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Strategic Risks to Sustainability in Infrastructural Megaprojects

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¹ **Note:** The findings from this working paper does not in any way reflect the views of the Development Finance Centre (DEFIC). The views are only representative of the authors.

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Anthony Goslar & Tom Ryan

Abstract

The proponents of the infrastructural megaprojects promise much but often fail to deliver. These projects are complex interactions of numerous stakeholders often providing technical solutions to many end-users. The extent to which megaprojects identify and adequately address risks to sustainability is of concern to the societies employing the megaproject framework for investing in infrastructure. The goal of infrastructural engineering is to design and build infrastructure that supports society. Sustainability in megaprojects is concerned with the delivery of products and services that benefit society over the long-term. Failure to do so can result in social pushback such as protests seeking accountability and a refusal to pay. The result is a burden on society who do not reap the benefits promised to them by the project proponents.

This paper investigated the strategic risks which have an impact on sustainability in megaprojects. The research has emerged from interviews with professionals and documented sources. The study uses a qualitative research approach of grounded theory to investigate how megaprojects can better stay on track to deliver the infrastructure they promised for the benefit of society, both now and for future generations. A model was developed using a theory building process based on a concern variable and the seven core categories that emerged during data collection and analysis. The model likened the strategic risks to sustainability to those of the semi-generic archetype of Shifting the Burden.

The model was then applied to the case of the Gauteng Freeway Improvements Project to test for practical adequacy. Recommendations for further research are to investigate government guarantees, risk allocation, and responsibility as they relate to sustainability. Of importance is the lack of resilience in megaprojects, which prevents stakeholders from adapting to a changing world. Building resilience in mega-projects would allow for better adaption in the face of uncertainty.

Keywords: Strategic Risk | Infrastructure Megaprojects | Sustainability |