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Unveiling the energy saving role of banking performance in Sub-Sahara Africa

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Context

Most countries in Sub-Sahara Africa are on the path of becoming emerging economies with huge economic prospects and investment opportunities. Notwithstanding, energy insecurity and fragmented banking sector are the predominant features in the region. Thus, energy intensity is high in the region and the banking sector is under developed; this is an indication that more energy is required to produce a unit of output in the sub-region. Given the close link between energy consumption and climate change (Amuakwa-Mensah and Adom 2017; Ali et al., 2016; Shabaz et al., 2015), the current energy use pattern in Sub-Sahara Africa has important implications on the region's environment. Since the adverse effects of climate change have no geographic boundaries, the international community should be concerned about the energy use patterns in sub-Saharan Africa. Our study provides an important insight into global discussions on energy efficiency, climate change and political institutions.

What do we already know?

Energy consumption and financial development nexus have produced two opposing views in the literature. First it is asserted that the development of the financial sector leads to scale effects in an economy via the effects of reduced cost of borrowing. Therefore, with an expansion in economic activities, more energy is needed to run these activities leading to higher energy consumption. On the other hand, financial development is shown to have technical effects in an economy; this facilitates technological investment and diffusion, and, in the end, improve the efficient use of energy. Despite the indirect acknowledgement of how financial development could potentially promote inefficiency, there are no explicit empirical test of this assertion, at least from African Perspective. This policy brief provides answers to this.

Research Approach

We adopted a unique banking data set by Andrianova et al. (2015) for our study. Also, a two-step system generalised method of moment (GMM) technique is adopted and a panel data for 43 Sub-Sahara African countries from 1998 to 2012 is used to explore the energy saving role of the banking sector. Variables included in our study includes return on asset, asset quality, bank capitalization and managerial efficiency as indicators of bank performance, the Z-score is used to measure the fragility of the financial system.

Other important controls considered in the analysis include crude oil prices, GDP per capita, FDI, trade openness, industry value added, urbanization and institutional quality.

Further we applied the Principal Component Analysis to derive a composite index for banking performance, which is used to check for robustness.

Key Findings

The findings reveal that, both in the short and long run, improved banking performance which was measured by different indicators foster energy efficiency improvements in sub-Saharan Africa but this is compromised by democracy (institutional quality). Thus, from energy security perspective, creating the enabling

environment and removing market barriers for banking operation to thrive should be given more attention. For example, programs such as tax rebates and energy subsidy for the sector could be a step in the right direction. More ambitiously, creating a regional green bank in the sub-region may stimulate energy efficiency investments and hence promote energy efficiency in the sub-region. Also, Banks in sub-Saharan African countries are underdeveloped, and countries either do not have functioning credit reference bureau system or for those who have, it is not fully utilized. Creating a national/regional credit reference bureau system would enable banks to assess the creditworthiness of clients before issuing a loan; this will help reduce the possibility of bad debts. From the forgone, the close connection between banking operation and the energy sector suggests that, government policies should be integrated in nature. While all the above may be necessary to ensure energy efficiency improvements in the sub-region, the political environment also matters. A democratic environment characterized by the existence of pressure interest groups can compromise the energy-saving role of improved banking performance. Thus, for the general good, democratic governance in the sub-region should find ways to wean themselves of things that affect the progress of the real sector. The task of promoting energy efficiency, however, is multifaceted. As revealed in our study, openness policy and economic growth are necessary, as well as the conscientious attempt to strengthen environmental policies to prevent the pollution-haven hypothesis and remove fuel subsidies for the non-banking sector. Given the high poverty incidence in the sub-region, the removal of subsidies may compromise welfare in the short-run. However, in the long-run, this will be reversed since the growth benefits associated with energy efficiency improvements can be redistributed back to the poor in the form of improved social intervention programs in education, housing, and health.

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