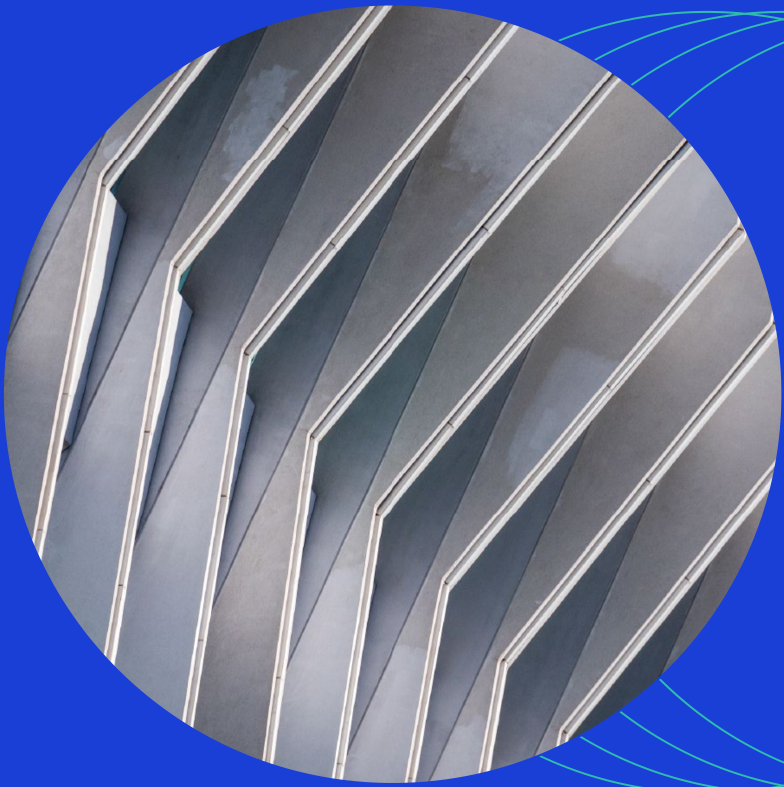
Insights in action

October 2025

Rethinking Access to Private Equity

Applications of the MSCI World Private Equity Return Tracker Index



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Introduction

Private equity (PE) has become an increasingly important component of global capital markets. Over the past several decades, strategies such as buyouts, growth equity and venture capital have generated competitive returns and gained a larger share of institutional portfolios. Assets under management (AUM) in private equity have grown substantially, driven by performance and sustained investor demand for opportunities outside traditional public markets. What is particularly notable today is the broadening base of investors entering this space. While large asset owners and pension funds remain the dominant allocators, the wealth and retail segments are now driving a new wave of demand. Semi-liquid structures (e.g., interval funds, tender offer funds) have emerged to meet this demand, offering access to private markets within more flexible investment vehicles.

The motivation behind this paper is grounded in this shift. Direct access remains constrained by structural features such as limited liquidity, long lock-up periods and complex drawdown mechanisms. These limitations highlight the need for complementary solutions that can bring some of the characteristics of private equity into more accessible and liquid forms.

The MSCI World Private Equity Return Tracker Index (World PERT Index) has been developed in response to this need. The index builds on a simple premise: While some of private equity's historical performance advantage has been attributed to the skill of general partners in sourcing, selecting and operating portfolio companies, another portion can be linked to more measurable exposures such as sector allocation, regional focus and factor characteristics like size, value or leverage. These systematic elements can be approximated using liquid listed equities.

By leveraging MSCI's extensive data on private-equity fund performance and deal-level fundamentals, the World PERT Index seeks to capture the replicable dimensions of private-equity characteristics in a transparent, rules-based and accessible form. In doing so, it aims to provide investors with a bridge between private and public markets.

In the pages that follow, we discuss a range of potential use cases for the World PERT Index, outline its methodology and compare its characteristics and performance against both private-equity benchmarks and public-market indexes. Together, these insights highlight how the World PERT Index can serve as both a research tool for understanding private-equity exposures and as a practical instrument for creating investment solutions for those looking to navigate the growing role of private assets in portfolio construction.

Presenting the MSCI World Private Equity Return Tracker Index

The World PERT Index is designed to capture the portion of private-equity returns that can be systematically measured and attributed to identifiable and persistent general factors. While general partners (GPs) may create value by selecting companies and driving operational improvements, part of private equity's performance relative to public markets arises from sector and regional exposures, as well as the fundamental characteristics of the underlying companies. MSCI's deal- and asset-level data allows us to analyze private-equity funds across managers, assess their aggregate exposure to systematic factors and replicate the scale of such exposures using liquid, listed equities.

Applications of the index

There are numerous use cases for the World PERT Index. Here we focus on two main categories.

1. A liquid alternative to private equity

Private equity has delivered strong returns over recent decades and remains a core allocation for many institutional investors. Wealth and retail investors, as well as some smaller institutions, however, have not been able to take advantage of this opportunity. Barriers include:

- Restricted access: Traditional closed-end drawdown funds are typically available only to large institutional investors.
- Cash-flow uncertainty (drawdown structure) and lack of liquidity: Commitments to closed-end funds are generally locked up for 7–10 years. Capital is also called gradually, creating uncertainty around cash-flow timing and making PE allocations impractical for investors with shorter investment horizons.
- Less transparency: GPs typically disclose limited information about underlying portfolio companies, making it difficult for investors to assess exposures, risks and sources of performance.

The World PERT Index helps break down these barriers by providing a liquid and transparent alternative. A fund or ETF tracking the index would hold listed equities, making private-equity–like exposures accessible to a broader investor base while removing the cashflow uncertainty that comes from private investments. The trade-off is that the World PERT Index seeks to capture only the measurable, systematic drivers of PE performance — not any additional value created by GP skill. This distinction is evident in the relative performance results presented later in this paper.

2. A (liquid) parking lot for cash

The liquidity of a World PERT Index-tracking fund and its similarity to private-equity exposures make it a useful option for managing uninvested or committed capital. We highlight three key applications:

a. Parking capital while awaiting an allocation to private equity

Unlike listed equities, where capital can be deployed immediately after an allocation decision, private-equity commitments often take years to be fully invested. Investors typically need time to select managers, structure commitments across vintages and avoid concentration risk.

During this waiting period, capital is often invested in liquid instruments. Given its close alignment with private-equity characteristics, a fund tracking the World PERT Index could provide another, perhaps more appropriate interim option than the use of broad equity indexes. Using liquid proxies for transitory allocations is common practice — even in liquid markets — where investors park capital with index trackers while selecting active managers.

b. Parking capital that's committed but not yet called by GPs

Once capital is committed to a PE fund, it may take three to five years for GPs to draw it down fully. In the meantime, limited partners (LPs) must hold liquid assets to meet unpredictable capital calls. A World PERT Index-tracking fund could serve this purpose, but with an important distinction from the previous case: here the amount committed is fixed, but the timing of calls is uncertain.

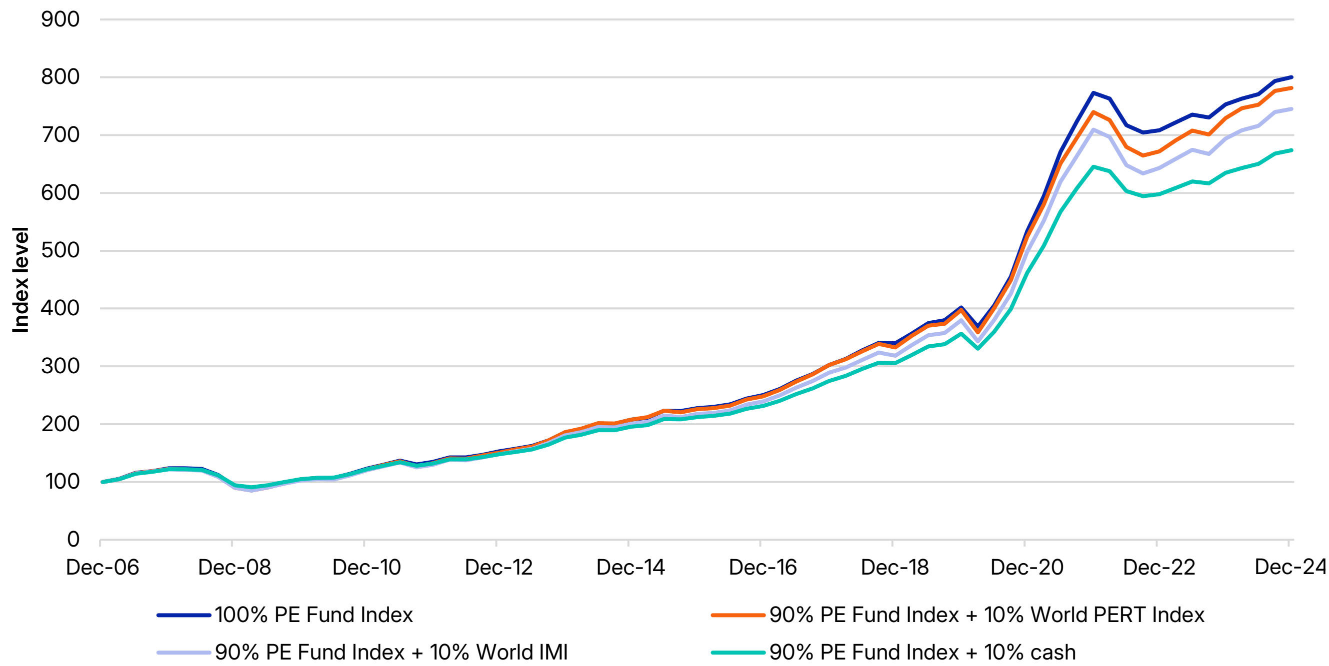
This means LPs must be prepared to liquidate the interim holding in any market conditions, introducing potential mismatch risks. Investors therefore need to carefully manage the uncertainty around drawdown timing when using funds based on the World PERT Index for this purpose.

c. Parking the cash buffer of semi-liquid funds

Semi-liquid or interval private-equity funds invest mainly in illiquid companies, similar to closed-end drawdown funds, but differ in that they provide scheduled redemptions. To meet these redemptions and finance new investments, asset managers typically hold about 10% of the net asset value (NAV) in cash or equivalents. While common practice, this liquidity buffer impacts overall returns and can misalign expectations — an investor committing USD 100 may not realize that only USD 90 is deployed in the target assets.

Investing the liquidity buffer in a World PERT Index-tracking fund could help manage this drag. By preserving liquidity while maintaining an exposure more closely aligned with those of the private-equity opportunity set, such an approach could help semi-liquid funds stay more fully invested. The chart below compares three cases in which a 10% liquidity buffer is held in USD cash, tracks the MSCI World Investable Market Index (IMI) or replicates the World PERT Index. In the World PERT Index case, fund performance tracks more closely the hypothetical possibility of being 100% invested in illiquid private equity. (Further analysis of this use case is outlined in the Appendix.)

Long-term performance of a hypothetical semi-liquid PE fund with liquidity buffers vs fully invested PE fund



Long-term performance of a hypothetical semi-liquid PE fund with a 10% liquidity buffer invested in cash, fund tracking World PERT Index, or World IMI, compared to a fully invested PE fund (MSCI Global Developed Private Equity Closed-End Fund Index, net-of-fees USD returns). The World PERT Index and World IMI are gross total return in USD. The weights of the PE Fund Index and the liquidity buffer are reset to 90%-10% on a quarterly basis.

Design of the World PERT Index

The objective of the index is to track the performance of the private-equity universe in developed markets,[1] as represented by the MSCI Global Developed Private Equity Closed-End Fund Index (PE Fund Index).[2] The PE Fund Index reflects the net-of-fees LP view of thousands of private-equity funds, using their complete cash-flow and valuation histories to produce quarterly performance (time-weighted returns).

The World PERT Index itself is constructed from liquid, listed equities. The eligible universe is the MSCI World IMI, which covers large-, mid- and small-cap companies across developed markets and included 5191 constituents as of the August 2025 rebalance.

The index design rests on a set of key assumptions:

1. Private-equity funds invest in companies, and while these companies are not public, they are fundamentally the same asset class as listed companies.
2. Some of the private-equity return is due to GPs' skill in selecting companies and adding value through control. Some of the return is attributed to their allocation to factors such as sector, geography and style (value, size, growth, etc.).
3. A listed equity index can replicate some of the systematic characteristics of private-equity portfolios and capture the associated returns, but it cannot replicate GP's operational decisions.
4. Within private equity, return drivers vary across strategies (e.g., buyout, venture, growth) and regions (North America, Europe and Middle East, Pacific).

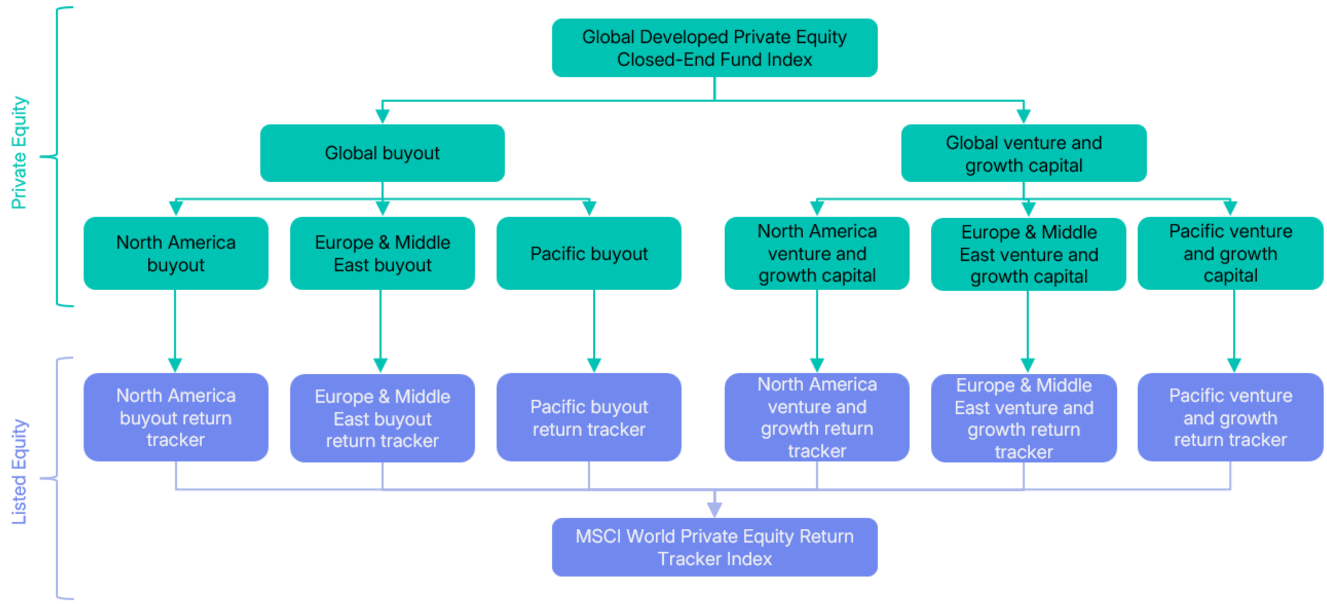
Using these assumptions, we can simplify our approach into three steps:

1. **Segment the private-equity market:** Strategies for venture capital and buyout differ significantly. Buyout companies are often associated with leverage, while leverage is less common among venture-backed firms. Venture-backed and growth companies also exhibit greater growth exposure than buyouts. Given that North America, Europe and Middle East and the Pacific region each display distinct characteristics, we divide the global private-equity market into six components — two strategies across three regions — and build a tracker index for each before combining them into a global tracker index.

[1] Detailed methodology can be found in the index methodology document.

[2] The MSCI Global Developed Private Equity Closed-End Fund Index aims to measure the net-of-fees aggregate performance of unlisted, closed-end private-equity fund vehicles. The index includes all the funds in MSCI's private-capital fund universe that are characterized as developed-market funds. For detailed methodology for these indexes, please contact MSCI client services.

Combining tracker indexes for strategy-region combinations to create global tracker index



2. **Measure replicable private-equity characteristics:** While less familiar in private equity, the systematic drivers of return are well established in listed markets. Factor models such as MSCI Equity Factor Models, which date back to the 1970s, provide the foundation. We group these drivers into two categories: core and non-core. Core factors include sector and country exposures; non-core factors include style factors such as value, growth, size, leverage, low volatility and momentum.

3. **Replicating exposures in a listed equity index:** The final step is to replicate these private-equity exposures in listed markets. We create six tracker indexes (component indexes), one for each strategy–region segment. We then combine them according to their weights in the PE Fund Index.[3]

The following sections outline steps 2 and 3 for each of the six strategy–region components. In what follows, references to the PE fund index denote the relevant segment (e.g., North America buyout).

[3] The weights are based on the most recent available private asset valuations, which are typically reported with a one-quarter lag. Given the breadth of the underlying universe and the relative stability of index exposures, this lag does not materially affect the robustness of the approach.

Measuring exposures

Core factors

Measuring core factors is relatively straightforward. MSCI's private-equity indexes use cash flow and valuation data for a broad universe of private-equity funds. In addition to fund-level data, MSCI collects and processes data on the portfolio companies held by these funds. While data availability varies across metrics, coverage of industry classification and geography is comprehensive. MSCI applies PACS, a proprietary asset-classification framework, for four-level industry classification and a three-level geography scheme.[4]

Core-factor exposures are calculated as country–sector group weights within the PE index. For example, for the North America buyout component, the U.S.–healthcare factor is the weight of all U.S.-based healthcare companies in that segment.

Non-core factors

There are two main approaches to measuring non-core factor exposures in the PE index: (1) regressing PE index returns on factor returns (from equity factor models or equity factor indexes), or (2) aggregating company characteristics bottom-up into index-level exposures. Both approaches present challenges in private equity.

The regression method is constrained by the quarterly frequency of private-equity data (valuations, index levels, etc.) and the smoothing inherent in reported valuations. This results in small effective sample sizes and difficulty extracting meaningful signals.

The bottom-up method faces the ongoing challenge of limited fundamental data for private companies. While not complete, MSCI's private asset and deal-level metrics dataset provides an extensive view of private-company fundamentals and deal-level data.

To overcome these challenges, Shepard and Baker (2025) introduce a Bayesian approach that incorporates company fundamentals as priors within a regression framework.[5] This innovative method combines time-series and cross-sectional information to provide improved estimates of PE-index exposures to non-core factors.

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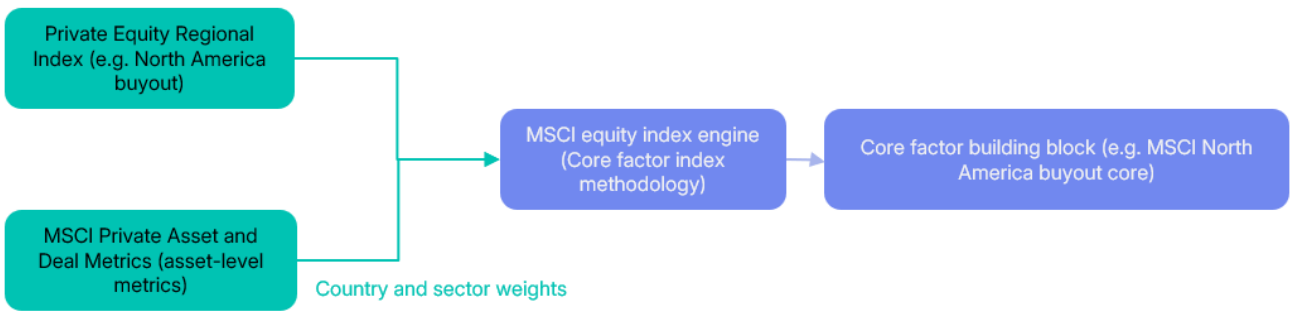
[4] MSCI PACS™ is a global taxonomy created specifically for private assets.

[5] Peter Shepard and Will Baker, "Tracking Private Equity. Understanding the fundamental drivers of private equity performance," MSCI, July 16, 2025.

Replicating exposures and constructing the World PERT Index

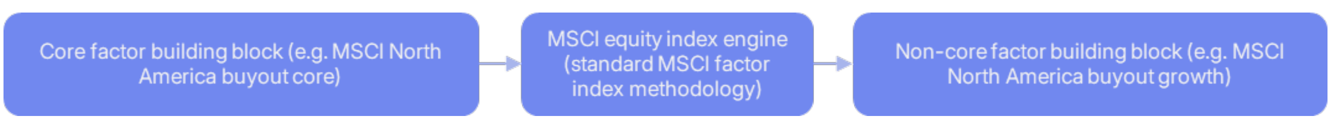
We use a building-block approach to create each of the six strategy–region component indexes. Each component is formed by combining a core-factor index with six non-core-factor indexes.

Core-factor building block: The core-factor index is constructed by reweighting the constituents of the relevant MSCI market-cap index (e.g., the MSCI North America IMI), to match the sector–country weight of the corresponding private-equity index (e.g. the MSCI North America Buyout Index).



The core-factor index re-weights the regional index (e.g. the MSCI North America IMI) to align with the sector and country exposures of the PE index (e.g. the MSCI North America Buyout Closed-End Fund Index).

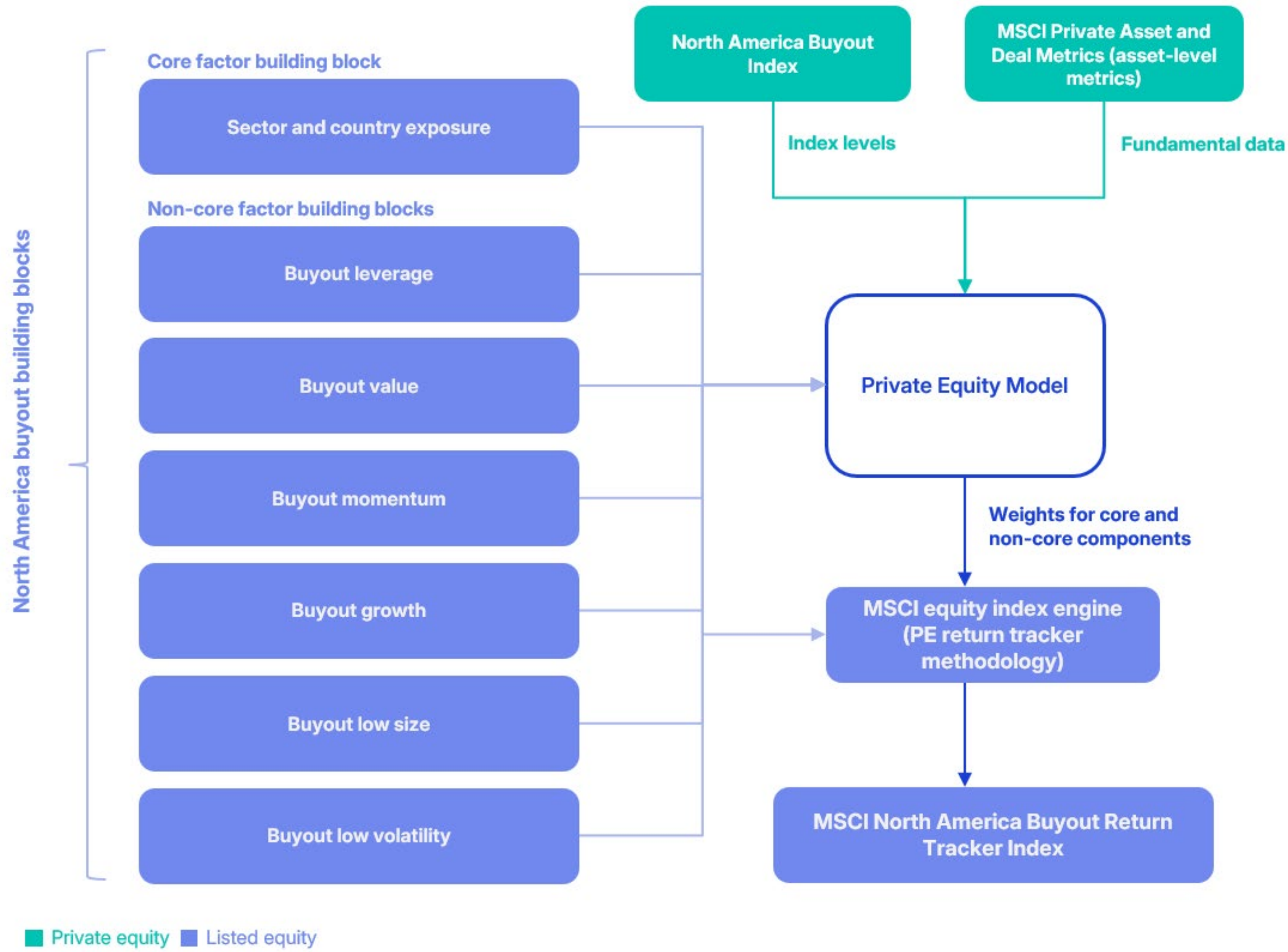
Non-core-factor building blocks: Non-core-factor indexes are long-short style indexes. The long legs are constructed by applying standard MSCI factor index methodologies on the core factor. The short legs are the corresponding core factor index.



Non-core factor indexes are built as long–short portfolios: The long leg applies MSCI's standard factor methodology to the core factor index, while the short leg is the core factor index itself.

Creating the component indexes: Each component index combines the core-factor and the six non-core-factor building blocks with weights determined by the Bayesian regression model highlighted earlier.

Model inputs



Alongside core and non-core factors and historical PE Fund Index performance, company-level characteristics from private-equity funds are used as model inputs. The model then determines the weights of core and non-core factor building blocks for each region–strategy component index.

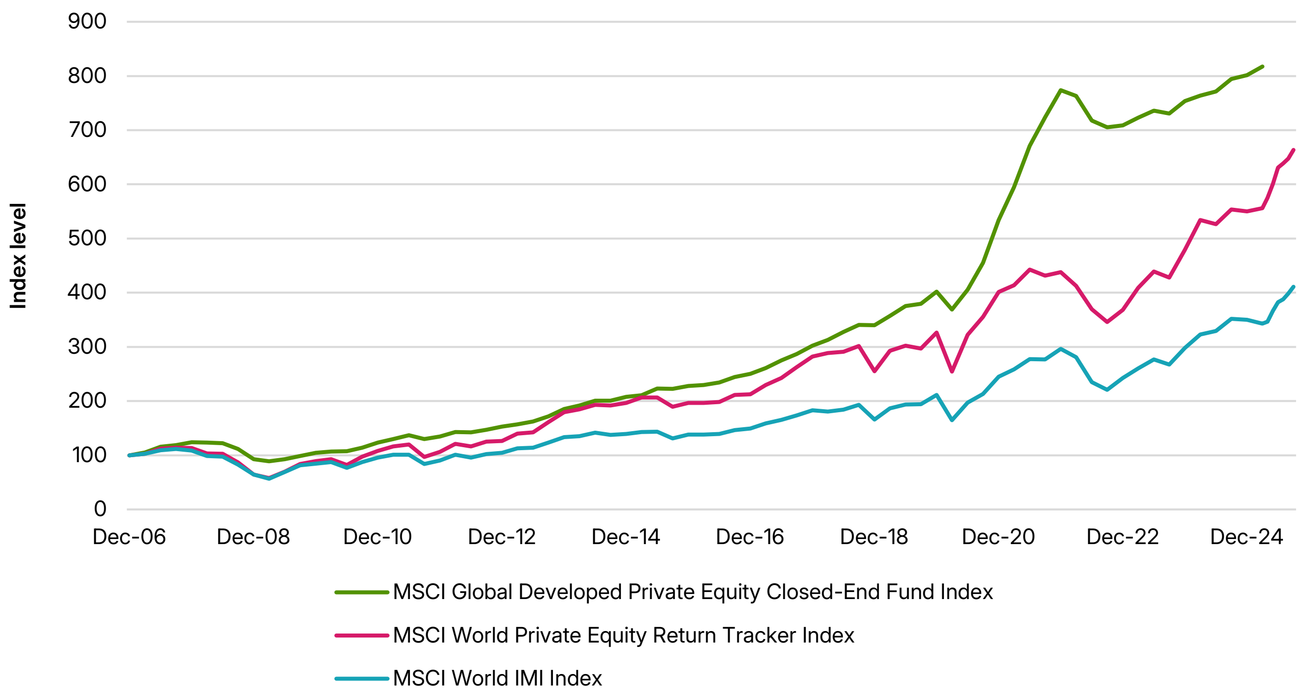
Constructing the World PERT Index: The final World PERT Index is built by aggregating the six strategy–region component indexes. Component weights are aligned with the relative weights of the strategy–region segments in the global PE index. All building blocks, component indexes and the World PERT Index are rebalanced quarterly, in line with MSCI equity index schedules, based on the most up-to-date available data. Updates to private-equity data typically occur with a lag.

Characteristics and behavior of the index

When we compare the long-term performance of the World PERT Index with the MSCI Global Developed Private Equity Closed-End Fund Index and the MSCI World IMI, as expected, the World PERT Index's performance sits between the PE Fund Index and World IMI. Over the analysis period, the PE Fund Index outperformed the World IMI by 520 basis points (bps) annually. The World PERT Index exceeded the World IMI by 290 bps but trailed the PE index by 230 bps.

These results are consistent with our premise: A portion of private equity's outperformance reflects measurable, replicable characteristics (such as sector allocation and factor exposures), while the remainder is driven by less observable elements such as GPs' ability to source, select and enhance companies.

Historical performance of the World PERT Index, the PE Fund Index and the World IMI



Historical performance of the World PERT Index, the PE Fund Index (net of fees), and the World IMI. The World PERT Index and World IMI are indexes of liquid, publicly listed equities, shown as gross total return in USD. The PE Fund Index reflects the net-of-fees aggregate performance of private-equity funds in the MSCI Private Capital Universe and is not investable or directly replicable.

While performance results are intuitive, the risk metrics require explanation. Annualized volatility for the PE index (naïvely measured using standard deviation of quarterly returns) is roughly half that of the World PERT Index and well below the World IMI. This does not imply that World PERT Index constituents are inherently riskier, nor does it stem from poor diversification or mismatched exposures, which are closely aligned by design. The difference arises from measurement. Listed equity indexes reflect market prices, whereas private-equity returns rely on GP-reported valuations. These valuations, as discussed later, smooth underlying fluctuations, making private-equity volatility appear artificially low.

This smoothing also affects other risk measures, including maximum drawdown, and is particularly evident in tracking error. One would expect the World PERT Index to show lower tracking error to private equity than the broad equity market. In practice, tracking errors are similar, with the World PERT Index slightly higher. This counterintuitive outcome is again a by-product of valuation smoothing, which reduces reported volatility but also distorts tracking error, limiting its usefulness as a measure of similarity. In such cases, alignment of underlying exposures provides a more reliable gauge.

Risk and return metrics for the World PERT Index, the PE Fund Index and the World IMI

	Annualized Total Return					Risk	Return/Risk	Max Drawdown	Tracking Error
	1Y	3Y	5Y	10Y	Full	Full	Full	Full	Full
PE Fund Index	7.1%	2.3%	17.2%	14.5%	12.2%	10.0%	1.2	-28.2%	-
World PERT Index	4.1%	10.4%	16.9%	10.4%	9.9%	19.1%	0.5	-49.3%	13.3%
World IMI	6.3%	6.9%	15.8%	9.2%	7.0%	17.6%	0.4	-49.1%	11.7%

Date range: Dec. 29, 2006, to March 31, 2025.

The following table shows sector–region weights of PE Fund Index and the World PERT Index. The World PERT Index has weight distribution similar to the one of the PE Fund Index, a stronger measure of similarity than tracking error.

Sector-region weights for the World PERT Index and the PE Fund Index

Region	Sector	PE Fund Index	World PERT Index
North America	Materials	1.9%	4.2%
	Industrials	12.8%	9.1%
	Consumer discretionary	6.9%	3.8%
	Consumer staples	2.3%	1.0%
	Health care	13.3%	11.4%
	Financials	6.3%	8.1%
	Information technology	25.7%	24.1%
	Communication services	3.3%	4.5%
	Real estate	0.4%	5.1%
Europe & Middle East	Industrials	4.7%	5.4%
	Consumer discretionary	2.8%	3.2%
	Consumer staples	1.2%	1.9%
	Health care	3.4%	2.1%
	Financials	2.8%	3.7%
	Information technology	6.9%	5.1%
	Communication services	1.6%	0.9%
Pacific	Materials	0.1%	0.1%
	Industrials	0.2%	0.4%
	Consumer discretionary	0.3%	0.2%
	Consumer staples	0.1%	0.1%
	Health care	0.2%	0.3%
	Financials	0.1%	0.1%
	Information technology	0.5%	0.3%
	Communication services	0.1%	0.2%

Data as of August 2025 index rebalance.

A snapshot of the index's characteristics illustrates its construction. Core-factor building blocks are long-only, while non-core factors are implemented long–short to strip out market exposure. As a result, the final index is a long–short extension index, with a cash component that may be positive or negative depending on the model's output (i.e., whether the beta is above or below one). In the snapshot shown, the long leg is 125.4%, the short leg 26.3% and the cash position 1.0%.

The methodology also incorporates rules to improve investability and liquidity. These include limiting allocations to small-cap securities, excluding names with negligible index weights, and removing securities with low liquidity from both the long and short sides, as well as hard-to-borrow stocks from the short leg.

Investability and liquidity metrics for the World PERT Index and the World IMI

Metrics	MSCI World Private Equity Return Tracker Index	MSCI World IMI Index
Total weight	99.0%	100%
Long weight	125.4%	100%
Short weight	-26.3%	N/A
USD weight	1.0%	N/A
#Constituents	2033	5191
#Constituents - long	1575	5191
#Constituents - short	458	N/A
Largest constituent weight	4.6%	5.1%
Smallest constituent weight	-1.1%	0.0%
Weight of small cap securities	35.9%	10.47%
Largest industry allocation - industry weight	16.9%	9.6%
Largest industry allocation - industry name	Software	Semiconductors & Semiconductor Equipment
Turnover*	31.2%	0.4%
Max weight multiplier (relative to IMI index)	25.6	N/A
Min weight multiplier (relative to IMI index)	-17.7	N/A
Weighted avg multiplier - long	14.9	N/A
Weighted avg multiplier - short	-1.2	N/A
Weighted avg 3m ATVR** - long	210.7%	165%
Weighted avg 3m ATVR - short	158.3%	N/A

Data as of August 2025 index rebalance. *Turnover indicates one-way turnover of the index on the August 2025 rebalance. **ATVR is the annualized free-float-adjusted traded value ratio based on recent 3-month data. ATVR measures trading volume in a security as a proportion of market capitalization.

Conclusion

Private equity has grown into a core allocation for many institutional investors and is increasingly sought after by wealth managers and retail channels. At the same time, its structural features — illiquidity, less transparency, long lock-ups and uncertain cash-flow profiles — continue to limit direct access and create practical challenges even for experienced allocators. These dynamics highlight the need for complementary approaches that can bring elements of private-equity exposure into more accessible formats.

The MSCI World Private Equity Return Tracker Index responds to this need by seeking to systematically replicate the measurable drivers of private-equity performance, including sector, geographic- and style-factor exposures, using listed equities. While it cannot capture value creation associated with GP skill, it provides a transparent, rules-based framework that reflects part of the return-stream variability of private equity in a liquid form. This makes it directly relevant for investors seeking a potential liquid alternative to private-equity allocation. Beyond this, it can also serve as the basis of an interim allocation vehicle during the pacing of capital commitments, provide the underlying for a liquid buffer within semi-liquid funds, and offer an alternative way to study private-equity exposures in a public-market setting.

Appendix

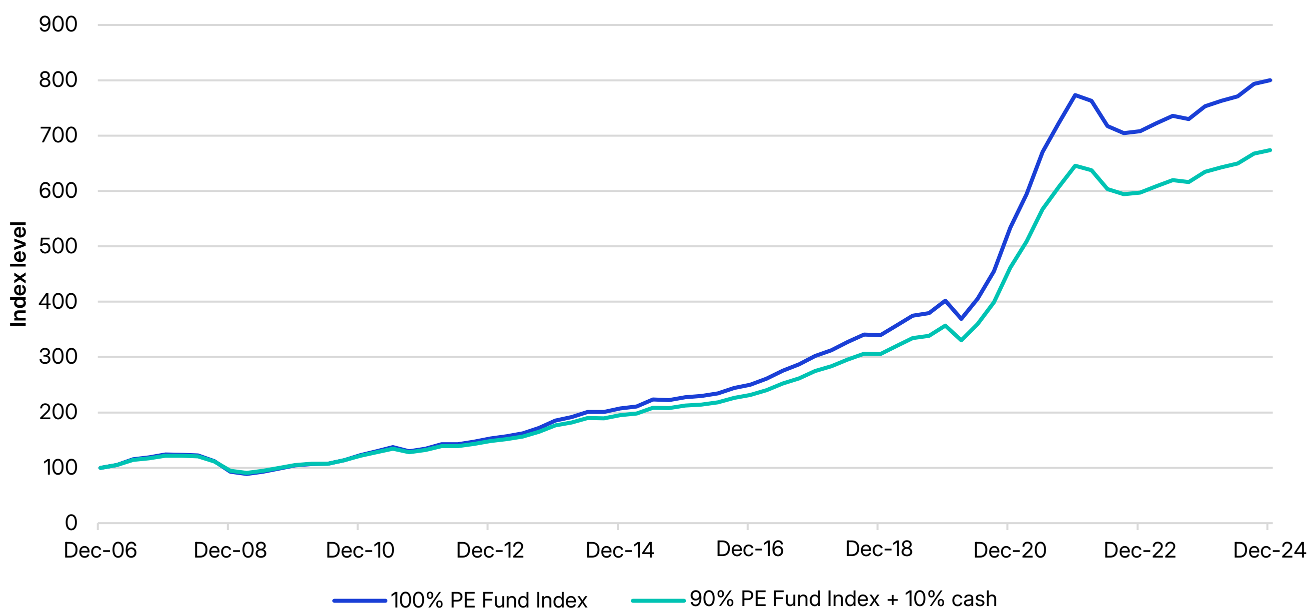
Replacing cash with the World PERT Index in semi-liquid funds

In this section, we discuss the advantages and disadvantages of using the World PERT Index in place of cash for the liquidity buffer in semi-liquid funds. While not the focus of this paper, we also underscore the need for fair-value NAVs in semi-liquid structures and suggest that World PERT Index could be used both as a liquidity buffer and as an input into more accurate NAV estimation.

Replacing cash with an allocation tracking the World PERT Index may have raised long-term expected returns — by capturing the equity premium — but it would also have introduced higher nominal return volatility. Consider a semi-liquid private-equity fund that invests 90% in private equity and 10% in liquid assets. We compare two scenarios, one where the 10% is held in cash and another where it is invested in a vehicle tracking the World PERT Index.

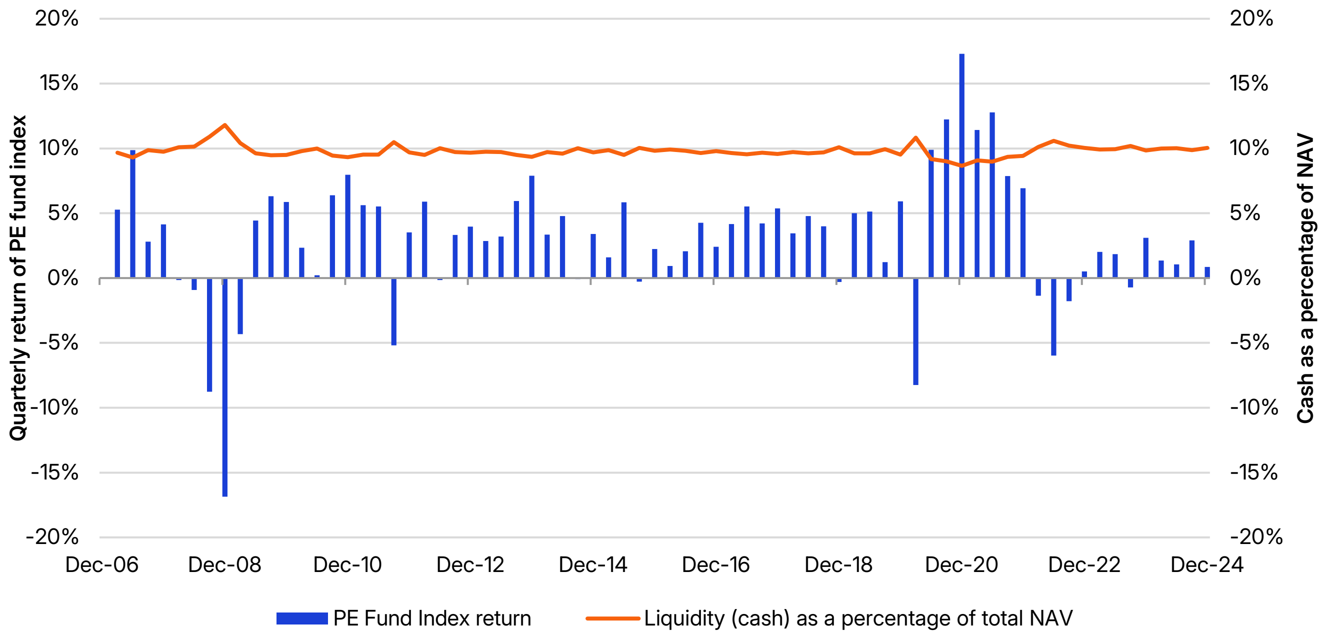
Using cash: Holding 10% in cash dampens performance, as cash generates little return. However, it provides stability in market downturns, maintaining its share of NAV at roughly 10% throughout the cycle.

Long-term performance of a hypothetical semi-liquid PE fund with cash buffer vs fully invested PE fund



Long-term performance of a hypothetical semi-liquid private-equity fund with a 10% liquidity buffer invested in cash compared to a fully invested PE fund (MSCI Global Developed Private Equity Closed-End Fund Index, net-of-fees USD returns). Cash allocation is to SOFR and the index is rebalanced quarterly to a 90%-10% allocation.

PE quarterly return and change in cash's share of NAV over quarters

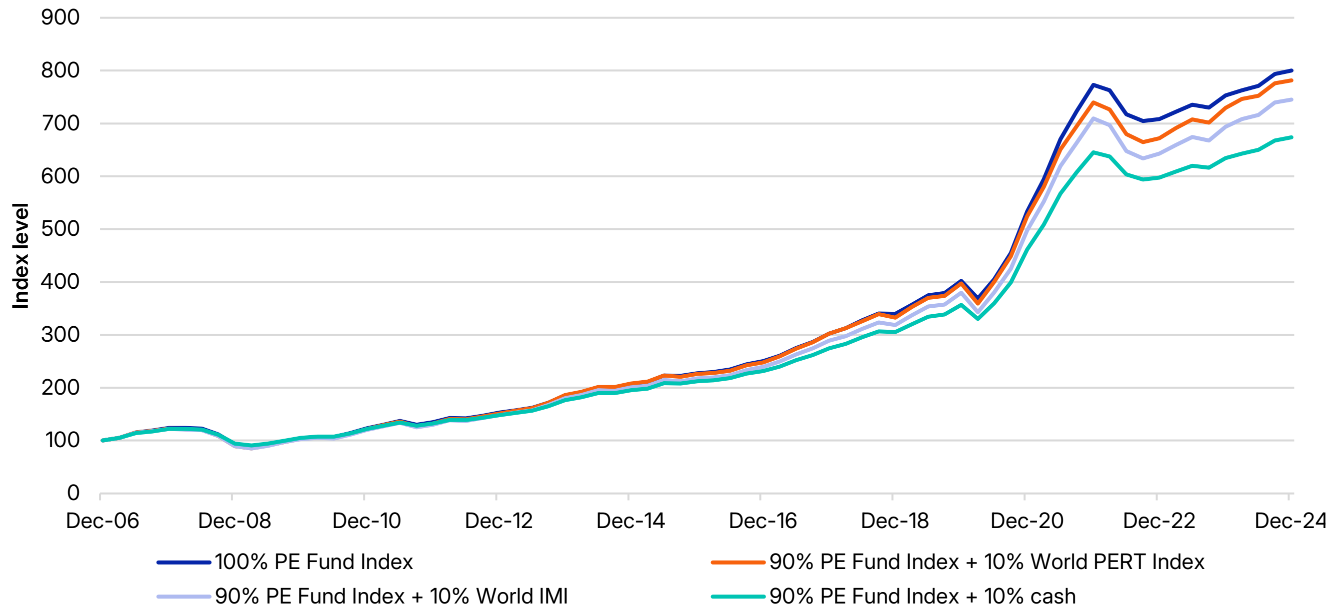


The chart illustrates how an initial 10% allocation of NAV to cash at the start of each quarter evolves as a percentage of NAV by quarter end.

Using the World PERT Index: Allocating the liquidity buffer to track the World PERT Index has provided market exposure and improved historical long-term performance so it approaches that of a hypothetical 100% PE allocation. In the short term, however, the World PERT Index has moved with public markets, causing fluctuations in the ratio of liquid assets to NAV. While generally stable around 10%, this ratio has dropped to ~8.5% during severe market drawdowns.[6]

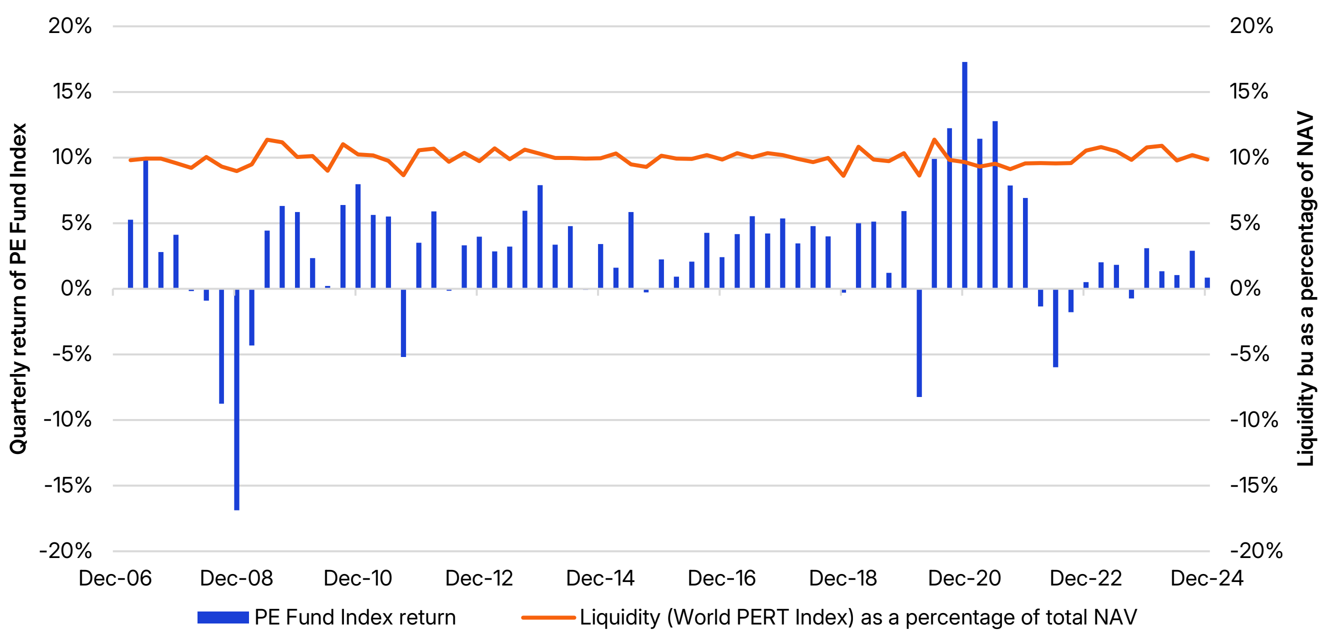
[6] These numbers are calculated based on the level of the PE Fund Index, which is itself based on the GP-reported valuations and may not fully reflect the market. If the GP valuations were more reflective of the market movement, this ratio would stay closer to 1.

Long-term performance of a hypothetical semi-liquid PE fund with liquidity buffers vs a fully invested PE fund



Long-term performance of a hypothetical semi-liquid PE fund with a 10% liquidity buffer invested in cash, World PERT Index tracker, or World IMI tracker, compared to a fully invested PE fund (PE Fund Index).

PE return and change in World PERT Index-tracker fund's share of NAV over quarters



The chart illustrates how an initial 10% allocation of NAV to a World PERT Index-tracker fund at the start of each quarter would have evolved as a percentage of NAV by quarter-end.

This divergence arises partly from NAV smoothing in private equity. GP-reported valuations typically respond to market corrections gradually, understating volatility and making private assets appear more stable than they truly are. In contrast, the World PERT Index reflects market prices in real time, creating short-term discrepancies but arguably offering a more accurate picture.

In closed-end funds, such valuation lag is less harmful, as no transactions occur based on interim NAVs. In semi-liquid funds, however, redemptions are processed at these smoothed NAVs, which can create fairness issues among investors.

Hypothetical example:

Assume two investors, A and B, each invest USD 50 in a semi-liquid fund that allocates 90% to PE (proxied by the PE Fund Index) and 10% to cash. Investor A redeems whenever the public market (MSCI World IMI Index) falls by more than 5% in a quarter, up to 10% of NAV. Suppose the "true" private-equity-market return tracks the World PERT Index.

Between January 2007 and December 2024, there were 13 such quarters, with the market averaging –12.7%. Over these periods, the fund's reported NAV fell only –3.7%. Starting from USD 100 total NAV, it would decline to USD 96.3, while the "true" value (using World PERT Index returns) would be USD 87.5. Investor A redeems 10% (USD 9.63) and ends up with 44.5% of the remaining fund, while B holds 55.5%.

Revaluing based on the "true" USD 87.5 NAV:

- Investor A = USD 9.63 + 44.5% × (USD 87.5) = USD 44.2
- Investor B = 55.5% × (USD 87.5) = USD 43.3

This simple example highlights how smoothed NAVs can transfer value from non-redeeming to redeeming investors.

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