



ICT Infrastructure Development and Economic Growth in Ethiopia: A Comparative Analysis

Abraha Yilma^{1,2}, Fikru Mengisteab³, Zelalem Abiyesa^{4,5}

¹ Department of Data Science, Bahir Dar University

² Adama Science and Technology University (ASTU)

³ Gondar University

⁴ Department of Artificial Intelligence, Gondar University

⁵ Bahir Dar University

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Correspondence: ayilma@gmail.com

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Author notes

Abraha Yilma is affiliated with Department of Data Science, Bahir Dar University and focuses on Computer Science research in Africa.

Fikru Mengisteab is affiliated with Gondar University and focuses on Computer Science research in Africa.

Zelalem Abiyesa is affiliated with Department of Artificial Intelligence, Gondar University and focuses on Computer Science research in Africa.

Abstract

Ethiopia has been investing in information and communication technology (ICT) infrastructure to enhance economic development. Data from 2000 to 2010 was analysed using a linear regression model with robust standard errors. ICT investment in Ethiopia increased GDP by an average of 5% over the study period. The findings suggest that higher ICT investments are correlated with greater economic growth. Further research is recommended to explore these relationships across different sectors and regions. ICT infrastructure, Economic Growth, Ethiopia, Regression Analysis Model estimation used $\hat{\theta} = \text{argmin}_{\theta} \{ \sum_{i=1}^n (y_i - f(\theta(\xi)))^2 + \lambda \|\theta\|_1 \}$, with performance evaluated using out-of-sample error.

Keywords: *Sub-Saharan, ICT infrastructure, econometrics, growth theory, linear regression, productivity, development economics*

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