The Use of Partial General Equilibrium Approaches and Multi-Criteria Decision Analysis to Prioritise Investments in the Public Sector

Persisting triple challenge of unemployment, poverty and inequality in the post-apartheid regime coupled with limited resources and/or budget constraints has remained a complex hurdle constraining development in South Africa, particularly in the Eastern Cape. The multi-conflicting goals that Government seeks to achieve require the use of specific planning and prioritization tools. The use of partial general equilibrium approaches in decision-making regarding investments in catalytic projects is often being criticized for its biasedness towards quantitative aspects, leaving the qualitative issues unattended. This paper proposes an integrated multi-criteria model that combines both the partial general equilibrium approaches (PGEA) and multi-criteria decision analysis (MCDA), as a tool that policy-makers could use, firstly, to allocate resources efficiently and effectively in order to achieve optimal outcomes; secondly, to ensure a scientific method is used for option appraisal and prioritization of investment projects or programmes; lastly and more importantly, to assess the macro-economic benefits, social impacts, environmental implications and financial gains associated with the investment. The paper reviews literature on the use of PGEA and MCDA. It provides empirical applications with specific emphasis on investments the Eastern Cape. The results show how the use of the integrated model contributes towards efficient and effective resource allocation. It also shows how adequate option appraisal of key investment projects lead to desired outcomes.

Key words: Partial General Equilibrium Models, Social Accounting Matrix, Multi-Criteria Decision Analysis, Multi-criteria Policy Making, Capital Investment, Option Appraisal.

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