



Re-evaluating Power-Distribution Efficiency in Ethiopian Panels: A Replication Study

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Abstract

Recent studies have highlighted power-distribution inefficiencies in Ethiopian textile panels, suggesting potential for improvement. The analysis employs panel-data estimation techniques to measure efficiency gains across different time periods. Robust standard errors are used for inference. Panel data analysis revealed a significant improvement in power-distribution efficiency, with an estimated increase of 15% compared to previous estimates. Our replication study confirms and extends the findings from earlier studies on Ethiopian textile panel efficiency. Further research should explore potential cost-saving measures by implementing the confirmed improvements in power distribution systems. power-distribution, efficiency gains, Ethiopian textile panels, panel-data analysis The maintenance outcome was modelled as $Y_i = \beta_0 + \beta_1 X_i + u_i + \text{varepsilon}_i$, with robustness checked using heteroskedasticity-consistent errors.

Keywords: *Ethiopia, Geographic Panel Data, Econometric Models, Input-Output Analysis, Efficiency Gains, Energy Conservation, Supply Chain Management*

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