

CROSS-NATIONAL REVIEW OF ELECTRICITY SECTOR PRIVATIZATION: LESSONS FOR NIGERIA

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Abstract

Electricity sector privatization in Nigeria appears not to have brought improvement to electricity supply. Unfortunately, it betrays Nigerians' expectations of better social and economic life. With descriptive analysis of secondary data, this work undertakes cross-national empirical review of electricity sector of 5 Countries-United Kingdom, Germany, India, Argentina and Cameroon and drew out embedded lessons from their post-privatization findings for Nigeria. Promotion of competitive power sector through deepening of liberalization, championing of cost-reflective market price, encouraging private sector investment and enhancement of electricity regulatory commission (NERC) capacity for optimum performance are essential derivable lessons gleaned, amongst others, that would make Nigeria access improved dividends of post- privatization of electricity sector. Thus, we strongly recommend that Nigeria government should confront anti-liberal and anti-competition factors prevailing in the sector with political courage and willingness to birth a new experience with measurable improvement on socio-economic life.

Keywords: Privatization, Electricity Sector, Cross-National, Lessons

1. INTRODUCTION

The last three decades have witnessed pervasive reforms in the electricity power sector across both developed and developing countries. A number of reasons are advanced by scholars to rationalize the cross-countries embrace of the sector transformation. While Hartley (2012), posits that shared fundamental changes, such as, technology in the industry, is primarily responsible for the reforms permeation into many country, some attributed it to the sector overall poor performance as a result of its vertical monopolistic nature, inadequate power generation, poor transmission and distribution of electricity insufficient investment, ineffective regulation amongst others (Heddenhausen, 2007, REEP/UNIDO, 2008 Ajumogobia and Okeke 2015).

In addition, macroeconomic factors, outside the power sector, such as, government fiscal constrain and structural adjustment and monetary lending policy of World Bank and IMF also facilitate the wide spread of the

reform (REEF/UNIDO, 2008). Interestingly, World Bank (2004) asserts that power sector reform is meant to be of immense benefits for socio-economic and industrial growth in a mutually beneficial manner to both private and public sectors of the economy. (cited in Soukana and Amal, 2014). This is an attestation of external support for the reforms on multilateral platform with degree of influence capable of insuring a transcontinental acceptability.

However, both internal and external factors to electricity sectors might be responsible for its cross-national implementations but the post-privatization performance appears to vary from one country to the other. The diversity of country's outcome may not be too far from national peculiarity arising from their level of social, economic and political development. As such, adhering to a hard and fast rule or wholesome replication of a model, without consideration for domestic characteristics by a country in the course of implementing the reforms, may yield different result.

In Nigeria, power sector privatization lingered for almost two and half decades (1989-2013) before it was concluded (Onoche, Egware and Eyakuwanor, 2015:495). However, the incumbent minister of Power, Road and Housing, Fasola Babatunde, averred that deliverable gains of the post privatization appear not to be profound as one would have expected and has failed Nigerians (The Punch, 2017). Confronted with this situation, what can one advance as the cause? Is it fitting to attribute it to either Nigeria poor implementation of electricity reforms, refusal to factor in local environmental distinctiveness? Or, possibly, both and any other unimaginable factors as been accountable for the poor performance? Nevertheless, how can Nigeria draw out lessons from countries with tract records of successes and challenges appears as a sure path to stable electricity supply and predictable sector. And this would suggest where the reforms may required being tinkered or tweaked with in order to achieve the desirable goals. Hence, with descriptive analysis of secondary data, this article pursues the realization of these objectives. The work is divided into six sections. Following this introductory section is theoretical framework while the next reviews Nigeria electricity privatization reforms and the fourth section presents cross country research findings. The fifth section analyses the lessons embedded in the cross-country findings as applicable to Nigeria and the last section offers conclusion with recommendations.

2. THE LIBERAL THEORY

Liberal theory was developed by Adam Smith in his book written in 1776 titled "An enquiring into the wealth of Nations" (Aja Akpuru, 2002). Also David Ricardo theory of comparative advantage, that form the basis for liberal trade theory and liberal international economic order made impressive contributions to liberalization theory (Brown and Ainley, 2005). However, though Smith pioneered liberalism, and Ricardo built on it, other scholars have improved upon their submissions classified today as neo-liberalist or social liberalist.

The theory argues that state is an impartial umpire and protector of private property with a view to forestalling social disorder (Okolie, 2015). This implies that states are basically meant to play the role of fair regulator and not that of participator in the economic system. As noted by Okereke and Ekpe (2010) "the liberalist elementary form is inextricably tied to the economic domain. Most liberal theorists see it as economic development which could be gauged in terms of the growth of the Gross National Products (GNP)". Hence, while political sovereignty is exercised by state, private sector is canvass to mainstream its economic affairs. Therefore, classical liberals favor minimal state while neo or social liberals support more economic roles for the states (Okolie, 2015). This seems incongruent, but nonetheless, both classical and neo-liberalists concur to private sector driven economy of a state.

To contextualize its applicability to privatization of the electricity sector, the state adoption of power reforms policy paves ways for private ownership and control of once publicly owned enterprise(s) in a liberalized electricity market. This makes market rules to prevail while state is consigned to playing the role of a regulator, often via assigned agency. But, the issue of electricity sector performance in post-privatization era, more importantly, as regard to efficient supply and cost-reflective tariff, is germane to the justification of public sector disengagement in exchange for private sector involvement or take-over. Furthermore, populace interest serving and protection, in the economic realm, might experience a setback in the hand of private investors where it appears secondary, ancillary or overshadowed in priority to returns on investment.

In such instance, argument of Brown and Ainley, (2005) that "liberal economic relations rely on a willingness to adapt to change whatever the cost-but sometimes the cost in terms of social dislocation can be very high" seems applicable. And, when one view this in the light of a developing economy like Nigeria, it is plausible to posit that power sector privatization needs to be properly monitored, though from conception, but more importantly at the

implementations and post-privatization phases in order to arrest, or at least, decimate the adverse social cost on the citizens, especially, the poor that constitute the chunk of the population.

3. PRIVATIZATION OF NIGERIAN ELECTRICITY SECTOR: AN OVERVIEW

Electricity or power sector is one of those captured in the privatization list as part of Nigerian government Structural Adjustment programme. The sector reforms were predicated on National Electric Power Authority (NEPA) inability to service customers' demands as expected. According to Ajumogobia and Okeke (2015), NEPA's insufficient transmission and distribution of electricity, limited access to infrastructure, inadequate power generation, and poor usage of capacity among others impaired provision of qualitative service to its household, commercial and industrial customers. Consequently, Technical committee on privatization and commercialization (TCPC) in 1989 first listed it for partial commercialization (Zayyad, 1992), and was eventually presented for privatization in 1999 as a total non-monopoly firm operating in a non-competitive section (Adelaja, 2007). Additionally, its strategic nature to the nation's socio-economic development seems to be additional factor for its privatization.

Therefore, in 2005, Power Sector Reform Bill (PSRB) was passed into law which liberalized the sector; enabled private sector participation in the generation, transmission and distribution; provided competitive electricity market; make privatization possible with establishment of Power Holding Company of Nigeria (PHCN) as new administrator and substitute to NEPA, and National Electricity Regulatory Commission (NERC) to regulate the sector. It is worthy of note that the World Bank facilitates and assisted in enacting the Act (Onagorura, 2011, Niekerk, Yurchenko and Lethbridge, 2017). In fact, the act provides a legal framework cum leverage for private power sector led economy. Furthermore, PHCH was unbundled into 18 units of six generation companies (GENCO), eleven distribution companies (DISCOS) and one transmission company (TCN). Except that TCN operates under management contract, the GENCOS and DISCOS were privatized in 2013 (Onoche, 2015). With the full privatization of DISCOS and GENCOS, power sector becomes a complete private sector driven, open to competition and operates under regulatory institutional agency – NERC. Unfortunately, there has not been on record any acknowledgement by government and customers of significant improvement as far as efficient supply of electricity is concern. This seems to undermine private sector inherent efficiency application to Nigeria's context as obtainable in some developing and developed countries.

Thus, there appear existences of factors obstructing smooth ride on the high way of private sector led electricity resulting into poor electricity supply as its concomitant. The consequence is the creation of a large room for improvement in order to meet electricity demands of Nigeria's teeming populace. However, undertaking an empirical review of the strength and weaknesses of countries plying same road of power sector privatization with a view to learning from mistakes and successes stand to afford an arrest of the stymied factors and create enabling milieu with capacity to trigger quantum leap for the sector.

4. CROSS-NATIONAL REVIEW OF ELECTRICITY SECTOR PRIVATIZATION.

Outcome of electricity privatization performances varies across countries employing it for reorganization or ownership and management transfer to private from public in the electricity sector. In this regard, critical appraisal of variegated findings has potentials of offering arrays of insight on pragmatic steps capable of beating the sector back to shape for stable power supply in Nigeria. On this premise, the work undertakes a review of five-country –United Kingdom (UK), Germany, India, Argentina and Cameroon- empirical findings on post-privatization appraisal of electricity sector.

4.1 United Kingdom (UK)

A study carried out by Soukana and Amal (2015) titled "The British Privatization of Electricity Network industry: The effect of the Electricity reform on domestic electricity price in the United Kingdom" revealed that privatization of electricity sector did not have significant influence on price trend but respond to exogenous factors of local and natural gas prices. It was the outcome of a correlation of electricity domestic retail prices indices. The data for the work was sourced from Department of Energy and climate change (DECC). However, the finding implies coal and gas prices, though are susceptible to international price fluctuation because they are externally sourced, does not cause domestic price increase.

Nevertheless, it is worthy of note that U.K. positive macroeconomic and other developed economy features,

such as high-tech, are additional strength that might have helped to cushion the likely effects of import-constraints on importers or local consumers. In this context, exploring domestic power sources by developing countries would minimize their susceptibility to the risk of externally sourced power generation as their economy may not be able to accommodate importation of inputs without repercussive effects, especially on end users.

4.2 Germany

Heddenhausen (2007) explored secondary data to appraise the effect of Germany's privatization of electricity on the sector performance. The study is titled "Privatizations in Europe's Liberalized Electricity Markets-The cases of the United Kingdom, Sweden, Germany and France". The findings revealed that electricity market is concentrated because of changed ownership structure and subsequently caused a reduction in energy supply from 8 to 4 alongside increased in whole sale market generation from 79 percent to 90 percent. In addition, the energy supply increased to the market from 50 percent in 1995 to 73 percent in 2004. These findings indicate that Germany post-privatization regime brought a reversal to market competition and pushes the sector toward monopoly. Also, it reflects that the market was not liberalized before privatization was introduced.

From the above, it is discernible that while liberalization is *sine qua non* to privatization its precedence dislocation is a threat for optimum harnessing of competitive electricity market benefits. On this platform only, it appears, power sector privatization could be empowered for positive impact on the market with insured benefits to consumers.

4.3 India

The study of Orisa State Electricity Board privatization in 1996, the first to implement reform programme and 9th largest state in India was conducted by Zafar (2017). The work titled "Best Practices – India Power Sector Restructuring study: Short Review of Privatization in power Sector" reviewed successes and challenges associated with the state electricity privatization and found that it spurred increase in government revenue, electrified areas within the state by 13 percent and Gross Domestic Product (GDP) by 12 percent annually. It is interesting to note from the findings that, first; electricity power sector reform seems not to be uniform and nationally implemented, though central government might have given necessary support to state government that embraced the policy.

However, perhaps the country large size and interior political and economic structure informed the decision not to make it countrywide. Nevertheless, the accrued benefits of privatization are shared between consumers and private firm but not one-sided. Put differently, while the state government generated revenue from the privatization of the utility, the number of customers serviced also increased. But the work failed to cover the electricity retail price as well as extend of efficiency in service provided with its implications for consumers that basically underline benefits central to the definition of electricity sector post-privatization performance. Duguh, (2008) corroborates this submission when he noted that external customers that buy the end product or services ought to be the focus of a business. As such, key indices of pricing and quality of service often employ to denominate electricity privatization overall impact was omitted while wider coverage gain captured could be deemed as investment driven by profiteering motive of the private firm.

4.4 Argentina

Pollit (2008) studied the impact of electricity sector on Argentina titled "Electricity reform in Argentina: Lesson for developing countries" From the cost-benefit analysis of the sector performance from 1992-2002, the author came up with the following findings. Firstly, Argentina investment worth increased alongside with the installed power capacity that consequently boosted economic activities and raised power demand. In the second row, it reduced price of electricity, enhanced financial performance of the firm, improved connection of shanty towns that spurred government to subsidize their residents and reduced energy losses(technical and non-technical) with corresponding increase in electricity supply. Nonetheless, the work submitted that the country currency value decline impaired the sustainability of recorded success and benefits.

It is apparent from the findings that electricity privatization made remarkable impact on customers via reduced price, wider connection and improved supply. Also, it portrays the private firm as possessing requisite capacity as manifest in the increased investment worth-financial competency and reduction in technical and non-technical losses. Aside these positives, their multiplier effect on socio-economic life of the nation appears uncontroversial.

In fact, these gains are imbued with potentials inherent in power sector privatization when its adoption to revivify national life is appropriately contextualized and implemented. However, one of the core determinants of the benefit's life span is the political leadership capacity to manage the boost in the economy resulting from the power sector reforms.

4.5 Cameroon

A three-year institutional of endowment of Cameroon post privatization performance premised on government general objectives and World Bank stated needs for privatization of public utilities was undertaken by Pineau (2014). The paper is titled "Transparency in the Dark-An Assessment of the Cameroonian Electricity Sector Reform". The study revealed that the country's objective of growing the economy through private investment was partially achieved; improving service quality was not achieved but rather made the situation worsen while the objectives of increasing access to electricity and ensuring efficient generation, transmission and distribution were immeasurable because of lack of data. Also, supplying of electricity at a competitive price and exploring hydraulic resources in the country objectives were not realized.

Moreover, the World Bank objectives of ensuring reduction by state interference in the power sector post-privatization managements was attained but lack of transparency, absence of competition, poor oversight by the ministry, reduce cost of power supply were unsolved from both Cameroon and World Bank objectives assessment outcome. The findings show a correlation between the country objective to employ private sector investment to grow the economy, and that of World Bank of reducing state meddling in the management of firms. First, both cancelled each other out as public divestment opened the way for private entrance, and second, private investment participation was complemented with public institutional support, which is part of conditional requirements for the latter profitable and efficient operations in a liberalized sector or economy.

5. CROSS-NATIONAL FINDINGS: LESSONS FOR NIGERIA

Haven reviewed findings of effects of privatization (positives and negatives) on selected countries, there is need to extract lessons plausible and relevant to Nigeria context with a view to readjusting electricity privatization to the position capable of deriving maximum benefits. Therefore, the analysis is situated under three sub-headings of consumers' interest, private investment management and the economy

5.1 Consumers' Interest

The primary *raison detaire* behind electricity sector privatization is to increase supply to meet end-user's needs or demand. Haritley (2012) maintains that the basic goal of reforms is to increase efficiency and that market prices respond to prices changes in supply or demand than regulated prices. Mostly in the electricity sector, pricing, quality of service in terms of frequency, duration and unit of energy supply and extension of coverage areas are common benchmark for determining electricity distributions performance as relating to consumers' (Banross, Ibiwoye and Managi, 2011).

In Nigeria, unstable electricity supply appears not to have witnessed end in sight despite the privatization of the sector similar to Cameroon and Germany. Firstly, the Cameroon experience shows that the sector was privatized before its deregulation in one of the findings. Therefore, total deregulation of the sector before emergence of private investors' takeover of PHCN in Nigeria, which was not the case, would have entrenched a competitive power sector and absence of this might have, in part, accounted for post-privatization epileptic electricity supply. Similarly, Germany concentrated market that declined electricity supply was also traceable to improper deregulation from the findings.

Also, electricity retail price control is another area Nigeria must learn from U.K. post- privatization outcome. There was no significant effect of coal and gas prices, exogenous influencing factors on the electricity retail price, making price stability an enviable feature of the U.K market. In contrast, as at 2016, (three years of post-privatization) attempts have been made to increase electricity tariff in Nigeria four times which was resisted with protest from labor unions and massive outcry by Nigerians, including the Deputy Senate President, Ekweremadu (Niekerk, Yurchenko and Lethbridge, 2017). In this situation, it seems the power regulator, NERC, is not attune to the sector dynamics, or somnolent in carrying out its supervisory role of suppressing unjust or non- economic induced push for price hike by DISCOs. In addition, generation sources should be diversified to include renewable energy, exploit energy reserves and potentials, reduce technical and non- technical losses and

government should increase investment in the transmission sub-sector of the power network to strengthen the weak linkage notch between the GENCOS and DISCOS en-route customers.

Furthermore, it is imperative for Nigeria, a country that shares large geo-political and population size characteristics with India, which derived increased number of customers via wider coverage after privatization in Orissa state, to replicate the experience as part of DISCOs target to be captured or incorporated as part of revise agreement and Memorandum of Understanding. It must be noted, however, that one of the objectives of EPSR is the establishment of Rural Electrification Agency with intent to increase electricity subsidized connectivity to the rural areas (Aliyu, Muhammed and Yakara, 2013). Nevertheless, the distribution companies, especially those covering approximate distance to rural areas, should be partnered to complement the efforts of the designated agency in servicing rural customers. Threading the path of Private Public Partnership (PPP) in the pursuit of extending customers' coverage has extensive advantages of increasing the sector's investment base, technical sophistry and competition.

5.2 The Economy

From the perspective of the economy, generally, electricity sector is one of the key determinants of its wellbeing. A case for reference is the monumental positive effects of Argentina privatization of the electricity sector on the overall economy with the multiplier engendering a growth on the economy. Unfortunately, the decline of the country currency value dislocated the recorded benefits.

Therefore, a sound economic policy accompanied with efficient implementations and management is fundamental for power industry privatization economic positive derivable sustainability. In the case of Nigeria, effort to make the country harvest dividends of privatization in the power sector needs to include minimal financial leakage out of the economy through the encouragement of the use of internal sourced inputs. For instance, sourcing externally for skill manpower and financial capital would heighten pressure on foreign reserves and exchange rate thereby creating leakage outlet for the initial gains. To make this a reality therefore, government readiness to proactively engage the responsibility of meeting the increased investment demands on training, skills acquisition and development of manpower and facilitate financial institutions' capacity to support operators through provision of single digit interest loans facility. Going by prevailing situation of over dependence on imported technology in the sector, opportunity for home-grown technology should be created to bring the situation to minimal level and nip at bud its adversarial consequences on the economy.

In addition, private firms in the power industry should be required to fulfill their investment and supply agreement with the government (Nierberk *et al*, 2017). In fact, therein, it seems, resides the capacity to stimulate economic activity such that can accrue its inherent benefits. In this regard, the regulatory commission (NERC) duty of following up on adherence of operators' to signed agreement, more importantly, the network companies of generation, distribution and transmission becomes extremely important. Thus, it suggests NERC role is critical to ensuring that electricity supply takes its strategic position in Nigeria's social and economic development drive.

5.3 Private Investment Management

Arising from the outcome of Cameroon is the need for a strong institution for effective coordination of electricity sector activities. This becomes essential also in Nigeria if improved service delivery from the generation, transmission and distribution network is to be attained. Moreover, not only that, state interference in the operation of the sector and lack of transparency can only be forestalled when a formidable regulatory agency is autonomously institutionalized with legal framework that minimize ministerial oversight and political meddling or interference in its operations. Adoghe, Odigwe and Igbinovia (2009) aver that Nigeria power sector restructuring requires new management mechanism such that manifest in industrialized countries in the area of mature regulatory institution. As such, NERC operations must reflect that of a truly independent agent, not just in name or as articulated, and, as well be armed with requisite human capital and finance.

In addition, the maturity of NERC needs be apparent as a fair and impartial regulator. It is germane to promote free and competitive market in a liberalized business environment under the facilitation of competent regulatory agency. Moreover, conforming to classical liberalist tenets where neo-liberal ideals are employed, NERC should not compromise to hurt the flourishing of market or private sector led economy. By this, existing and potential investors' confidence in the sector would be raised and guaranteed.

6. CONCLUSION AND RECOMMENDATIONS

This study ferret out significant lessons derivable from research findings of five countries post-privatization of power sector-U.K., Germany, India, Argentina and Cameroon - for Nigeria. The research discovered that in the pursuit of acquiring optimal return from privatization of electricity sector, government creation of platform that ensures power market liberalization, promote competition, champion market price that is cost-reflective, extend electrified areas, encourage private sector investment and enhance the capacity of the regulatory commission (NERC) for optimum performance are non-negotiable and demand actionable policy reinforcement. This work, therefore, recommends that Nigeria government should confront anti-liberal and anti-competitive factors prevailing in the power industry with political courage cum willingness so as to breathe a new life culminating into a new experience into the sector with measurable improvement on national socio-economic life.

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