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Effect of Working Capital Management on the Performance of Food and Beverage Industries in Nigeria

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Abstract

This study examined the impact of working capital management on firm performance using Nestle Food Nigeria plc as a case study. The study was anchored on Behavioural Finance Theory, Economic Order Quantity (EOQ) Model and Theory of Capital Movement. Secondary data was used for the study and it was obtained from the financial statement of Nestle Nigeria Plc for the period of 2004-2013. The study made use of Ordinary Least Squares (OLS) regression after the data was subjected to unit root test and found to be stationary at levels and are integrated of order zero [I(0)]. The findings revealed that a positive relationship exist between Current Ratio (CUR), Quick Ratio (QUR) and Return on Asset (ROA) and the relationship is statistically significant (p<0.05) and in line with a priori expectation. The coefficient of determination (R^2) for the study is 85.23%. This indicates that 85.23% of the variations in the model can be explained by the explanatory variables of the model. The result shows that the management of working capital is important to business organization performance. It was recommended among others that the management of the Nestle Food Nig Plc should pay more attention on the management of quick ratio as its management indicates the best way of measuring the amount of the most liquid current assets there are to cover current liabilities. Management should therefore aim at higher values of quick ratio as a higher ratio means a more liquid current position of the company which is a good indicator of firm performance.

Keywords: Working capital management; Firm performance; Beverage Industries; Food Industries; Nigeria

Introduction

In the current recessionary environment, where traditional sources of financing have been constricted, strict attention to working capital management is of paramount importance to organizations of all sizes and financial condition [1]. Indeed, in a world where "cash is king," it is important that a working capital management program be properly aligned with an organization's overall business strategy and goals. This requires an organization to implement processes and related tools to measure, and thereby monitor the components of working capital.

The principle goal of Working Capital Management is to ensure that an organization generates sufficient positive working capital (specifically in the form of Cash) from ongoing business activities to continually fund both debt payments and operating expenses [2]. Effective management of working capital involves managing discrete, but highly inter-related processes (cycles). Since these processes are interrelated, decisions made within each one of the disciplines can impact the other processes, and ultimately affect an organization's overall financial performance. Working Capital is the perception within much organization's that you cannot effectively predict when cash will be collected or when it will need to be disbursed. In reality, analyzing statistics (i.e., metrics) for individual components of working capital often yield patterns or trends that enable managers to reasonably forecast sources and uses of cash.

This study presents the perspectives of Nigerian financial executives regarding the importance of working capital management to Nestle Food Nigeria Plc. It explores their views on how companies manage working capital, examines whether their organizations have implemented improvement programs and how their companies have managed various working capital management challenges, solutions and strategies.

The management of working capital is one of the most challenging issues for financial managers as the success or otherwise of the management of the financial ratios affects the company either positively or negatively. The consequences of ineffective management of working capital are the inability of the company to meet its financial obligations.

It is almost impossible to have a business venture that does not encounter cash problem. These problems are aggravated today in Nigeria by the economic crisis and various government policies which directly or indirectly affect the cash that a firm holds at any point in time.

Firms are always faced with the problem of how much cash to hold in a particular period and when to hold small or large amount of cash. This however, is as a result of the fact that holding too much cash makes the organization lose the profit that would have accrued if such excess cash was invested. Similarly, insufficient cash can disrupt the activities of the firm.

In contemporary Nigeria, organizations are faced with liquidity problems. Some of these businesses have either totally collapsed or are experiencing business decline. Many organizations have lost some of their valuable staff while some individuals in some organizations have refused to work cooperatively with other staff, all because of ineffectiveness among departments or units within the organization due to working capital management. As a result of this, coordination of activities become difficult and achievement of the overall organizational goals unattainable. These and many others issues relating to the impact of working capital on the performance of firms in Nigeria is what this current study is set out to explore.

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The broad objective of this study is to examine the impact of working capital management on the performance of food and beverage industries in Nigeria. The specific objectives are to: determine the effect of Current Ratio as a working capital management tool on the performance of food and beverage industries in Nigeria, assess the effect of Quick Ratio as a working capital management tool on the performance of food and beverage industries in Nigeria, examine the effect of Cash ratio as a working capital management tool on the performance of food and beverage industries in Nigeria.

Review of Related Literature

Working capital management

Managing the firm's working capital is a day-to-day activity that ensures the firm has sufficient resources to continue its operation, this relates to the firm's receipt and disbursement of cash [3]. In doing this, the company should:

 i. Determine the amount of cash and inventory that are to be kept in hand;

 ii. Determine whether to sell on credit or not, the credit terms that are offered to the customer and how much to extend the credit limit;

 iii. Determine how and where to raise or borrow short-term funds in order to meet short-term needs.

The amount of working capital available to firm is considerably interest to short -term creditors since it represents assets financed from long-term capital sources that do not require near term repayment. For a firm to qualify for favourable credit terms, and to take advantage of opportunities quickly, ample working capital is a necessary precondition.

Although it is always confronting to short-term creditors to use target working capital balance, their joy is full only after they have, been, satisfied that the working capital is turning over at an acceptable rate and that their obligations could, be paid when due. Rather than being a sign of strength, a large of working capital balance means that stagnant or absolute inventory is building up. To put the working capital figure into proper perspective therefore, it must be supplemented with other analytical work.

Rockley [4] states that working capital is a measure of the extent to which the current assets could lose their value before the amount owing to short-tent) creditors were jeopardized. Therefore, a monthly or an annual trend, in the working capital amounts would be a relevant feature to observe in any study of the adequacy of working capital in companies. A matter of even greater significance for corporate liquidity appraisal liabilities is qualified. The excess of an enterprises total current assets over its total current liabilities at the same point in time may be termed its net current assets or working capital, furthermore, the various sources can be determined without reviewing and classifying every transaction that occurred during the year (period). There is also need to determine the individual effects of a number of similar transactions. In summary, figures are sufficient. In view of the above definitions and explanations the researcher is made to suggest that the Working capital should be those assets which may be rapidly converted into cash and used to acquire labour, materials power and other items needed before the fixed assets can operate and to finance the business sales activities.

Metrics used to assess performance of various components of working capital: The CR is used primarily to determine a company's ability to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, accounts receivable). The higher the current ratio, the more capable the company is of paying its obligations.

Quick Ratio (QR): (Total Current Assets-Inventory)/Total Current Liabilities Also known as the "acid test ratio," the QR predicts your immediate liquidity more accurately than the current ratio because it takes into account the time needed to convert inventory to cash.

Inventory Turnover Ratio (ITR): Cost of Goods Sold/Average Value of Inventory. The ITR indicates how quickly inventory is turning. A low turnover ratio often implies poor sales, and therefore, excess inventory. A high ratio suggests strong sales or ineffective buying. Frequently it is a good idea to evaluate the ITR by inventory class or subgroup to better understand the underlying causes that contribute to the overall ITR results. Working capital management and control is the flow of funds through the cycle back to the original fund from where the cycle is repeated, in the first instance, the original funds invested are used to meet expenses, supplies of raw materials or payment to creditors, goods or services are sold to customers who either settles on cash transaction basis or ultimately convert their debts by means of these sales transactions flow into the business and issued for various purposes including the provision of funds to recommence the cycle.

According to Ramond [5], in producing an item of output, it requires the use of working capital. It ties up fund's that could be used elsewhere from the time materials were purchased for its production until payment is collected from its sales. This includes the time raw materials and the finished products are held in inventory, and the time after the sale before the payment is actually received. For a part of this time interval the use of working capital is financed by accounts payable and other accrued payable and other accrued liabilities since payment is not made immediately for purchases and labour.

Firms operate more or less continuously with working capital committed to all stages of production. The generalized sequence from the initial outlay to the receipt of payment is called the short-term operating cycle or cash-to-cash cycle.

Theoretical framework

Miller-Orr cash management model: The approach of Miller-Orr model assumes that the underlying problem facing the manager is to keep enough cash on hand to meet daily transactions demand, while minimizing the opportunity cost of not holding a return yielding asset. Miller and Orr focus their model on maintaining two boundaries: the upper and lower boundaries as depicted in Figure 1 [6].

The Miller-Orr model above imposes upper and lower limits which trigger buy/sell actions in order to bring cash balances back to

Figure 1: Miller-Orr model.
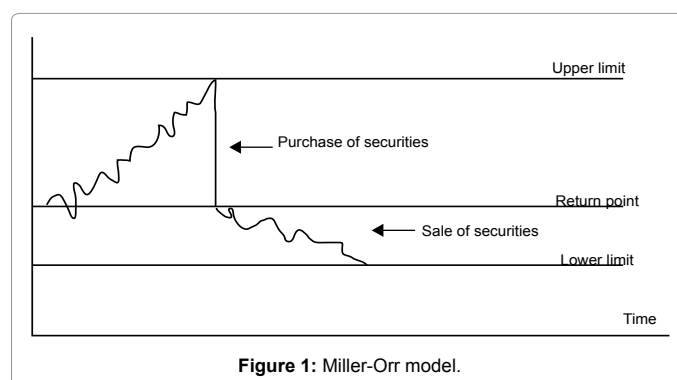
an optimal return point. In doing this, it constrains the upward and downward movements of cash to within acceptable limits. The model allows the company to set the lower control limit while the model determines the higher control limit and the average cash balance.

An organization will either buy or sell securities for cash to return its cash balance to a normal return point. When the cash balance reaches the upper limit, an organization will buy securities in order to lower the cash balance to the return point. Likewise also, when the cash balance reaches the lower limit, an organization will sell securities to have the cash balance back at the return point.

Most firms don't use their cash flows uniformly and also cannot predict their daily cash inflows and outflows. Mille-Orr Model helps them by allowing daily cash flow variation.

Under the model, the firm allows the cash balance to fluctuate between the upper control limit and the lower control limit, making a purchase and sale of marketable securities only when one of these limits is reached. The assumption made here is that the net cash flows are normally distributed with a zero value of mean and a standard deviation.

As shown by the Miller-Orr model, the lower limit is set by the firm based on its desired minimum "safety stock" of cash in hand. The firm should also determine the following factors: 1. An interest rate for marketable securities, 2. A fixed transaction cost for buying and selling marketable securities, 3. The standard deviation of its daily cash flows.

The Miller-Orr Model is more realistic as it allows variation in cash balance within the lower and upper limits. The lower limit can be set according to the firm's liquidity requirement. To determine the standard deviation of net cash flows the pasty data of the net cash flow behaviour can be used. Managerial attention is needed only if the cash balance deviates from the limits.

Miller-Orr model seeks to overcome the short comings of the Baumol model as it allows for daily cash flow fluctuations and assumes that net cash flows are normally distributed. Unlike the Baumol Model, this model allows for uncertainty cash flows and safety stocks (precautionary balance).

This theory is vital for the working capital management in organization as it shows to the manager the best way to manage working capital to achieve the desired organizational objectives and goals and good performance of the firms under study.

Behavioural finance theory: This theory was developed by Shin [7]. In the traditional finance context, companies are assumed to be rational and markets are assumed to offer opportunities for participants to take positions on either side of current asset prices. Thus, the theory is primarily concerned with the psychology of companies that may not act rationally in the way assumed by traditional financial analyst/experts. The proponents of this theory contend that working capital management can be achieved by the rational behaviour of companies.

Theory of capital movement: This theory was propounded by Iversen [8] with ground breaking contribution in the first explanation of working capital in the industrial organization tradition. Hymer's market imperfection theory (1960) affirms that firms invest overseas so that they can control more markets, increase their profitability and create oligopolies. He saw working capital as a means of acquiring wealth both tangible and tacit. In a similar way, Vanhom [9] used the product life cycle concept to theorize that firms set up production facilities abroad for products that already have standardized and matured in the home market.

Empirical review: prior researches on working capital management (WCM)

Keown [10] studied cash management behaviour of firms in integrating Europe: A proceedings of the University of Vaasa. He presents some preliminary evidence regarding the relationships between Quick ratio and firm's performance. He investigates cash management behaviour using ratios from financial statements as explanatory variables in the firms' demand for money function in addition to some macro-variables. The hypothesis of more efficient cash management was rejected due to the coefficient of the independent variable.

Shin et al. [7] investigate the relationship between the firm's efficiency of working capital management and its current ratio in a Spanish firm. Although current ratio is only a part of working capital management, the results concerning the latter could be valuable in analyzing cash management behaviour. They use the net trade cycle (NTC) to measure the efficiency of managing the firm's working capital. NTC was used as a proxy for the cash conversion cycle (CCC). Based on the study's evidence, Shin et al. [7] find that a strong negative association exists between the firm's NTC and its firm efficiency. In their later study, Shin et al. [7] find that, contrary to traditional belief, the firm studied has a larger sale with a generous credit policy, which extends the cash cycle, the longer CCC can result in higher performance.

Howard [11] asserted that the difference between a firm's assets and current liabilities exceed its net working capital over current liabilities give rise to positive net working capital. Since cash flows were usually not perfectly, it was necessary for a firm's current assets to exceed its current liabilities. This is because the greater the net working capital, the more liquid a firm and the maintenance of adequate current assets enables a firm to meet its short-term obligations conveniently as they fall due. On the other hand, the lower its liquidity the greater the level of risk faced by it. Thus, if networking or liquidity increases, a firm's risks decreases and vice versa. Experience has shown that most business failure can be traced to insufficiency of working capital.

Hirt [12] in his study of "working capital policy" observed that, working capital is 'the management of the current assets of the firm and the acquisition of the appropriate financial for those assets. While a firm may be able to sustain a decreased in sales or profitability for some period of time they need for current assets and the associated financing is new. Typical working capital decision involves the determination of the appropriate level of cash ratio of accounts receivable and inventory that the firm should maintain which will have a significant effect on the performance of company. Working capital management involves the financing and management of current assets of the firm.

Lyroudi et al. [13] studied relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange. They demonstrated through a study that there exists no linear relationship between current ratio and profitability among firms in the Greek food industry. In support of this view, Bragg [14] reports that Dell Corporation generated a huge amount of liquidity and extra-ordinary high returns at the same time. His study reveals that while it took Dell 45 days to pay its vendors, its debtor's collection period was faour days. That this strategy has crafted a sort of cash engine which enabled them to finance the company's rapid growth and limited its external financing needs as well as has yielded high returns. Finally, this argument can equally be supported by a view

that current ratio can mismanagement limit advantages of favorable discounts, profitable opportunities, management actions and coverage of current obligations. In the same vein, illiquidity often precedes lower profitability, restricted opportunities, loss of owner control, loss of capital investment, insolvency and bankruptcy [15].

Ray [16] pointed out that; the management of working capital is a key point to consider in the overall financial management of any firm since it often constitutes a substantial proportion of its aggregate financing. Moreover, changes in working capital may give an indication whether firm's internally generated funds will be adequate or there will be a need to seek external financing for its operations. Specifically, it involves the management of each of the components of current assets and liabilities to ensure the adequacy of working capital whereas, current liabilities may be relatively easy to forecast, the same measure of predictability cannot be said to apply in the ease of current assets. Yunq-Janq [17] examines the relationship between cash ratio and profitability for firms in Japan and Taiwan and discovers that aggressive quick ratio management enhances operating performance which leads to achievement of higher corporate values for both countries despite differences in both their structural characteristics and financial systems.

Martin [2] revealed that, working capital is the firm's investment in current assets' current assets comprises of all assets that the firms expects to convert into cash within the year. Managing the firms working capital however mean more than simply managing the firm's liquidity, it involves managing the firm's investment in current assets and its use of current liabilities. Investing in current assets was found to reduce the firm's risk of illiquidity at the expense of lowering its overall rate of return on its investment in assets. Furthermore, the use of long-term sources of financing was found to enhance the firm's liquidity while reducing its rate of return on assets.

Eljelly [18] examines liquidity-profitability trade-off: An Empirical investigation in an Emerging Market in Saudi Arabia examined a sample of 29 joint stock companies in Saudi Arabia and finds a strong negative relationship between current ratio and profitability of the company. These two studies evidence the need to balance profitability with liquidity. This is because policies that tend to maximize profitability tend to reduce liquidity and vice versa for the particular business firms under consideration.

Damilola [19] in his study of Financial Accounting, Principles and Application in Lagos Nigeria opines that the purpose of offering credit is to maximize profits. Credit periods whether from suppliers or granted to customers, in most cases, have a positive impact on profitability. However, due to associated risks inherent in credit policy, financial managers, most often, vary the level of receivables in keeping with the trade-off between profitability and working capital ratios. Given a significant investment in accounts receivables by most large firms, credit management policy choices and practices may have important implications on corporate value and that successful management of resources will often lead to higher corporate profitability.

Agrawal [20] in his study of Cash and foreign exchange management: Theory and corporate practice in three countries, the ultimate goal of the financial manager in the management of cash is similar to the management of other current assets (e.g. stocks and debtors). The objective is to attain an optimal balance and turnover of cash that maximizes the market value of the firm. Attaining the optimal balance of cash means that effective and efficient management of cash should impact on both the firm's liquidity and profitability.

Egbide et al. [21], in a study of Working Capital Management and Profitability: A Study of 25 Listed Companies in the Nigerian Stock Exchange most empirical studies have established that Quick Ratio is the most important working capital management ratios which its impact is directly linked to how management influences this key ratio affects the performance of the firm. The trade-off between the dual goals of working capital management similar to risk-return trade-off has increasingly been supported by many empirical findings [18,22].

Mohammad [23] studied Working Capital Management and Profitability: A Study on Textiles Industry in India. Textiles industry plays a vital role in the socio-economic development of Bangladesh. But the profitability of this industry is not satisfactory. This study is designed to show the Profitability and Working Capital position of Textiles Industries, correlation between them and whether the profitability is affected by Working Capital Management. Ratio Analysis, Correlation Matrix and Regression Analysis have been used to show Profitability, Working Capital position, correlation between them and the impact of Working Capital on Profitability respectively. For the source of data the author mainly relied on Annual Reports and official records as well as primary data collected through questionnaire. It is observed from the study that profitability and Working Capital Management position of the Textiles Industry are not satisfactory. The study reveals that correlation exists between Working Capital Management and Profitability. The study also brings to fore that Working Capital Management has a positive impact on Profitability. This study is very relevant to our study because, profitability is a measure of performance and it relates with how other variables of working capital affects performance of firms in Nigeria.

Methodology

An ex-post-facto research design was adopted. The ex-post-facto research design attempts to explore causes that affect relationship where causes already exist and looks backwards to explain why. The research study makes use of secondary data. The data used are obtained from the Statistical Bulletin of Nestle Food Nigeria Plc for the period of 2003-2013.

Model specification

The implicit form of the model is shown below:

$$ROA = f(CUR, QUR, CAR) \qquad (1)$$

Where,

ROA= Return on Asset (A proxy for firm performance)

CUR=Current Ratio

QUR=Quick Ratio

CAR=Cash Ratio

In explicit form the model is presented thus;

$$ROA = \beta_0 + \beta_1 CUR + \beta_2 QUR + \beta_3 CAR + E \qquad (2)$$

β_0=Intercept of the line with Y- axis or the value of y when x is zero

E=Error term

$\beta_1, \beta_2, \beta_3$=The regression coefficients

A Priori expectation: $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$

Data analysis techniques

Several data analytical techniques were deployed. Augmented

Dickey Fuller Test (ADF) was used to establish the stationarity of the data. The general form of the Augmented Dickey Fuller test statistics is given as shown below:

$$\Delta Y_t = \mu + \gamma Y_{t-1} + \sum_{j=1}^{p} \alpha_j \Delta Y_{t-j} + \beta t + \omega_t$$

Where μ is the drift term, t denotes the time trend, and p is the largest lag length used.

If all the variables are stationary at level, then Ordinary Least Squares (OLS) can be used to evaluate the relationship between the variables of the study. However, if the variables are stationary at first difference, further statistical test like Johansen cointegration test will be carried out to test the long run relationship among the variables of the study. If there is a long run relationship among the variables of the study, error correction estimation is done to integrate the short run dynamics with its long run equilibrium.

In examining the impact of capital market on economic growth in Nigeria, the researcher prefers to use the scientific method of Ordinary Least Square (OLS) regression technique. The reason for employing the classical Ordinary Least Squares (OLS) follows from the Gauss-Markov theorem which states that of all classes of estimators, the Ordinary Least Squares (OLS) is the Best Linear Unbiased Estimator (BLUE) and it has Minimum Error. The OLS possesses some salient features such as Unbiasedness, Efficiency, Best Linear Unbiasedness, Least or Minimum Variance, Least Mean Square Error and sufficiency when compared with other econometric estimators. The data was analyzed using Econometric Views (E-Views) 7.0 to estimate the relationship between the variables of the study.

Decision rule

The hypotheses are tested using Standard Error test which have the following decision rule.

$S(b_i) > 1/2 b_i$ we accept the null hypothesis, that is, we accept that the

estimate b_i is not statistically significant at the 5% level of significance.

$S(b_i) < 1/2 b_i$ we reject the null hypothesis, in other words, that is, we accept that the estimate $b1$ is statistically significant at the 5% level of significance.

Data Presentation, Analysis and Discussion

This chapter presents the results of data and description of the analysis of the data collected. The data used for this study covered a period of 2004-2013. The variables of the model for this study are Return on Asset (ROA), Current Ratio (CUR), Quick Ratio (QUR) and Cash Ratio (CAR) which are proxies that measures company performance and working capital management.

Trend analysis of the variables of the study

Trend analysis is the process of comparing data over time to identify any consistent results or trends. It helps in developing a strategy to respond to these trends in line with expected goals.

The result of the descriptive statistics shows that the performance proxy, Return on Asset, has a Mean of 11.90102 with a standard deviation of 9.729180 and Skewness of 1.450467. The detailed descriptive statistics for Current ratio (CUR), Quick ratio (QUR) and cash ratio (CAR) can be found in Figure 2 above.

The test of the normality using the p-values of the Jarque–Bera test of goodness-of-fit indicates that the data for the study is normally distributed.

Trend analysis for the variable identified a consistent results or trends in the movement of the variables from year to year. The declines of the ROA orchestrated by the vagaries in economic fundamentals and working capital management variables were attributed to several factors that affect changes in how the management of the floor mill managed the working capital in their control. Egbide et al. [21] in their study of Working Capital Management and Profitability: A Study of 25 Listed Companies in the Nigerian Stock Exchange found similar results.
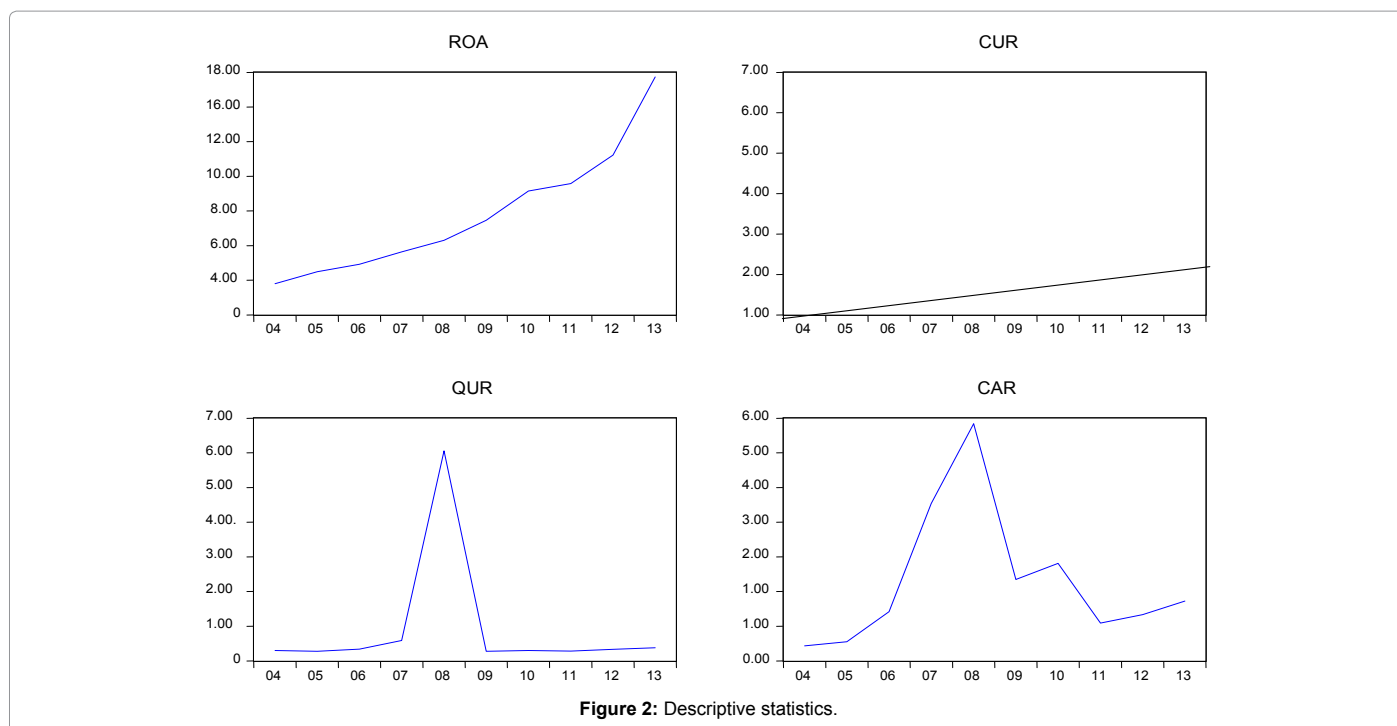

Figure 2: Descriptive statistics.

Testing for unit root (ADF-Test)

The unit root test using ADF shows that Return on Asset (ROA), Current Ratio (CUR), Quick Ratio (QUR) and Cash Ratio (CAR) were all stationary at levels and are integrated of order zero [I (0)]. As a result of this, the use of Ordinary Least Squares (OLS) was used as the estimator as its use is trustworthy and will yield consistent and unbiased estimate (Table 1).

Regression results and discussion

Dependent Variable: ROA

Method: Least Squares

Date: 11/18/15 Time: 9:58

Sample: 2004 2013

Included observations: 10

Source: E-views Output 7.0

The model specification for firm performance (Table 2) proxied by return on asset (ROA) establishes that a positive relationship exist between return on asset (ROA) and all the independent variables of Current Ratio (CUR), Quick Ratio (QUR) and Cash Ratio (CAR) and the relationship is statistically significant ($p<0.05$) and in line with *a priori expectation*. Hirt [12] in his study of working capital management found similar association between the variables under study. He observed that, working capital policy is 'the management of the current assets of the firm and the acquisition of the appropriate financial for those assets.

The coefficient of determination R^2 for the study is 0.8523 or 85.23%. This indicates that 85.23% of the variations in the model can be explained by the explanatory variables of the model while 14.77% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square of 77.85% show a negligible penalty for additional explanatory variables introduced by the researcher.

The test of the hypotheses using the standard error test showed that the estimate b_1 is statistically significant at the 5% level of significance, implying that Current ratio (CUR) has a significant impact on firm

performance proxied by return on asset (ROA). This result is in line with the findings of Martin [2] in his study of "working capital is the firm's investment in current assets" which revealed that, effective management of the current ratio was found to reduce the firm's risk of illiquidity at the expense of lowering its overall rate of return on its investment in assets thus improving the performance of the firm in the longrun.

Quick Ratio (QUR) also has a significant impact on firm performance proxied by return on asset (ROA). Egbide et al. [21] in their study of Working Capital Management and Profitability: A Study of 25 Listed Companies in the Nigerian Stock Exchange' found similar result that Quick Ratio is the most important working capital management ratios which its impact is directly linked to how management influences how this key ratio affects the performance of the firm. The trade-off between the dual goals of this working capital management which is similar to risk-return trade-off increasingly been supported by many empirical findings [18,22,24].

The estimate b_3 is not statistically significant at the 5% level of significance. This implies that Cash ratio as a working capital management tool has no significant effect on the firm performance in Nigeria. Hirt [12] in his study of "working capital policy" found contrary result. According to him, typical working capital decision involves the determination of the appropriate level of cash ratio of accounts receivable and inventory that the firm should maintain which will have a significant effect on the performance of company.

Conclusions and Recommendations

Conclusion

The study shows that working capital performance provides critical insight into the state of a company's financial position. It is an important indicator of financial fitness, as the availability of a company's working capital is one of the first items a lender or investor will examine on a balance sheet. It was noted that a firm's ability to properly manage current assets and the association liabilities or current obligations may determine how well it is able to survive in the short run. The study revealed that working capital management is particularly important to small firms. Although such firms can minimize their investment in fixed assets by renting or leasing plant and equipment, they cannot avoid investment in cash receivables and inventories.

Working capital ratios which are invariably liquidity ratios plays a very significant role in the performance of Nestle Food Nigeria Plc as shown by the findings of our study. The interactions of these ratios are determined by managers of the company and its impact determines if the organization is performing well or not. Thus management's role on how working capital affects the performance of the industry is very significant.

Recommendations

Based on the findings of this study, the following recommendations are made for this study:

1. The positive coefficient of current ratio shows that the company's current assets can cover its current liabilities; however, investors should be aware that this is not the whole story on company liquidity. It is very important to understand the types of current assets the company has and how quickly these can be converted into cash to meet current liabilities. Current ratio should also be combined with other ratios to gain better understanding of how this affects performance of firm.

2. Management of the Nestle Food Nig Plc should pay more

Variables	ADF	5% Critical Value	Order of Integration
ROA	- 2.785511	-4.259808	I (0)
CUR	-1.675051	-3.259808	I (0)
QUR	-2.896155	-3.559808	I (0)
CAR	-2.846027	-3.259808	I (0)

Source: SPSS Result Output, 2016

Table 1: Augmented Dickey-Fuller Test (ADF).

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CUR	0.653266	0.127612	5.793354	0.0012
QUR	0.458767	0.179325	0.522243	0.02
CAR	-0.781695	0.724995	-2.457527	0.0493
C	13.378776	9.687654	1.416841	0.2063
R-squared	0.852316	Mean dependent var		29.14039
Adjusted R-squared	0.778474	S.D. dependent var		18.41848
S.E. of regression	8.668945	Akaike info criterion		30.4724
Sum squared resid	4.51E+12	Schwarz criterion		30.59343
Log likelihood	-148.362	Hannan-Quinn criter.		30.33962
F-statistic	11.54243	Durbin-Watson stat		2.856232

Table 2: Regression coefficient.

attention on the management of quick ratio as its management indicates the best way of measuring the amount of the most liquid current assets there are to cover current liabilities. Management should therefore aim at higher values of quick ratio as a higher ratio means a more liquid current position of the company which is a good indicator of firm performance.

3. Nestle Food Nig Plc should be aware of very high cash ratio as this is an indication of management inability to invest idle cash into a productive venture. The reason being that it's often seen as poor asset utilization for a company to hold large amounts of cash on its balance sheet, as this money could be returned to shareholders or used elsewhere to generate higher returns.

4. The management of Nestle Food Nig Plc should know that the the optimum performance of the company depends on the manner in which those in charge of the company manage the working capital.

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