Allocation	2	4	1	2	1	2	-	0
Other	-	0	1	1	-	0	3	3

Source: Foundation data as reported to Cambridge Associates LLC.

Notes: *n* indicates the number of colleges and universities that are included in the average number of managers. 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 will not equal the true total average of managers.

PARTICIPANTS

Access Strategies Fund Albany Foundation The James B. and Lois R. Archer Charitable Foundation Arkansas Community Foundation Atherton Family Foundation Marion and Henry Bloch Family Foundation The Herb Block Foundation Buena Vista Foundation The California Endowment California Wellness Foundation James & Abigail Campbell Family Foundation Carnegie Corporation of New York The Annie E. Casey Foundation The Clarence T.C. Ching Foundation Circle of Service Foundation Community Funds, Inc. Connecticut Health Foundation, Inc. The Dana Foundation De Beaumont Foundation Dogwood Health Trust Gaylord and Dorothy Donnelley Foundation The Duke Endowment Alfred I. duPont Testamentary Trust Emily Hall Tremaine Foundation The Enfranchisement Foundation The Erie Community Foundation Richard M. Fairbanks Foundation, Inc. Sherman Fairchild Foundation Fetzer Institute Five Rings Family Foundation The Flinn Foundation The Ford Family Foundation The Ford Foundation Franklin Southampton Charities Bill and Melinda Gates Foundation Trust The Gerber Foundation **GHR** Foundation Gidwitz Memorial Foundation Eugene & Marilyn Glick Family Foundation John T. Gorman Foundation The Florence Gould Foundation Grantham Fdn for the Protection of the Environment William Caspar Graustein Memorial Fund The Heinz Endowments Clarence E. Heller Charitable Foundation The Highland Street Foundation Conrad N. Hilton Foundation The H & R Block Foundation The Hyams Foundation Inasmuch Foundation InFaith Community Foundation The Robert Wood Johnson Foundation The Fletcher Jones Foundation Ewing Marion Kauffman Foundation Anna-Maria and Stephen Kellen Foundation W.K. Kellogg Foundation Trust John S. and James L. Knight Foundation The Kresge Foundation Leaves of Grass Foundation John and Catherine MacArthur Foundation The Alexander M. and June L. Maisin Foundation Mathile Family Foundation The Marshall L. and Perrine D. McCune Charitable Fdn McGregor Fund The Andrew W. Mellon Foundation Eugene and Agnes E. Meyer Foundation Meyer Memorial Trust

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