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# THE RELATIONSHIP BETWEEN WORKING CAPITAL MANAGEMENT AND FINANCIAL PERFORMANCE OF PRIVATE HEALTH FACILITIES IN MOMBASA COUNTY, KENYA

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# ABSTRACT

The study sought to establish the relationship between working capital management and profitability of private health facilities in Mombasa County, Kenya. The study used a crosssectional casual research design. The target population comprised of 10 private health facilities. Data was collected from secondary sources for between 2012 and 2018. Regression analysis was used to establish the actual relationship between the study variables. The dependant variable was financial performance while the independent variable being working capital management practices. The study found out that a positive significant relationship exists between profitability, collection of average period and Consumable materials used. Average payment period revealed an opposite association with profitability. The study concluded that there exist a significant relationship between financial performance and working capital management in health facilities in Mombasa County. Thus increase in profitability is shown when there is an increase in Accounts payable while decreasing with an increase in accounts receivable. The study recommends that efforts should be made to ensure consumables being purchased at the facilities are being used effectively so as to reap maximum profit.

**Key words**: Working Capital, Average collection period, Profitability, Consumables, Accounts payable, Accounts receivable.

# **1.1 Introduction**

Working Capital management can be defined as the ability of a firm to be able to meet its short term liabilities, financing requirements, maintaining an optimum balance between the Current Assets, Inventory and Current liabilities. With good planning and controlling of current assets and liabilities, this leads a firm to reducing its risk and inability to meet its short term obligation thus resulting to efficient working capital (Ejelly, 2004). Current assets is taken to mean those items in firm that can be converted in cash within a year if the firm runs smoothly whereas current liabilities are the debts of firm that have accrued within the year and needed to be offset within the year examples are overdraft.

Working capital can be measured using cash conversion cycle which is calculated by having the accounts receivable and the inventory period summed then less the accounts payable. Cash Conversion cycle as an operating cycle is an ongoing liquidity measure developed by Gitman (1974). With shorter cycle, the firm will need fewer resources to tie up (Deloof, 2003). According to Shalman and Cox (2006) financial component is divided into working capital requirement and Net liquidity balance. In that, a reduction in the time of receivable accounts will reduce the working capital requirement and net liquidity balance at the same time increase on value of cash. In the event of high sum of capital a short term guarantee of effective working capital is maintained. Therefore the effective management of working capital will influence both long and short term performances.

# **1.2 Research Problem**

Snober (2014) on his research on the impact of working capital on firm's profitability, using Cement Industry listed in the Stock exchange of Karachi found out that there exist a negative relationship between profitability measures and the degree of aggressiveness of working capital investment and financing policies. Positive effects have been identified on return on assets using the variables of cash conversion cycle and stock turnover ratio of the water companies in Garowe by Ugas (2017). Jyoti and Uday (2016) focused on the Return on Assets of a firm and their result was that there exists a positive relationship with Average Payment Period. Afza and Nazir (2007) through cross-sectional regression models on working capital policies, profitability and risk of the firms, found a negative relationship between the profitability measures of firms and degree of aggressiveness on working capital investment and financing policies while Padachi (2006) found

that high investment in inventories and receivables is associated with lower profitability which was similar to the study by Christopher and Kamalavalli (2009) which focused on 14 corporate hospitals in India for the period 1996-1997 and also from 2005-2006. Biwott, (2011) found a significant negative relationship between net operating profit and the average collection period for a sample of Kenyan firms listed on Nairobi Securities Exchange.

From the aforementioned studies, the topic has not been widely captured to the fullest to assist in capping down the issue of working capital management more so in the health sector. This study therefore attempted to bridge the gap in the literature.

# **1.3 Research Objective**

To establish the relationship between working capital management policies and financial performance of Hospitals in Mombasa County

# **2.0 METHODS**

The design for this study was a cross-sectional casual study in which the financial data was gathered from the financial statements of the private hospitals for the last five year period. The target population of study comprised of 10 major private health facilities in Mombasa County, Kenya. The health facilities had to be in practice from 2012 to 2018. The study was conducted by the use of Secondary data. The Information was retrieved from records office of the hospitals ranging from 2012-2018. The information gathered was analyzed by use of regression analysis so to establish the actual relationship between the sets of study variables.

The following multivariate regression model was used:

# $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where Y = Operating Profit Margin

 $X_1$  = Average Collection Period

 $X_2$  = Average payment Period

X<sub>3</sub>= Consumables Materials Used

 $\beta_0$  = Constant term,

 $\beta_0$ ----- $\beta_4$ = were used to measure the dependent variable (Y) to unit change in the predictor Variables

#### $\boldsymbol{\varepsilon}$ = is the error term for all variables influencing performance

# **3.0 RESULTS**

#### **Table 1: Model Summary**

Model Summary									
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate					
1	0.992	0.985	0.94	0.024185					
<ul><li>a. predictors: (Constant) CCC, APP,CMU</li><li>b. dependent variable OPM</li></ul>									

The co-efficient determination  $(R^2)$  demonstrates 98.5% of the variations in financial sector development are influenced by health sector variables. This leaves 1.5% of the variation to be influenced by other factors. The coefficient of multiple determinations (adjusted  $R^2$ ) indicates the percentage proportion of variations of the dependent variable clarified collectively by the independent variables. Results indicate 94% of the working capital management in health sector in Mombasa County in Kenya can be ascribed to the joint influence of the indicator variables.

**Table 2: Regression Coefficients** 

Coefficients								
Model	Unstandardized Coefficients		Standardized Coefficients					
	В	Std.Error	Beta	Т	Sig.			
Constant	0.222	0.31		0.716	0.604			
ACP	0.006	0.012	0.074	0.5	0.698			
APP	-0.002	0.003	-0.090	-0.666	0.616			
CMU	23.266	3.516	0.942	6.617	0.095			
a. Dependant Variable: OPM								

Regression Model derived from the table was:

#### $Y = 0.222 + 0.006 X_1 - 0.002 X_2 + 23.266 X_3$

#### Where:

**Y**= Operating Profit Margin measured using revenue less taxes and Interest less operating expenses.

 $X_1$ = Average Collection Period given as Accounts receivable over net sales times 365 days

 $X_2$ = Average Payment Period calculated as the Accounts Payable over the cost of sale times 365 days

 $X_3$ = Consumable material used given by revenues less operating expenses

The findings indicate that holding all independent variables constant: A unit increment in the ratio of consumable material used would prompt to a 23.66 rise in the scores of financial sector development in health sector. A unit increment in the ratio of average collection period used would prompt to a 0.006 rise in the scores of financial sector development in health sector. A unit decrement in the ratio of average payment period used would prompt to a 0.002 fall in the scores of financial sector development in health sector. Overall, the ratio of consumable material used had the greatest impact on the financial performance in the health sector.

### 4.0 Conclusion and Recommendations

#### 4.1 Conclusion

It was noted that profits have a positive relationship with working capital management. This implies that profitability increases with increase in consumable and average accounts receivables while decreasing with increasing average accounts payable's it cannot be ruled out that relationship between Working Capital Management and profitability is to some extent a consequence of profitability affecting Working Capital Management, and not vice versa. Indeed, the most plausible explanation for the negative relation between accounts payable and profitability is that less profitable firms wait longer to pay their bills. A negative relation between consumables and profitability can be caused by declining services. From the results of the study, it also concludes that working capital management and finance have contributed positively. This could be ascribed to patterns registered with this could be ascribed to patterns registered with upward movement in the ratio of consumable material used. The relationship between working capital management and profitability affecting working capital management and not vice versa. From the conclusion of the study it implies that profitability increases with increase in inventory andaverage accounts payables while decreasing

with increasing accounts receivables. The negative relationship of accounts receivables and profitability is explained by firms waiting for longer hours to be paid their bills. Decline in revenues are can result in a negative relation between the cash conversion cycle and profitability.

# **4.2 Recommendations**

From the basis of study from the research it has been conclude that profitability can be improved in a number of ways. It has acknowledged the fact that different firms have their profitability being determined with various factors. Factors vary in degree of influence and profitability. However, at the end to maintain efficiency and effectiveness on profitability of a firm, management should be able to work on their working capital. The Health facilities should be able to negotiate with their creditors for longer credit period and at the same time increase their debtor's collection. The value for the shareholders can be created by the managers by reducing the number of days for accounts receivables.

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