

Building benchmarks of unlisted infrastructure equity investment

The four main issues with building a suitable index

In this article, drawn from research carried out with the support of Meridiam Infrastructure and Campbell Lutyens, Frederic Blanc-Brude, research director at EDHEC Risk Institute – Asia, argues that unlisted infrastructure equity benchmarks have the potential to meet the major expectations institutional investors have of infrastructure investment and could provide infrastructure market beta. Suitably diversified infrastructure index portfolios would provide attractive risk-adjusted returns for efficient investment in infrastructure and multi-asset-class diversification.

In modern finance theory, separation theorems state that the management of risk and performance is best done via separate portfolios: for a pension fund or insurance company, performance should be obtained through optimal exposure to risk factors in order to minimise the burden of contributions or premia, while hedging liabilities is the role of a separate, dedicated portfolio (Amenc *et al.* 2010). In this context, the choice of benchmark is central to the portfolio construction exercise. In the general case, once reliable estimates of risk and expected returns have been obtained, one may design efficient proxies for asset class benchmarks. But an assessment of expected returns and risk measures for infrastructure equity investment cannot be derived from existing research results, and instead requires the design of appropriate benchmarks.

Although the potential benefits of index-based infrastructure products seem very attractive, our current knowledge based on past experience of private equity funds or listed infrastructure companies is inappropriate to develop such products.

Building infrastructure betas will require concerted efforts between final investors, investment managers and academics in order to meet certain minimum requirements. These requirements depend on whether the index is used as a benchmark for investment in specific styles, instruments or locations or as an investment vehicle. Each of these uses has its own set of construction requirements, some of which

overlap. For instance, representativity may be more important for indices that are meant to be used as benchmarks for performance measurement, while investability may be of greater importance for indices that are meant to be investable. In common is a requirement for transparency: both the construction methodology and the information to calculate the index should be publicly available.

Based on EDHEC-Risk Institute's previous work on unlisted real estate indices (Schoeffler, 2012), we highlight the four main issues with building a suitable index for unlisted infrastructure:

1. **Valuation:** In the absence of frequent market transactions, valuations are contentious and may lead to smoothing and a mis-representation of volatility. New research on infrastructure equity valuation and reporting is necessary to arrive at a clear, academically-validated and industry-recognised framework.
2. **Representativity:** Given the mostly private and decentralised nature of infrastructure projects, transaction prices or appraisals should be collected directly from market participants. Although institutional investors account for a major share of the overall infrastructure markets, any index based on information acquired solely from them misses information on the rest of the sector. Such issues need to be addressed explicitly, leading, for example, to an index for institutional infrastructure investment with a clear liquidity threshold.
3. **Transparency:** As most providers of individual-deal-based indices use proprietary information, the actual components of underlying indices are generally not published. Like appraisal-based indices, transaction-based

indices also have this problem, in addition to the extra layer of opaqueness caused by the complex and counter-intuitive economics involved in calculating them.

4. **Investability:** Indices based on direct investment would lack investability. Even if the exact projects an index is based on were known, it would be very difficult to invest in these indices. First, the corresponding projects or utilities are most likely not on the market at the corresponding time. Second, index replication with other projects would, given the high unit values involved, certainly require great availability of funds. With these investment restrictions and the general heterogeneity of the sector, index replication would involve considerable tracking error.

These issues need to be addressed in the case of unlisted infrastructure indexing and benchmarking. By using data collected according to clear reporting standards, an index could address the problems of representativity, transparency and investability that can beset current benchmarks. In short, it could be designed to have greater transparency and to be more representative. Using unlisted infrastructure funds with an active secondary market, problems of investability could be addressed.

In terms of representativity, sub-universes can be designed to incorporate the financial economics of infrastructure contracts, including such variables as revenue schemes (e.g. availability payments, real tolls, shadow tolls), financial structure, regulatory regimes, etc. In line with the recent initiative by the UK Treasury to have Private Finance Initiative (PFI) returns published regularly, the index can also be transparent. ■

References

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