

## Press Release

### **From driverless cars to an improved approach to measuring credit risk in private infrastructure debt**

**31 May 2016** - EDHEC Infrastructure Institute-Singapore (EDHEC*infra*) has released a new paper entitled “Cash Flow Dynamics of Private Infrastructure Project Debt”, drawn from the EDHEC-NATIXIS Research Chair<sup>1</sup> on private infrastructure debt investments. This paper is the first empirical study of the dynamics of debt service cover ratio (DSCR) in infrastructure project finance and shows that focusing on certain data points and using advanced statistical methods can greatly improve investors’ ability to understand credit risk in private infrastructure debt.

For this study, the authors rely on a new and unique dataset of cash flows spanning 15 years for hundreds of infrastructure projects in the OECD.

Co-author and Director of EDHEC*infra* Frederic Blanc-Brude said, “Most credit risk models of private infrastructure debt use static assumptions which are not suited for project finance because the risk profile evolves dramatically in time. The authors make use of concepts from robotics that are akin to how driverless cars position themselves in space to track key cash flow ratios in a mean/variance plane.

“Thanks to this, we can better understand and predict cash flow risk in private infrastructure debt,” Dr Blanc-Brude said.

Ms Anne-Christine Champion, Global Head of Infrastructure & Projects at NATIXIS, said, “This paper, based on a large and diversified sample of projects, demonstrates what we are experiencing in practice: the nature of the underlying revenue models (i.e level of contracted cash flow) is the most important variable to explain DSCR volatility.”

Ms Champion said, “With a now documented distribution of DSCR associated with a robust valuation framework, investors will be able to make informed asset allocation decisions on infrastructure debt. Those results are also highly valuable to calibrate prudential frameworks and to better align them with the risk profile of the underlying assets.”

Next steps with the EDHEC/NATIXIS research chair include the valuation of individual infrastructure assets and building reference portfolios that can be used as benchmarks of private infrastructure debt.

*A copy of “Cash Flow Dynamics of Private Infrastructure Project Debt” can be downloaded via:*

[http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude\\_2016a.pdf](http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2016a.pdf)

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<sup>1</sup> The EDHEC-NATIXIS chair (2013-2016) was extended for an additional three years in February 2016. The new chair with NATIXIS will focus on benchmarks for private infrastructure debt until Year 2019.

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**About EDHEC Infrastructure Institute – Singapore (EDHECinfra)**

EDHECinfra was launched on 24 February 2016 by the EDHEC Business School to address the profound knowledge gap faced by infrastructure investors, by collecting and standardising private investment and cash flow data and running state-of-the-art asset pricing and risk models to create the performance benchmarks that are needed for asset allocation, prudential regulation and the design of new infrastructure investment solutions. EDHECinfra currently has the world's largest dedicated database of infrastructure investment cash flows, covering more than 15 years of data and hundreds of projects across the globe. EDHECinfra is headquartered in Singapore and has a team of 10 researchers. Please visit EDHECinfra's website at [edhec.infrastructure.institute](http://edhec.infrastructure.institute).

**About NATIXIS**

NATIXIS is the international corporate, investment, insurance and financial services arm of Groupe BPCE, the 2nd-largest banking group in France with 36 million clients spread over two retail banking networks, Banque Populaire and Caisse d'Epargne. With more than 16,000 employees, NATIXIS has a number of areas of expertise that are organised into three main business lines: Corporate & Investment Banking, Investment Solutions & Insurance, and Specialised Financial Services. A global player, NATIXIS has its own client base of companies, financial institutions and institutional investors as well as the client base of individuals, professionals and small and medium-size businesses of Groupe BPCE's banking networks. Listed on the Paris stock exchange, it has a solid financial base with a CET1 capital under Basel 3(1) of EUR 12.6 billion, a Basel 3 CET1 Ratio 11 of 11% and quality long-term ratings (Standard & Poor's: A / Moody's: A2 / Fitch Ratings: A) More information on Natixis infrastructure expertise available at: <http://cib.natixis.com/infrastructure>.