

Improving Nigeria's Electricity Supply Industry

Increasing generating capacity in the Nigerian Electricity Sector by reducing incentives for corruption

Research Question

The electricity sector is inherently political, and Nigeria is no exception. High capital requirements and risks for investors, and the huge benefits of cheap electricity for economic development can justify public investments to provide electricity, with private investments coming from connected entrepreneurs who are better able to insulate themselves from risk and get away with delivering poor results. This project seeks to identify pockets of the sector where coalitions could be built to reduce corruption and increase reliable electricity supply.

Key Findings

In search of feasible solutions we focus on Small and Medium Enterprises (SMEs) who are typically forced to access power through informal and sometimes illegal means. Our analysis suggests that (SMEs) do not want to operate in illicit markets and would be willing to pay for regular, reliable, access. By mapping out the incentives for rent-seeking through the electricity chain from the power plant to people's homes, we will identify institutional mechanisms that enable relationships to become mutually productive.

Implications

If successful, we will be able to identify anti-corruption strategies that align the interests and the capabilities of a sufficient number of SMEs. To improve sustainable electricity supply we hope to form a coalition whose incentives will be aligned with increasing electricity generation and willingness to pay, thereby reducing leakages, and side-stepping the inefficient grid (for the time being).

Project Summary

Our project is investigating the very complex story of corruption that straddles the entire electricity value chain (generation, transmission, distribution) in Nigeria, including even feedstock supply to end-users, both residential, commercial and industrial.

Corruption and inefficiencies in the main grid mean that off-grid solutions are imperative and recent policy changes that allow consumers to bypass the grid and the distribution companies can help. But for this we need to ensure off-grid solutions are implemented within manufacturing clusters who can organise the collective action required to mitigate relevant types of corruption. Incentives created so far in the sector have been hugely distortionary and our solution aims to break this network of collusive interests by giving productive stakeholders in the sector a sense of ownership of the policy solution.

We are concentrating on locations (Aba, Nnewi, Onitsha) that are the heart of the SME sector in Nigeria. While they are connected to the national grid their chief sources of power are their own generators as well as private mini generator owners/operators who control power generation and supply electricity

on a 'flexible' basis and who are a critical component of the SME value chain. It is clear that the informal generator-set based contractual solution is subject to less corruption and more efficiency. This is in itself a new finding but our next step, given that the generator-set arrangement seems to be working, is to develop a cost-benefit analysis that will show the benefits of switching to an off-grid solution.

SOAS-ACE is also one of the first external research projects to reach out to SME high consumption users in these industrial clusters (excluding Abuja). This detailed knowledge will suggest the types of contracting arrangements that may be win-win for generators and SME users, and will help to prevent corruption disrupting the achievement of these goals. This research contribution is important because: a) simply providing off-grid solutions is unlikely to work and institutional/contractual arrangements for their management and oversight are a necessary complement to this; b) off-grid solutions also need to focus on the SME sector to increase economic productivity, along with the residential and commercial sector.

Key research questions

- Mapping the extent for rent-seeking through the electricity value chain
- How has the 2013 privatisation process changed the nature of rent capture in the industry and what is the most damaging corruption in the sector?
- How do rents get captured in the generating sector and how are Power Purchase Agreements (PPAs) used to effect this?
- Under what conditions would the industry be compelled to invest and improve efficiency as the basis for profitability?

Methodology

Stage 1

Our core hypotheses were developed through extensive discussions during 2018 with entrepreneurs in Abuja, Aba, Newi and Onitsha.

Stage 2

Review of the literature on how privatisation in Nigeria's power sector has impacted on the nature of rent capture and the most damaging types of corruption prevailing in the sector after privatisation has been concluded.

Stage 3

Stakeholder workshops and extensive key informant interviews to develop a cost structure for representative SMEs and triangulating these costs with SME owners who took part in our focus group discussions.

Stage 4

Develop strategies for using results, for example in suggesting the best types of contracting arrangements for generators and SME users that will help to prevent corruption.

Policy and programming implications

Our scoping research revealed that corruption in the power sector has many drivers and the policy solution in the sector has to be two-fold, with different anti-corruption challenges. One is long-term, addressing the structural problems of transmission infrastructure, improving collections and better gas supply to increase generation. The other has to be a short term approach that increases generation and supplies to the productive sector without running into political interventions or requiring expensive infrastructure—and this is the approach that we develop in our project.

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