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The Impact of Basic and Social Infrastructure Investment on Economic Growth and Social Development in South Africa's Urban and Rural Municipalities

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The Bill of Rights of the Constitution of the Republic of South Africa envisages sustainable human settlements including housing, education, health and access to cultural and leisure activities. This remains a significant policy challenge, with widespread inequality and divided societies still being prevalent in the country (Adams, Gallant, Jansen & Yu, 2015). Poor education outcomes, a divided community, uneven public service performance, divided spatial patterns and a crumbling infrastructure is some of the key challenges that have to be addressed in order to overcome persistent poverty and inequality in South Africa (NPC, 2011:19).

Under the right conditions, basic and social infrastructure investment can contribute to increased economic growth, social development and the reduction of inequality and poverty (Calderón & Servén, 2008:1). Being able to measure the impact of basic and social infrastructure investments on economic growth and social development in urban and rural areas, respectively, can contribute to the development of policy to reduce overall and spatial inequality (Calderón & Servén, 2008).

This study quantifies and compares the effect of basic and social infrastructure investment on economic growth and social development returns in South Africa's urban and rural municipalities respectively. The methodology uses Principal Component Analysis (PCA) to construct synthetic basic and social infrastructure indices. The basic infrastructure index is based on the number of households that have access to water, electricity and sanitation, while the social infrastructure index uses proxy variables for health, education and safety, due to the lack of direct measures on a municipal level, for each of the municipalities from 1996 to 2012. The data is sourced from the Information Handling Services (IHS) Information and Insight Regional explorer databank for the period from 1996 to 2012 (IHS, 2013). The study focuses on local municipalities in South Africa using the National Department of Corporative Governance and Traditional Affairs (COGTA) classification for the urban and rural groupings.

Basic and social infrastructure delivery has a positive impact on economic growth and social development. The results indicate that the impact of basic and social infrastructure economic investment on economic growth and social development would be greater in rural municipalities. The results furthermore generally indicate lower economic growth and social return elasticities for South Africa when compared to other countries. This could be explained by the absence of quality of investment measures for basic and social infrastructure, respectively (Calderón & Servén, 2008). The qualitative information is, however, not available and will most likely not be

compiled in the foreseeable future. The lower elasticities could also underline governance concerns (Hemson, 2004:17), ill-considered spatial implementation (Luo & Wang, 2003:876) and the inability of planners to understand the cultural aspects required to optimise social capital returns (Putnam, 1995). Many of these factors have been identified by the National Planning Commission (NPC) as binding constraints for South Africa becoming a growing and inclusive society. Using detailed economic growth and social development elasticities of basic and social infrastructure investment for urban and rural municipalities, respectively, would assist planning initiatives and optimise investment returns within different spatial areas.

Furthermore the results of this study show that the economic growth and social development returns on basic and social infrastructure are greater in rural municipalities than in urban municipalities. Therefore the government should prioritise investment in basic and social infrastructure in rural municipalities, for example investment on the provision of basic amenities, education- and health services and safety developments, to decrease the existing inequalities between rural and urban municipalities.

The results on both the elasticities and prioritising the economic growth and development in rural municipalities can be integrated into municipal planning frameworks. Such policy measures could, firstly, ensure the optimal utilization of available resources and, secondly, serve as an indicator of where basic- and social infrastructure should be increased to create a more inclusive and equal society on a spatial level in order to provide the practical realisation of the vision of the South Africa's Constitution.

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