



Public debt, tax and economic growth in Sub-Saharan African countries

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Abstract

This study examines the effect of public debt on the relationship between tax and economic growth in sub-Saharan African countries. Grounded in the extended endogenous growth model, it employs a dynamic fixed-effects model to explore both linear and nonlinear relationships. For the full sample, the linear analysis demonstrates that tax measures contribute positively to economic growth regardless of public debt inclusion. Intriguingly, while public debt on its own has a detrimental effect on growth, its interaction with total taxes exhibits a positive influence. Conversely, the nonlinear approach reveals a negative association between public debt and growth. Moreover, the interaction term indicates that public debt weakly supports the impact of indirect taxes on economic growth while undermining the effectiveness of taxes on goods and services. However, the interactions between public debt and other tax measures are not statistically significant. When considering various country classifications based on income level, fragility, and resource endowment under the linear approach, the study uncovers that several tax measures have a positive and statistically significant direct impact on growth. Furthermore, in low-income countries, public debt has a weaker effect on economic growth compared to that in middle-income countries. Public debt tends to reduce the effectiveness of direct taxes and taxes on income, profits, and capital gains in low-income countries. Conversely, public debt enhances only the effectiveness of indirect taxes in driving economic growth in middle-income countries. Under the nonlinear approach, mixed results are observed. Specifically, public debt predominantly undermines the effectiveness of most tax measures in middle-income countries. The findings across other country classifications also reveal diverse effects of public debt on the tax–growth relationship.

Keywords Public debt · Taxes · Growth · Sub-Saharan Africa

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