Institutional Insights

Are private assets worth the effort?
A study of their impact on endowments and foundations' returns and spending

Fidelity analysis shows nonprofits can potentially improve investment performance and reduce spending volatility by accessing above-median private market managers.

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The projections or any other information generated by our methodology regarding the likelihood of various outcomes are hypothetical in nature, have inherent limitations, do not reflect actual results, and given that market conditions may vary, are not guarantees of future results. There are many factors to consider when evaluating investment return assumptions, such as future levels of interest rates and government policy. See exhibits and Appendix on page 8 for full details.

KEY TAKEAWAYS

- Given muted return expectations for some public markets and elevated inflation expectations, simulation analysis shows that a nonprofit's investment plan with a traditional 70% stock/30% bond portfolio only has a 42% chance of meeting a 5% real return spending target over a 10-year period.¹
- Private assets are not always beneficial in meeting the return objective. Our simulation analysis shows that consistently sourcing the median private market managers barely improves (42% to 44%) the probability of meeting the return target (investment objective) relative to the 70% stock/30% bond portfolio.²
- We believe private manager access and selection are critical. Top-quartile private equity managers have historically delivered nearly 4.4% higher annualized returns than median managers. A nonprofit could potentially improve the probability of meeting the return target—increasing to an estimated 65% chance—if allocating 30% of portfolio exposure to top-quartile private managers.³
- Investing in bottom-quartile private market managers can lower a plan's probability of achieving the 5% spending target to only 25%—a far worse outcome than investing in traditional asset classes alone.⁴
- Contrary to commonly held views, diversified exposure* to top-quartile managers
 can potentially provide liquidity through annual distributions, while also
 potentially reducing the volatility of total asset levels used for calculating annual
 spending (and thereby mitigate potential spending shortfalls and volatility).
- Resource-constrained endowments and foundations need not forgo private
 market exposure and related potential benefits, but rather they can extend
 their capabilities and staff by aligning with an outsourced chief investment
 officer (OCIO) provider that can assist with access to private market talent and
 liquidity management.



Introduction

Even though many endowments and foundations still manage to a simple portfolio benchmark of roughly 70% stocks/30% bonds, our analysis shows that it is unlikely that such a portfolio will be able to deliver on their long-term real return objectives, typically the Consumer Price Index (CPI) + 5%. Specifically, we used mean and covariance assumptions from an industry survey, along with a corresponding log-normal distribution assumption, to generate our results. 5 Our simulation analysis found that the probability of meeting that target barely improves by allocating to median private market managers and can be substantially lower than that of a 70/30 portfolio if investing in bottom-quartile managers. In contrast, the addition of top-quartile private market managers could meaningfully improve the probability of meeting the return target. This article will take a closer look at the potential benefit of exposure to private market managers, how to navigate some of the key complexities of the asset class, and the potential benefits of outsourced chief investment officer (OCIO) capabilities.

Private markets: A compelling case?

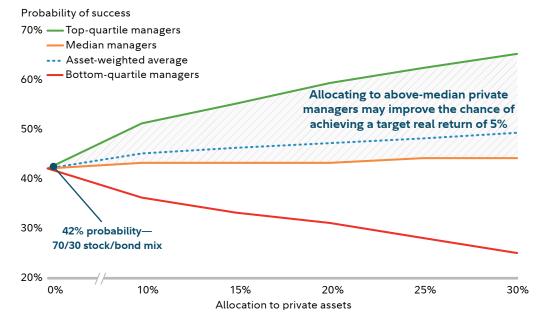
A recent Fidelity survey of institutional investors found that institutions have not significantly changed their approaches to strategic asset allocation, alpha generation, or risk management despite several sharp drawdowns in public equities and bonds over the last two years. 6 At the same time, many institutions expect private markets to deliver higher returns than traditional asset classes, as measured by a survey of long-term capital market assumptions (CMAs) by Horizon Actuarial Services LLC.⁷ The Horizon survey, featuring aggregated views from 42 investment firms, found expected returns for private assets over a 10-year period to be 150-250 bps higher than for public assets, prompting our study into how private asset exposure may play a role in achieving long-term returns.

Using the Horizon survey, industry performance data from MSCI Private Assets, and simulation analysis, we determined that an allocation to private markets is unlikely to materially improve endowments and foundations' probability of achieving their target returns, unless their private market program consistently invests in above-median managers. For the purposes of this paper, we define the return objective as the ability to maintain a 5% annual spending rate over a decade without reducing the organization's asset size in real terms. Our analysis shows that a traditional mix of 70% stocks and 30% bonds has only a 42% probability of meeting the 5% real return annualized spending target over the next 10 years, but the probability of achieving that return increases materially with higher allocations to above-median private market managers (Exhibit 1). See the Appendix on page 8 for full details.

As outlined in Exhibit 1, the green line set of results demonstrates this probability of reaching the target return—increasing from 42% to 65%—by investing in topquartile managers (with a 30% allocation). Strikingly, investing a 30% allocation in median managers (orange line set of results) delivers roughly the same odds of success (only 42%) as a traditional 70/30 portfolio, while investing in bottom-quartile private market managers (red line set of results) significantly lowers the probability of success—only 25% compared to the traditional, public-asset-only portfolio—such that poor manager selection is worse than not investing in the asset class at all.

EXHIBIT 1: A traditional mix of 70% stocks and 30% bonds has only a 42% probability of meeting the 5% real return annualized spending target over the next 10 years.

Probability of meeting or exceeding 5% annualized real returns over 10 years



Past performance is no guarantee of future results. Sources: Fidelity Investments, MSCI Private Assets, and Horizon Actuarial Services LLC. Source for cross-sectional private market return data is MSCI Private Assets. Based on Monte Carlo simulation analysis using Horizon's 2023 Survey of Capital Market Assumptions. Assumes a 70% public equity/30% fixed income portfolio, with a 0% to 30% weighting in private markets funded from public equities. The private markets allocation is 70% private equity and 10% each private credit, private real estate, and private infrastructure. The exhibit shows the probability of meeting or exceeding a CPI+5% annual return over a 10-year horizon. Capital market assumptions (CMAs) are forward-looking estimates but are not presented as investment recommendations or guarantees of actual future performance. Results for asset-weighted average based on Horizon CMA data. Results for top-quartile, median, and bottom-quartile managers calculated using a combination of Horizon CMA and MSCI Private Assets data. Top and bottom quartile managers are in the top and bottom 25%, respectively. Median represents the middle of the data set. For illustrative purposes only to depict the probability and range of results based on simulations, historical analysis and research. This is not meant to be exhaustive of all possible options or analysis an institution may wish to consider, and will not necessarily come to pass. See Appendix on page 8 for fur full details on assumptions, asset class proxies, and methodology.

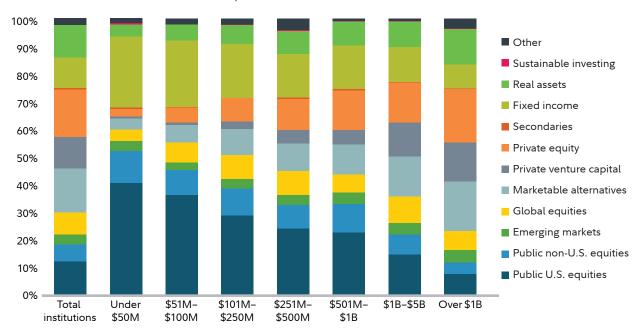
Fidelity's analysis shows that investing 30% of portfolio assets in topquartile private market managers may provide an increased probability of achieving a 5% real annualized return than investing in a traditional, public-asset-only portfolio-65% versus just 42%. Past performance is no guarantee of future results.

Navigating the complexities of private markets

It's well known that the largest endowments and foundations have historically maintained higher allocations to alternative investments, including private assets. However, this trend does not extend to all endowments and foundations. A recent study of endowments investing found much lower exposure to private equity and venture capital in smaller nonprofit organizations (Exhibit 2). While institutions with over \$1 billion in assets had more than 30% exposure to private equity and venture capital, smaller firms allocated a fraction of their total assets, according to the 2023 NACUBO-Commonfund Study of Endowments.8

EXHIBIT 2: A recent industry survey found that small endowments have significantly lower allocations to private equity and venture capital.





Source: 2023 NACUBO-Commonfund Study of Endowments.

One reason for less exposure may be some organizations' inability to source, access, and research private asset managers, which is critical due to the higher return dispersions observed in the segment. Exhibit 3 illustrates the distribution of 10-year returns across private asset classes, using MSCI Private Assets data: Performance has varied significantly among top-quartile managers (75th percentile), median managers (50th percentile), and bottom-quartile managers (25th percentile). For example, private equity managers in the top quartile delivered an annualized excess return of +4.4% versus their broad peer group's average return, compared to underperformance of –9.1% for those in the bottom quartile. Even median managers (50th percentile) underperformed the marketcap weighted index by -2.0%, which highlights how a select cohort of managers have dominated performance and asset gathering within each private asset class. Over time, however, identifying and getting access to top managers has become more difficult. Recent academic research shows

that performance persistence among top-quartile Buyout managers has been erased over time while top-quartile Venture funds are often over-subscribed and difficult to obtain unless a large commitment is made. 9 As such, the ability to access such top-performing managers remains key to a successful program. Understandably, this may be challenging for organizations without dedicated resources to source such talent and exposure. Top performers may also vary from year to year, which can create an additional barrier for investors.

EXHIBIT 3: One of the greatest challenges of investing in private markets is access to topperforming managers.

Cross-sectional distribution of annualized returns over 10-year periods

		Excess returns vs. corresponding MSCI global funds index		
	Index return	75th percentile fund	50th percentile fund	25th percentile fund
Private equity	14.9%	4.4%	-2.0%	-9.1%
Private credit	9.6%	2.1%	-0.9%	-4.1%
Real estate	6.6%	4.7%	-0.3%	-6.2%
Infrastructure	7.8%	4.3%	-0.4%	-4.1%

Past performance is no guarantee of future results. Source: Fidelity Investments, MSCI Private Assets. Excess returns relative to the corresponding MSCI Global Funds Index represent vintages from 2000–2023 that have 10 years of returns, using the Direct Alpha statistical method. Private equity represented by MSCI Global Private Equity Funds Index; private credit represented by MSCI Global Private Debt Funds Index; private real estate represented by MSCI Global Real Estate Funds Index; and private infrastructure represented by MSCI Global Infrastructure Funds Index. The Direct Alpha statistical method of Gredil-Griffiths-Stucke (https://dx.doi. org/10.2139/ssrn.4174563) seeks to quantify alpha, or manager skill, using the corresponding MSCI private funds index for each class. Ten-year periods were selected for analysis because a 10-year period aligns with the 10-year CMAs used in Exhibit 1. In Exhibit 1, the team used Monte Carlo analysis to generate a range of return outcomes over a 10-year period, which generally includes a full cycle, so the team selected 10-year periods to better reflect a full cycle. Index returns represent annualized returns for corresponding MSCI indexes over the period 2002–2021. See Appendix on page 8 for full details on the methodology.

EXHIBIT 4: Exposure to private markets as a percent of total assets can grow organically even in a few years, requiring the need for rebalancing.

	Starting asset allocation	Scenario 1: Base case, after 3 years	Scenario 2: Right tail, after 3 years
Public equities	50%	45%	38%
Private assets	20%	25%	31%
Public fixed income	30%	30%	30%

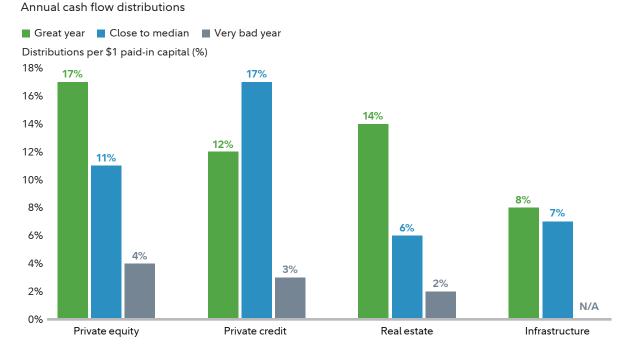
Source: Fidelity Investments and Horizon Actuarial Services LLC. Asset classes are from values and data in the Horizon survey. Scenario 1 represents the median while scenario 2 shows the 95th percentile of the simulated portfolio weight of private assets after three years. Numbers may not sum to 100 due to rounding. See Appendix on page 8 for full details on methodology. Simulated data has inherent limitations due to the application of a model designed with the benefit of hindsight and may not reflect the effect that any material market or economic factors may have on the use of the model. Thus, simulated performance is speculative and of extremely limited use to any investor and should not be relied upon in any way. Simulated performance is no guarantee of future results and obviously private markets can also decline in value.

A well-diversified program of top-performing managers generally will regularly distribute capital back to LPs, providing some ongoing liquidity for rebalancing and spending purposes.

In addition to the challenge of sourcing top manager talent, smaller endowments and foundations may perceive the liquidity characteristics of private markets to be a barrier. It is true that in a highly concentrated private markets program, liquidity can create rebalancing challenges given that new private market programs generally will not distribute capital to limited partners (LPs) in the first three years. As outlined in Exhibit 4, exposure to private markets as a percentage of an institution's total assets can grow significantly over the initial three-year period. For example, based on our simulation analysis, using a starting mix of 50% public equities, 30% public fixed income, and 20% private assets, private market exposure can grow organically from 20% to upwards of 32% over a three-year period, depending on the realized relative performance of private versus public assets. This may result in distortions to a plan's asset allocation and sources of liquidity for extended periods of time.

However, it is worth pointing out that diversified* and mature private market programs are not as illiquid as one might think. A well-diversified program of above-median managers generally will regularly distribute capital back to LPs, providing some ongoing liquidity for rebalancing and spending purposes. For example, Exhibit 5 illustrates historical distributions in three different return

EXHIBIT 5: Diversified and mature private investment programs generally will regularly distribute capital back to LPs.



Past performance is no guarantee of future results. Source: Fidelity Investments, MSCI Private Assets. Asset classes reflect asset-weighted distributions per \$1 paid-in-capital across funds over the past 10 vintages for a given year (great, median, and bad). The universe of funds used to calculate the asset-weighted average distributions are subsets of the following: for private equity, MSCI Global Private Equity Funds Index; for private credit, MSCI Global Private Debt Funds Index; for real estate, MSCI Global Real Estate Funds Index, and for infrastructure, MSCI Global Infrastructure Funds Index. A great year is defined as 2021, which was one of the best years on record for private alts for returns; 2012 was a year in which returns were close to the median; and 2008 was deemed very bad because returns were among the lowest on record. Median is defined as the middle of a data set. Distributions calculated using a cap-weighted mix of the past 10 vintages for each asset class for each calendar year of 2021, 2012, or 2008. See the Appendix on page 8 for more information.

scenarios—what would be considered a great year (2021), a median year (2012), and a very bad year (2008). Notably, even in average market conditions (the year 2012), diversified private equity, private debt, and private real estate exposure have returned 6% to 17% of invested capital back to investors each year. But even in extremely challenging public market backdrops (as illustrated by the very bad year, 2008), diversified private markets exposures have historically returned 2% to 4% of invested capital back to LPs. As such, diversified private programs do generally provide some ongoing liquidity for endowments and foundations to spend, reinvest, or help rebalance exposure. Importantly, allocators must have the resources in place to properly manage liquidity around private investments, including both distributions and capital calls.

Another important priority for endowments and foundations, particularly those supporting ongoing operations, is how to manage the volatility of spending from year to year. Annual payouts are typically derived as a percentage of total assets, calculated based on three- to fiveyear rolling windows. Consider an organization with a \$100 million investment portfolio aiming to fund \$5 million in grants per year (after factoring in inflation). We found that an organization with a 70% equity/30% bond portfolio of public assets is likely to fall short of that \$5 million annual goal 66% of the time. Allocating 30% to median private market managers does not lead to a significant improvement in any of these statistics. In contrast, a portfolio with 30% allocated to top-quartile private market managers falls short of that \$5 million annual goal less frequently (52% of the time). Furthermore, the degree of annual shortfall is much less severe for portfolios with top-quartile private market managers. Our analysis shows that the same \$100 million 70% equity/30% bond portfolio is even likely to fall short of a \$4 million annual payout once every five years, while a portfolio with 30% in top-quartile private market managers is expected to fall short of \$4 million annual payout only once every nine years. 10 As such, endowments and foundations with investments in top-tier private market managers are able to provide a more consistent level of philanthropic support over time.

Investment implications

Current market expectations suggest endowments and foundations whose portfolios are dominated by traditional equity/bond exposures may unfortunately face spending shortfalls in the years ahead. Our research shows that investing in private markets can potentially be helpful in mitigating some of these shortfalls if asset owners are able to access above-median private market managers. We recognize that obtaining exposure to top-performing managers is challenging, especially for resource-constrained organizations. To overcome these barriers, nonprofits may want to consider an OCIO and/or allocate directly to an evergreen private market solution. Endowments and foundations have the potential to gain access to robust networks of leading private market managers, enhance diversification,* and improve liquidity management at a competitive cost. We see a significant benefit in adopting this approach, as our research shows that the probability of meeting target returns and delivering more consistent payouts may increase significantly. Endowments and foundations may therefore be an even more reliable partner to the organizations they were designed to support.

For more information on adding private market exposure to an investment plan, or OCIO solutions, please contact your Fidelity representative.

Appendix

Measuring success in private market investments can be challenging due to high return dispersion across funds and approximation errors in traditional methods of evaluating performance. To explore the potential benefit of an allocation to private assets, Fidelity conducted proprietary simulation analyses to quantify the probability of success in achieving a desired return target—particularly for those organizations that typically invest in a traditional passive portfolio of 70% stocks and 30% bonds. We note that Fidelity's analyses are not to compare top-quartile private market managers against the performance of traditional, passive equity and bond indices but to show the potential impact of including an allocation within a traditional equity/bond mix; dispersions in private markets are also much higher than in public markets. Past performance is no guarantee of future results. We believe such an approach would be useful for endowments and foundations that operate with specific annual spending targets.

While many of the largest organizations have successfully invested in private assets for decades to capitalize on the illiquidity premium, as outlined in Exhibit 2, this analysis illustrates the potential benefit of an allocation for less resourced organizations whose investments more closely mirror a traditional 70/30 mix.

As part of this work, we leveraged private markets data from MSCI Private Assets, as well as capital market assumptions from the 2023 Horizon Actuarial Services LLC Survey of Capital Market Assumptions, representing the aggregated views of 42 institutions.

The Horizon survey compiled insights for a 10-year window and a 20-year window, noting that 15 respondents provided their views over 10 years and 27 respondents provided views for both 10 years and 20 years. We selected the 10 year data because it matches the time periods used by our teams. Horizon did note that some organizations that are less mature or facing solvency challenges may want to consider a 20-year window in their allocation decisions. Horizon did not present shorter time periods.

Methodology

- We created hypothetical portfolios with an increasing initial allocation to private assets (up to 30%) funded from the public equity portion; the means and covariance for the asset-weighted indices for private assets are based on Horizon's CMA Survey. The initial allocation within the private assets portfolio is 70% private equity and 10% each to private credit, private real estate, and private infrastructure.
- We calculate the probability of meeting or exceeding CPI+5% annually for portfolios because this investment objective, typically referred to as a return target, is commonly used by endowments and foundations to ensure spending needs that will surpass the rate of inflation. The analysis used a constant rate of inflation of 2.55% over the period analyzed. Portfolios comprising 0% to 30% allocations of asset-weighted private markets indices using the Horizon Survey. The results for top-, median-, and bottom-quartile managers overlay crosssectional direct alpha distributions from MSCI Private Assets onto Horizon's 10-year CMAs (asset-weighted average). The indexes are: private equity, MSCI Global Private Equity Funds Index; private credit:, MSCI Global Private Debt Funds Index; real estate, MSCI Global Real Estate Funds Index; and infrastructure, MSCI Global Infrastructure Funds Index.

- Monte Carlo simulations are mathematical methods to estimate the likelihood of a particular outcome. Each Monte Carlo simulation reproduces a random set of results by generating a random return for the scenario. When analyzed together, these results suggest a probability of occurrence.
- Direct alpha values were obtained from MSCI Private Assets, which used the method of Gredil-Griffiths-Stucke (https://dx.doi. org/10.2139/ssrn.4174563).
- In Exhibit 4, private assets are assumed to have zero distributions during the three-year period; spending is thus financed entirely through the public assets. The portfolio weights to private assets cannot be rebalanced during the three-year period due to the lack of liauidity.
- In Exhibit 5, a great year is defined as 2021, which was one of the best years on record for private alts for returns; 2012 was a year in which returns were close to the median; and 2008 was deemed very bad because returns were among the lowest on record. The analysis looks at the asset-weighted average distributions per \$ across funds over the past 10 vintages for the given year. The universe of funds used to calculated the asset-weighted average Distribution per \$ uses subsets of the same MSCI indexes as outlined above.

Endnotes

- ¹ Source: Fidelity Investments. See article exhibits and Appendix on page 8 for full details.
- ² Ibid.
- ³ Ibid.
- ⁴ Ibid.
- ⁵ Ibid.
- ⁶ Fidelity Institutional Investor Innovation Study, December 2023. "Is Your Portfolio Prepared for a New Investment Regime?" The study, conducted in May and June 2023, surveyed senior decision-makers at 500 institutions with \$12 trillion in assets under management. Respondents included pensions, insurers, family offices, and endowments and foundations.
- ⁷ Horizon Actuarial Services LLC, Survey of Capital Market Assumptions, 2023 edition.
- ⁸ 2023 NACUBO-Commonfund Study of Endowments.
- ⁹© 2020 by Robert S. Harris, Tim Jenkinson, Steven N. Kaplan, and Ruediger Stucke. All rights reserved. Has Persistence Persisted in Private Equity? Evidence from Buyout and Venture Capital Funds. NBER Working Paper No. 28109, November 2020, JEL No. G11, G24.
- ¹⁰ Source: Horizon Actuarial Services LLC, MSCI Private Assets. Analysis of hypothetical payout rates from a portfolio with a starting value of \$100 million, using the asset-weighted average from Horizon's CMAs plus the direct alpha for 75th percentile private funds from MSCI Private Assets (Exhibit 3). The scenarios include the probability of the portfolio delivering a spend of less than \$4 million or \$5 million in any given year over a 10-year period (due to weaker performance of the overall investment portfolio).

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