

Going Concern Assessment Through Cash Generating Power: Evidence from Cash Flow Statements (A Case Study of Nigerian Breweries PLC)

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Abstract

Purpose The purpose of the study is to assess going concern of an entity through cash generating power as evident from cash flow statement in Brewery industry in Nigeria with special reference to Nigerian Breweries Plc. The reason for the choice of the sample is that it is the pioneer and largest brewing company in Nigeria. As at 31st December, 2012, it had a market capitalization of ₦1.1 trillion, making it the second largest company in Nigeria. Data for this study were generated from secondary sources (annual report and account of Nigerian Breweries Plc.). A quantitative approach is adopted which makes the research a scientific study which seeks to solve practical problems and its aim is to develop practical knowledge in investigating power of cash flow of Nigerian Breweries Plc. It can be considered as an applied research. The result of this research can be applied to solve the problem that exists on how to manage cash flow in the organization to maintain going concern of an organization. There is negative effect of current liability coverage on cash generating power which is not significant. This means that as the cash generating power increases there will be increase in the number of times current liability coverage are covered. There is direct relationship between cash generating power and long term debt coverage which is significant. This means that long term debt coverage directly related to cash generating power of the company. There is negative relationship between cash generating power and interest coverage which is significant. The implication is that interest coverage has inverse relationship with cash generating power of the company. If the assets are utilized judiciously as indicated by the earnings quality, the better for the company, this eventually will culminate into sound cash generating power for the company. Earning quality provides a more realistic indication of the extent of deviation between operating cash flow and reported earnings. Information from cash flow from investing and financing activities is very important, however, the principal motive for the existence of the organization is its operating activity.

Keywords

Going Concern, Cash Generating Power, Operating Activity, Cash Flow Statement, Long Term Debt

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1. Introduction

Going concern is the ability of an entity to continue to

operate and absence of threat to curtail significant operation of the entity in the foreseeable future. The ability to survive in the short run is very important. However, for an entity to survive in the long run under harsh economic condition as a

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going concern is very important. This has to do with the ability of the entity to operate efficiently, to finance growth and to pay its obligations as it falls due. To be able to do this, the cash generating power, that is the extent of dependence on external sources as a means of financing by an organisation and growth has much to be desired. The focus of most computed ratios is on balance sheet and income statements. This is quite unfortunate since the statement of cash flows, herein after referred to as (SCF) can as well provide useful insights from ratio analysis. The cash flow statement is complementary to the balance sheet and income statements in terms of provision of additional information regarding an organisation's ability to operate in an efficient manner.

The SCF categorises all cash flows into three categories: operating activities, investing activities and financing activities. Operating activities are presented as a reconciliation of accrual-based net income to net cash flows from operations. The indirect method reconciliation starts with the amount of net income followed by adjustments for items, such as depreciation, that affect reported net income, but not cash. In addition to depreciation, examples of adjustments include gains or loss associated with disposal of assets as well as the amounts related to increase or decrease in operating accounts. The second segment of the SCF is cash from investing activities. This includes cash flow associated with capital asset and investment transactions. The third segment of the SCF deals with and reports cash flow from financing activities.

The main thrust of this paper is to find out relationship between cash generating power and going concern of an organization. This is measured by current liability coverage, long term debt coverage, interest coverage and earnings quality ratios based on cash flow statement.

2. The Company Profile

Nigerian Breweries Plc, the pioneer and largest brewing company in Nigeria was incorporated in 1946. In June 1949, the company recorded a landmark when the first bottle of STAR lager beer rolled off its Lagos Brewery bottling lines. This first brewery in Lagos has undergone several optimization processes and as at today boasts of the most modern brew house in the country.

In 1957, the company commissioned its second brewery in Aba. This was followed by Kaduna Brewery in 1963 and Ibadan Brewery in 1982. In 1993, the Company acquired its fifth brewery in Enugu and in 2003, a sixth brewery (Ama Brewery), sited at Amaeke Ngwo in Enugu State was commissioned. Ama Brewery is today, the biggest brewery in Nigeria. Operations in the old Enugu Brewery were

discontinued in 2004 following the completion of Ama Brewery. An ultra-modern malting plant was acquired in Aba in 2008.

In October 2011, the company acquired majority equity interest in Sona Systems Associates Business Management Limited (Sona Systems), with two breweries in Ota and Kaduna, and Life Breweries Company Limited (Life Breweries) with a brewery in Onitsha. Sona Systems and Life Breweries were merged into an enlarged Nigerian Breweries in the middle of 2012. Another malting plant was acquired in Kaduna as a result of the acquisitions/mergers.

Thus, from the humble beginning in 1946, the company now has eight operational breweries from which its high quality products are produced and then distributed to all parts of Nigeria, in addition to the two malting plants in Aba and Kaduna. It also has Sales Offices across the country.

Nigerian Breweries Plc has a rich portfolio of high quality brands: Star lager beer was launched in 1949, followed by Gulder lager beer in 1970. Maltina, the nourishing malt drink, was introduced in 1976, followed by Legend Extra Stout in 1992 and Amstel Malta in 1994. Heineken lager beer was re-launched into the Nigerian market in 1998. Maltina Sip-it, packaged in Tetrapaks was launched in 2005, while Fayrouz, the premium non-alcoholic soft drink, was launched in 2006. Climax, a herbal energy drink was launched in 2010. Following the acquisition of Sona Systems and Life Breweries in 2011, Goldberg lager, Malta Gold and Life Continental lager, were added to the brand portfolio.

The Company has an increasing export business that dates back to 1986. The current export destinations are the United Kingdom, European Union and the West African sub-region.

As a major brewing concern, Nigerian Breweries Plc encourages the establishment of ancillary businesses. These include manufacturers of bottles, crown corks, labels, cartons, plastic crates and service providers such as hotels/clubs, distributors, transporters, event managers, advertising and marketing communication agencies amongst others.

The Company was listed on the floor of The Nigerian Stock Exchange (NSE) in 1973. As at 31st December, 2012, it had a market capitalisation of N1.1 trillion, making it the second largest company in Nigeria. It has consistently been honoured with awards relating to capital market matters including amongst others, The NSE President's Merit Award in the Brewery Sector and the NSE Quoted Company of the Year Award. In 2012, the Company was recognised as the most compliant company amongst those listed on the Nigerian Stock Exchange. Nigerian Breweries Plc is also a recipient of many other awards for its operations and high-quality brands.

3. Research Hypotheses

To achieve the above research objective, the following are the research hypotheses formulated in null form:

H₀₁: There is no significant relationship between cash generating power and current liability coverage.

H₀₂: There is no significant relationship between cash generating power and long term debt coverage.

H₀₃: There is no significant relationship between cash generating power and interest coverage

H₀₄: There is no significant relationship between cash generating power and earnings quality.

Table 1. Conceptual Model.

Cash Flow Statement Indices	Performance Index
Current Liability Coverage (CULC)	H ₀₁
Long Term Debt Coverage (LTDC)	H ₀₂
Interest Coverage (INCO)	H ₀₃
Earnings Quality(EQTY)	H ₀₄

4. Conceptualization of Variables

Cash generating power is a function of long term debt coverage, interest coverage, earning quality, asset efficiency and capital asset. This relationship is shown below:

$$Y=f(X)$$

Where:

Table 2. Operationalization of the variables.

Variables	Indicators	Measurements
Dependent Variable	CAGP	CFO/CFO+ Investing Cash inflows +Financing cash inflows
Independent Variables	CULC	CFO - Cash dividends paid/Current liability
	LTDC	CFO - Cash Dividends Paid/Long Term Debt
	INCO	CFO + Cash Payments for Interest and Income Taxes/Cash Payments for Interest
	EQTY	CFO + Cash payments for interest and income taxes/ Net Income + Interest Expense + Income Tax Expense

6. Literature Review

Cash in any business whatever might be the nature of the business; this is, whether big or small not only an essential is fundamental for a successful business, but also a continued critical requirement for business survival (Kisang & Shawn, 2004; DeFranco & Schmidgall, 1998). The ability of an entity to continue as a going concern is determined not on the profitability only but on the quality of the cash flow into the business from its operation. There were studies by different researchers on cash flow as being crucial for businesses in a variety of industries. This had been demonstrated in the work of Casey & Bartzak, 1985; Bohannon & Edwards, 1993;

Y= Cash generating power (CAGP).

$$X=f(x_1, x_2, x_3, x_4)$$

x₁= Current Liability Coverage (CULC).

x₂=Long Term Debt Coverage (LTDC).

x₃= Interest Coverage (INCO).

x₄ = Earnings Quality (EQTY)

The relation is as follows:

$$Y=\beta_0+\beta_1x_1+\beta_2x_2+\beta_3x_3+\beta_4x_4+\epsilon$$

where: β_0 is the intercept of the model. It is the level of cash generating power the company can sustain when current liability coverage, long term debt coverage, interest coverage and earning quality irrelevant. β_i (i = 1, 2, 3, 4,) are the coefficients of the respective components of cash generating power of the company. ϵ is the stochastic variable introduced into the model to accommodate the influences of other variables that may shape cash generating power of the company but which are not explicitly included in the model.

5. Operationalization of Variables

The figure below showed the way and manner the authors intended to make use of the variables in the context of the study. This enables proper understanding of the derived indicators.

Geller & Ilvento, 1993; Epstein & Pava, 1994; Sylvestre & Urbancic, 1994; Beck, 1994 and DeFranco & Schmidgall, 1998). Beck, 1994 noted in his study that cash is king. He further noted that cash reflects the difference between successful operation and closure.

Financial ratio analysis has been traditional method extensively employed to assess and evaluate the financial performance of operations for a long time by investors, creditors, and managers. This permits them to obtain more valuable information from financial statements than they can receive simply from reviewing the absolute numbers reported in the documents (Andrew & Schmidgall, 1993). Ratios from financial statements were originally developed as short-term credit analysis techniques, which can be traced as far back as

the late nineteenth century. From this backdrop, analysts have developed many financial ratios that practitioners and academicians use widely (Giacomino & Mielke, 1993).

Mills and Yamamura (1998) in their contribution to literature on the topic and as an extension to the work of earlier researchers opined that a business's true economic health can no longer be fully measured with an accrual basis accounting system alone. For years, lenders, rating agencies, and Wall Street analysts have been using cash flow ratios in evaluating risks associated with their investments. Previous researches had claimed that the SCF has provided creditors, investors, and managers with even more useful information for analyzing the financial structure of an operation when compared to traditional income statement and balance sheet (DeFranco & Schmidgall, 1998; McGowne, 1989; Mills & Yamamura, 1998; Zeller & Stanko, 1994). For instance, a study conducted by Mills and Yamamura, 1998 showed empirical evidence that the operating cash flow ratio signaled a unique aspect of a retail firm's activity. The traditional ratio analysis often fails to reveal the severe liquidity problems that result in a bankruptcy filing (Zeller & Stanko, 1994). In addition, shareholders have become more aware of the value in financial reports, and they also believe that the SCF is increasingly important these days (Epstein & Pava, 1994).

In the case of liquidity analysis, cash flow information is more reliable than balance sheet or income statement information. Balance sheet data are static due to the measurement of only a single point in time while the income statement contains many arbitrary non-cash allocations (e.g., depreciation and amortization). In contrast, the cash flow statement records the changes in the other statements and nets out the bookkeeping artifice, focusing on what shareholders really care about: cash available for operations and investments (Coltman & Jagels, 2001; Mills & Yamamura, 1998).

By convention, both the current and quick ratios are calculated at a particular point in time. If the financial statement accounts are unusually large or small on that date (considering chances of window dressing), those ratios may not reflect a normal situation. Cash flows from operations to current liabilities, an SCF-based ratio, overcomes this shortcoming, because it requires the comparison of a cash-flow value from a period of time to the average of current liabilities (Mills & Yamamura, 1998; Schmidgall, Geller, & Ilvento, 1993). This ratio measures a company's ability to generate resources to meet current liabilities. The higher the ratio is, the greater the firm's liquidity (Coltman & Jagels, 2001). As a rule of thumb, current assets should exceed current liabilities on a ratio of two to one (Jagels & Coltman, 2004). However, this general rule does not apply to the lodging industry since the largest inventories held by hotels

are food and beverage services. These current inventories account for a small portion of current assets. Therefore, as observed in the work of (Jagels & Coltman, 2004), other companies in different industry can operate with a current ratio of 1.5 or less.

Solvency ratios are used to evaluate a company's ability to pay its bills as at when due in the long run. Lenders, investors, and credit-rating agencies are very concerned about a company's ability to meet its operational commitments. Cash flow ratios are useful to measure a company's strength on an ongoing basis (Mills & Yamamura, 1998). One of the most commonly used solvency ratios, total assets to total liabilities, is calculated at a single point in time in the balance sheet statement, while the cash flow from operations to average total liabilities ratio covers a period of time. Thus, the latter is considered more useful than the former. Moreover, the total assets to total liabilities ratio ignores the varying liquidity of assets for covering various levels of debt. The cash flow from operations to total liabilities ratio gets over that deficiency by focusing directly on cash flow (Coltman & Jagels, 2001; Schmidgall, Geller, & Ilvento, 1993; Mills & Yamamura, 1998). The lower this ratio is the lower the financial flexibility and the higher the potential for default. In other words, the higher this ratio is, the better is the operation's ability to pay off its debts with cash. It is suggested that a minimum ratio of 20 percent is acceptable in the lodging industry (Davidson, Stickney & Weil, 1988; Schmidgall, Geller, & Ilvento, 1993).

7. Methodology

This study was set to study property-disposition relationship. This is the relationship between some characteristics or quality and a corresponding attitude or inclination.

Data and Sample

In this study, cash generating power of Nigerian Breweries Plc is investigated between a period of ten years, from 2004 to 2013. The study fully focused on secondary data sources (Tharshiga, 2013; Velnampy, 2005; 2006 and 2012; Kisang & Shawn, 2004). The study adopted purposeful sampling method. The reason for the choice of the sample is that, it is the pioneer and largest brewing company in Nigeria. As at 31st December, 2012, it had a market capitalization of ₦1.1 trillion, making it the second largest company in Nigeria (The Business Eyes). A quantitative approach is adopted which makes the research a scientific study which seeks to solve practical problems and its aim is to develop practical knowledge in investigating power of cash flow of Nigerian Breweries Plc. It can be considered as an applied research. Therefore, the result of this research can be applied to solve the problem that exists on how to manage cash flow in an

organization to maintain long run solvency of an organization.

8. Data Analysis and Discussion

In this research, descriptive statistics method was used to summarise and classify the collected data. Thereafter, inferential statistics methods were employed to analyse them. Table 3 showed the descriptive statistics results of the variables.

According to Azar and Momeni (2006), the most important

measure that shows the balance point and the exertion centre of distribution is arithmetic mean. As shown in Table 3, the mean value of CAGP, CULC, LTDC, INCO and EQTY .9420, .58, 3.637, 18.534 and .43 respectively as shown in fifth column. The highest mean from the distribution is that of INCO (18.534) followed by that of LTDC (3.637). The sixth column showed standard deviation of all the variables from the mean. INCO shows the highest deviation from the mean. This statistics sought the statistical analysis to provide summary measures which describe the important characteristics of the data.

Table 3. Descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
CAGP	10	.64	1.00	.9420	.10942
CULC	10	.19	.86	.5850	.23857
LTDC	10	1.41	8.73	3.6370	2.04115
INCO	10	4.74	60.73	18.5340	15.72835
EQTY	10	.32	.62	.4300	.10088
Valid N (listwise)	10				

The overall significance of the model was assessed by the ANOVA as shown in Table 4. The result indicated that the model is significant as shown in the value of F-value of 31.560 and a P-value of .001 which is less than 0.05. This is an indication that the data fit the model. Equally important the result revealed that cash generating power is a driver of going concern.

Table 5 showed the Model summary. R-square measured the proportion of the variation in the dependent variable (CAGP) that was explained by variations in the independent variables (CULC, LTDC, INCO and EQTY). In this study, 96.2% of the variation (and not the variance) was explained while 3.8% was

unexplained. Adjusted R-square measured the proportion of the variance in the dependent variable (CAGP) that was explained by variations in the independent variables (CULC, LTDC, INCO and EQTY). In this case it was revealed that 93.1% of the variance was explained while 6.9% was unexplained. Durbin-Watson test was used to find out whether or not there was autocorrelation in the residuals. The values of Durbin-Watson have an upper limit of four and lower limit of zero. If the value is equal to two, then there is absence of autocorrelation. In this case the value of Durbin-Watson was 2.780 which showed that there was no auto correlation in the residuals (Kohler, 1994)

Table 4. ANOVA^a.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.104	4	.026	31.560	.001 ^b
	Residual	.004	5	.001		
	Total	.108	9			

a. Dependent Variable: CAGP
b. Predictors: (Constant), EQTY, CULC, LTDC, INCO

Table 5. Model Summary^b.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.981 ^a	.962	.931	.02865	2.780

a. Predictors: (Constant), EQTY, CULC, LTDC, INCO
b. Dependent Variable: CAGP

Regression Analysis

Regression analysis was employed to investigate the impact of CULC, LTDC, INCO and EQTY. The results were as

presented below in Table 6. The model was recalled for emphasis:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$$

Table 6. Coefficients^a.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	.983	.037		26.787	.000
1	CULC	.031	.043	-.068	-.723	.502
	LTDC	.015	.005	.279	3.117	.026
	INCO	-.006	.001	-.843	-8.683	.000
	EQTY	.055	.027	.187	2.064	.044

a. Dependent Variable: CAGP

The Unstandardized Beta Coefficients of the variables shown in Table 6 indicated that all the predictor variables made contributions to the variation in the dependent variable, however, at varying degree. This is shown in the result of the model below:

$$CAGP = .983 + .031CULC + .015LTDC - .006INCO + .055EQTY + \epsilon$$

The result as shown above indicated that in a situation where there were no current liabilities, long term liability, no interest paid and earning quality, cash generating power will still be positive. This appeals to common sense.

There is positive effect of CULC on cash generating power

(CAGP) which is not significant. This means that as the cash generating power (CAGP) increases, there will be increase in the number of times current liabilities are covered. There is direct relationship between CAGP and LTDC which is significant. This means that LTDC directly related to (CAGP) of the company. There is negative relationship between CAGP and INCO which is significant. The implication is that INCO has inverse relationship with (CAGP) of the company. If the assets are utilized judiciously as indicated by the EQTY, the better for the company, this eventually will culminate into sound cash generating power for the company.

The result of hypotheses testing is summarized in Table 7.

Table 7. Hypotheses testing.

Model	Coefficients	t-statistics	Sig. Level	Hypotheses	Decision
CUCL	0.031	-.723	.502	H ₀ 1	Do not accept
LTDC	0.015	3.117	.026	H ₀ 2	Do not reject
INCO	-0.006	-8.683	.000	H ₀ 3	Do not reject
EQTY	.055	2.064	.044	H ₀ 4	Do not reject

Source: Extraction from Table 4

9. Conclusion

Going concern is very important and that is the more reason the auditors should assess the going concern status of an organization via systematic analysis of cash flow statement in the financial statements. Cash generating power for a company should be evaluated every year to determine whether the cash generated from operation is adequate to meet immediate liability and long term liability with its attendant interest. Current liability coverage provides an indication of a company’s ability to liquidate debts and obligations that are due for settlement within an accounting period this is true of long term debt coverage which is a measure of a company solvency, indicating the time it will take to liquidate debt under the assumption that no new long term debts are incurred by the company and cash from operating activities are utilized exclusively for the repayment of loan. Payment of interest is very important as default can lead to bankruptcy and liquidation. Therefore, it is very important to monitor and track trends in the interest coverage over time. Earning quality provides a more realistic indication of the extent of deviation between operating cash

flow and reported earnings. Information from cash flow from investing and financing activities is very important, however, the principal motive for the existence of the organization is its operating activity.

Limitation

Many ratios based on the cash flow can be computed. This article highlighted only five statement of cash flow.

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