Methodological Evaluation of Nigerian Secondary School Systems Using Time-Series Forecasting Models for Efficiency Measurement inContext

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Abstract

The Nigerian secondary school system faces challenges in efficiency and resource allocation. A time-series forecasting model will be applied to analyse trends and predict future performance, with robust statistical methods ensuring accuracy and reliability. The analysis revealed a significant improvement in school efficiency over the last decade, indicating positive changes in educational management practices. Time-series forecasting models provide a valuable tool for assessing the effectiveness of Nigerian secondary schools and can inform policy decisions aimed at enhancing resource utilization and student outcomes. Policymakers should prioritise investment in predictive analytics to monitor school performance trends and allocate resources more effectively. Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} \, sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, African, Econometrics, Numerical-Methods, Social-Economics, Time-Series, Data-Analysis*

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