US Private Equity Replication

November 2023
A New Type of Listed Private Equity Investment

In this paper we present the Solactive CEPRES US Private Equity Industry Replicator Index, explain how it is constructed, and compare it to other available products that promise to offer exposure to the private equity (PE) market.

The PE industry has grown rapidly over the last two decades, recording an extraordinary increase in funds raised, fund size, deal volume, and overall deal size. PE is now a major component of the alternative investment landscape. But while investor involvement in the asset class has soared as returns have outperformed public market assets, PE remains off limits to some investors. Another perennial challenge – illiquidity – remains largely unresolved. There have been numerous attempts to broaden access to this asset class, including via investments into publicly listed private equity firms. However, buying the shares of a PE firm is not the same as investing in PE funds.

In a bid to solve the challenges of accessibility, illiquidity – and the significant tracking error of many existing products compared to real private equity returns – that continue to exist for many investors, we have adopted a new approach.

The Solactive CEPRES US Private Equity Industry Replicator Index provides return exposure to the return profile of buyout funds focused on North America. Its returns are designed to match the distribution of net asset value (NAV) for private equity investments (at a deal/portfolio company level) on a continuously-updated basis. The key innovation is that this performance is replicated using the Solactive GBS United States 500 Index, which tracks the largest 500 companies in the US stock market. Market capitalization weights in the Replicator Index are adjusted to align with current PE investments.

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This replication approach, based on reweighting publicly listed equities, can deliver a similar performance to the North American private equity sector. The Replicator Index generated a total return of 317% from January 2007 to September 2022 compared to 334% for the CEPRES Buyout North America Index (and 245% for the United States 500 Index). Volatility of the Industry Replicator Index is just 0.17,
significantly lower than the target Buyout Index. As a result, the Solactive CEPRES US Private Equity Industry Replicator Index offers the highest Sharpe Ratio of the three indices, at 0.57, compared to 0.48 for the standard United States 500 Index, and 0.46 for the CEPRES Buyout North America Index. In addition, downside risk – as measured by the maximum drawdown – is lowest for the Industry Replicator Index at 47%, compared to 50% for the United States 500 Index and 58% for the Buyout North America Index.

The graph above shows the similarity in performance of the CEPRES Buyout North America Index and the Solactive CEPRES US Private Equity Industry Replication Index. The outperformance of both over the Solactive GBS United States 500 Index is clear. In the case of the Replication Index, the outperformance is derived solely from the PE-targeted weighting. The following two graphs show how this weighting changes over time, reflecting how the focus of private equity investments has shifted across various industries over the last fifteen years.
Industry exposure of the Replication Index and the Benchmark across time does not align exactly. For example, exposure to financials is consistently lower in the Replication Index than in the benchmark. Equally, healthcare is higher in the Replication Index than in the benchmark while PE exposure to the consumer industry and industrials is higher than the benchmark across the entire timeline. Nevertheless, changes in exposure are clearly correlated across the two indices through the time period.
The graph above shows how the industry exposures of the Solactive CEPRES US Private Equity Industry Replication Index and its universe has changed over time. Notably, divergence has narrowed (especially in the last decade). This could be interpreted as reflecting a change in investment approach by PE, with PE managers broadening the range of industries they invest in rather than targeting a handful of sectors.

**How Do Existing Approaches to PE Investment Work?**

Until now, many investors have accessed PE-related returns by buying the shares of publicly listed private equity companies. This has several disadvantages, as can be seen by comparing the Solactive CEPRES US Private Equity Industry Replication Index to the S&P Listed Private Equity Index and the LPX50 Listed Private Equity Index. One downside of these indices is that they are based on publicly listed private equity firms, which operate globally and across various stages/strategies, including infrastructure, real estate and other strategies. They therefore do not specifically track the performance of the US private equity market.
The graph above shows the divergence in performance of the S&P and LPX50 indices from the US private equity market; the Replicator Index is notably more aligned with the North America Buyout Index. This divergence becomes even more pronounced when products, such as ETFs, that use the S&P and LPX50 indices are considered. This is because ETFs typically have total expense ratios of between 0.65% and 2.7%, which detracts from performance.

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The table shows the performance of the Buyout Index, the Replicator Index, the United States 500 Index and the two listed PE indices from September 2013 to September 2022. The two PE indices fail to outperform the broad US benchmark, and do not remotely replicate US PE market performance. In contrast, the total return of the Solactive CEPRES US Private Equity Industry Replicator Index is within 10 percentage points of the PE market return.

Blackstone, Partners Group, 3i and KKR are among the largest publicly listed private equity companies. These multi-strategy investment firms have combined assets under management of more than $1.5 trillion. However, while they are clearly successful in raising funds and investing money, the index tracking them underperforms the 500 biggest US companies. One reason for this is that a PE fund buys, optimizes and sells operating businesses over a defined lifetime. Firms raise capital from institutional investors and use it to acquire, invest in, or manage various assets, including real estate, private companies, and infrastructure. The firms
aim to generate returns for their investors through active management, value creation, and strategic investments.

In contrast, the business model of a typical listed PE company is focused on private equity and alternative asset management. Its main revenue drivers are management fees and carried interest payments, which are linked to the gains delivered to investors. Typically, Limited Partnership Agreements include hurdles and other guaranteed rates of returns for limited partners (investors that invest directly in private equity funds). As a result, revenue for a listed PE company is highly dependent on performance, which can be volatile: a return that is just 1 percentage point lower can result in significantly lower success-linked carried interest payments, impacting the listed PE firms performance and its stock price. Of course, PE companies’ success is also dependent on other external factors; the current slowdown in fundraising will likely affect performance, for instance.

How Can the Private Equity Replication Index Be Used?

In bullish market conditions, instruments (like an ETF or financial derivative/product) based on the Solactive CEPRES US Private Equity Industry Replicator Index can provide the following benefits:

1. **Diversification**: Private equity investments are illiquid and often have a long-term horizon. An instrument referencing the Industry Replicator Index can provide diversification by allocating a portion of the PE allocation to a more liquid form of exposure, reducing overall portfolio liquidity risk.
2. **Immediate Deployment/Exposure**: Typically, PE funds call committed capital over several years (with around 75% usually called by year four). In contrast, investors can achieve instant exposure with an Industry Replicator instrument.
3. **Cushioning From Regulatory Changes**: New regulations or tax policies may impact private equity investments. An index-referencing instrument can provide a buffer against adverse regulatory developments since the index is only based on transparently regulated public equities.
4. **Portfolio Flexibility**: An instrument referencing the Industry Replicator Index allows for more dynamic portfolio management, enabling investors to adjust their exposure to private equity as market conditions change.
5. **Straightforward Asset Allocation Rebalancing**: Gaining exposure to PE via an investment referencing the Index can facilitate periodic rebalancing of asset allocations to maintain target risk levels and investment objectives.

In a bearish environment, an investment tool referencing the Industry Replicator Index can provide a valuable hedge, offering protection against:
1. Macroeconomic Uncertainty: The outlook for the global economy remains unclear; changes in the interest rate environment, geopolitical tensions, or other factors could prompt sudden market downturns.

2. Interest Rate Risks: Changes in interest rates can affect the valuation of private equity investments. A hedge (e.g. inverse ETF) can mitigate the impact of rising interest rates on the overall portfolio.

3. Market Volatility: Private equity investments can be subject to valuation fluctuations, especially during volatile public market conditions. Hedging can reduce portfolio volatility and protect against downside risk.

4. PE Market Downturns: In uncertain economic times, private equity investments may face challenges, such as delayed exits and reduced valuations. Hedging using an instrument referencing the Industry Replicator Index can some downside protection.
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