



# **AFRICA CENTRE FOR ENERGY POLICY**

**IS ELECTRICITY COMPANY OF GHANA A VIABLE COMPANY ? A  
FINANCIAL ANALYSIS OF ECG (2009-2012)**

*Policy Unit*

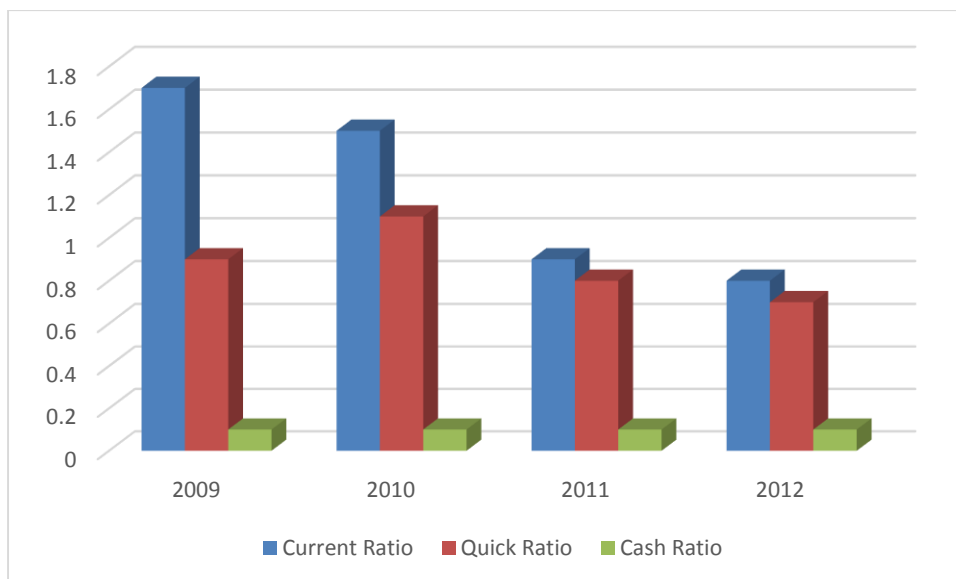
## Key Findings

1. In 2011 and 2012, the values of current assets could not cover up for current liabilities.
2. The trend indicates an unfavourable Quick ratio position for the company apart from the year 2010. This means it will be difficult for ECG to find it difficult in the short term to convert assets to cash or pay for current liabilities.
3. ECG during the years under review has improved its Cash Conversion Cycle significantly. For the years 2011 and 2012, the company records negative cash conversion cycles. These mean that the company retrieves cash for its services way before it pays its creditors.
4. Negative or minimal returns to assets which requires ECG to invest in capital. However, ECG uses more than 65% of its to pay salaries and emoluments.
5. For the years under review, the Electricity Company of Ghana recorded operating losses and hence negative operating Profit Margins except for the year 2010. **-2.60%, 4.20%, -3.30% and -6.60%** were the margins chalked respectively.
6. Apart from the year 2011, the ECG for the period under review has been unable to cover its debts germane to its operating cash flows within the respective financial years.

## Introduction

As Ghana struggles to end the power crises, a lot of questions have been asked about the performance of ECG, the main distributor of power. These questions became intense when the management of ECG voted in 2013 to increase their salaries by 35%. In this study, ACEP uses financial ratios to analyse the performance of ECG from 2009 to 2012

### 1. Liquidity ratios



## **Current Ratio**

Conventionally the Current ratio is used to test a company's current or working capital position. In conceptual terms it is also used to ascertain a company's ability to readily use its current assets or short term assets (e.g. cash, cash equivalents, inventories, receivables and marketable securities if listed) to pay for its current or short term liabilities ( e.g. borrowings within one year, accounts payables and accrued taxes and expenses).

**In theory, the higher the current ratio, the better.** However, the current ratio is supposed to be analysed in tandem with other more conservative liquidity ratios such as the Quick , Cash and Cash Conversion Cycle ratios so as to get the nearest accurate picture of the liquidity position of a said company.

The Electricity Company of Ghana in the period under review (2009-2012) has recorded current ratios of **1.7, 1.5, 0.9 and 0.8** respectively. Clearly the trend shows a decline of current ratios of the company over the period under review and possibly poses danger to its liquidity position especially in the years 2011 and 2012 which have their values of currents assets not covering up for current liabilities.

## **Quick Ratio**

The Quick Ratio also known as the acid test ratio further refines the current ratio because it takes into consideration how assets that are easier to turn into cash (**e.g. Cash and cash equivalents, short-term investment and account receivables**) could be used to pay off the current liabilities of a company.

**A higher ratio germane to the Quick ratio is always good for a company.**

The following are the quick ratios for the Electricity Company of Ghana for the period under review; **0.9, 1.1, 0.8 and 0.7** respectively. The trend indicates an unfavourable Quick ratio position for the company apart from the year 2010.

### **Cash Ratio**

Arguably, the Cash ratio is the most conservative of liquidity ratios as it refines the Current and Quick ratios by finding out how readily a company is able to use its cash, cash equivalents and invested funds to cover up its current liabilities.

**Again, a higher ratio is always better.** However, for asset utilisation purposes it is always unrealistic for a company to hold huge cash reserves to pay off current liabilities while it could rather use those cash assets to generate higher returns. This is to say a low cash ratio is not too bad either.

Cash ratios for the Electricity Company of Ghana for the period under review have been **0.1** throughout. This provides an interesting liquidity perspective for the company and indicates that the ECG seldom relies on its cash and other most liquid assets to pay off current liabilities. Suffice to say however that a cash ratio of **0.1** for a period of 4 years is quite low by conventional standards and poses some clear liquidity threats.

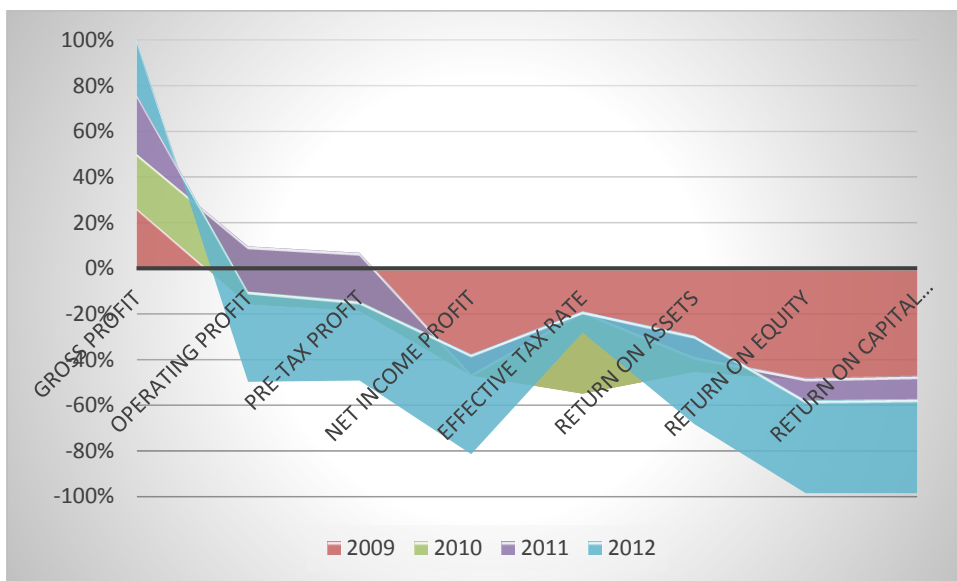
### **Cash Conversion Cycle**

The Cash Conversion Cycle also known as the Operating Cycle measures the number of days that a company takes to retrieve cash that has been tied up in production and sales processes taking into consideration the advantages that it enjoys from the payment terms given it by its creditors.

**The shorter the cycle, the more liquid the company is.**

The following has been the Cash Conversion Cycle of the Electricity Company of Ghana for the period under consideration; **66, 62, (49), (71)** days respectively. The figures clearly show that the company during the years under review has improved its Cash Conversion Cycle significantly. For the years 2011 and 2012, the company records negative cash conversion cycles. These mean that the company retrieves cash for its services way before it pays its creditors. The establishment of the prepaid system for some electricity consumers in the country and other prudent management mechanisms must have contributed to this trend.

## 2.PROFITABILITY INDICATOR RATIOS



### Gross Profit Margin

This is used to analyse how efficiently or otherwise a company uses its raw materials. Labour and production related fixed assets to generate profits. **A higher margin percentage is a favourable profit indicator.**

For the period under review the Electricity Company of Ghana recorded following Gross Profit Margins in percentage terms respectively; **12.10%, 11%, 12% and 11%**. This is an indication of a favourable profit margin which means that revenues generated from the operations of the company on the average over the four years under review outweigh the direct costs incurred by the company by an average of at least 10%.

### **Operating Profit Margin**

The Operating Profit is arrived at by subtracting general administrative and distribution expenses from the Gross profit. Operating Profit is then expressed as a percentage of the company's revenues to arrive at its Operating Profit Margin. Operating Profit margins are much more controllable by the management of a company than the Gross Profit Margin. Thus investors are much more interested in Operating Profit Margins for investment decisions. **A higher margin percentage is a favourable profit indicator and also to an extent measures the financial prudence of the management of a company.**

For the years under review, the Electricity Company of Ghana recorded operating losses and hence negative operating Profit Margins except for the year 2010. **-2.60%, 4.20%, -3.30% and -6.60%** were the margins chalked respectively.

Conventionally, it is understandable that new and small companies would normally record negative operating profit margins but for establish and bigger companies like the Electricity Company of Ghana, it is a worrying trend.

This trend could be reversed by making more funding available for the company or by being prudent with administrative and distribution expenses. Consistent operating profit margins lends credence to the arguments of the proponents of privatisation of the company as it is

clear that the company rarely receives financial support from the government which is the owner of the ECG a hundred per cent.

### **Pre-Tax Profit Margin**

The Pre-tax Profit Margin of the ECG under the period of review follows the same trend as that of the Operating Profit Margin. Except for the year 2010, the other years recorded negative pre-tax profit margins an indication of poor management decisions just like in the case of the Operating Profit Margin. The following ratios were recorded for Pre-Tax Margin ratios for the period under reviews; **-4.10%, 5.60%, -4.70% and -7.60%.**

### **Effective Tax Rate**

This rate measure a company's tax bill as a percentage of taxable income. Conventionally, Companies that can work within the tax code to pay lower taxes are more favourable to investors. This is because tax savings can be used for reinvestment or paid as dividends if the company is listed. However, it should be noted that where a company makes no pre-tax profit; it also has nil effective tax rate.

The Electricity Company of Ghana has an effective tax rate only in the year **2010; 97.7%**. The current trend adds a lot more fillip to arguments that are in favour of strategies that would make the ECG best managed so as to generate enough revenues to pay its taxes as well as have enough for upgrade of its technologies.

### **Return on Assets**

This ratio illustrates how well a company's management employs its assets to make profits. The Return on Assets Ratio is calculated by comparing a company's net income to average total assets expressed in percentage terms. **A higher return means the management of a company is efficiently utilising its total assets to make profit.**



Normally, capital intensive companies like the Electricity Company of Ghana would be expected to have higher Return on Assets Ratios. However, the ECG for the period under review recorded some interesting undulating Return on Asset ratios; **-3.40%, 0.50%, 0.69% and -2.90%**.

The ratios recorded is also prove that the Electricity Company of Ghana would need to have more invested in its assets especially fixed assets to make its operations more efficient to generate more income as capital intensive one.

### **Return on Equity**

The Return on Equity ratio measures how much shareholders earn from investing in the company. It is measured by comparing a company's net income with its shareholder's equity in percentage terms.

The Electricity Company of Ghana is totally owned by the Government of Ghana. Returns on Equity for the period under review are **-6.10, 0.90%, -1.20% and -5.07%** respectively. As a rule of thumb financial analysts consider return on equity ratios in the 15-20% range as representing attractive levels of investment quality.

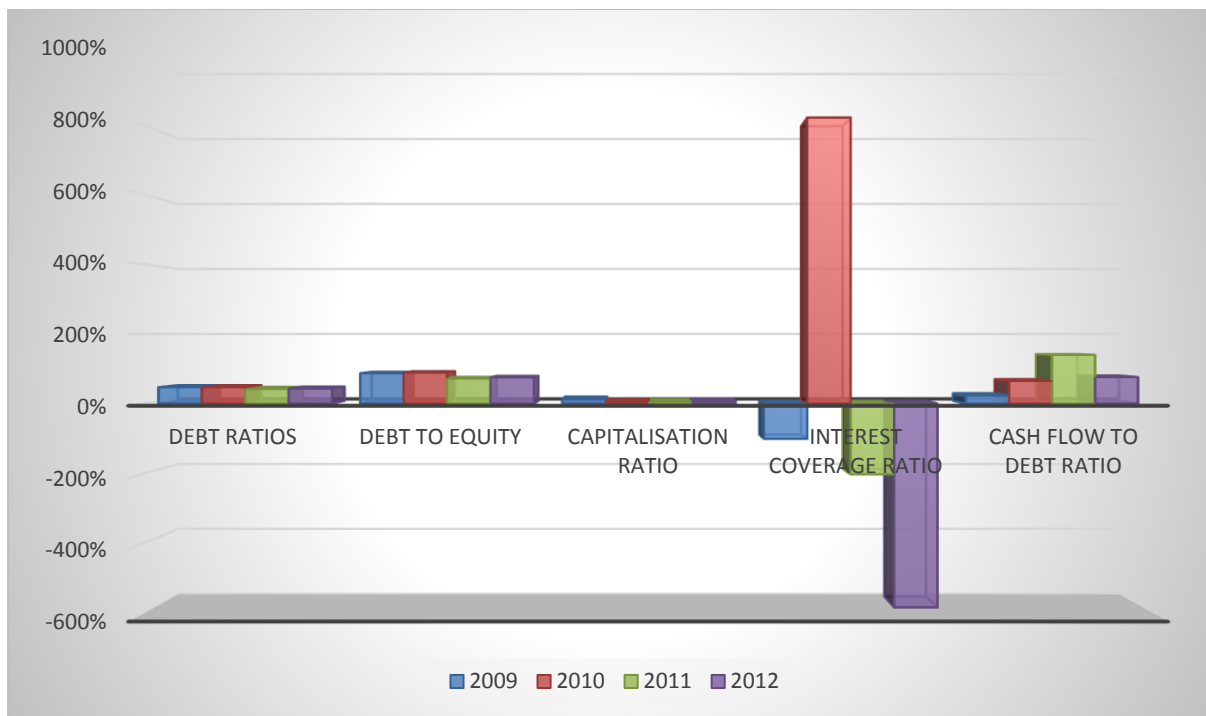
Considering the figures from the ECG on the said ratio it is clear it needs more financial support from government if the company would not be privatised.

### **Return on Capital Employed**

This indicator measures how well the management of a company is able to generate earnings from a company's total pool of capital. The Return on Capital Employed ratio is calculated by expressing in percentage terms the complements of the return on equity ratio by adding a company's debt liabilities, or funded debt, to equity to reflect a company's total "capital employed".

**-5.40%, 0.08%, -1.14% and -4.66%** respectively from 2009 to 2012 for the ECG on the returns on Capital Employed ratios indicates the inability of the management of the firm to generate enough earnings possibly because of the lack of capital available it.

### 3.DEBT/ SOLVENCY RATIOS



#### Debt Ratio

The debt ratio compares the liabilities of a company to its assets in percentage terms. A higher debt ratio indicates more risk for a company. However, a company would have been more efficient with its leverage if it is able to use its debts to above cost of capital.

The ECGs debt ratios for the period under review are as follows; **47%, 47%, 42 % and 43%**. These records would have been normal for a capital intensive company such as the ECG if it was able to generate more than its cost of capital but the reverse has been true considering its capital structure.

ECGs position in this regard is very risky.

### **Debt-Equity Ratio.**

This ratio gauges the how much suppliers, lenders and creditors have committed to the company as compared to how much owners have committed. A higher debt-equity ratio is risky for a company.

For the years under review the ECG recorded the following for debt to equity ratio; **87%, 89%, 72% and 75%** respectively. Clearly the company is surviving much more on the commitment of creditors, suppliers, lenders and obligors rather than the commitment from its owners which is solely the Government of Ghana. With such a trend, the ECG risks solvency if suppliers, creditors also begin to experience similar difficulties. The trend also proves that the ECG needs more financial support from government; its sole owner; if it is to survive.

### **Capitalisation Ratio**

This measures the debt component of a company's capital structure. It is calculated by expressing in percentage terms the long-term debts divided by the sum of long-term debt and shareholder's equity. Conventionally, low debt and high equity levels in the capitalisation ratio indicate investment quality. However, it should be noticed that a company may have lower long-term debts but much higher short term-debts which may put it at higher risk though the capitalisation ratio may indicate otherwise.

For the period under review, the ECG records the following; **13%, 7%, 5% and 7%** respectively.

By placing a cursory glance at the capitalisation ratio of the company there is an indication that it is in a good solvency standing, however by comparing the capitalisation ratio to the debt to equity ratio; it is clear that the ECG is more reliant on other non-current liabilities to finance its operations.

### **Interest Coverage Ratio**

The interest coverage ratio determines how easily a company is able to pay interest expenses on outstanding debt. It is calculated by dividing a company's earnings before tax (EBIT) by the company's interest expenses by the same period. **The lower the ratio, the more the company is burdened with interest expenses.** Conventionally, when a company's interest coverage ratio is only 1.5 or lower, its ability to meet interest expenses may be questionable.

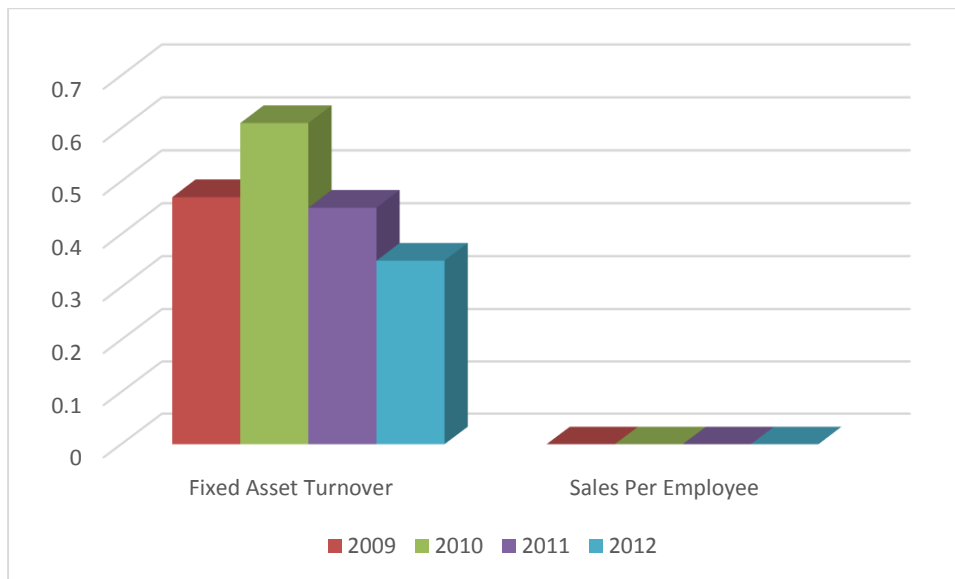
For the period under review, the ECG records the following; **-1.01, 8.21,-2.03 and -5.85** respectively. Apart from the year 2010, the debt and interest expense burden of the ECG needs no further explanation if one considers that any figure under 1.5 for this ratio is risky for any company.

### **Cash flow to Debt ratio.**

This measures the coverage of a company's operating cash flow over its total debt. It is calculated by dividing a company's operating cash flow by the sum of its short-term borrowings, portion of long-term debt and long-term debt. **The higher the ratio the better the company is able to carry its debts within a financial year.**

The following figures for the ECG for the period under review are **0.23, 0.65, 1.4 and 0.76** respectively. The figures recorded indicate that apart from the year 2011, the ECG for the period under review has been unable to cover its debts germane to its operating cash flows within the respective financial years.

## 4. OPERATING PERFORMANCE RATIOS



### Fixed Asset Turnover

The ratio is a measurement of the productivity of a company's fixed assets; normally property, plant and equipment; with regards to generating sales. This is because for very capital intensive companies investments in fixed assets represent substantial components of total assets. This represents management's efficiency in managing significant assets.

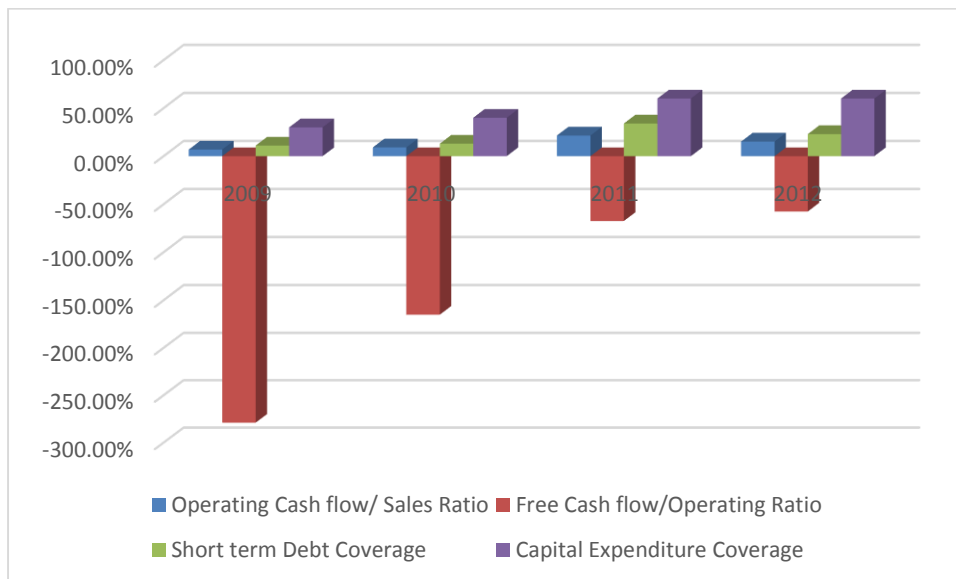
The higher the rate the better. ECG for the period under review records the following for its Fixed Asset Turnover; **0.47, 0.61, 0.45 and 0.35**. These figures indicate the lack of efficiency with regards to the use of investments in fixed assets in generating further earnings for the ECG.

### Sales per Employee/ Revenues Generated per Employee

For high tech and capital intensive companies sales or revenues per employees on the average should be higher than labour intensive businesses. The ratio essentially measures personnel productivity in terms of revenues generated annually.

Though the value for the ECG on the measure of personnel productivity has been steadily increasing over the period under review it is pretty low still. These are the figures: **114.5, 168.14, 209.8 and 236.5 Cedis** respectively. The figures are necessary proofs that the ECG is inefficient with regards to personnel productivity.

## 5.CASH FLOW INDICATOR RATIOS.



### Operating Cash flow/ Sales Ratio

This ratio, which expressed as a percentage, compares a company's operating cash flow to its net sales or revenues, which gives investors an idea of the company's ability to turn sales into cash. It is a worrisome trend to see a company's sales grow without a parallel growth in operating cash flow.

Improving percentage increases in this ratio is a sign of positive investment qualities.

These are the figures for the ratio under discussion for the ECG for the period under review **6.90%, 9.10%, 21.50% and 15.20%.**

This indicates good prospects for investments but still on the low side for a high tech and capital intensive company like the ECG.

### **Free Cash flow/ Operating Ratio**

This ratio calculates the relationship between free cash flow and operating cash flow in percentage terms. The free Cash flow is arrived at by subtracting capital expenditures from operating cash flows. This is because companies are considered to make more capital expenses which are essential to maintain competitiveness and efficiency. The free cash flow is therefore useful for expansion and possible stability in times of financial difficulties.

The higher the percentage of the free Cash flow embedded in a company's operating cash flow, the greater the financial strength of the company.

For the period under review the ECG recorded **-279%**, **-165%**, **-67.50%** and **-57.60%** respectively. This trend though shows a steady decline, indicates a negative outlook on the ECG's ability to expand with its free cash flow.

### **Short –term Debt Coverage**

This measures the coverage of operating cash flow over a company's short term debt and current portion of long-term debt.

The higher the coverage the better.

ECG with the following scores for this ratio has poor cash flow-short term debt coverage for the period under review. The figures are **0.11, 0.13, 0.34 and 0.23** respectively.

### **Capital Expenditure Coverage**

This measures how much cash flow a company has to fund capital expenditure coverage. This indicates how much a company has available to fund further expenditure on Plant, Property and Equipment if need be. A higher coverage is a good indication for possible capital expenditure for expansion.

ECGs Capital Expenditure Coverage is significantly low over the period under review. **0.3, 0.4, 0.6 and 0.6** are the figures. This means that the company would struggle to spend on fixed assets in the near future.

### **6. CONCLUSION**

This study supports ACEP's position that ECG should either be under management contract, divided into smaller operational units or privatise. Again, there is a need to invest more than 60% in capital. ECG should do more to minimise both technical and commercial losses.