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# Beyond the Fiscal Cliff: Threshold Effects of Resource Revenues on Public Expenditure Efficiency in Africa

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#### Abstract:

The information flow between the government revenue and spending decision is important for policymakers in the effective allocation of government resources and public financial management. This study explores government revenue and expenditure nexus in Ghana using annual data from 1983 to 2021. To understand how information flow in the frequency domain, we employed ensemble empirical mode decomposition and transfer entropy. Our findings reveal that government revenue and expenditure decisions are made concurrently and compatible with fiscal synchronisation hypothesis in a short-term but inconsistence in the medium- and long-term, were government revenue decision drives expenditure. These findings infer that government spends and then raises taxes to finance public expenditures, which will lead to budget deficit in the future should government expenditure increase more rapidly than revenue generated. The obtained Rényi entropy transfer estimates find an insignificant information flow between government revenue and GDP in the short and medium term. However, the finding reveals a unidirectional flow of information between the nexus in the long term, which suggests that an increase in revenue affects GDP in the long run.

## **Keywords:**

Government revenue, expenditure, GDP, transfer entropy, ensemble empirical mode decomposition.