WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF THE HEALTH SERVICES SECTOR IN NIGERIA

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Abstract

This study assessed the relationship between the health services sector's profitability and working capital management in Nigeria. The study's goals were to analyze the effects of current ratio on return on equity and return on assets. It also sought to ascertain the influence of current ratio on return on capital employed. E-view version 9 was used to examine the data using Ordinary Least Square (OLS) estimate methods. This approach was used because of its advantages in terms of decreasing error sum of squares, efficiency, and readability. The study's findings indicate that the p-value for Return On Asset (ROA) is lower than the alpha level of statistical significance at 0.05, producing values of 0.032, 0.008, and 0.027. The results also demonstrated that working capital management positively impacts the profitability of Nigeria's health service sector. The study therefore advised management to focus on their working capital in order to retain the firm's effectiveness.

Keywords: Working capital, Profitability, Current ratio, Return on asset, Return on equity and Capital employed.

Introduction

Health care facilities often perform poorly financially, it has been noted. The majority of the health sector underperforms and fails within a few years of operation (Nwidobie, 2012). The health sector's performance is impacted by specific sets of issues. For a company, finding a balance amongst maintaining liquidity and profitability is essential. Profit growth at the expense of liquidity can cause the company major issues. Working capital management (WCM), or the optimal maintenance of liquidity, has been suggested as a potential factor in subpar performance.
According to Wanjoi's (2008) research, 70% of founder lack professional training in working capital management techniques. Studies have mostly focused on corporations with shareholders. Since there are no shareholders in the healthcare sector, profits are reinvested, which demotivates employees and results in a lack of sufficient responsibility, which contributes to the industry's observed poor financial performance. Businesses need enough working capital to operate and make sure it is used as effectively as possible to increase a commercial enterprise's profitability, it is an important aspect in profit-making organizations' financial success (Chituru, 2012) Marttonen. Because of this strong profitability, working capital management is crucial and cannot be overstated.

Solvency and its effects on performance have been researched in a wide range of industries and countries (Nwidobie, 2012; Wanjoi, 2008; Chituru, 2012; Radhika & Azhagaiah, 2016; Padachi, 2006; Zainab 2008; Weinraub & Visscher, 1998; Fazzari & Petersen, 1993; Shin & Soenen, 1998, Horne, 2017; Noren, 2019; Brealey et al, 2002; Fathi & Tavakkoli, 2009; Khan, Jawaid, Arif & Khan, 2012) but from the works reviewed so far, not much have been done on the health services sector of Nigeria.

The main objective of this research is to determine the extent to which working capital management affect the financial performance of the Nigeria's health-care industry. The particular objectives are as follows:
To determine the influence of current ratio on return on asset
To assess the effect of current ratio on return on equity
To determine the effect of current ratio on capital employed

It has been determined that working capital management has played and is still playing a substantial effect on financial performance based on earlier and recent results of researchers, scholars, and authors that touch on the issue of working capital management and financial performance.

The study's research design is ex-post facto because it relied on documented data from the sampled organizations' annual reports and accounts. Given the use of documented data for the study, the use of ex-post facto research design is judged justifiable and, as such, is not subject to manipulation. Eko Corps Plc, Evans Medical Plc, Fidson Health Care Plc, Glaxo Smith Kline Plc, May & Baker Nigeria Plc, Morison Industries Plc, Neimeth International Pharmaceutical Plc, Nigeria-German Clinical Plc, Pharma-Decko Plc, and Union Diagnostic Clinical Plc make up the population of this study.

Eko Corps Plc, Glaxo Smith Kline Plc, Union Diagnostic and Clinical Service Plc, Fidson Health Care Plc, May & Baker Nigeria Plc, Morison Industries Plc, Neimeth International Pharmaceutical Plc, and Pharma-Decko Plc are the eight quoted health services sectors in Nigeria that have complete data points for the relevant number of years. The research's study period runs from 2016 to 2020.

The data used in the study were secondary in nature, obtained from publicized consolidated financial statements of the health services sectors from 2016 to 2020 in order to analyze working capital management and performance in the Nigerian health services sector.

Multivariate correlation and regression coefficients were used to analyze the data in order to determine the effect of working capital management on the profitability of Nigeria's health services sector using SPSS statistical software. The model below is designed to carry out the objective of the study:

$C.R = f(ROA, ROE, ROCE)$..... (1)

In a specific form, equation (1) above translates to equation (2) thus:

$C.R = \beta o + \beta 1ROA + \beta 2ROE + \beta 3ROCE + \mu t$ ..... (2)

C.R= Current Ratio
ROA=Return on Asset
ROE= Return on Equity
ROCE=Return on Capital Employed
μ= Error Margin

Regression Analysis

The goal of using linear regression analysis, a type of general linear modeling, was to investigate the ability of the independent variables to predict the dependent variable by predicting the significance of the relationship between the independent variables and the dependent variable. Using linear regression analysis, the relative contribution of each independent variable to explaining variance in the criterion variable can be quantitatively evaluated.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.568[a]	.622	.587	.21798	.622	7.744	3

The Goodness of Fit test results, which reveal how much variance in the dependent variables (TR) can be accounted for by the explanatory variable, as displayed above. The adjusted squared statistic is 0.587 = 58.7 percent, which is better suited for comparing models with various numbers of independent variables, while the (R2), which measures the overall goodness of fit of the entire regression, is 0.622 = 62.2 percent. According to the estimate's standard error, the residuals' standard deviation is 0.21798. This indicated that another variable not included in the model can account for the remaining 38 percent of the variance in the dependent variable, leaving the independent variables to account for around 62 percent of that variation. This implies that the independent variable under consideration has a positive impact on the financial profitability of Nigeria's health-care sector.

F-test:

Reject the null hypothesis (H0), and derive the conclusion that the total estimate is statistically significant if the f-calculated is greater than the f-tabulated (f-cal>f-tab). The outcome indicates that f-calculated (7.744) is higher than f-tabulated (3.920), or f-cal> f-tab. Since our independent variables are simultaneously significant and the entire estimate has a strong fit, we reject the null hypothesis (**H_0**).

Model Summary[b]

Model	Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	11[a]	.016	1.365

a. Predictors: (Constant), ROCE, ROE, ROA
b. Dependent Variable: CRA

Durbin Watson Statistics:

At a significance level of 5% and three explanatory variables, the calculated Durbin Watson is 1.365. As a result, we draw the conclusion that serial correlation is not supported.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.239	.566		2.188	.011
	ROA	.112	.173	.168	.645	.032
	ROE	.015	.101	.038	.154	.080
	ROCE	-.413	.220	-.490	-1.876	.027

$CRA = \beta_0 + \beta\ ROA + \beta\ ROE + \beta\ ROCE + \mu$ … (i)
$CRA = 1.239 + 0.112\ ROA + 0.015\ ROE - 0.413\ ROCE + \mu$ … (i)

The intercept's value of 1.239 indicated that, when all other variables are held constant, the financial performance of Nigeria's health sector will grow by 1.239 units. The coefficient of return on asset (ROA), which is 0.112, shown a strong link between ROA and Nigerian health sector profitability, with each unit rise in ROA being followed by an improvement in financial performance. The coefficient of return on equity (ROE) was discovered to be 0.015, demonstrating a favorable association between ROE and profitability in Nigeria's health industry. In other words, as ROE rises, so does the sector's financial success. Finally, The coefficient of return on capital employed (ROCE) is -0.413, demonstrating a negative link between ROCE and Nigerian health sector financial results. As ROCE declines, the financial performance of the Nigerian health sector rises proportionately.

Findings, Summary, Conclusion and Recommendations

According to the research, working capital management methods taken into consideration in this study are pertinent in assessing the financial performance of the health-care industry in Nigeria based on the analysis and findings thereof. A substantial improvement in ROA is associated with a rise in the financial results of Nigeria's health industry. A unit increase in ROE is followed by an improvement in the financial results of Nigeria's health industry, which shows that ROE and the health sector's financial success are positively correlated.A unit fall in ROCE is followed by an increase in the financial performance of the health sector in Nigeria, proving that ROCE is negatively correlated with that sector's financial performance in Nigeria.

The report concludes that working capital management significantly affects the health sector's financial performance. The overall impact of the working capital management measures in this study is found to be significant at 5% level of significance.

The study does not, however, exclude the possibility that there may be additional environmental factors that are important for determining profitability.

The study suggests the following in light of its findings;

By lowering the days for accounts receivable, managers can provide values for shareholders.
To keep the company's efficiency and effectiveness high, management should focus on their working capital.

The healthcare institutions should be able to work out long credit terms with their debtors while also increasing debtor collection.

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