DSC Quantitative Group

Frequently Asked Questions

1. How does the Thomson Reuters Private Equity Buyout Index track the industry?

The PE industry tracking is made up of two indices: a Research Index that tracks the returns of the underlying portfolio companies of U.S. private equity funds and an Investable Index that is designed to track the Research Index.

2. What does the Research Index track and how does it compare to other PE Indices?

The Research Index seeks to track the universe of U.S. private equity-backed portfolio companies. As a result, the Index is tracking the "gross" returns of a continuous portfolio of the entire asset class. Most other indices are tracking fund-level returns and are consequently reporting "net" returns (i.e., after fees).

3. How can one be sure that the Thomson Reuters Private Equity Buyout Research Index accurately reflects the PE industry returns?

The Thomson Reuters PE Index is driven by a granular data collection process that includes valuation information on over 5,000 U.S. PE-backed companies, currently valued at $1.7T. While we believe this represents the vast majority of the U.S. PE universe, we recognize that data collection is an imperfect process and that there are potentially some missing smaller PE-backed companies. However, as we are constructing a market-cap weighted index, we believe we are capturing the largest companies that drive returns for the overall asset class. Any smaller companies that we may be missing would be unlikely to have a material impact on the overall valuation of the Index.

4. How are monthly PE-backed company valuations determined in the Research Index?

Our approach to constructing the Research Index includes a combination of observed and estimated valuations. Our estimated values are unbiased and driven by calibrated econometric models incorporating observed valuations, public market comps, and other economic variables.

In a similar way, Cambridge Associates' PE and VC index values are driven by manager reported returns, which incorporate a combination of observed and estimated values (as un-listed companies' valuations are by definition "estimated" until they are finally sold). Valuations may differ widely for the same company across PE managers. This may be the result of different valuation models, associated fees, or an attempt to manage fund level returns in the short-term. Ultimately, Cambridge's and our approach will reflect the actual "selling price" of the company at exit.

At any point in time we believe our Index more accurately reflects the performance and valuation of the industry as it takes into account up-to-date public and private market information. Also, we have no inherent biases on position marking in our Indices. As an example to the contrary, PE industry valuations during the Global Financial Crisis were widely considered to be miss-marked as the PE industry's overall valuation did not drop anywhere near the same levels seen in the broader equity markets. This was demonstrated clearly during attempts to sell PE stakes in the secondary market.

5. Since it is not possible to get company marks on a monthly basis for PE-backed companies, how accurate have your estimated PE valuations been over time?

Perhaps the clearest way to assess the accuracy of our valuation methodology is to compare what kind of revisions have been made over time to the Research Index (the Research Index is subject to revision for eight quarters as supplemental data becomes available). Ultimately, any company's value estimate will be

"trued-up" during the exit process (this is also true for traditional PE managers). In examining this level of change over the eight quarter periods during which a modification can be made per the Index rules, we observed that on average the maximum monthly adjustment to the Research Index was just 14 basis points.

6. Since your product seeks to replicate the asset class return stream, does that mean you are not believers in the value creation of PE managers?

Our view is that many PE managers create significant value as they transform businesses, often through some combination of improving operational efficiencies, upgrading management, improving corporate governance, and improving balance sheet management. And because these improvements are captured in the company valuations of the Research Index, we are able to reflect the effects of the "business enhancement premium" through the replication process.

7. How are you able to replicate the Research Index?

The Research Index is made up of a large portfolio of privately held equities, or simply "stocks." The fact that they are private does not matter - they still behave like their publicly listed equity peers and economic headwinds and tailwinds impact them in similar ways. Our exclusive relationship with Thomson Reuters provides us with significant information on the make-up of the individual private equities and the portfolio characteristics of the Research Index. In a large portfolio like the Research Index, the idiosyncratic elements of individual companies tend to neutralize each other out, leaving the systematic return drivers of the asset class. As a result, we are able to construct a tracking portfolio in the same way one might replicate the S&P 500 with just a subset of the index's constituents or by using equities not included in the index.

8. The Thomson Reuters Private Equity Index appears to have higher volatility than traditional PE, including the Cambridge Associates' Index. Is that correct?

We believe our Index reflects a more accurate picture of the asset class volatility as it is marked daily (rather than quarterly, in the case of Cambridge) by models driven by current market data. PE fund managers tend to dampen volatility by smoothing returns. Also, recent academic research estimates the actual PE industry volatility to be ~22%, which is in line with the long-term figures from our PE Index.[1]

9. What are the appropriate applications of the product?

For institutional investors with well-developed PE programs, we look at our product as a complement to traditional PE investments, as part of a core-satellite framework or as an exposure management tool. For investors without the scale and infrastructure required for a properly diversified PE program, our Index can provide a compelling alternative to a Fund-of-Funds approach. Key benefits include:

- Highly liquid and significant capacity relative to traditional private funds
- Tracks gross US PE industry performance by eliminating the layers of management and incentive fees associated with private funds
- Immediate and ongoing asset class exposure that is not impacted by unpredictable GP capital calls and distributions
- Diversification benefits across vintages, sectors, and fund managers as the strategies seek to track the aggregate PE and VC industries

[1] Kinlaw, W., Kritzman, M., Mao, J. "The Components of Private Equity Performance: Implications for Portfolio Choice." *Journal of Alternative Investments,* forthcoming.