# **ERSA Research Brief**



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# Regional disparities in income-independent quality of life in South African municipalities: convergence or divergence?

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## Background:

Since 1994, the South African government has introduced various policy measures to address inequalities brought about segregated development under the Apartheid regime. If these policies have been effective, then one would expect convergence between poorer municipalities and their richer counterparts, not only as regards to income levels but most important human welfare in general. The purpose of this study is to investigate the effectiveness of policy measures through analysing both income and objectively measured income-independent quality of life (IIQoL)<sup>1</sup> convergence dynamics across South Africa's 234 municipalities for the period 1996-2014. In order for the study to achieve the aforementioned, the following research questions are answered. First, the study will construct a composite IIQoL measure and test for unconditional  $\beta$  – convergence. This convergence rate will subsequently be compared to the one obtained from the traditional real GDP per capita in order to analyse the level of misrepresentation reported by past studies that only focused on income measures. Second, the study will focus on determining the specific conditions needed for conditional  $\beta$  –convergence in IIQoL.

# Methodology and Research findings:

To address the research questions related to  $\beta$  –convergence we follow the proposed method of Baumol (1986) and Barro and Sala-i-Martin (1992) and estimate the growth in real GDP per capital and IIQoL utilising Systems Generalised Methods of Moments. We derive, from the estimated coefficient of the initial level of real GDP per capita or IIQoL respectively, the speed of convergence ( $\beta$ ) as well as the half-life, which accounts for the time, in years, required for a municipality to cover half the distance between the initial real GDP per capita or IIQoL levels and its steady state level.

The primary results indicate unconditional convergence in both income and IIQoL but interestingly enough at different rates. IIQoL seems to be converging at a faster rate, which reiterates the fact that poorer regions can achieve more than one would expect given their levels of per capita income. Through investigating conditional convergence in IIQoL, we found that the local government policy regarding poverty alleviation, level of human capital, level of income inequality as well as spare capacity were driving growth. Results indicate that municipalities' IIQoL converge at a conditional rate of 10.9 per cent per year and according to the half-life calculation, it will take 6.03 years for each municipality to eliminate 50 per cent of the distance between its initial - and steady state level.

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<sup>&</sup>lt;sup>1</sup> IIQoL is a multidimensional quality of life index, from which the variance due to income has been removed.

## Policy recommendations:

As the ultimate goal of economic growth and development is to increase the quality of life for all, policymakers need to address the inequalities still evident between municipalities. Unfortunately, it seems that current policy aimed at addressing these inequalities between municipalities are not entirely successful as the rate of convergence is still relatively slow indicating a period of more than 6 years to eliminate 50 per cent of the distance between the initial and steady state levels. This result begs the question of whether this convergence rate is indeed fast enough to address these huge inequalities inherited from a past regime or whether more audacious policy such as higher levels of investment in education, health and the provision of basic services in poorer municipalities are urgently needed.

## **References:**

- Barro, R. J. and Sala-i-Martin, X. X. (1992). Convergence. *Journal of Political Economy*, 100(2), 223-251.
- Baumol, W. J. (1986). Productivity growth, convergence and welfare: what the long run data show. *The American Economic Review*, 76(5), 1072-1085.