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Effect of Information and Communication Intervention on Stable Economic Growth in Ethiopia

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Abstract : The advancement of information technology has significantly impacted Ethiopia's economy, driving innovation, productivity, job creation, and global connectivity. This research examined the impact of contemporary information and communication technologies on Ethiopian economic progress. The study examined eight variables, including mobile, internet, and fixed-line penetration rates, and five macroeconomic control variables. The results showed a positive and strong effect of ICT on economic growth in Ethiopia, with 1% increase in mobile, internet, and fixed line services penetration indexes resulting in an 8.03, 10.05, and 30.06% increase in real GDP. The Granger causality test showed that all ICT variables Granger caused economic growth, but economic growth Granger caused mobile penetration rate only. The study suggests that coordinated ICT infrastructure development, increased telecom service accessibility, and increased competition in the telecom market are crucial for Ethiopia's economic growth. Ethiopia is attempting to establish a digital economy through massive investment in ensuring ICT quality and accessibility. Thus, the research could enhance in understanding of the economic impact of ICT expansion for successful ICT policy interventions for future research.

Keywords: economic growth, cointegration and error correction, ICT expansion, granger causality, penetration

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