The Effects of Working Capital Management on Organizational Performance - A Survey of Manufacturing Firms in Eldoret Municipality

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Abstract

Working capital management is a crucial element in determining the financial performance of an organization. The purpose of this study was to investigate the relationship between working capital management (given by cash conversion cycle, CCC) and organizational performance (represented by profitability/returns) of manufacturing firms in Eldoret Municipality of Uasin Gishu County, Kenya.

A sample of 13 manufacturing firms in the region was used in the study. Historical data on financial performance was collected from the annual financial statements of the sampled firms for a period spanning ten years. More data was also obtained from the managements of these firms through interview schedules and questionnaires. Performance was measured in terms of return on assets and return on equity while cash conversion cycle, current assets to total assets and current liabilities to total assets were used as measures of working capital management.

Correlation and regression analysis were used for the analysis. The findings reveal that the working capital management is negatively correlated with return on assets (ROA) and return on equity (ROE) consisting the R values of -0.148 and -0.231 respectively. However, these figures are low, implying that there is no significant relationship between CCC and performance measures used in the study.

The regression coefficients of cash conversion cycle (CCC) relating to return on assets (ROA) and return on equity (ROE) were -0.007 and -0.018 respectively. This confirms the negative relationship between working capital management and performance measures.

KEY WORDS: Cash Conversion Cycle; Performance; Return on Assets; Return on Equity; Working Capital.

1.0 Introduction/Background

Eldoret Municipality is the headquarters of Uasin Gishu County, one of the 47 counties of the republic of Kenya. The county is not only an agricultural region, but also an industrial hub. Uasin Gishu County covers has a surface area of about 3,328 Km^2 and extends between longitude 34° 50′ and 35 ° 37′ east, and between latitude 0° 03′ south and 0° 55′ north. It falls under the altitude of 1,500m to 2,700m above sea level. The county shares common borders with Trans Nzoia County to the north, Elgeyo-Marakwet County to the east, Baringo County to the southeast, Kericho and Nandi Counties to the south, and Kakamega County to the northwest.

Eldoret Municipality boosts various types of manufacturing firms. These cut across different sectors ranging from textile industry, milk processing, timber treatment, paper manufacture, steel industry, soft drink manufacturing, to food processing.

Over the years, some of the large and well known manufacturing firms within the region such as Raymond Woolen Mills, KCC Milk Processors, Rivatex Cotton Mills, and East Africa Tanning Extract Company have collapsed due to a variety of reasons which includes mismanagement. An example of mismanagement is normally reflected in poor working capital management.

Working capital is the life-line of any organization. Success of every business is revolves around how well it manages its working capital. Working capital management is considered to be a very important element in analyzing the organizations' performance while conducting day to day operations, and by which balance can be maintained between liquidity and profitability.

Working capital management is a managerial accounting strategy focusing on maintaining efficient levels of both components of working capital (that is, current assets and current liabilities) in respect to each other. Working capital management ensures that a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses. Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of working capital management are ratio analysis and management of individual components of working capital.

Some of the key performance ratios of a working capital management system are the liquidity ratio, inventory turnover ratio, and the average collection and payment ratios. Ratio analysis helps the management to identify areas of focus, such as inventory management, cash management, accounts receivable and payables management.

Working capital management involves, the process of managing the activities and processes related to working capital. The aim is to ensure that there are checks and balances to ensure that the amount of cash flowing into the business is enough to sustain the company's operations. This must be an ongoing process that must be evaluated using the current level of assets and liabilities. Working capital management may involve implementing short-term decisions that may or may not carry over from one financial period to the next.

Current assets are very important for proper working of fixed assets. A company may not utilize its fixed assets such as plant and machinery if it does not have sufficient stocks of raw material. If a firm has no cash in hand, it cannot pay for different expenses it incurs. Working capital in simple terms is the excess of current assets over the current liabilities.

This study assessed the effects of working capital management on organizational performance of manufacturing firms in Eldoret Municipality of Uasin Gishu County.

1.1 Research Problem

Working capital is the most crucial factor for maintaining liquidity, survival, solvency and profitability of business (Niresh, 2012). Working capital management is one of the most important areas while making the liquidity and profitability comparisons among firms and involves the decisions on the amount and composition of current assets and the financing of these assets. A proper system of working capital management consists of all measures, procedures and controls put in place to provide management with assurance that at any given time there is optimum cash flows that will assure smooth business operations.

Working capital management is essential because of its effect on a firm's profitability and risk, and consequently, its value and long-term survival. Working capital management is the investment in current assets and current liabilities which are liquidated in a year or less, and is very crucial for a firm's day-to-day operations. Firms can increase their organizational performance and profitability, and maximize their value by having an optimal level of working capital. On the left hand of the balance sheet, a firm can have large inventory and generous trade credit policy which may lead to higher sales. Larger inventory reduces the risk of stock-outs. Accounts receivables (debtors), which is a part of trade credit, stimulates sales because it allows customers to assess product quality before paying.

The flip-side of granting trade credit and keeping inventories is that money is locked up in working capital. Another component of working capital is accounts payable. Receiving trade credit from a suppliers allows a firm to assess the quality of the products bought, and can be an inexpensive and flexible source of financing for the firm. The flipside is that receiving such trade credit can be expensive if a firm is offered a discount for the early payment. This is also the case with uncollected and extended trade credit, which can lead to cash inflow problems for the firm.

Researchers have studied working capital management in many different ways. While some authors studied the impact of an optimal inventory management, others have studied the optimal way of managing accounts receivables that leads to profit maximization (Besley and Meyer, 1987). In order to improve a firm's organizational performance, the firm must manage its working capital in an "optimal way". The most optimal way of managing working capital is one that leads to the highest possible profitability for the firm.

In order to sustain the business, it is essential for any organization to successfully manage its working capital. Keeping in view the realistic importance of working capital management, an attempt was made in this study to examine the working capital management of manufacturing firms within Eldoret Municipality.

1.2 Research Objectives/ Research Questions

1.21 General objectives

The general objective of the study was to determine the effects of working capital management on organizational performance of manufacturing firms in Eldoret Municipality.

1.22 Specific objectives

1. To determine the effects of working capital management on the performance of manufacturing firms in Eldoret Municipality.
2. To establish the relationship between working capital management and organizational performance.

1.23 Research Questions

1. What are the effects of working capital management on the performance of manufacturing firms in Eldoret Municipality?
2. What is the relationship between working capital management and organizational performance?

1.24 Hypothesis

The study tested the following hypothesis:

H_0: There is no significant relationship between working capital management and organizational performance.

H_1: There is a significant relationship between working capital management and organizational performance.

2.0 Review of Literature
2.1 Introduction/ Theoretical Orientations

Working capital is an important tool for growth and profitability for companies. If the levels of working capital are not optimal, it could lead to shortages and problems with the day-to-day operations. Working capital, also called net working capital and is defined as current assets less current liabilities (Hillier, et al., 2010);

i.e., Net working capital = Current assets – current liabilities

Both components of the working capital formula/equation above can be found on the balance sheet. Current assets can be found on the left side of the balance sheet and are those assets that generate cash within one year. Current assets are normally divided in cash and cash equivalents, short-term investments, trade and other receivables (debtors), prepaid expenses, inventories (stocks) and work-in-progress. Current liabilities can be found on the right side of the balance sheet and are obligations which have to be met within one year. Current liabilities are divided in trade payables (creditors), short-term debt and accrued liabilities.

Working capital management is part of the financial management of a firm. Other parts are dividend policy decisions, capital budgeting (or investment decisions), and capital structure decisions. Capital budgeting and capital structure decisions mainly focus on the managing of long-term investments and returns while working capital management focuses mainly on the short-term financing and short-term investment decisions of firms (Sharma and Kumar, 2011). Working capital management is vital for a firm, especially for manufacturing, trading and distribution firms, because in these firms working capital management directly affect their profitability and liquidity (i.e., performance).

This is because for these firms it accounts for over half their total assets (Raheman and Nasr, 2007). It is possible that inefficient working capital management can lead to bankruptcy, even if the profitability of a firm is constantly positive (Kargar and Bluementhal, 1994). A reason for this could be that excessive levels of current assets can easily lead to a below average return on investment for a firm. An efficient firm has to its manage working capital in such a way that it eliminates risks of default on payment of short-term obligations on one side and minimizes the change of excessive levels of working capital on the other side (Eljelly, 2004).

In the 1980's working capital management was compartmentalized (Sartoris and Hill, 1983) and divided in cash, account payables and account receivables. In most firms, these compartments were managed by different managers on various different organizational layers. But Sartoris and Hill argued that there was a need for an integrated approach, where all the three compartments are combined. This led to the integration of the management of inventories, account payables and account receivables, now called working capital.

Accounts receivables (debtors) can be seen as short-term loans to customers given by the supplying firm. Giving these credit terms to customers are an important way of securing sales (Berry and Jarvis, 2006). Although the total amount of receivables on a balance sheet of a firm could be constant over time, its components are continually shifting and therefore careful monitoring is needed (Firth, 1976). When the accounts receivables keep growing, funds are unavailable and therefore can be seen as opportunity costs. According to Berry and Jarvis (2006), a firm setting up a policy for determining the optimal amount of account receivables has to take in account the trade-off between the securing of sales and profits and the amount of opportunity cost and administrative costs of the increasing account receivables; the level of risk the firm is prepared to take when extending credit to a customer, because this customer could default when payment is due; and the investment in debt collection management.

Account payables (creditors) are the opposite of account receivables, instead of giving a credit on a sale, a firm receives a credit. When a firm makes a purchase on credit, it incurs an obligation to pay for the goods according to the terms given by the seller (Hampton and Wagner, 1989). Until the cash is paid for the goods, the obligation to pay is recorded in accounts payables. Account payables can be seen as a short term loan, or a source of funding.

Instead of a source of funding using the trade credit term of a supplier can also be used to assess product quality (Deloof, 2003). This assessment has to be done during the credit term and if the quality of the product is not satisfying, it can be sent back without paying the bill.

2.12 The Cash Conversion Cycle Model (CCC model)

A good assessment of a company's liquidity is important because a decline in liquidity leads to a greater risk of bankruptcy. Financial accounting standards board (FASB) describes liquidity as reflecting "an asset's or

liability's nearness to cash". Creditors often incorporate into loan covenants minimum measures of liquidity that borrowers must maintain. Investors and analysts are interested in a company's ability to generate cash and to have enough cash available to meet everyday demands, and vendors are interested in whether a company will regularly have cash available to pay for purchased goods. Liquidity is also important to external auditors for responsibilities such as assessing issues of going concern.

In assessing company liquidity, the most commonly used measure is the current ratio and its variations, such as the quick/acid-test ratio. These measures, however, fail to incorporate a measure of "nearness" to cash described by FASB beyond the fact that "current" generally indicates that the assets will be converted to cash or consumed during the normal operating cycle of the business, and the liabilities will be liquidated using current assets, or by the creation of other current liabilities. Nevertheless, in accounting and auditing textbooks, the current and quick ratios continue to be the focus of liquidity analysis.

Noticeably, absent from almost all accounting and auditing textbooks is an approach to liquidity analysis that incorporates the element of time. Cash conversion cycle (CCC) capture this element. The concept was introduced in by Verlyn Richards and Eugene Laughlin in1980. Consideration of the CCC along with the traditional measures of liquidity leads to a more thorough analysis of a company's liquidity position.

Static measures of liquidity can be misleading if used exclusively, while the CCC can provide a useful complement in assessing company liquidity and hence (as prior studies have shown) profitability and stock returns. A major disadvantage of the static measures is that they are measures of liquidity at only one moment in time. With the exception of holdings of cash and cash equivalents, liquidity depends on the relationship between inflows of cash and required outflows of cash that occur over time. Static measures do not account for the amount of time involved in converting current assets to cash or the amount of time involved in paying current liabilities. Furthermore, financial statement users cannot ascertain what a company's current ratio was even the day before the financial statement date. The current ratio measure can be easily manipulated by any company wishing to report a higher ratio.

Cash Conversion Cycle is defined as the interval of time (days) required to convert a shilling invested in current assets into cash. It is calculated by adding the average period to collect to the average inventory period and subtracting the average period of payment; i.e., [(Days inventory outstanding + Days receivables outstanding) - Days payables outstanding].

The three-part formula expresses the length of time that a company uses to sell inventory, collect receivables, and pay its accounts. Reconsidering FASB's definition of liquidity, this formula, when compared to the current and quick ratios, better approximates assets' and liabilities' nearness to cash. The shorter the CCC, the more liquid the company's working-capital position is.

The first part of the formula, days inventory outstanding (DIO), measures the number of days a company takes to convert its inventory into sales. An undesirable buildup of slow-moving inventory would result in a less favorable CCC. In contrast, the current ratio does not distinguish between liquid current assets and illiquid current assets. As far as the current ratio is concerned, inventories and cash are the same thing and are immediately available to take care of current liabilities.

The second part of the CCC formula, days receivables outstanding (DRO), measures the number of days a company takes to collect on sales. If a company relaxes its credit policies, and receivables become less liquid, the static measures of liquidity will not indicate this. As with slow-moving inventories, an undesirable buildup of accounts receivable will result in a less favorable CCC.

The third part of the formula, days payables outstanding (DPO), measures the number of days the company is able to defer payment of its accounts payable. With this portion of the formula, consideration is given to the length of time in which a company is able to obtain interest-free financing through credit relationships with vendors. The longer a company is able to delay payment (without harming supplier relations), the better the company's working-capital position. A shorter CCC is favourable, and it is entirely possible to have a negative CCC. This would indicate that the company manages its working capital so well that it is, on average, able to purchase inventory, sell inventory, and collect the resulting receivable before the corresponding payable from the inventory purchase becomes due.

Firms face a number of important decisions in their current operations and one of these important decisions concerns the efficient management of liquidity. This decision is critical, as it is the reason for which many firms go bankrupt if not careful enough. The first is that they do not analyze the components of CCC as a whole (i.e., they do not integrate credit, cash and inventory policies with the process of sales projections) quite the contrary, the working capital management is carried out from different perspectives assigning unequal objectives to each one of the policies and therefore maintaining an inefficient management of working capital.

2.2 Empirical Review

Deloof (2003) investigated the relationship between working capital management and firm profitability by using cash conversion cycle (CCC) as a measure of working capital management. He found a negative relation between gross operating income and receivables collection period, inventory turnover period and creditors' payment period. The results suggest that the managers could create value for stockholders if they were to reduce the time periods of receivables and inventories to reasonably minimum levels. These results show that there is a certain level of working capital that maximizes the value of the firms.

Afza and Nazir (2009) through cross-sectional regression models on working capital policies and 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. Their result indicates that, the firms yield negative returns if they follow an aggressive working capital policy.

Raheman and Nasr (2007) carried out a study that aimed to determine the effects of working capital management on the net operating profitability and liquidity. They used average collection period, inventory turnover in days, average payment period, cash conversion cycle, current ratio, debt ratio, size of the firm and financial assets to total assets ratio as the independent variables and net operating profit as the dependent variable in the analysis. They found that, there is a strong negative relationship between variables of working capital management and profitability of the firms. Their study also demonstrated a considerable negative relationship between liquidity and profitability and positive relationship exists between size of the firm and its profitability.

Soenen (1998) reported similar findings but used net trading cycle (NTC) as comprehensive measure of working capital management and found significant negative relationship between NTC and profitability. However, this relationship was not found to be very significant when the analysis was for specific industry.

Raheman and Nasr (2007) studied the relationship between working capital management and corporate profitability for 94 firms listed on Karachi Stock Exchange using static measure of liquidity and ongoing operating measure of working capital management. The findings of study suggested that there exist a negative relation between working capital management measures and performance.

2.3 Knowledge Gap

A lot of studies have been undertaken in the area of working capital management. Most of these researches were, however, conducted in the developed countries that have attained full industrialization status and have manufacturing as their main economic driver. This study sought to assess the effects of working capital management on performance of manufacturing firms in the context of developing countries.

2.4 Theoretical Framework

Working capital decisions provide an example of the risk-return nature of financial decision making. Increasing a firm's net working capital (current assets less current liabilities) reduces the risk of a firm not being able to pay its bills on time. This at the same time reduces the overall profitability of the firm. Working capital management involves the risk-return trade-off; i.e., not taking additional risk unless compensated with additional returns.

The existence of a firm depends on the ability of its management to manage the firm's working capital (Ross, 2009). Working capital management involves the process of converting investment in inventories and accounts receivables into cash for the firm to use in paying its operational bills. As such, working capital management is therefore at the heart of the firm's day-to-day operating environment, and improving corporate performance, as measured by its profitability.

2.5 Conceptual Framework

Manufacturing firms put in place various working capital management measures in order to ensure efficient working capital management and organizational performance. These measures are the independent variables since they determine the efficiency of working capital management and ultimately, the profitability and performance of the organization. The conceptual framework is shown below:-

Figure 1: Conceptual Framework

Independent variables   Dependent variables

Working capital management:
- Cash Conversion cycle
- Current Assets/Total Assets
- Curren Liabilities/Total Assets

Performance:
- Return on Assets
- Return on Equity
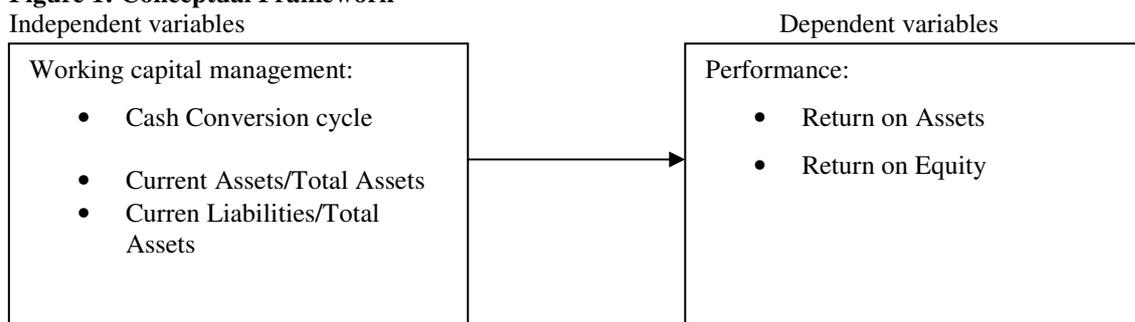
The conceptual framework shows that working capital management measures (independent variables) affects a firm's organizational performance and growth (dependent variables). When working capital management measures are put in place, they affect the efficiency of working capital and therefore organizational performance as measured by profitability, which is normally reflected by higher return on assets and return on investment/equity ratios.

3.0 Research Methodology
3.1 Research Design
The study was conducted through an exploratory survey design. The main purpose of exploratory research study is that of formulating a problem for more precise investigation, or of developing the working hypotheses from an operational point of view.

The main tool of data collection was questionnaires, which were filled by the management of the firms. Interviews meant to obtain relevant data were also conducted. Past financial statements (the balance sheets and income statements) of the sampled manufacturing firms were also obtained from both public and private sources.

3.2 Target Population
The target population is that population to which a researcher wants to generalize the results of the study (Mugenda and Mugenda, 1999). Target population as defined by Borg and Crall (1959) as a universal set of the study of all members of real or hypothetical set of people, events or objects to which an investigator wishes to generalize the result.

The target population for the study was the manufacturing firms within Eldoret Municipality. Though there are tens of manufacturing firms in the regions, data necessary for the purpose of this study was only available on 26 of them. They were categorized as follows:

Table 1: Target population

Type of Firm	Frequency (No.)	Percentage (%)
Large scale	5	19
Middle-sized	9	35
Small scale	12	46
Total	26	100

Source: Authors data (2013)

3.3 Sampling Design.
A sampling design is a definitive plan for obtaining a sample from a given population (Kothari (2005). It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Kuul (1984) described sampling as the process by which a relatively small number of individual, object or event is selected and analyzed in order to find out something about the entire population from which it was selected. A sample is a small proportion of targeted population selected using some systematic form.

The sample for the study was selected using convenience and purposive sampling methods. These methods were found to be most appropriate because majority of the firms in the medium-sized and small-scale categories do not maintain proper accounting records which are relevant for purposes of preparation of financial statements. Though most of these do not publish their accounts, they were still selected since data on their working capital management could still be obtained. A sample size of 13 firms (50% of target population) was selected. The composition of the sample is given in the table below.

Table 2: Sample Size

Type of Firm	Target population	Sample size
Large scale	5	3
Medium-sized	8	5
Small scale	13	5
Total	26	13

Source: Author's data (2013)

3.4 Data Collection Procedures
Most of the data used in the study was acquired from financial statements (the balance sheets and income statements) of the sampled manufacturing firms, obtained during the visit to the firms, and from both public and private sources. Relevant data was also obtained through interviews with management of the respective firms.

The study aimed at finding out the effects of working capital on firms' performance. The quantitative method

was followed in order to find better results and outcomes. Panel data was taken from the annual financial statements of the firms collected from the different sources. The data was to help in determining whether, and to what degree a relationship exists between two or more quantifiable variables. Multivariate correlation strategy was applied on the pooled data. Degree of relationship is expressed as a correlation coefficient.

3.5 Data Analysis Procedures

The quantitative research approach was employed to arrive at the findings of the study. Correlation and regression analysis were used in the study to identify the nature and extent of relationship and to find out the effects of working capital management variables on performance measures.

Data was analyzed using descriptive inferential statistics. Both quantitative and qualitative analysis was employed. Quantitative analysis involved a summary of descriptions of the findings that relied on numeric figures while qualitative analysis involved derivation of statistical descriptions and interpretation of data that relied on non-numerical values. The statistical tool, Statistical Package for Social Science (SPSS) was applied to get the results.

Simple linear regression model was formed to find out the effects of working capital management variables on performance measures for the selected manufacturing firms. The regression model was formulated as follows:

$$Y = \alpha + \beta X$$

Where Y is the dependent variable, α is an intercept and β is the co-efficient of the independent variable. By substituting both dependent and independent variables in the above model, the following models were formed (Niresh, J, 2012);

$$ROA = \alpha + \beta 1 CCC$$
$$ROA = \alpha + \beta 1 CATA \qquad \text{Model I}$$
$$ROA = \alpha + \beta 1 CLTA$$

$$ROE = \alpha + \beta 1 CCC$$
$$ROE = \alpha + \beta 1 CATA \qquad \text{Model II}$$
$$ROE = \alpha + \beta 1 CLTA$$

Where;
ROA = Return on Assets
ROE = Return on Equity
CCC = Cash Conversion Cycle
CATA = Current Assets/Total Assets
CLTA = Current Liabilities/Total Assets

4.0 Research Findings

4.1 Results of Correlation Analysis

The results of correlation analysis are summarized in the following table:

Table 3: Correlation Matrix

Variables	CCC	CATA	CLTA	ROA	ROE
CCC	1				
CATA	0.191 (0.315)	1			
CLTA	-0.378** (0.039)	0.383* (0.044)	1		
ROA	-0.148 (0.451)	0.229 (0.250)	-0.181 (0.339)	1	
ROE	-0.231 (0.209)	0.033 (0.873)	0.049 (0.798)	0.631** (0.000)	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Interpretation

The correlation values between the working capital management variables and the firm's performance variables show that the return on equity (ROE) is positively correlated with current assets/total assets (CATA) and current liabilities/total assets (CLTA). The positive correlation between CATA and CLTA (R=0.383) indicates that if

more current assets are used to finance the total assets it will have a positive impact on ROE.

Return on assets (ROA) and ROE are positively correlated with CATA consisting of the R values of 0.229 and 0.033 respectively. This indicates that current assets are kept by the sampled manufacturing firms in relation to the total assets, putting the firms in conservative position. Further, cash conversion cycle (CCC) is negatively correlated with ROA and ROE consisting of the R values of -0.148 and -0.231 respectively. However, this association is insignificant, implying that there is no significant relationship between CCC and performance measures used in the study.

4.2 Hypotheses Testing

From the correlation analysis results above, the null hypothesis is accepted and alternative hypothesis is rejected. It therefore means that there is no significant relationship between working capital management (represented by cash conversion cycle) and performance measures (ROA and ROE).

4.3 Results of Regression Analysis

The following table shows the summary of predictors of performance using Model I.

Table 4: Predictors of Performance - Model I

Model	Dependent Variable	R	R2	Adjusted R Square	Std. Error of The Estimate
I	ROA	0.148	0.022	-0.014	11.292
II	ROE	0.231	0.053	0.021	19.938

Predictors: (Constant), CCC

Interpretation

The R2 values of 0.022 and 0.053 denote that only 2% and 5% of the observed variability in return on assets (ROA) and return on equity (ROE) is explained by the variability in the independent variable of cash conversion cycle (CCC). This indicates that, working capital management, represented by CCC, is not a major determining factor of performance/profitability of manufacturing firms in Eldoret Municipality.

The table below shows the summary of predictors of performance using Model II.

Table 5: Predictors of Performance - Model II

Model	Dependent Variable	R	R2	Adjusted R Square	Std. Error of The Estimate
I	ROA	0.219	0.048	0.014	11.139
II	ROE	0.034	0.001	-0.036	20.512

Predictors: (Constant), CATA

Interpretation

The results show that the composition of current assets to total assets (CATA) exerts very little impact on the dependent variables of return on assets (ROA) and return on equity (ROE). This reveals that, other factors are probably better predictors of performance.

5.0 Conclusions and Recommendations

5.1 Summary of Findings

This study investigated the relationship between working capital management and organizational performance of manufacturing firms in Eldoret Municipality. The study showed that there is a negative relationship between cash conversion cycle (CCC) and measures of performance. The current assets to total assets ratio shows a weak positive association with the performance measures of return on assets and return on equity. The weak relationship can be explained by the fact that the sampled companies belong to different fields of activity.

It was also found that inventory turnover in days has a negative relationship with both indicators of firm performance i.e. Return on Assets and Return on Equity which means that companies performance can be increased by reducing inventory in days. Cash Conversion Cycle and Net Trading Cycle shows significant negative relation with Return on Assets and Return on Equities showing that firms' performance can be increased with short size of both of them. Lastly liquidity (Current Ratio) is positively associated with both performance dimensions.

5.2 Conclusion and Recommendations

Firms' management should continue to emphasize and implement strong controls that will ensure effective and efficient working capital management systems. The study recommends that the manufacturing firms should

manage their working capital efficiently to achieve optimal profitability. This can be achieved by improving the inventory control process, collecting receivables in line with the agreed credit terms and by delaying payments to suppliers. All these will lead to shortening the cash conversion cycle resulting to an increase in profitability.

It is also recommended that there should be proper inventory management system to avoid over stock of inventory. Manufacturing firms should engage in relationship with those suppliers who allow long credit time period and those customers who will take short payment period.

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