

CASE STUDY

An Investment Manager Bolsters its Analysis of Infrastructure Finance Risks

THE CLIENT:

A large global investment manager headquartered in Australia

USERS:

The fixed income team

Pension fund assets need to be prudently managed to make sure that retirees receive promised benefits. For many years, this required funds to invest primarily in government securities, investment-grade bonds, and blue-chip stocks. Pension plan rules changed over time, and now permit investments in most asset classes, including infrastructure. Australia is one of the leading countries in institutional infrastructure investing, with the country's superannuation funds currently allocating 7% to this area.¹

Many market participants struggle to reliably evaluate the level of risk related to a project. The challenge comes from the inherent complexity of the asset class and the need for qualitative analysis, which is unique to each transaction. The fixed income team at this investment management firm wanted to enhance its assessments of project finance with a capability that was scalable and easily replicable to enforce consistency across the firm's many offices.

¹“Commentary: Pension funds can launch a new infrastructure era”, Pensions & Investments, June 2, 2021, www.pionline.com/industry-voices/commentary-pension-funds-can-launch-new-infrastructure-era.



Pain Points

The fixed income team had its own internal ratings model, which was cumbersome to use and open to wide interpretation. It was important to have an approach that could be used consistently across offices and enable the team to easily handle a high volume of transactions. Ideally, a solution would provide:

- **An intuitive and user-friendly credit assessment framework** designed specifically for project finance analysts, with extensive sector coverage.
- The ability to handle **situations where there is little data** available to build a statistical model.
- A sound methodology for **calculating probabilities of default (PDs)**.
- A methodology for **assessing loss given default (LGD)** to more fully understand the actual share of an asset that won't be recovered.
- **Transparency** to see how the capabilities were developed, their limitations, use of data, and performance.
- Credit Assessment Scorecard implementation and application **training workshops** to get the most out of the offering.

The fixed income team needed a more reliable solution specifically for project finance, given the complexity of the asset class and the need to standardize assessments coming from analysts in different offices around the world.

The fixed income team met with S&P Global Market Intelligence (“Market Intelligence”) to discuss the firm’s capabilities in this area.



The Solution

Market Intelligence discussed its project finance solution that provides a general framework for the analysis of transactions, regardless of the industry or sector in which they operate. The solution comprises PD and LGD Scorecards that bring together statistically validated methodologies, quantitative and qualitative risk factors, and market benchmarks to build a single, robust assessment framework. These capabilities would help the fixed income team:



Evaluate PDs for different transactions

The Project Finance PD Scorecard generates credit scores that are designed to broadly align with credit ratings by S&P Global Ratings.² Results are calibrated to PDs using data from S&P Global Ratings proprietary default database, accumulated since 1981. This Excel[®]-based tool draws on a mix of quantitative and qualitative questions in a check-box style to identify key risks. It is fully transparent, providing the underlying logic, including weights. In line with S&P Global Ratings project finance criteria, it explicitly separates construction risk from operation risk to capture the credit quality of a project during its weakest period, until the obligation is repaid through project cash flows.



Determine actual losses

The Project Finance LGD Scorecard is designed to estimate the potential loss experienced by an exposed party, assuming the project is in default. The Scorecard produces point estimates of loss, capturing even the

² S&P Global Ratings does not contribute to or participate in the creation of credit scores generated by S&P Global Market Intelligence. Lowercase nomenclature is used to differentiate S&P Global Market Intelligence PD credit model scores from the credit ratings issued by S&P Global Ratings.

smallest changes in the value of inputs, which is crucial in the proof-of-concept stage of a project where sensitivity analysis is key. It is complemented by unique insights sourced from the Annual Global Project Finance Default and Recovery Study published by Market Intelligence, as well as relevant research and criteria published by S&P Global Ratings. LGD point estimates can be mapped to any discrete recovery rating scale, and average LGD estimates for most portfolios are considerably below 45%.



Key Benefits

The fixed income team thought the Market Intelligence Project Finance Scorecards would be scalable and not open to different interpretations across analysts. In addition, the solution could be quickly deployed and provide:

- A solution from a well-recognized and trusted provider with experience in the project finance space.
- **Access to an off-the-shelf and user-friendly credit assessment framework** with a clear methodology to complement cash flow analysis.
- **Separation of construction risk from operation risk** to capture the credit quality of a project during its weakest period.
- **Methodological transparency** that reveals all risk factors, weights, benchmarks, and scoring algorithms.
- The ability to **map LGD point estimates to any discrete recovery rating scale.**
- **A broad and global scope of application**, including: power generation and transmission projects (e.g., wind, hydro, biomass, nuclear, and solar thermal), transportation projects (e.g., toll roads, bridges, tunnels, and ports), oil and gas projects, (e.g., refinery processing, pipelines, and storage), public-private partnership/private finance projects (e.g., schools, stadiums, hospitals, and museums), and generic projects that do not fit in any of the categories named.
- **An annual model review process** to maintain high performance, reliability, and granularity.
- **Technical documentation** describing the analytical/statistical processes used to develop the model.
- **Credit Assessment Scorecard implementation and application training workshops**, plus ongoing analytical and operational support.

[Click here to explore the capabilities mentioned in this case study.](#)

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