

## **Influence of Working Capital Management on Firms Profitability: A Case of SMEs in Kenya**

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**Abstract:** Working capital management plays a significant role in better performance of business entities. This study analyzes the influence of working capital management on firm's profitability Kenya. For this purpose, fixed panel data of 232 firms was used. The results indicate that the average debtors day, stock turnover period and the cash conversion cycle are significantly affecting the profitability of the firms. The manufacturing firms are in general facing problems with their collection and payment policies. Moreover, the financial leverage, ratio of current asset to current liability and firm size also have significant effect on the firm's profitability. The study also concludes that SMEs in Kenya are following conservative working capital management policy and the firms are needed to concentrate and improve their collection and payment policy. The effective policies must be formulated for the individual components of working capital. Furthermore, efficient management and financing of working capital (current assets and current liabilities) can increase the operating profitability of manufacturing firms. For efficient working capital management, specialized persons in the fields of finance should be hired by the firms for expert advice on working capital management in the manufacturing sector.

**Key words:** Working capital management, small and medium enterprises, profitability, policy, firms, Kenya

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### **INTRODUCTION**

In order to support any feasible economic effort at the firm level, short term finances are required to support operational costs. Finances of this nature are known as working capital. Working capital is fundamental to the finance structure of every enterprise, since it drives the liquidity position of the firm in the short-term. Ideally, the firm invests in working capital so as dispose itself in a manner that will assure timely and obligatory payment to creditors, employees, interest to the providers of finance and other pecuniary falling due on short notice.

Irrespective of the size of the firm, components of working capital will be recognised as cash, inventories and accounts receivables commonly referred to as current assets on one side and trade creditors, bank overdrafts, tax provisions as well as other payables also known as current liabilities on the other. Accordingly, finance managers must engage in concerted effort to ensure that the amount of current asset investment levels are just adequate to cover the current liabilities held or which may arise in the course of doing business. An investment in current assets denies a firm an opportunity to invest in non-current assets whose life is longer with better and

stable returns which yield higher profitability and greater shareholders wealth. On the other hand, failure to adequately cover current liabilities diminishes the firm's credibility, goodwill and profitability in the long run. The balance between the two extremes must be smoothed using working capital management principles.

Working capital management plays an important role in a firm's profitability and risk as well as its value as noted by Smith (1980). Financial management experts have found several reasons for the continued focus on working capital management. For a typical manufacturing firm, the current assets account for over half of its total assets. For a merchandising firm, they account for even a bigger proportion. Ambitious levels of current assets may result in a firm's realizing a suboptimal return on investment. However, Van Horne and Wachowicz (2005) point out that excessive level of current assets may have a negative effect of a firm's profitability whereas a low level of current assets may lead to lowers of liquidity and stock-outs, resulting in difficulties in maintaining smooth operations. Similar sentiments have been expressed by Padachi (2006). Efficient management of working capital plays an important role of overall corporate strategy in order to create shareholder value. Working capital is

regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished good. The way of working capital management can have a significant impact on both the liquidity and profitability of the company (Shin and Soenen, 1998). The main purpose of any firm is maximum the profit. But maintaining liquidity of the firm also is an important objective. The difficulty is that when profits are increased at the cost of liquidity may throw the firm into disrepute. Thus, strategy of firm must be a balance between these two objectives of the firms. Because the importance of profit and liquidity are the same so one objective should not be at cost of the other. If we ignore about profit, we cannot survive for a longer period. Conversely if we do not care about liquidity, we may face the problem of insolvency. For these reasons, working capital management should be given proper attention, since it does ultimately affect the profitability of the firm. Working capital management involves sourcing, planning and controlling current assets and current liabilities in a manner that mitigates against the risk of inability to meet due short term obligations on the one hand and avoid over investment in these assets on the other hand (Eljelly, 2004).

Lamberson (1995) showed that working capital management has become one of the most important issues in organization where many financial managers are finding it difficult to identify the important drivers of working capital and the optimum level of working capital. As a result, companies can minimize risk and improve their overall performance if they can understand the role and determinants of working capital. A firm may choose an aggressive working capital management policy with a low level of current assets as percentage of total assets or it may also be used for the financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities (Afza and Nazir, 2008).

Keeping an optimal balance among each of the working capital components is the main objective of working capital management. Business goals achievement heavily relies on the ability of the finance managers to effectively manage debtors, inventory and payables (James *et al.*, 2005). Lastly, working capital management plays an important role in managerial enterprise, it may impact to success or failure of firm in business because working capital management affect to the profitability of the firm. The study is expected to contribute to better understanding of relationship between working capital management and profitability in order to help managers think a lot more about using working capital to create value for their shareholders, especially in emerging markets like Kenya.

**Role of SMEs:** In developing countries, >90% of all firms outside the agricultural sector are SMEs and generating a significant portion of GDP. For example, in Morocco, 93% of industrial firms are SMEs and account for 38% of production, 33% of investment, 30% of exports and 46% of employment. In Bangladesh, enterprises of <100 employees account for 99% of firms and 58% of employment. Similarly in Ecuador, 99% of all private companies have <50 employees and account for 55% of employment. The situation is not any different in Kenya. Given, approximately 1.3 million SMEs are employing some 2.36 million people including part-time and casual workers according to National Baseline Survey (1999). Despite, this significant role, SMEs financial management environment is not well understood, hence the focus of this study.

SMEs also represent an important source of innovation. They tend to occupy specialized market niches and follow competitive strategies that set them apart from other companies. This might include re-engineering products or services to meet market demands, exploring innovative distribution or sales techniques or developing new and untapped markets. Efficiency within the firm can cause the SME to access the market better leading to competitive advantage according to Albaladejo and Romijn. This efficiency is well illustrated in the manner in which these firms manage their working capital resources hence the study.

**Theoretical and empirical perspectives:** Working Capital Management (WCM) is a significant area of financial management and the administration of working capital may have an important impact on the profitability and liquidity of the firm (Shin and Soenen, 1998). Pertinent to this is the Transaction cost theory TCE at its core, focuses on transactions and the costs that attend completing transactions by one institutional mode rather than another (Williamson, 1975). The transaction, a transfer of a good or service is the unit of analysis in TCE and the means of effecting the transaction is the principal outcome of interest (Williamson, 1985).

The theory's central claim is that transactions will be handled in such a way as to minimize the costs involved in carrying them out. The goods in this case refer to finances committed for WCM. In WCM, four elements (cash, debtors, stock and creditors) stand out as the key problems, whose management involves rigorous planning and resource commitment. For example, stocks can be modelled mathematically to formulate a basic policy outlining when stocks should be ordered what quantity and the associated cost. In a SME environment, the tools for such action may be lacking or the cost of such

adoption may offset the benefits of use. In most practical circumstances, firms can choose between the relative benefits of two basic types of strategies for net working capital management; they can minimize working capital investment or they can adopt working capital policies designed to increase sales. Thus, the management of a firm has to evaluate the trade-off between expected profitability and risk each of them representing an opportunity cost of the other before deciding the optimal level of investment in current assets.

Aggressive WCM policies involves minimizing working capital investment by reducing the proportion of its total assets in the form of net current assets is expected to positively affect the profitability of the firm. However, Wang (2002) points out that if the inventory levels are reduced too much, the firm risks losing increases in sales. Also, a significant reduction of the trade credit granted may provoke a reduction in sales from customers requiring credit. Similarly, delaying payment to suppliers may result in losing discount for prompt payments which again increases the transaction cost.

Notably, the opportunity cost may exceed 20%, depending on the discount percentage and the discount period granted (Wilner, 2000). On the other hand and contrary to traditional belief, investing heavily in working capital (conservative policy) may also result in higher profitability. In particular, maintaining high inventory levels reduces stock outs and the associated events in the production process and of loss of goodwill due to the scarcity of products, reduces supply costs and protects against price fluctuations, among other advantages (Blinder and Maccini, 1991). Such a scenario does contribute immensely to long term profits. Granting trade credit another form of inflating working capital also favours the firm's sales in various ways. Trade credit can act as an effective price cut (Petersen and Rajan, 1997), incentivizes customers to acquire merchandise at times of low demand (Emery, 1987), allows customers to check that the merchandise they receive is as agreed (quantity and quality) and to ensure that the services contracted are carried out (Smith, 1980) and helps firms to strengthen long-term relationships with their customers (Ng *et al.*, 1999).

However, these benefits have to offset the reduction in profitability due to the increase of investment in current assets. Most empirical studies relating to working capital management and profitability support the fact that aggressive working capital policies enhance profitability. In particular, Jose *et al.* (1996) provide strong evidence for US companies on the benefits of aggressive working capital policies. Shin and Soenen (1998) analyze the relation between the net trade credit and profitability for

a sample of firms listed on the US stock exchange during the period 1974-1994. Their results also show strong evidence that reducing the net trade credit increases firms' profitability.

However, this relationship is not found to be very strong when the analysis is at the level of a specific industry (Soenen, 1993). More recently, Deloof (2003) analyzes a sample of large Belgian firms during the period 1992-1996. His results confirm that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Moreover, he finds that less profitable firms wait longer to pay their bills. Finally, Wang (2002) analyzes a sample of Japanese and Taiwanese firms from 1985-1996 and finds that a shorter cash conversion cycle is related to better operating performance. These results can be partially explained by the fact that there are industry benchmarks to which firms adhere when setting their working capital investment policies. Thus, firms can increase their profitability by reducing investment on accounts receivable and inventories to a reasonable minimum indicated by the benchmarks for their industry. Furthermore as pointed out by Soenen (1993), cash conversion cycle management tries to collect cash inflow as quickly as possible and to postpone cash outflow as long as possible. The result will be the shortening of the cash conversion cycle. On the other hand, a longer cash conversion cycle may increase profitability because it leads to higher sales, especially if the concern is a manufacturer. However, profitability might also decrease with the cash conversion cycle if the costs of higher investment in working capital is higher and rises faster than the benefits of holding more inventories and granting more inventories and trade credit to customers (Deloof, 2003).

Companies have increasingly been relying on short-term funds particularly short-term bank credit and trade credit. WC ratios are useful tools in appraising the financial strength and immediate solvency of a firm. Current and quick ratios registered insignificant associations whilst the comprehensive liquidity index indicated significant associations with Return on Investment (ROI) (Smith, 1980). The lower the level of liquid assets, the greater will be the risks of not being able to meet current obligations (Van Horne and Wachowicz, 2005).

The way in which WC is managed will have a significant impact on the profitability of companies. This is a significant negative relation between gross operating income and the number of days of accounts receivable, inventories and accounts payables. The negative relation between account payables and profitability is consistent

with the view that less profitable companies wait longer to pay their bills (Deloof, 2003). The managers properly recognize the role of efficient use of WC in liquidity and profitability but in practice they could not achieve it due to suboptimum utilization of WC. In SMEs however, the owners more often than not doubles as the manager. The ideals of WCM may not be realised, since the owner may not be adequately motivated to professionalise the management of the entity even where knowledge about the attendant benefits exists. However, this study does not draw a line between the manager and owners role in WCM.

Efficient WCM is necessary for achieving both liquidity and profitability of a company. A poor and inefficient WCM leads to tie up funds in idle assets and reduces the liquidity and profitability of a company (Raheman and Nasr, 2007). Efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk inability to meet due short-term obligations and avoids excessive investment in these assets. For measuring WCM efficiency, some common WCM ratios may be used among them, debtors ratio, stock turnover and creditors days. The aim is keeping each of the different components (accounts receivables, accounts payables and inventory) to an optimum level (Lazaridis and Tryfonidis, 2006). Notably, studies of large firms (Jose *et al.*, 1996; Wang, 2002; Deloof, 2003) confirm that there is a significant negative relationship between WCM and profitability. Also, the greater the cash cycle, the lesser will be the profitability. There is a significant negative relationship between liquidity and profitability. There is also negative relationship between debt used by the firm and its profitability (Raheman and Nasr, 2007). More recently and in light of SMEs, Garcia-Teruel and Martinez-Solano (2007) found that an SME's return on assets is reduced by lengthening the number of days accounts receivable, number of days of inventory and number of days accounts payable. On the other hand, lengthening the deadlines for clients to make their payments, although it may improve profitability because greater payment facilities may raise sales also negatively affects profitability. Thus a more restrictive credit policy which allows customers less time to make their payments improves performance. The firm's profitability can also be improved by reducing the number of days of inventory so that keeping inventory for less time can also improve profitability.

**Statement of the problem and scope:** Very few studies have been made in relation to Working Capital Management (WCM), especially in the SME sector in

Kenya. Therefore, the study is a maiden attempt to analyze the relationship between WCM efficiency and profit in SME sector in Kenya. The study covers SMEs in Kenya for which an attempt is made to provide an empirical support to the hypothesized relationship between WCM efficiency and profitability. The objective of the study is to examine the relationship between the WCM efficiency and earnings of SME sector in Kenya. The study hypothesis therefore was there is no significant relationship between wcm efficiency and ebit of SME sector in Kenya.

## MATERIALS AND METHODS

**Sampling method:** The study took place between June, 2009 and March, 2010. A total of 250 firms were sampled through a multi-stage cluster sampling method. Four stratum were chosen from eight clusters covering areas for example, cities of which Nairobi was chosen to be representative of all the major cities in Kenya, towns of which Nakuru town was chosen to be representative of all the major town in Kenya having a population >10,000 people urban; of which Eldoret was chosen to be representative of all urban areas in Kenya with a population of between 2000 people to 10,000 people and lastly rural; of which Isiolo and Naivasha were chosen to be representative of all the rural areas in Kenya. From these stratified clusters, 200 SME's were chosen based on their demographic and economic characteristics with each stratum producing 50 SME's. A bigger percentage of the total SME populations of the small enterprises (52%) are concentrated in the rural areas. The response rate of the SME's owner or Managers was with 92% response rate.

**Model specification:** In order to find out the relationship between different variables, first Pearson correlation coefficients are calculated. The impact of working capital management on firms' performance is than investigated using balanced panel data of SMEs in Kenya. For this purpose, we develop an empirical frame work 1st used by Deloof (2003) then by Garcia-Teruel and Martinez-Solano (2007). The model is specified as:

$$GOP_{it} = f(WACM_{it}, CATA_{it}, CLTA_{it}, DER_{it}, LNSAL) \quad (1)$$

Further:

$$GOP_{it} = \beta_0 + \beta_1 (WACM_{it}) + \beta_2 (CATA_{it}) + \beta_3 (CLTA_{it}) + \beta_4 (DER_{it}) + \beta_4 (LNSAL_{it}) + \epsilon_{it} \quad (2)$$

Where, profit (GOP) is used as a measure of firm's performance. Specifically, gross profit was used, since it

**Table 1: Variables definition**

Abbreviation	Variables	Measurement
GOP	Gross operating margin	Gross profit/sales
ADP	Average debtors period	Debtors/sales×365
SRTD	Stock rate turnover in days	Average stock/cost of sales×365
ACP	Average creditors period	Creditors/purchases×365
CACC	Cash conversion cycle	ADP+SRTD-ACP
CATA	Current assets to total assets ratio	Current assets to total assets
CLTA	Current liabilities to total assets ratio	Current liabilities/total assets
DET	Debt ratio	Total debt/total assets
LNSAL	Size of firm using log of sales	Natural logarithm of sales

arguers well with the operational component of working capital. In SME environment, financial reporting for reliability and comparability is not well grounded especially in terms of net profit, hence the lack of consideration. WCAM is Working capital management which is a key variable of the study used as a vector of Average Debtors Period (ADP), Stock Turnover Rate in Days (SRTD), Average Creditors Period (ACP) and Cash Conversion Cycle (CACC) of the firm. It is expected that WCAM has negative relationship with the profitability. If we reduce number of days in debtors (ACP), Stock (SRTD) and Cash Conversion Cycle (CCC), it will enhance the profitability.

Furthermore, Average Payment Period (ADP) is directly associated with profitability. Other explanatory variables typically assumed to affect firm performance are CATA is the current assets to total assets ratio and CLTA is the current liabilities to total assets ratio are used to check the investing and financing policy of working capital management, respectively. Debt Ratio (DER) representing leverage is expected to have negative relationship and natural logarithm of sales (LNSAL) representing size has positive relationship with firm profitability while  $\epsilon$  is the error term. Complete details for defined variables is available in Table 1.

**RESULTS AND DISCUSSION**

Observations were made pertaining to the practices of WCM adopted by SMEs in Kenya. It can be deduced from Table 2 that the average value of net gross operating profitability is 23% of sales and standard deviation is 12%. This figure means that the value of profitability can deviate from mean to both sides by 12%. Information from descriptive statistics also indicates that the mean of cash conversion cycle that used as a proxy to check the efficiency in managing working capital is 60 days and standard deviation is 162 days. The average of number of debtors collection days is 37 with standard deviation 50 days. Minimum time taken by a company to collect cash from customers is 0 day while the maximum time for

**Table 2: Descriptive data**

Variables	Mean±SD	Max.	Min.
GOP	0.23±0.12	1.50	-0.20
ADP	37±50.00	640.00	0.00
SRTD	68±68.00	720.00	0.00
ACP	64±103.0	534.00	0.00
CACC	60±162.0	832.00	-432.00
CATA	0.43±0.19	1.00	0.00
CLTA	0.46±0.23	3.43	0.01
DET	0.63±0.35	5.80	0.01
LNSAL	20.92±1.56	26.58	13.15

this goal is 640 days. This means that it is taking almost 2 calendar years in certain firms to collect debt which in itself is unsound business practice. The average time of paying to suppliers is 64 days and the standard deviation is 103 days. Maximum time taken from firm to pay for their suppliers is 534 days while minimum time taken for this purpose is 0 day.

Moreover, it takes an average 60 days in order to sell inventory with standard deviation of 162 days. Maximum time taken by a firm is 720 days while minimum time to convert inventory into sales is 0 day. Natural logarithm of sales that measure the size of the firm is used as a control variable. From Table 1, we can see that the mean of logarithm of sales is 20.92 and standard deviation is 1.56. The maximum value of log of sales for a firm in a year is 26.58 while the minimum value is 13.15. Debt ratio is used to check the relationship between debt financing and the profitability.

It is also used as a control variable. The result of descriptive statistics indicates that the average of debt ratio is 63% with standard deviation of 35%. However, it is also possible if the equity of the firm is negative. While the minimum of debt ratio is 1%, this means that there is a company that uses a little debt in its operation. Finally, the current assets ratio and current liabilities ratio also utilized as control variables show a mean value for this ratio is 43 and 46%, respectively. This shows that most managers may be prefer a conservative WCM policy.

**Correlation analysis:** Correlation matrix of all variables included in the analysis is shown in Table 3 which is calculated based on data of 232 firms. Table 3 shows that gross profitability is negatively associated with measures of working capital management (Average collection period, stock turnover in days, average payment period and cash conversion cycle).

The correlation coefficients for all measures of working capital management are significant except for cash conversion cycle. These results are consistent with the view that making payment to suppliers, collecting payments from customers earlier and keeping product or inventory in the stock for lesser time are associated with

Table 3: Pearson correlation matrix between variables

	ADP	SRTD	ACP	CACC	CATA	CATL	DER	LNSAL
ADP	1.000							
SRTD	-0.015	1.000						
ACP	-0.076 <sup>b</sup>	-0.151 <sup>c</sup>	1.000					
CACC	0.118 <sup>a</sup>	-0.159 <sup>a</sup>	0.123 <sup>c</sup>	1.000				
CATA	-0.107 <sup>b</sup>	0.085 <sup>b</sup>	-0.010	-0.424 <sup>c</sup>	1.000			
CLTA	0.157 <sup>c</sup>	0.010	-0.185 <sup>c</sup>	0.182 <sup>c</sup>	-0.178 <sup>a</sup>	1.000		
DER	0.154 <sup>c</sup>	0.024	0.125 <sup>c</sup>	-0.063	0.057	-0.519 <sup>a</sup>	1.000	
LNSALE	0.064	0.152 <sup>c</sup>	-0.341 <sup>c</sup>	-0.177 <sup>c</sup>	-0.005	0.117 <sup>b</sup>	-0.054	1.000

<sup>a</sup><sup>b</sup><sup>c</sup>Denotes significance level at 1, 5 and 10%, respectively

Table 4: Regression model

Independent variables	Regression model (Fixed effect model)			
	Model 1 ADP	Model 2 SRTD	Model 3 ACP	Model 4 CACC
$\beta_0$ (intercept)	-0.31014 (0.0001)	-0.17112 (0.01561)	-0.3281 (0.0000)	-0.2301 (0.0001)
ADP	0.00017 (0.8153)			
SRTD		-0.0031 (0.0000)		
ACP			0.000087 (0.2267)	
CACC				0.00017 (0.0000)
CATA	0.2428 (0.0000)	0.2747 (0.0000)	-0.0381 (0.0081)	0.2456 (0.0000)
CLTA	-0.0361 (0.0131)	0.01441 (0.0087)	-0.0381 (0.0092)	-0.00434 (0.0031)
DER	-0.06431 (0.0000)	-0.04327 (0.0000)	-0.0634 (0.0000)	-0.04631 (0.0000)
LNSALE	0.01431 (0.0001)	0.0573	0.0634	0.0290
F-value	12.91467	13.47092	12.93129	13.28089
R <sup>2</sup>	0.598506	0.608596	0.598815	0.605206
Adjusted R <sup>2</sup>	0.563417	0.552163	0.552508	0.565461
n	232	232	232	232

Dependent variable = Gross Operating Profit (GOP)

increases maximum time for this goal is 640 days. This means that it is taking almost two calendar years in certain firms to collect debt which in itself is unsound business practice.

**Model 1:**

$$GOP_{it} = \beta_0 + \beta_1 (ADP_{it}) + \beta_2 (CATA_{it}) + \beta_3 (CLTA_{it}) + \beta_4 (DER_{it}) + \beta_5 (LNSAL_{it}) + \epsilon_{it} \quad (3)$$

In model 1, we use Gross Operating Profitability (GOP) as a dependent variable. Number of days accounts receivable (ADP) is used as an independent variable. while CATA is the current assets to total assets ratio and CLTA, the current liabilities to total assets ratio and Debt Ratio (DER) and natural logarithm of sales (LNSAL) are used as control variables. Model 1 is estimated with fixed effects and includes number of days accounts receivable as a measure of accounts receivable policy. The result of this regression indicates that the coefficient of account receivable is negative with -0.31014 and p-value is 0.001. It shows highly significant at  $\alpha = 0.01$ .

This implies that the increase or decrease in accounts receivable will significantly affect profitability of firm. Debt ratio is used to represent leverage from analysis of regression shows that there is a positive relationship with dependent variable. The coefficient is 0.269 and is significant at  $\alpha = 0.01$ .

This means that if there is an increase in debt ratio, it will lead to increase in profitability of firm. The result also indicates that there is a positive relationship among logarithm of sale, fixed financial assets to total assets and profitability. The coefficients are 0.138 and 0.143, respectively. Both of them are significant at  $\alpha = 0.01$ . It implies that the size of firm has effect on profitability of firm. The larger size leads to more profitable. The adjusted R<sup>2</sup> also called the coefficient of multiple determinations is the percent of the variance in the dependent explained uniquely or jointly by the independent variables and is 56.34%. The F statistic is used to test significant of R. From result, we see that the model is fit with F statistics 12.915 and p-value is 0.000. It shows highly significant at  $\alpha = 0.01$ . So, concludes that at least one of control variables is related to GOP.

**Model 2:**

$$GOP_{it} = \beta_0 + \beta_1 (STRD_{it}) + \beta_2 (CATA_{it}) + \beta_3 (CLTA_{it}) + \beta_4 (DER_{it}) + \beta_5 (LNSAL_{it}) + \epsilon_{it} \quad (4)$$

In the model 2, there are the dependent variable gross operating profit and the same independent variables as the 1st model 1 equation. The only difference is number of days of stock turnover variable replaced by number of days accounts payable variable. Looking at coefficients (Table 4), we see that there is a negative relationship between number of days accounts payable and

profitability of firm. The coefficient is -0.1711 and p-value is 0.005. It shows highly significant at  $\alpha = 0.01$ . It implies that the increase or decrease in the average stock turnover period significantly affects profitability of the firm. The negative relationship between the average stock turnover period and profitability indicates that the more profitable firms strive to make sales faster. The adjusted  $R^2$  is 55.21% and F of the model is fit with F-statistics 13.474 and p-value is 0.000. It shows highly significant at  $\alpha = 0.01$ .

**Model 3:**

$$GOP_{it} = \beta_0 + \beta_1 (ACP_{it}) + \beta_2 (CATA_{it}) + \beta_3 (CLTA_{it}) + \beta_4 (DER_{it}) + \beta_5 (LNSAL_{it}) + \epsilon_{it} \quad (5)$$

The 3rd model is run using the number of days stock as an independent variable as substitute of average payment period. The other variables are same as they have been in 1st and 2nd model. In the model 3, there are the dependent variable gross operating profit and the same independent variables as the 1st model 1 equation. The only difference is number of days of stock turnover variable replaced by number of days accounts payable variable looking at coefficients (Table 4), we see that there is a positive relationship between number of days accounts payable and profitability of firm. The coefficient is 0.3281 and p-value is 0.000. It shows highly significant at  $\alpha = 0.01$ . It implies that the increase or decrease in the average stock turnover period significantly affects profitability of the firm. The positive relationship between the average payment period and profitability indicates that the more profitable firms wait longer to pay their bill. The adjusted  $R^2$  is 55.25% and F of the model is fit with F-statistics 12.9312 and p-value is 0.000. It shows highly significant at  $\alpha = 0.01$ .

**Model 4:**

$$GOP_{it} = \beta_0 + \beta_1 (CACC_{it}) + \beta_2 (CATA_{it}) + \beta_3 (CLTA_{it}) + \beta_4 (DER_{it}) + \beta_5 (LNSAL_{it}) + \epsilon_{it} \quad (6)$$

In the model 2, there are the dependent variable gross operating profit and the same independent variables as the 1st model 1 equation. The only difference is number of days of cash conversion cycle variable replaced by number of days accounts payable variable. Similar observations can be draw given the observations in Table 4.

**CONCLUSION**

Working capital management is particularly important in the case of SMEs. Most of these companies' assets are in the form of current assets. Also, current liabilities are

one of their main sources of external finance. In this context, the objective of the current research has been to provide empirical evidence about the effects of working capital management on the profitability of SMEs in emerging markets. The results are similar to those found in previous studies that focused on large firms (Shin and Soenen, 1998; Wang, 2002; Deloof, 2003) and SMEs (Garcia-Teruel and Martinez-Solano, 2007) and the which confirms that there is a significant negative relation between an SME's profitability and the number of days accounts receivable and days of inventory. We cannot however, confirm that the number of days accounts payable affects an SME's return on assets. This study however, did not pin down the direction of the relationship between profitability and cash conversion cycle which calls for further research.

Further, the study concludes that given the high current asset to liabilities ratio, SMEs in Kenya have adopted Conservative WCM which means that given TCE, optimum use of resources is stills at bay. Also, efficient Management and financing of working capital (current assets and current liabilities) can increase the operating profitability of manufacturing firms. For efficient working capital management, specialized persons in the fields of finance should be hired by the firms for expert advice on working capital management in the SME sector.

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