

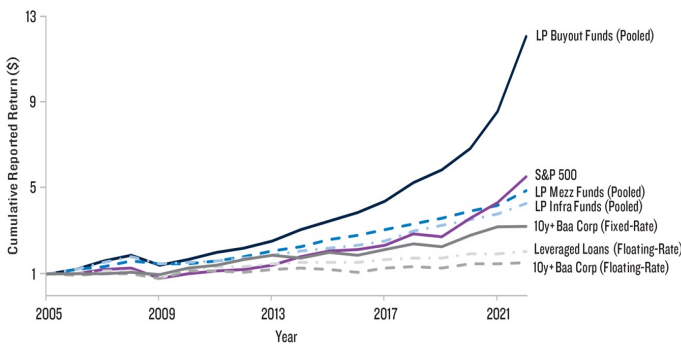
PRIVATE VS. PUBLIC INVESTMENT STRATEGIES: REPORTED AND REAL-WORLD PERFORMANCE



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Based on *reported* cumulative returns, private assets – especially buyout funds – outperformed public assets by a wide margin from 2005 to 2021. However, this traditional performance comparison is misleading because reported performance of private assets does not reflect the *real-world* performance experienced by CIOs.

Traditional Comparison of Private vs. Public Asset Reported Performance; 2005-2021



Note: Private investment strategy annual returns are 1y IRRs computed by pooling cash flows and NAVs across all funds from all vintages for US buyout funds (minimum \$250m capitalization), US mezzanine funds, and global infrastructure funds, respectively. Cumulative returns are calculated by compounding annual returns over the 2005-2021 horizon, assuming a \$1 initial investment. Source: Bloomberg, Burgiss, S&P and PGIM IAS. Provided for illustrative purposes only.

Reported performance for a private asset class assumes an investor's allocation is always fully invested in a highly-diverse pool of private assets (e.g., funds). However, there are many real-world constraints that inhibit a CIO from experiencing this reported performance.

In practice, a CIO must follow an **investment strategy** to achieve a portfolio allocation to private assets. Such a strategy involves investing in only a subset of funds currently available (not the universe of funds), following a particular commitment pacing strategy, and temporarily holding uncalled and uncommitted capital in another asset class (say, a public market index or cash). Fund-selection uncertainty, commitment pacing, and the uncalled and uncommitted components are important contributors to a private investment strategy's real-world performance. Consequently, a CIO's private asset investment strategy performance is unlikely to match reported performance.

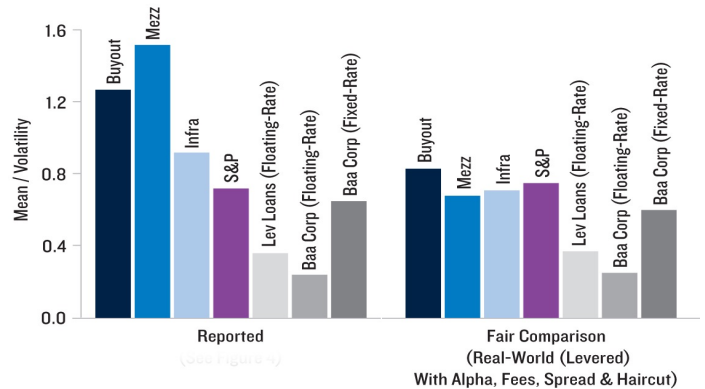
In contrast, reported performance for a public asset class (e.g., publicly listed equities) closely matches its real-world performance since a CIO can, if desired, immediately and fully invest in the entire asset class. In other words, the performances of an allocation to public assets and of its associated public asset investment strategy are identical.

When making asset allocation decisions, CIOs often consult historical reported asset class performance. However, comparing private and public asset class reported performance can be misleading. Instead, CIOs should compare private and public real-world asset class performance at the investment strategy level.

The Fair Comparison (FC) framework is a methodology to produce real-world performance measures for a private investment strategy. With the FC framework, CIOs can compare private and public investment strategies on a consistent, risk-adjusted basis and make better-informed asset allocation decisions.

For 2005-2021, real-world means and volatilities for private investment strategies are significantly different from their reported values. Specifically, using real-world returns we find that a buyout investment strategy outperformed mezzanine and infrastructure strategies, which is not apparent from reported returns. Also, a strategy of investing in public 10y+ fixed-rate Baa-corporate bonds has been competitive with private investment strategies.

Fair Comparison of Private vs. Public Investment Strategy Performance; 2005-2021



Note: All return numbers are annualized. Source: Bloomberg, Burgiss, S&P and PGIM IAS. Provided for illustrative purposes only.

CIOs would have achieved stronger portfolio performance using real-world instead of reported performance for portfolio construction. We consider an example of a portfolio comprising three strategies (buyout funds, 10y+ Baa Corp (Fixed-Rate) and 3m T-bill) with a 9%/y portfolio volatility target. CIOs using the real-world performance of buyout, with a lower mean and a higher volatility than reported, would have faced a lower *ex-ante* efficient frontier and would have allocated less to buyout. Consequently, they would have realized a lower portfolio volatility, meeting the volatility target, and a higher Sharpe ratio, than if they had relied on reported performance.

CIOs can use the FC framework, which can be customized based on their own assumptions, to estimate the real-world performance of their contemplated private assets and make better-informed asset allocation decisions.

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