PROJECT OVERVIEW

Large-scale project and portfolio financial viability models

Latent development demand exists in South African cities but is often constrained by the lack of available bulk infrastructure. Municipalities face financing constraints to provide the large, lumpy investments for bulk infrastructure, particularly for large-scale development, and the lack of this infrastructure delays growth and development in the country. To try and address this pressing issue, the Development Bank of Southern Africa has developed an off balance sheet financing product, Vumela, to assist municipalities to provide the required bulk infrastructure. To test and refine the Vumela concept, PDG, in association with HR&A Advisors, Inc. (HR&A), Riskworx and Johan Kruger, was appointed by the DBSA to a) develop project assessment criteria and use these to undertake market demand assessments on three case study projects; b) develop a project financial model to assess the financial viability of using Vumela to finance individual projects, and apply this model to the three case study projects; and c) develop a portfolio financial model to illustrate the benefits of aggregating projects together under Vumela to improve cash flows.

The market demand assessment involved statistical regression and complex stochastic risk modelling to assess the impact of exogenous macro-economic factors on the potential demand for different land uses, and thus uptake of the developments. This unique approach to assessing uptake risk helped the DBSA to reality check the expected project cash flows and the associated risks of this not materialising.

The project financial model incorporated the market demand risk modelling, as well as factoring other

project-related risks (construction delays, cost escalation, municipal default, etc.) to assess the expected developer return, to quantify the expected cashflows from the project to the municipality, and thus structure the debt financing and the resulting commitment required from the municipality of grants, property rates and development charges to fund the bulk infrastructure. The portfolio model allowed the DBSA to aggregate cash flows from up to 30 projects, structure debt at a portfolio level and demonstrate the resulting rate of return that can be expected by potential investors.

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DVT PROJECT:

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