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Comparative financial analysis of electricity utilities in West Africa

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ABSTRACT

Access to electricity is a major issue in West Africa. Governments have a difficult equation to solve. They naturally seek to offer their people a cheap kWh. But they are constrained by a production based largely on oil and therefore highly volatile production costs. How to fix an acceptable tariff, taking into account the investment needs required to expand the network and increase production? This analysis should provide some answers.

The study presented in this paper provides a financial analysis of electricity utilities in West Africa. It allows a comparison of performances on a number of key financial ratios related to operations (Earning Before Interest Taxes Debt and Amortization/sales, working capital requirement/sales, days of receivables or payables), investment (net fixed assets/gross fixed assets), bank financing (financial structure, debt/EBITDA, interest expense/EBITDA) and economic and financial returns (Return On Capital Employed, Return On Equity).

The conclusion focuses on the growth opportunity that the electricity sector could represent for each country. But this opportunity may only materialize if the EBITDA margins are restored. The available options appear limited and must be assessed taking into account the context of each country: tariff increase, improvement of technical losses or diversification into means of production no longer based primarily on oil or gas.

1. Introduction

1.1. Presentation of the study and utilities

The study focuses on the electricity companies from seven countries of the Western African Economic and Monetary Union (WAEMU) (Table 1).[1] They all use the same currency, the Franc CFA or XOF. All are electricity distribution utilities, but they are more or less integrated in the production of the electricity they distribute. EDM Mali is also involved in water distribution. With the exception of the CIE, they are all public or publically controlled companies.

The study is based solely on audited accounts using the OHADA[2] format and the annual reports of the past three years. The accounts are assumed to be sincere. A majority of these companies publish these documents online and allow them to be downloaded. Due to the lack of information available, EAGB (Electricidade e Aguas de Guinea-Bissau) could not be included in this study.

Graph 1 gives an indication of the relative size of each company in terms of number of subscribers, revenue (sales and subsidies) and balance sheet size:

These companies are somewhat comparable in terms of balance sheet size except for CIE and SENELEC that must be distinguished by their number of subscribers and revenue. That is why this study is based primarily on a number of key ratios, annexed at the end of document, to allow comparison between the performances of each company.

1.2. The financial vision of the company and the three cash flow cycles

All companies produce accounts that reflect their business of the year. This financial translation is not always easy to interpret. The very fact of summarising the business of a company by

Abbreviations: EBITDA, Earnings Before Interest; Taxes, Debt and Amortization; EUR, Euro; GDP, Gross Domestic Product; LMTD, long and medium term debt; MW, mega watt; OHADA, Organization for Harmonization in Africa of Business Law.; ROE, Return On Equity; ROCE, Return On Capital Employed; STD, short term debt; USD, United States Dollar; VAT, Value Added Tax; XOF, Currency used in the eight states of the WAEMU (Benin, Burkina Faso, Guinea Bissau, Ivory Coast, Mali, Niger, Senegal, Togo).; WAEMU, Western African Economic and Monetary Union; WCR, working capital requirement

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[1] The currency used in the eight states of the WAEMU (Benin, Burkina Faso, Guinea Bissau, Ivory Coast, Mali, Niger, Senegal, Togo) is the same. According to norm ISO 4217, this common currency is denominated by the three letters XOF, in the same way that EUR stands for Euro and USD for United States Dollar. Change is fixed with the Euro: 1 billion XOF is equal to 1 524 490.27 EUR.

[2] Organization for Harmonization in Africa of Business Law. It has in particular lead to a common chart of accounts.

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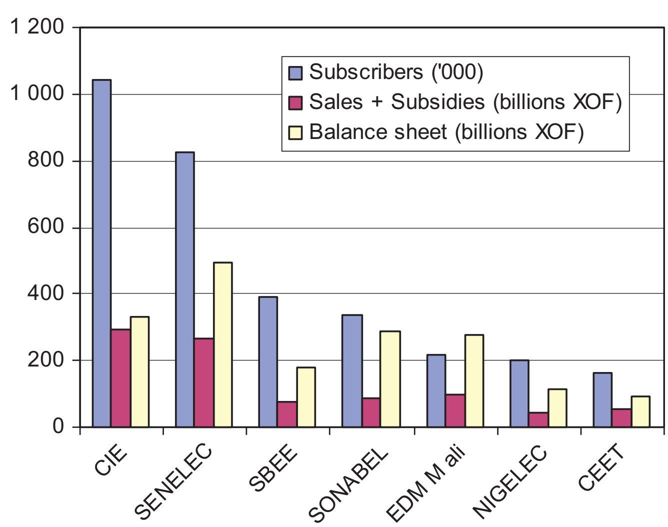
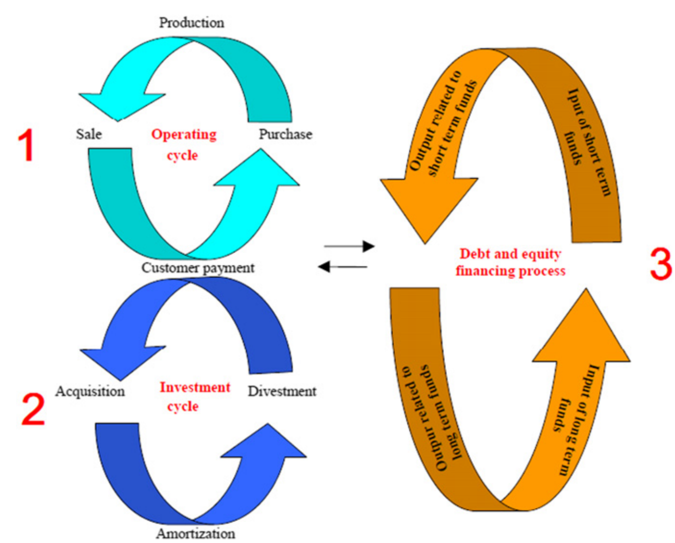
Table 1
Electricity distribution company WAEMU.
Source: Author, corporate activity reports.

Country	Company	Activity	Status	Website
Benin	SBEE	Production (12%) Purchase/import (88%) Distribution	Public	
Burkina	SONABEL	Production (83%) Purchase/import (17%) Distribution	Public	www.sonabel.bf
Ivory Coast	CIE	Production (38%) Purchase (62%) Distribution	Private	www.groupecie.net
Mali	EDM Mali	Production (38%) Purchase/import (62%) Distribution + Water (15% of sales)	Public (66%) Private (34%)	www.edm-sa.com
Niger	NIGELEC	Production (8%) Purchase/import (92%) Distribution	Public	
Senegal	SENELEC	Production (76%) Purchase (24%) Distribution	Public	www.senelec.sn
Togo	CEET	Production (3%) Purchase/import (97%) Distribution	Public	www.ceet.tg



Graph 1. Size of power companies, number of subscribers, revenues and total assets.
Source: Annual reports of utilities, annual accounts.



Graph 2. Different cash flows cycles in a company.
Source: CEFEB.

a translation in monetary units is of course simplistic and open to discussion.

But it is the language of financiers, bankers and investors, in a capitalist world. It is therefore necessary to master this language to be able to understand them and negotiate credit or equity. We must also admit that profit is the object and purpose of their activity, even if in the case of an electricity utility for instance, it might be argued that the objective should be to connect 100% of citizens and offer the best service for the lowest price. It is up to politicians by the use of law to ensure that the objective of profit maximization coincides with those of citizens by banning, taxing, subsidizing or redistributing.

This translation also implies that financial accounting statements and activity reports are accurate and conform to established standards in order to remain meaningful. For this study, the financial statements were assumed to be sincere and have not been restated.

According to Vernimmen in Corporate Finance, the financier seeks to understand a business through the knowledge of cash flows deducted from the financial statements (Graph 2). It distinguishes the following cash flows in this order of priority:

1. The operating cycle.
2. The investment cycle.
3. The process of debt and equity financing.

The order of precedence follows this reasoning: if a company generates large cash surpluses from its operation, it will naturally be led to invest in order to increase its activity so as to produce more financial surpluses and the financiers will compete to bring