

PRIVATIZATION AND PERFORMANCE OF BENIN ELECTRICITY DISTRIBUTION COMPANY (BEDC) IN EDO STATE, NIGERIA

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ABSTRACT

This research examines the privatization and the performance of Benin electricity distribution company (BEDC) in Etsako-West local government area, Edo State, Nigeria, focusing on the crucial performance of electricity in advancing the economies of developed nations toward industrialization. However, despite substantial budget allocations for power in Etsako-West Local Government Area viz-a-viz Nigeria, the supply remains sporadic and unreliable. With a study population estimated at 294,000 based on data from the Nigeria Population Commission of 2022, a sample size of 247 was determined using the Freund Williams sample size determinant, employing questionnaires for data collection. The test-retest methodology was utilized, followed by ANOVA and Correlation Coefficient testing to ascertain the F-statistics, correlation, and p values. The results indicate a significant impact of ownership transfer on the service quality of BEDC alongside a notable correlation between regulatory frameworks and operational efficiency of BEDC in the same locality. The following recommendations are made: There should be strategies aimed at bolstering service quality post-privatization, policy reform, and investment; there is a need for stakeholder collaboration and monitoring in day-to-day activities, and the government should fortify the regulatory framework governing Benin electricity distribution company (BEDC) operations in Etsako-West Local Government Area.

Keywords: Privatization, Performance, Benin Electricity Distribution Company (BEDC), Customer Service, Efficiency, Etsako-West Local Government Area, Sampling.

INTRODUCTION

The Nigerian government's decision to privatize the power supply arose from years of neglect and mismanagement, resulting in inconsistent and unreliable electricity, which hindered the nation's economic growth despite being the largest black population and strongest economy in Africa. Acknowledging the crucial role of power in

driving development, it is often stated, "No power, no nation." A country unable to generate sufficient electricity for its industries remains trapped in underdevelopment. The primary goal is to tackle the persistent power shortage and dismantle the long-standing monopoly of the state-owned power entity. Electricity provision is pivotal for economic development, yet in

Nigeria, its supply is erratic, hindering industrialization efforts (Anyebe, 2002).

The Nigerian government's decision to privatize the power supply was prompted by years of neglect and mismanagement, leading to inconsistent and unreliable electricity, which has hindered the nation's economic growth. Despite having the largest black population and the strongest economy in Africa, Nigeria's power shortage has impeded development and industrialization efforts. The goal is to address the persistent power shortage and dismantle the long-standing monopoly of the state-owned power entity.

However, despite significant investments in the power sector, reliability remains elusive, and privatized enterprises have not universally met expectations. This raises concerns about the effectiveness of privatization in enhancing performance and efficiency. Therefore, the specific problem to be addressed is the challenges and uncertainties surrounding the privatization and performance of the Benin Electricity Distribution Company (BEDC) in Etsako-West Local Government Area, Edo State, Nigeria, requiring further investigation.

The specific objectives are to examine the impact of ownership transfer on BEDC's service quality in the Etsako-West Local Government Area and assess the role of the regulatory framework in shaping BEDC's operational efficiency in Etsako-West Local Government Area.

The following hypotheses were formulated :

H₁: There is no significant relationship between ownership transfer and BEDC's service quality in Etsako-West Local Government Area, Edo State.

H₂: There is no significant relationship between the regulatory framework and BEDC's operational efficiency in Etsako-West Local Government Area, Edo State.

LITERATURE REVIEW AND THEORETICAL FOUNDATION

The Privatization Concept

The term "privatization" can be defined in various ways. It can refer to the transfer of publicly owned assets to the private sector, typically through the issuance of shares, according to Ohashi and Roth (1980) as reported in Anyebe (2010). However, this definition is limited. A more comprehensive understanding of privatization is the reduction in production, provision, subsidies, or regulation, or a combination of these factors, as described by Anyebe (2001). The United Nations Development Programme (UNDP) Guidelines on Privatization (1991) define it as the marketization of public-sector activities, involving the application of market forces to macroeconomic decision-making, which is characteristic of public-oriented private-sector operations.

Privatization is also defined as the transfer of government-owned shares to private owners, including people and corporate entities, under Section 14 of Decree No. 25 of 1988. According to Ezeani (2004), it is a purposeful government policy meant to boost economic efficiency and growth by limiting state intervention and broadening the range of private sector activity. Some of the strategies used to achieve this goal include turning over state-owned assets to the private sector, encouraging private sector participation in previously public endeavors, and delegating decision-making to agents who are influenced by market indicators.

According to Kayode (1986), the process of privatization is how the public sector aims to achieve goals with efficiency and effectiveness, with a particular emphasis on financial considerations and the adoption of management styles that incentivize high performance and

penalize poor performance. According to Ojobo (2005), privatization is the process of transferring power from the government or its agencies to private entities by selling a portion of the entire equity of a publicly-owned company to private persons or groups. All these definitions converge on the idea that privatization involves the government's withdrawal from economic activities, allowing it to focus on its traditional functions of maintaining law and order while creating a conducive environment for business growth (Aminu & Peterside, 2014).

Historical Development of Power Generation in Nigeria

Historically, power generation in Nigeria commenced in the late 19th century. The initial power plant was erected in Marina, Lagos in 1898 (Awosope, 2014). Subsequently, the industry evolved into a sole monopoly known as the National Electric Power Authority (NEPA), established on April 1, 1972. However, under NEPA, the power industry collapsed to a pitiful state marked by unpredictable electricity delivery, exorbitant invoicing, and dishonest staff behavior. A description of the situation of the power sector following the transition to civilian rule in 1999 was given by Dikki (2014). Only nineteen of Nigeria's generating units were operating as designed. 1,750 MW of power were generated on average per day. It is important to note that between 1991 and 1999, no new electrical infrastructure was built. The last transmission line was constructed in 1987, while the most recent power plant was completed in 1990. Shockingly, 90 million people were estimated to be without access to grid electricity.

The power industry was in terrible shape when Nigerian democracy was restored in 1999. President Obasanjo's administration took decisive action to rejuvenate the sector through a series of reforms. One notable reform was the implementation of the Electric Power Sector Reform (EPSR) Act in 2005. This legislation outlined strategies to address the existing challenges within the power sector. Aminu and Peterside (2014) highlighted the objectives of the

Act, which encompassed ensuring the availability of electricity generation and supply to consumers, promoting investment opportunities, and dismantling the monopoly held by NEPA. These objectives aimed to rectify the identified discrepancies within the power industry. The act also established the Power Holding Company of Nigeria (PHCN) as a holding company to manage the transfer of NEPA to eighteen successor entities.

The establishment of several firms in the electricity industry, including as the transmission business Transco, six generation companies called Gencos, and eleven distribution companies called Discos, was made possible by the EPSR Act. Furthermore, the act required the creation of the Nigeria Electricity Regulatory Commission (NERC), which has the following responsibilities according to Inugonam (2005). The responsibilities assigned to Nigeria Electricity Regulatory Commission (NERC), as outlined by Inugonam(2005), include: regulating rates and guaranteeing high-quality service, managing the power sector's operations to improve efficiency, creating and enforcing the regulatory framework, and licensing the trading, distribution, and generation companies that come from the unbundling of NEPA. Having the legislative authority to add special license conditions, address environmental laws, energy conservation, management of limited resources, promotion of efficient energy, and publication of reports and statistics; addressing public policy interests related to fuel supply; providing the necessary legal basis and provisions for the establishment, amendment, enforcement, and regulation of technical rules, market rules, and standards.

In addition, the Federal Government set objectives that mirrored the initiatives mentioned in the 2005 Electricity Reform Act. The power reform road map projected that 14,000 megawatts of power would be available for distribution by December 2013, following the commissioning of independent power plants and the renovation of existing ones.

The reform efforts in Nigeria's power sector have undergone significant transformations over the years. From the establishment of NEPA as a monopoly to the enactment of the Electric Power Sector Reform Act of 2005, the sector has seen a shift towards privatization and regulatory oversight. The creation of entities such as PHCN, Transco, Gencos, Discos, and NERC signifies a concerted effort to address the longstanding challenges of inefficiency and lack of access to electricity. Through regulatory frameworks and targeted reforms, Nigeria aims to improve electricity generation, transmission, and distribution, ultimately enhancing economic development and quality of life for its citizens.

The Distribution Companies (DISCOs) were designated to serve specific states in Nigeria. The eleven distribution companies are listed here, along with the states they service: The Benin Electricity Distribution Company (BEDC) covers Edo, Delta, Ekiti, and Ondo States respectively.

The culmination of the privatization process in 2013 instilled hope among citizens for an enhancement in the power sector, especially in the services provided by the Distribution Companies, who serve as the primary service providers. However, several issues arose during and after the privatization exercise (Adedeji, 2017).

Benin Electricity Distribution Company (BEDC) is a prominent electricity Distribution Company in Nigeria founded in 2013. It was established as one of the successor distribution companies after the unbundling and privatization of the state-owned Power Holding Company of Nigeria Plc (PHCN). BEDC is headquartered in Benin City, Edo State, Nigeria. BEDC operates in the appliances, electrical, and electronics manufacturing industry. It is also involved in electrical power transmission, control, and distribution. BEDC is responsible for distributing power across the Delta, Edo, Ekiti, and Ondo States in Nigeria. BEDC has between 1,001 and 5,000 employees. Etsako-West, one of Edo state's eighteen local government areas and part of Edo North, has a population of 294,000 according to the National Population

Commission's 2022 estimate. The area's total land mass is 944.8 km square, with a population density of 311.2/km square. The annual population change is 2.5% based on the 2022 National Population estimate.

Etsako-West Local Government Area encompasses various towns and villages, including Auchi, Jattu, Agbede, Ughiole, Odighie, Egho, Ubiane, Iyamho, Iyuku, Ayogwiri, Apana, Iyora, Afowa, Afashio, Ikabigbo, Irekpai, Ogbido, Ayaoghena, Ikholo, Uluoke, Ugbenor, Idato, Ayua, Imeke, Elele, Sabo Iyakpi, Ibienafe, Ughieda, Iyerekhu, Egbogio, Jagbe clan (Ikhwa, Imiokono, Imhianmhen, Imogian), and Awain clan (Ewora, Idegun, Ama, Ibhioba). Source: (www.bedc.com/etsako-west).

The Concept of Performance

The concept "Performance" has gradually expanded beyond the realm of sports and is now used in other areas, particularly in the field of economics, business administration, marketing, etc. despite seeming paradoxical, there is a connection between sports performance and the performance of economic entities. (Pintea & Achim, 2010).

In sports, performance is defined as the surpassing predetermined targets or achieving better results than competitors. Pintea and Achim (2010) assert that an economic entity's performance is based on its capacity to achieve targets and flourish in a highly competitive environment. Performance is inherently comparative. In the economic field, there are various definitions of performance due to its subjective nature, and its definition varies based on the individual looking for performance-related information. Employees view performance through job stability and profitability, managers consider the overall performance of the company they oversee, creditors are interested in the stability of the company, and current and potential investors evaluate performance in terms of investment profitability. Verboncu and Zalman (2005) opine performance as the specific outcome achieved in various fields such as management, economics, marketing. These

outcomes demonstrate the organization's competitiveness, efficiency, and effectiveness, both in terms of its processes and structure. Performance can be considered synonymous with competitiveness.

There are many definitions for the term "performance," most of which are dependent on the particular context or functional perspective. Anthony (1965) provided a thorough and expertly constructed definition of performance, emphasizing its two essential elements: efficiency and effectiveness. When it comes to performance in terms of inputs and outputs, efficiency is defined as obtaining a higher volume with a given amount of inputs. Effectiveness, on the other hand, gauges performance according to how well-desired results are accomplished. (For instance, aiming to prevent supply disruptions over time can be considered an effective result.).

According to Didier Noyé (2002), performance is all about reaching the objectives that the company has set out in accordance with its strategic focus. According to him, performance is more about comparing the result to the target than it is about the outcome alone. In contrast to other writers, Noyé stresses that this concept entails contrasting the target with the outcome. However, given that results and aims can change across various areas of activity, Noyé's definition is vague. Performance, in the opinion of Whooley (1996), is future-oriented and takes into account the distinctive qualities of each individual or organization. He proposes a causal model that links different components and final goods. According to Lebas, a "successful" organization strives to achieve the goals set by the management coalition, even if those goals haven't been fully achieved. Therefore, skills and future-focused activities both define performance. Unlike other authors, Lebas distinguishes between "a performance," "performance," and "being performant." "A performance" is generally used to characterize a measurable result that surpasses previous results or expectations and is always linked to favorable results. "Performance" is linked to previous outcomes and can be both positive and poor.

According to Whooley (1996), performance is a socially manufactured idea that exists in people's thoughts rather than an actual reality that is ready to be measured and evaluated. Performance, in the author's opinion, is made up of a variety of elements, outcomes, and affects and is related to things like equity, economy, efficiency, and effectiveness. Lebas (1995) and Whooley (1996) both emphasize the ambiguity of the term by viewing performance as subjective and interpretive, with links to cost lines. According to Whooley (1996), the effectiveness, efficiency, quality, productivity, quality of work, innovation, and profitability of an organizational structure are all part of a complicated interaction that affects its performance.

Performance is closely tied to achievement of these criteria, which can be seen as performance objectives. Rolstadas claims that because performance is dependent on these seven imprecise factors, there is no exact definition of performance. Folan (2007) highlights three priorities or objectives of performance governance in business: analyzing performance within the relevant operating environment, aligning performance with internally established objectives and targets, and focusing on relevant and recognizable features. Folan emphasizes that performance should be analyzed and quantified from multiple perspectives, using various definitions of the concept.

According to Neely (2002), performance ought to be measured in terms of effectiveness and efficiency, which can be communicated both statistically and qualitatively.

According to Whooley (1996), optimizing the cost-value pair is a better way to measure an enterprise's performance than merely cutting expenses or adding value. In other words, it is about enhancing the relationship between cost and value creation. To translate the cost-value couple into concrete elements that can be monitored, it is important to describe how the enterprise currently creates value and its plans for future developments. This process involves defining the strategic objectives that contribute to value creation. Hence, an equivalent definition of

performance in the enterprise would be "all that contributes to the achievement of strategic objectives."

A company's ability to create economic value added—that is, a positive value after taking into account all elements, including equity—is how one measures how efficient it is. In general, performance is a complex, subjective term that depends on circumstances and goals. It includes reaching objectives, enhancing the cost-value pair, creating value, and satisfying the demands of diverse stakeholders. Chai, another author, agrees that social fairness and environmental goals should be included in the definition of performance in the public sector in addition to financial considerations.

This aligns with the transition from a 3E system (efficiency, effectiveness, economy) to a 5E system (economy, efficiency, effectiveness, environment, and equity). Evaluation, piloting, efficiency, effectiveness, and quality are all suggested to be included in the definition of performance by Bartoli and Blatrix (2015). It's clear that different authors and nations take different stances on the idea of organizational performance. For its practical interpretation and implementation, this emphasizes how crucial it is to learn and comprehend the notion.

Concept of Ownership Transfer

Ownership transfer involves the legal transfer of property or assets from one party to another, typically done through the exchange of ownership titles, often through legal documents such as deeds or contracts (Investopedia, 2022). Ownership transfer signifies the transfer of title and control of property or assets from an initial owner to a subsequent owner, which can happen through legitimate methods such as sales, gifts, inheritances, or other legally recognized processes (Legal Match Law Library, 2022).

Ownership transfer entails the lawful transfer of rights, title, and interest in property or assets from one entity to another, typically formalized through paperwork like contracts, deeds, or agreements to solidify the transition of ownership (Legal Information Institute, 2022). Ownership

transfer involves transferring ownership of property or assets from one party to another, which can be accomplished through methods like selling, gifting, inheriting, or as mandated by legal authority (Business Dictionary.com, 2022).

Ownership transfer involves the formal transfer of legal rights and responsibilities of a property or asset from one individual or entity to another, typically facilitated through legal procedures like contracts, deeds, or assignments (Legal Match Law Library, 2022). Ownership transfer signifies the transfer of title and control of property or assets from an initial owner to a subsequent owner, usually achieved through methods such as sale, gift, or inheritance The Free Dictionary by Farlex. (2022). Ownership transfer involves the transfer of legal rights and responsibilities of property or assets from one party to another, often facilitated by the signing of legal documents like deeds, contracts, or assignments. Legal Dictionary (2022) assert ownership transfer to involves the official transfer of title and control of property or assets from one owner to another, which may be accomplished through various legal methods such as sale, inheritance, gift, or other legitimate means. (Merriam-Webster, 2022).

Concept of Efficiency

Efficiency evaluates how effectively resources like time, money, and labor are used to achieve specific goals, aiming to optimize output relative to input (Investopedia, 2022). Efficiency involves achieving goals or tasks using the least amount of resources, time, or effort possible, by streamlining processes and maximizing output relative to input Business Dictionary.com. (2022)

Efficiency entails achieving desired outcomes while minimizing waste, resources, or time, through the optimization of processes or operations for maximum output The FinancialDictionary (2022).Efficiency represents the relationship between output and input in a system, indicating the effectiveness of resource utilization in attaining defined goals, with an emphasis on maximizing productivity and minimizing inefficiencies (Business Jargons, 2022).

Efficiency evaluates the effectiveness of resource utilization in reaching a particular objective, typically quantified by comparing output to input, with an emphasis on reducing waste and enhancing productivity. Efficiency involves accomplishing goals using minimal resources, waste, or time, through the optimization of processes and the maximization of productivity. (The Free Dictionary by Farlex, 2022).

METHODOLOGY

During the examination of the Privatization of BEDC and its Performance in Etsako-West Local Government Area, a cross-sectional survey was carried out spanning from December 2023 to January 2024. The survey encompassed 300 electricity consumers selected at random from various towns and villages within the local government area, including Auchi, Jattu, Agbede, Ughiole, Odighie, Egbo, Ubiane, Iyamho, Iyuku, Ayogwiri, Apana, Iyora, Afowa, Afashio, Ikabigbo, Irekpa, Ogbido, Ayaoghena, Ikhola, Uluoke, Ugbenor, Idato, Ayua, Imeke, Elele, Sabo Iyakpi, Ibienafe, Ughieda, Iyereku, Egbogio, Jagbe clan (Ikhwa, Imiokono, Imhianmhen, Imogian), and Awain clan (Ewora, Idegun, Ama, Ibioba).

The study utilized a survey as its research design, focusing on a population of 294,000. The sample size was approximately 247, calculated employing the Freund and Williams formula which is calculated using:

$$n = \frac{Z^2 NPQ}{Ne^2 + Z^2 PQ}$$

where,

n = required sample size

N = total population size

P = expected proportion or prevalence of the outcome in the population (80%)

$Q = (1-P)$, the complement of the expected proportion (20%)

Z = Z score corresponding to the desired confidence level (95% at 1.96)

e = desired margin of error (5% or 0.05)

Sample size of Etsako-West Local Government

$$n = \frac{(1.96)^2(294,000)(0.8)(0.2)}{294,000(0.05)^2 + (1.96)^2(0.8)(0.2)}$$

$$n = 247$$

(Agbadudu, 2004)

To determine the value of p and q , the researcher conducted a pilot survey by distributing 100 questionnaires at two different intervals. Employing the test and re-test method, 80 questionnaires were returned, while 20 remained unreturned. This outcome indicates that the pilot survey achieved 80% probability of success and 20% probability of failure. Therefore $p=0.8$ while $q=0.2$.

For the main study, validated questionnaires were distributed to 227 randomly selected consumers and 20 BEDC staff in Etsako-West Local Government Area. This approach aimed to gather firsthand information, collect quantitative data, analyze trends, and offer valuable insights for stakeholders involved in assessing the privatization and performance of BEDC in the local government area. Respondents' ages ranged from 18 to 60 years.

The sample size of 247 respondents was determined using the Freund and Williams formula. According to the 2022 estimate by the National Population Commission, the population of Etsako-West local government area is 294,000. Out of the 247 questionnaires distributed, 240 (97.2%) were returned, while 7 (2.8%) were unreturned. The statistical tool employed to test the two hypotheses was ANOVA. In statistical hypothesis testing, the decision rule states that if the p -value calculated from the ANOVA test is less than the chosen significance level (often 0.05), the null

hypothesis is rejected, and the alternative hypothesis is accepted (Agbadudu, 2004).

Conversely, if the p-value is greater than 0.05 (at a 5% level of significance), the null hypothesis is accepted, and the alternative hypothesis is rejected.

RESULTS AND DISCUSSIONS

For the presentation of results and analysis, a 5-point Likert Scale was utilized, where values were assigned ranging from (SA) -5 point for positive responses to (SD) -1 point for negative responses. (SA) stands for Strongly Agree while (SD) stands for Strongly Disagree. The computation revealed that the mean for TOS is 4.50 while the standard deviation is 63.89 (**Appendix**). This indicates that although the average value is 4.50, the data points for TOS are highly spread out from the mean. The values for TOS may vary significantly from one another, with a large range of values. Similarly, the mean for TCS is 4.35, and the standard deviation is 61.30. Similar to TOS, this suggests that although the average value is 4.35, the data points for TCS are also highly spread out from the mean.

The values for TCS may have significant variation, with a wide range of values. The mean for TOT is 4.45, and the standard deviation is 62.48. Like TOS and TCS, this indicates that although the average value is 4.45, the data points for TOT are also spread out from the mean. The values for TOT may exhibit noticeable variability, with a significant range of values. The mean for TOE is 3.71, and the standard deviation is 37.58. This value is relatively smaller compared to the previous questions. It suggests that although the average value is 3.71, the data points for TOE are less spread out from the mean compared to TOS, TCS, and TOT. The values for TOE may have less variability, with a narrower range of values compared to the other questions. Lastly, the mean for TSD is 4.39, and the standard deviation is 59.56, this indicates that although the average value is 4.39, the data points for TSD are moderately spread out from the

mean. The values for TSD may have noticeable variation, but not as much as TOS, TCS, or TOT.

The computation provided reveals various statistical measures for different questions (TOS-TSD). Here's a summary of the findings:

TOS: Mean = 4.50, Standard Deviation = 63.89. This suggests that although the average response for TOS is 4.50, the data points are widely spread out from the mean, indicating significant variability and a large range of values.

TCS: Mean = 4.35, Standard Deviation = 61.30. Similar to TOS, the mean response for TCS is 4.35, but the data points are highly spread out from the mean, indicating considerable variability and a wide range of values.

TOT: Mean = 4.45, Standard Deviation = 62.48. Again, the average response for TOT is 4.45, but the data points exhibit notable variability from the mean, suggesting a significant range of values.

TOE: Mean = 3.71, Standard Deviation = 37.58. The mean response for TOE is 3.71, and the standard deviation is relatively smaller compared to TOS-TOT. This indicates that although there is variability in responses for TOE, it is less pronounced compared to the previous questions, with a narrower range of values.

TSD: Mean = 4.39, Standard Deviation = 59.56. The average response for TSD is 4.39, and the standard deviation suggests that the data points are moderately spread out from the mean. While there is noticeable variation, it is not as significant as observed in TOS, TCS, or TOT.

In summary, the analysis indicates varying levels of response variability across the questions, with TOS-TOT exhibiting higher variability compared to TOE and TSD. These insights provide valuable information for understanding the distribution and spread of responses among respondents.

Table 1: Model Summary

	R				Durbin-
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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Watson's
1	.883	.780	.777	.20792	2.151

Source: SPSS 16.0 Data Output

From the result of the regression shown above, the correlation coefficient(R) indicates the strength and direction of the linear relationship between the TSD, TOS, and TOE (dependent variable) and OT which is the independent

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.931	.124		7.530	.000
TOS	.399	.020	.603	19.707	.000
TOE	.198	.010	.586	18.872	.000
TSD	.185	.016	.354	11.367	.000

Source: SPSS 16.0 Data Output

a. Dependent Variable: OT

variable. In this case, $R = 0.883$, suggesting a strong positive correlation between the predictors (dependent variables) and the outcome variable (independent variable). The value 0.780 of the R Square represents the proportion of variance in the dependent variables (TSD, TOS, TOE) explained by the independent variable (OT). It indicates that approximately 78.0% of the variability in the dependent variable.

Table 2: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	36.106	3	12.035	278.391	.000 ^a
	Residual	10.203	236	.043		
	Total	46.309	239			

Source: SPSS 16.0 Data Output

a. Predictors: (Constant), TSD, TOS, TOE

b. Dependent Variable: OT

The significance (p-value) in the Table 2 above is less than 5%, which therefore signifies that there is strong

evidence against the null hypothesis. It therefore means the alternative hypothesis should be accepted. Furthermore, F-statistic of 278.391 is statistically significant.

Table 3: Coefficient of ownership Transfer and BEDC's Service Quality

Test of Hypothesis: There is no significant relationship between ownership transfer and BEDC's service quality in Etsako-West Local Government Area, Edo State

A careful observation of Table 3 above reveals that the value 0.000 is less than 0.05 and this suggests that there is no relationship between ownership transfer in the power sector and

service quality, which also suggests that there is a strong evidence to reject the null hypothesis.

HYPOTHESIS TWO: ANALYSIS AND INTERPRETATION

The analysis reveals that for RFT, the mean is 4.57 with a standard deviation of 69.62, indicating substantial dispersion from the mean (See Appendix B). RFP also shows significant variability with a mean of 4.27 and a standard deviation of 56.86. RFS follows a similar pattern with a mean of 4.40 and a standard deviation of 60.36. RFM displays a mean of 4.43 and a standard deviation of 58.33, suggesting notable variance. RFC exhibits a mean of 4.36 and a standard deviation of 59.71, mirroring the trend of substantial variability (See Appendix B). In summary, while the means indicate a consensus or positive responses, the considerable standard deviations signify extensive dispersion around the mean for each question. This data aids in gauging the level of agreement or discrepancy among respondents regarding the statements or items represented by the questions.

Table 4: Model Summary

Model	R	R Square	Adjusted R square	Std. Error of the estimate	Durbin-Watson
1	.763 ^a	.582	.577	.26467	1.397

Source: SPSS 16.0 Data Output

a. Predictors (Constant), RFC, RFS, RFT

b. Dependent Variable: RF

From the result of the regression shown in table 4 above, the correlation coefficient (R) indicates the strength and direction of the linear relationship between the RFC, RFS, and RFT (dependent variable) and RF which is the independent variable. In this case, $R = 0.763$, suggests a strong positive correlation between the predictors

(dependent variables) and the outcome variable (independent variable). The value 0.582 of the R Square represents the proportion of variance in the dependent variables (RFC, RFS, RFT) explained by the independent variable (RF). It indicates that approximately 58.2% of the variability in the dependent variable.

Table 5: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	23.020	3	7.673	109.544	.000 ^a
	Residual	16.532	236	.070		
	Total	39.552	239			

Source: SPSS 16.0 Data Output

a. Predictors: (Constant), RFC, RFS, RFT

b. Independent Variable: RF

The significance (p-value) in the Table 5 above is less than 5%, which therefore signifies that there is strong evidence against the null hypothesis. It therefore means the alternative hypothesis should be accepted. Furthermore, F-statistic of 109.544 is statistically significant.

Table 6: Coefficient of Regulatory Framework and BEDC's Operational Efficiency in

Etsako-West Local Government Area

Table 6: Results from SPSS

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.348	.173		7.787	.000
RFT	.259	.022	.498	11.755	.000
RFS	.168	.021	.332	7.841	.000
RF C	.260	.027	.412	9.772	.000

Source: SPSS 16.0 Data Output

Dependent Variable: RF

There is no significant relationship between regulatory framework and BEDC's operational efficiency in Etsako-West Local Government Area, Edo State

A cursory look at the above Table reveals that the value 0.000 is less than 0.05 and this suggests that the privatization of BEDC has not resulted in the improvement of the company's operational efficiency.

Discussion of Findings

Technocrats had earlier asserted that the only solution to incessant poor service delivery in the Nigeria's power sector is privatization. After careful analyses of the data collected in attempt to find out if there is any significant relationship between privatization and performance of BEDC in Etsako-West Local Government Area, the correlation coefficient(R) indicates the strength and direction of the linear relationship between the TSD, TOS, and TOE (dependent variable) and Ownership Transfer (independent variable). In this case, $R = 0.883$, suggesting a strong positive correlation between the predictors (dependent variables) and the outcome variable (independent variable). Regulatory Framework also correlates positively with the dependent variables ($R = 0.763$). This confirms the

conclusion drawn by Adelekan, Amu, & Adewumi, (2017) who asserted that increased investment in power infrastructure such as transmission, and distribution networks, positively correlates with improvements in electricity generation and distribution efficiency.

CONCLUSION AND RECOMMENDATIONS

Privatization (Ownership Transfer) and regulatory frameworks have had a positive effect on service quality and efficiency in service delivery, respectively. Privatization significantly impacts the performance of the Benin Electricity Distribution Company (BEDC) in Edo State, Nigeria. The researcher offers the following recommendations:

- Policy Reform and Investment:** Owners of distribution companies should focus on policy reforms to facilitate efficient ownership transfer and regulatory frameworks, while encouraging investment in infrastructure and technology.
- Infrastructure Development and Capacity Building:** Prioritize infrastructure development to enhance the reliability and efficiency of power systems, coupled with capacity-building programs to empower personnel. The study provides a comprehensive analysis of the effects of privatization on the functioning of BEDC in the Etsako-West local government area. This analysis can inform policymakers and regulatory bodies about the efficacy of privatization in the electricity sector, highlighting areas requiring attention and potential policy adjustments to enhance service delivery.
- Stakeholder Collaboration and Monitoring:** Foster collaboration among stakeholders, including government, private sector, and communities, while implementing robust monitoring and evaluation mechanisms to track progress and address challenges effectively. The

study's findings can guide BEDC and other stakeholders in devising strategies to improve service reliability, reduce power outages, and enhance customer responsiveness. Ultimately, these efforts aim to enhance the overall electricity experience for residents in the local government area.

LIMITATIONS

Changes in government policies regarding electricity provision have affected the study, and current insecurity in affected areas has hindered researchers from collecting accurate data. While the study examines electricity efficiency in Etsako West local government area, extending it to South-South states would strengthen its generalizability.

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APPENDIX

Responses on Ownership Transfer and the Service Quality of BEDC

Ownership Transfer and Service Quality of BEDC	SA	A	UD	DA	S D	TS	STD	M	R
The transfer of ownership of BEDC has positively impacted the quality of services provided.(TOS)	135 675	98 392	2 6	3 6	2 2	240 108 1	63.89	4.50	1 st
The transfer of ownership has resulted in improved customer satisfaction (TCS)	110 350	120 480	0 0	5 10	5 5	240 104 5	61.30	4.35	4 th
The new ownership has brought about more transparency in BEDC's operations (TOT)	130 650	101 404	1 3	3 6	5 5	240 106 8	62.48	4.45	2 nd
The transfer of ownership has positively influenced the efficiency of BEDC's operations (TOE)	85 425	82 328	5 15	55 110	13 13	240 891	37.58	3.71	5 th
The transfer of ownership has led to better accountability in BEDC's service delivery (TSD)	125 625	100 400	5 15	3 6	7 7	240 105 3	59.56	4.39	3 rd

Source: Field Survey, 2024

Note: SA=Strongly Agreed; A= Agreed; U=Undecided; DA=Disagreed;

SD=Strongly Disagreed; TS=Total Score; STD= Standard Deviation; M=Mean; R=Rank

TOS=Transfer of ownership and service quality,

TCS=Transfer of ownership and customer satisfaction,

TOT=Transfer of ownership and transparency in operations,

TOE= Transfer of ownership and efficiency of operations,

TSD=Transfer of ownership and service delivery.

(B)

Table 5: Responses on Regulatory Framework in shaping BEDC's Operational Efficiency

Regulatory Framework of BEDC	SA	A	U	DA	SD	TS	STD	M	R
The regulatory framework in place has ensured fair and transparent billing practices by BEDC(RFT)	165 825	60 240	5 15	7 14	3 3	240 1097	69.62	4.57	1st
The regulatory framework has effectively protected the rights and interests of consumers(RFP)	130 650	85 340	0 0	10 20	15 15	240 1025	56.86	4.27	5th
The regulatory framework has encouraged BEDC to comply with quality standards in service delivery(RFS)	125 625	102 408	2 6	6 12	5 5	240 1056	60.36	4.40	3rd
The existing regulatory framework has facilitated effective monitoring and oversight of BEDC's operations(RFM)	120 600	102 408	18 54	0 0	0 0	240 1062	58.33	4.43	2nd
The regulatory framework has fostered a competitive and efficient electricity market(RFC)	105 525	121 484	10 30	4 8	0 0	240 1047	59.71	4.36	4th

Source: Field Survey, 2024

Note: SA=Strongly Agreed; A= Agreed; U=Undecided; DA=Disagreed;

SD=Strongly Disagreed; TS=Total Score; STD= Standard Deviation; M=Mean; R=Rank

RFT=Regulatory framework and transparent billing,

RFP=Regulatory Framework and protection of rights and interests,

RFS= Regulatory Framework and standard quality of service delivery

RFM=Regulatory framework and effective monitoring,

RFC=Regulatory framework, and competitive and efficient market