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THE STUDY OF WORKING CAPITAL MANAGEMENT AS A FINANCIAL STRATEGY (A Case Study of Nestle Nigeria PLC)

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ABSTRACT

Working capital management as a financial strategy has its effects on liquidity as well as profitability of the firm. In this study Nestle Nigeria Plc. was selected for a period of five years from 2004-2009.The effect of different variables of working capital management including current ratio and collection days on Gross profit movement co-efficient was used for analysis. The results showed that there is a negative correlation (-0.67) between current ratio and profitability. This means that as current ratio reduces, profitability of the firm will increase. On the other hand the collection days was regressed against ROCE, this showed that there is negative correlation between (0.43) collection days and ROCE. This indicates that as collection days are reduced there will be increase in profitability. The firm should be aggressive in the management of its working capital to improve profitability.

Keywords: *Working capital, financial strategy, liquidity, profitability and aggressive.*

INTRODUCTION

In the past working capital strategies has been the responsibility designated to those managers in accounting and finance departments. However, today's economy is changing those roles and many managers who traditionally were not part of this process are being called upon to take pro-active steps in reducing the risk associated with working capital.

A company's ultimate long-term success is based upon all departments within the organization coming together to fulfill its business purpose or mission. The same ideology should be used in managing the company's working capital strategies. It is probably not in the best interest of the company to provide all departments with every aspect of the current financial condition. However, each department is daily making decisions that dramatically affect working capital. Therefore, communication of working capital strategies using terminology that is targeted to the individual departments will assist companies in reaching their financial goals and objectives by keeping all personnel on the "same page".

Traditionally, focus had been on the study of long-term financial decisions, particularly investment, dividends or company valuation decisions. Short-term assets and liabilities are important components of total assets and needs to be carefully analyzed. Management of these short-term assets and liabilities warrants a careful investigation since the working capital management plays an important role for the firm's profitability and risk as well as its value.

Working capital management is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the relationship that exists between them. The term current assets refer to those assets which is in ordinary course of business can be, or will be converted into cash within one year without undergoing a diminution in value and without disrupting the operation of the firms. Examples are cash, marketable securities, account receivables and inventory. On the other hand, current liabilities are those liabilities which are intended, at their inception to be paid in the ordinary course of business in a year out of current assets or earnings of the concern. The basic current liabilities are account payables, bills payable, bank overdraft and outstanding expenses. Efficient management of working capital is a fundamental part of the overall corporate strategy to create shareholders' value.

Historical background of the case study

Nestle Nigeria Plc (Nestle) is a member of the respected and trustworthy nutrition, health and wellness company renowned world-wide for its high quality products. The company commenced simple trading operations in Nigeria in 1961 and has today grown into a leading food and beverages manufacturing and marketing company. Nestle was listed on the Nigerian Stock Exchange (NSE) on April20,1979. Nestle S.A. of Switzerland and Nestle CWA Limited, Ghana are the major shareholders of the company, controlling 3.17%and 59.13% of the company respectively. As at December2009, the number of Nigerian shareholders was more than 31,000.

The brands and products of the company are focus of continuous innovation so that they meet and exceed consumers' expectations. The company seeks a clear-cut advantage over competitors' products and to ensure its products are available wherever, whenever and however the customers want them. Continuous attention is also given to developing the professional and leadership skills of the staff at all levels so that they can directly contribute to growth and a higher level of performance. Nestle has a policy of contributing to the long term sustainability of the local economy in which it operates as over 75% of its raw materials are sourced locally. Its business supports an ever-increasing standard of living through employment generation, increased income, infrastructure improvements and a growing concern for the interest of the community here in Nigeria.

The company is engaged in the manufacturing, marketing and distribution of food products including purified water and the manufacture of hydrolysed plant protein mix for bouillon cubes and other food products. The company is organized into two principal business segments: Foods, which includes production and sales of Magi,Lactogen, Golden Morn,Cerelac, Nutrend, and Nan and beverages which includes the products and sale of Millo, Chocomilo, Nido, Nescafe and Nestle pure life water(FSDH Equity Research Report).

Statement of problem

Although profitability may be considered the governing factor of a business, nevertheless the management of working capital can effectively bring to a halt, or to its ultimate downfall, what might otherwise be a successful and profitable company.

The current squeeze on cash and credit is threatening the survival of many businesses all over the world generally and Nigeria in particular; as it is considered the sources of company's working assets and liabilities. The aftermath of this credit crunch is drastic reduction in production and sales, leading to massive retrenchment of workers and liquidation of many organizations. Unfortunately, not every company is able to find external financing easily. Where it is available, the cost of borrowing may be expensive, resulting in poorer bottom line. In view of this, liquidity management (working capital management) has become one of the most important issues in the organizations where many executives strive to identify the basic working capital drivers and the appropriate level of working capital.

Research question

From the foregoing, the only research question for this study is as follows:
Is it better to be aggressive or conservative in managing working capital?

Objective of the study

The objective of this study is to carry out empirical investigation whether it is better to be aggressive or conservative in formulating strategies for working capital management.

Significance of the study

This study investigates the potential relationship of aggressive/conservative policies with the accounting and market measures of profitability of Nestle Nigeria plc.The study is expected to contribute to better understand the policies of formulating strategies on the management of working capital and their impact on profitability especially in the emerging market in Nigeria. Equally important, the outcome of the study will be of benefit to managers in organization on what strategy to employ regarding working capital management in other to improve the performance of the organization.

Formulation of hypotheses

Since the objective of this study is to carry out empirical investigation on whether it is better to be aggressive or conservative in formulating strategies for working capital management, the study makes a set of testable hypotheses (the Null hypothesis HO versus the Alternative hypothesis H1)

Hypothesis 1

H0: There is no relationship between working capital management and profitability of Nigerian firms

H1: There relationship between working capital management and profitability of Nigerian firms.

Literature Review

This section is devoted to the review of the researches that had been carried out by other researchers on this topic-The study of working capital management as a financial strategy.

Many researchers have studied financial ratios as part of working capital management, very few, however, have discussed the working capital policies in specific. Filbeck and Krueger (2005) highlighted the importance of efficient of working capital management by carrying out analysis of working capital management policies of 32 non-financial industries in United States of America. The result revealed that significant differences exist between industries in working capital practice overtime.

However, Weinraub and Visscher (1998) have discussed the issue of aggressive and conservative working capital management policies by using quarterly data for a period of1984to1993 of US firms. Their study looked at ten diverse industry groups to examine the relative relationship between their aggressive/conservative working capital policies. The authors concluded that the industries had distinctive and significantly different working capital management policies. The study also showed a high and significant negative correlation between industry assets and liabilities policies and found that when relatively aggressive working capital asset policies are followed, they are balanced by relatively conservative working capital financial policies.

Later on, Deloof (2003) analyzed a sample of large Belgian firms during the period1992-1996 and the result confirmed that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Teruel and Solano (2005) suggested that managers can create value by reducing their firms' number of days account receivables and inventories. Similarly, shortening the cash conversion cycle also improves the firm's profitability.

In the Pakistani context, Rehman (2006) investigated the impact of working capital management on the profitability of 94 Pakistani firms listed at Islamabad Stock Exchange(ISE) for a period of 1999-2004.He studied the impact of different variables of the working capital management including Average payment period and cash conversion cycle on the Net Operating profit of firms. He concluded that there is a strong negative relationship between above working capital ratios and profitability of firms. Furthermore, managers can create a positive value for the shareholders by reducing the cash conversion cycle up to an optimal level. Similar studies on working capital and profitability includes Smith and Begemann(1997), Howorth and Westhead(2003), Ghosh and Maji(2004),Eljelly(2004) and Lazaridis and Tryfonidis(2006).

Afza and Nazir (2007) conducted an investigation into the relationship between aggressive/ conservative working capital policies for 17 industrial groups and a large sample of 263 public limited companies listed on the Karachi Stock Exchange for a period of 1998-2003. The study revealed significant differences among their working capital investment and financing policies across different industries.

Finally, Falope and Ajilore(2009) conducted investigation using a sample of 50 Nigerian quoted non-financial firms for the period1996-2005. They found a significant negative relationship between net operating profit and the average collection period, inventory turnover in days, average payment period and cash conversion cycle.

Methodology, sources of data and sampling design

The study employed the use of secondary data which is collected from the Report and Accounts of Nestle Nig. Plc from 2005-2009 as published according to the regulation of the Companies and Allied Matters Decree 1990 and other regulatory bodies. The collected data from this source have been compiled and used with due care as per the requirement of the study. The choice of secondary data is informed because data from such a source is free from bias, accurate and provides opportunity for replication. The sampling method adopted for this study is purposeful sampling.

Variables
The variables used in this study about working capital management as a financial strategy are as follows:
Current ratio and collection days as measurement of aggressiveness of working capital are independent variables.
Operating profitability that is, a measure of profitability of a firm is used as dependable variable, is measured by gross profit margin and return on capital employed.
Number of days accounts receivable used as proxy for the collection policy is an independent variable. It is calculated as (accounts receivablex365)/sales.
Number of days accounts payable used as proxy for the payment policy is an independent variable. It is calculated as (accounts payablex365)/cost of goods sold.
The cash conversion cycle used as a comprehensive measure of working capital management is another independent variable. It is calculated as (number of days accounts receivable + number of days inventory used- number of days accounts payable).

Data presentation
Table 1 Profit and loss account (2005-2009) #'M

	2009	2008	2007	2006	2005
Turnover	68,317	51,742	44,028	38,423	34,336
Cost of sales	39,957	31,301	27,805	23,717	21,116
Gross profit	28,361	20,442	16,222	14,705	13,220
Operating profit	15,732	11,904	8,396	8,013	7,642
EBITDM	17,297	13,168	9,625	8,995	8,273
PBT	13,783	11,862	8,464	8,198	7,908
Tax	4,000	3,531	3,022	2,538	2,605
PAT	9,784	8,332	5,442	5,660	5,303

Source: Annual Report and Account (2005-2009)

Table 2 Balance sheet (2005-2009) #'M

	2009	2008	2007	2006	2005
Fixed Assets	25,405	13,817	10,436	7,336	6,183
Current Assets	18,846	15,342	10,816	11,572	10,352
Total Assets	44,250	29,160	21,252	18,908	16,875
Current Liabilities	23,711	11,094	8,237	7,325	7,234
Long-Term Liabilities	14,695	9,035	6,779	5,223	3,661
Total Liabilities	38,406	20,128	15,016	12,548	10,895
Working Capital	(4,865)	4,249	2,580	4,247	3,118
Total Equity	10,544	9,031	6,360	6,360	5,980

Source: Annual Report and Accounts (2005-2009)

Table 3 Key Financial Ratios (2005-2009)

	2009	2008	2007	2006	2005
Gross Profit Margin(%)	41.51	39.51	36.85	38.27	38.50
EBITDA Margin (%)	25.32	25 .45	21.86	23.41	24.10
PBT Margin (%)	20.18	22.93	19.22	21.34	23.03
ROE (%)	92.79	92..25	87.26	88.99	88.68
ROCE (%)	62.33	65.89	64.51	69.18	79.26
Collection Days	10.42	22.00	6.45	4.88	4.52
Payable Days	28.53	35.00	31.43	24.95	31.63
Current Ratio (x)	0.99	1.38	1.31	1.58	1.43
Debt Ratio(%)	69.90	58.55	38.76	38.74	42.87
Total Debt to Equity (%)	113.06	66.22	-	-	-
Interest Cover(x)	7.69	176.51	299.17	-	-
EPS(#)	14.81	12.61	8.24	10.71	10.04
DPS(#)	7.74	6.59	2.98	4.56	5.37
Net Asset per Share(#)	15.96	13.67	9.44	12.04	11.32

Source: Calculation from Table 1 and 2

EBITDA= Earnings before interest, tax, depreciation and amortization
PBT= Profit before tax
ROE= Return on equity
ROCE= Return on capital employed
EPS= Earnings per share
DPS= Dividend per share

Data Analysis

The data will be analyzed using Pearsonian co-efficient.

$$r = \frac{\sum(x-x)(y-y)}{N\delta x\delta y}$$

Relationship between working capital and profit before tax margin (%)

a. Relationship between collection days (X)and sales(y).

Table 4 .Relationship between current ratio (x),and Gross profit margin(y)

	x	y	x-x	y-y	(x-x)	(y-y)	(x-x)(y-y)
2005	1.42	38.50	0.082	-0.428	0.008	0.183	-0.039
2006	1.58	38.27	0.242	-0.658	0.059	0.433	-0.159
2007	1.31	36.85	-0.028	-2.078	0.001	4.318	0.058
2008	1.38	39.51	0.042	0.582	0.002	0.339	0.024
2009	0.99	41.51	-0.348	2.582	0.121	6.667	-0.899
Total	6.68	194.64	0	0	0.191	11.94	-1.015

$$r=\frac{\sum(x-x)(y-y)}{N\delta x\delta y}$$

=-1.015/5X0.195X1.545

=-0.67

Table 5 Relationship between Collection Days (x) and Return on Capital Employed (ROCE)(Y)

	X	Y	X-X	Y-Y	(X-X)	(Y-Y)	(X-X)(Y-Y)
2005	4.52	79.26	-5.134	11.026	26.358	121.573	-56.607
2006	4.88	69.18	-4.774	0.946	22.791	0.895	-4.516
2007	6.45	64.51	-3.204	-3.724	10.266	13.868	11.932
2008	22	65.89	12.346	-2.344	152.424	5.494	-28.939
2009	10.42	62.33	0.766	-5.904	0.587	34.857	-4.522
Total	48.27	341.17	0	0	212.426	176.687	-82.652

$$r=\frac{\sum(x-x)(y-y)}{N\delta x\delta y}$$

= -82.652/5x6.518x5.945

= -0.43

Data interpretation

Two methods were used to interpret the findings.

Statistics analysis

The result of the regression equation indicates that the co-efficient of current ratio is negative (-0.67). That is the increase or decrease in working capital (aggressive/conservative) will significantly affect the profitability of the firm. The study went further to examine the extent to which the use of alternative proxy for working capital management might provide different results to this end it was replaced by average days of account receivable variable (collection days). This variable was regressed against return on capital employed. The result showed negative correlation between collection days and return on capital employed (Table5). The implication of this is that the company is giving incentive for early payment.

This paper adds to existing literature such as Deloof (2003),Lazaridis and Tryfonidis(2006),Raheman(2006) , Afza and Nazir(2007), and Falope and Ajilore(2009) , who found negative relationship between working capital drivers and profitability.

Descriptive analysis

Capital structure

The working capital stood at a negative of #165.21Mn at the end of 2009, representing a decline of 103.89% from#4.25bn as at the end of the previous year. It was noted that between 2005 and2008, the company operated on a positive working capital. In addition, the current ratio and the quick ratio as at 2009 stood at 0.99x and 0.43x respectively. Nestle may find it difficult to meet its short term obligation as they fall due.

Liquidity

The current assets of the company increased from #10.35bn in 2005 to#18.85bn in 2009, representing a CAGR of 16.16% and a growth of 22.84% between 2008 and 2009. The major contributors to the increase between the immediate two years are: stock (up by 66.75% to #10.70bn), that is aggressive working capital management. In another development, the current liability increased from#7.23bn in 2005 to #19.01 in 2009

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representing a CAGR of 27.32% between the period and an increase of 71.37% between 2008 and 2009. A critical look at Table 3 above showed that the company has greatly improve its collection days. This is shorter than payment days .The indication of this is that the Nestle Nigeria plc received payment earlier from her customer than the time she made payment to her suppliers. This is a good strategy as the company will not experience cash crunch.

Profitability

Nestle performance in 2009 and in the last five years was impressive. Its turnover increased from #34.34bn in 2005 to #68.32bn in 2009 representing a CAGR of 18.77% and increased by 32.03% between2008 and 2009. Nestlé's growth strategy combined with cost reduction strategies resulted in impressive performance in the profit before tax which increased from #7.91bn in 2005 to #13.78bn in 2009, representing a CAGR of 14.90% and a growth of 16.19% between 2008 and 2009. The cost of sales increased by 27.65% from #31.30bn in 2008to #39.96bn in 2009, lower than the growth in in the turnover, thereby leading to a growth of 38.74%growth in gross profit(GP) FROM#20.44BN IN 2008 T0 #28.36BN IN 2009.

Limitations and Scope for Further Study

The study is confined to five years data only, i.e from 2005-2009, therefore, a detailed analysis covering a lengthy period, which may give slightly different results has not been made.

The study is based on secondary data collected from the Reports and account of Nestle Nigeria Plc as published; therefore the quality of the study depends purely upon the accuracy, reliability and quality of the secondary data source.

The study is based on only one company. Therefore, the accuracy of results is purely based on the data of sample unit. If one takes sample units of say ten the results may go slightly differently.

Summary, recommendation and conclusion

The study investigated working capital management as a financial strategy for Nestle Nigeria plc from 2005-2009. The relationship between working capital and profit before tax was examined through regression model between working capital and profit before tax. It was discovered that there is a negative relationship between working capital and profit before tax. The relationship between collection days and turnover was also tested by regressing collection days against turnover. It was discovered that there is a positive relationship between collection days and turnover. The company must improve upon her working capital which is the life blood of any organization. The poor management of working capital is reflected in poor current ratio of 0.99 against the industrial average of 2:1.

Further Research

Since the scope of this study is limited to a period of five years and to a single company quoted in the Nigerian Stock Exchange, the scope of further research may be extended to the working capital components management including cash, marketable securities and inventory management.

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