Building Benchmarks For Infrastructure Investors
3 reasons to build private infrastructure investment benchmarks

#1 Asset owners need benchmarks to answer asset allocation, prudential and performance attribution questions.

#2 Using public equities to proxy private infrastructure fails to capture any unique or new investment characteristics.¹

#3 In a 2016 EDHEC/G20 survey, 94% of infrastructure investors concurred that such benchmarks did not exist. 75% of asset owners also declared that they were not sure they could trust the valuations reported by private infrastructure managers.²


² Blanc-Brude, Frederic, G. Chen and T. Whittaker (2016). “Towards Better Infrastructure Investment Products, A survey of investor’s perceptions and expectations from investing in infrastructure”, EDHEC Infrastructure Institute Publications. This survey included 187 respondents including the largest asset owners in the world representing USD7Tr in assets under management.
What is EDHECinfra?

With the support of MAS and the industry, EDHEC Business School created EDHECinfra to build benchmarks for infrastructure investors. Since 2015, a full-time team of 15 researchers, analysts, IT engineers and relationship managers is implementing a four-part action plan.

A global data collection effort

EDHECinfra has created the largest infrastructure investment database in the world, with hundreds of firms, going back 20 years and covering 14 European markets. Coverage is now being expanded to Asia Pacific & the Americas.

Advanced private asset pricing

EDHECinfra has developed a unique technology to value seldom traded assets like private infrastructure while taking into account observable changes in cash flow risk, market conditions and the term structure of interest rates, allowing accurate risk-adjusted performance measures.

Proper portfolio construction

With better risk measures, portfolios can be built that take into account the covariance of returns and the role of diversification in infrastructure investment. This has never been done before and shows that delivering the infrastructure investment narrative requires accessing infrastructure investments in a much more diversified manner than most asset owners are able to today.

Industry and regulatory impact

EDHEC research is designed to be useful to the financial industry. EDHECinfra is building 240 families of private infrastructure equity and debt indices covering multiple geographies, sectors, and corporate structures. Flagship indices are available through Bloomberg. These results contribute to the regulatory and policy debate, from the calibration of Solvency-II, to furthering the objectives of the G20.
The objective of the EDHEC infra All Infrastructure Private Equity index is to represent the broad market performance of the infrastructure private equity sector in 14 European countries.

The index includes 330 value weighted live exposures to private equity representing EUR293.554 Bn-equivalent of market value, or 14 percent of the identified investable universe by number of investments and 42 percent by book value. Over the period, a total 398 individual constituents have been included in the index. The index is ‘fully hedged’ i.e. the effect of exchange rate movements are not reflected in the returns.

Index sector breakdown by market value (2016)

Map of the physical assets in the index
Overview of the index computation methodology

Several steps are needed to derive robust measures of the required metrics:

1. A model of the "free cash flow to equity" (FCFE) until the end of the investment life is implemented using information about the firm’s revenues, capital and operating costs, as well as its capital structure, debt service cover ratio and forecast debt service;

2. The mean and variance of each firm’s FCFE "retention rate" (RR i.e. Cash at Bank end of period divided by FCFE) is estimated in all realised periods and forecasted for the remainder of the firm’s life;

3. The combination of the forecast of the mean and variance of FCFE and RR allows computing a stream of expected equity payouts as well as their conditional volatility;

4. Firms are grouped by risk 'clusters' or buckets, as a function of their payout volatility and time to investment end (duration);

5. Within each risk bucket, a term structure of discount factors (and its range) is derived, reflecting the value of the investment relative to expected payouts and conditional (future) payout volatility, as well as any relevant and observable market prices (primary and secondary transactions) in each year;

6. Finally, after individual performance metrics have been obtained for each firm’s senior debt, a return co-variance matrix is estimated for each reference index (and subindex) and individual assets are aggregated following preset inclusion and rebalancing rules.

(continued) the EDHECinfra Private Equity Europe Broad Market Index (hedged)
Supporters

About EDHEC Business School
EDHEC Business School, founded in 1906 and among the select few institutions to have garnered international recognition through the triple crown of EQUIS, AACSB and Association of MBAs accreditations, offers management education at undergraduate, graduate, post-graduate and executive levels designed to meet the needs of companies.

Its large range of international graduate programmes draws students from the world over. With its five campuses in Lille, Nice, Paris, London and Singapore, its 6,000 students, and its 134 full-time faculty and researchers, EDHEC has been ranked among the top international business schools for several years.

The Research for Business strategy is a key component of the school’s identity. Due to its not-for-profit aim, its financial independence and the time devoted to conducting research, the Research and Development Department contributes, as do other entities within the school, to the group’s strategic objectives of growing our resources, aiming to have a visible impact on business, and forging close ties with business wherever they may be located.

About the EDHECinfra Advisory Board
EDHECinfra was created to address the profound knowledge gap faced by infrastructure investors. In its endeavour, EDHECinfra is supported by an International Advisory Board of major infrastructure asset owners and managers that help steer research directions and provide guidance with respect to potential industrial applications.

This Advisory Board includes, from the asset management sector, Mark Korny (CIO, AIA), Adriaan Ryder (CIO, Abu Dhabi Investment Council), Anne-Christine Champion (Global Head of Portfolio Management, Natixis), Thierry Déau (CEO, Meridiam), Ian Berry (Head of Infrastructure, Aviva), Dave Brochet (Head of Infrastructure, CDPQ), Paul Shanti (Director, CalSTRS), Tomas Franzen (CIO, PA2), John Campbell (Chairman, Campbell Lutyens), Richard Desai (CRO, Clifford Capital), Paul Barrett (CIO, FWD), Chia Tai Tee (CRO, GIC), Away Shawney (CEO, Kermmantle Advisor), Mark Wang (CIO, NTUC Income), Tony Adams (Head of Infrastructure, Eastspring), James Davies (CIO, Optrust), Brad Holzberger (CIO, QSuper), Sancho Chan (CIO, Sun Life), Christoph M ansor (Head of Infrastructure, Swiss Life); from academia, Noël Amenc (professor, EDHEC), Robert Bianchi (professor, Griffith University), Antonio Estache (professor, Université Libre de Bruxelles), Stefano Gatti (professor, Bocconi University), Timo Väilä (visiting professor, UCL); from the public sector, Taik Him Chua (CEO, Enterprise Singapore), Chris Heathcote (CEO, Global Infrastructure Hub/O20), Andre Laboul (Deputy Director, OECD), Jordan Schwartz (Director, World Bank Group).