

# Effect of Working Capital Management on Financial Performance of State Corporations in Kenya: A Case Study of Rural Electrification Authority

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**Abstract:** The purpose of this study was to determine the effect of working capital management on financial performance of state corporations in Kenya, a case of REA. The study adopted a case study approach. There is need for assessment of working capital practices in REA a state corporation which is mandated to accelerate the pace of rural electrification in order to promote sustainable socio-economic development. It is also important to observe that there are notable working capital factors such as accounts receivable, accounts payable, cash management and inventory management in the financial history of State corporations in Kenya. In all these cases government entities which were not working optimally were either transformed through engagement with strategic and/or anchor investors, or introduction of missing links in the product value chains, which then added value before these could be partially privatized. The study was guided by the following objectives to establish the effect of cash management on the financial performance, to find out the effect of inventory management on the financial performance, to assess the effect of accounts receivable management on the financial performance and to assess the effect of accounts payables management on the financial performance To achieve this objective the researcher employed descriptive research design and make use of questionnaires to collect data from the respondents. The target population of the study was all 181 staff of REA based at the Headquarters in Nairobi while the sample population was 123 employees. Data was collected through questionnaires. The collected data was coded and entered into SPSS for analysis. Correlation analysis was used to test the nature of relationship between independent and dependent variables of the study. Corporations would benefit from the findings of this study as they would use the results of the study to improve financial performance. The findings indicate that cash management practices and inventory management policy have significant influence on financial performance of the organization. Management of accounts receivables is a critical element in achieving organizational growth objectives, shorter cash collection periods ensures there is systematic flow of cash for operations in the organizations Firms need to come up with a way of paying creditors as late as possible in order to maximize returns thus improve on financial performance of the organizations. Conclusion drawn are that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms. A longer inventory holding period has a negative effect on financial performance while the length of inventory holding period has a material impact on financial performance. Management of accounts receivables affects financial performance and a proper debt management policy and ensures that bad debts are provided. Proper cash management policy, proper budgeting of cash, maintaining of adequate inventory levels ,use of inventory management systems JIT and ensuring proper debt management policy exist, will improve financial performance of the organization. The study recommends that institutions need to put more emphasis to practice good cash management policy because its enables growth and improvement in the financial performance. They need to use inventory management systems like JIT and MRP which will greatly improve organizational efficiency and in the long run improve organizational financial performance. Management of debtors should be implemented through the formulation of sound credit policies and companies should sometimes use their receivables as collateral for borrowing money. Organizations need to negotiate for a longer credit period with the suppliers and that creditor should be paid as late as possible in order to maximize return.

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## 1. INTRODUCTION

### Background of the Study

Working capital refers to the funds needed to pay for the daily operations of the business, which are the short-term drivers of an organization (Harris, 2005). Gross working capital consists of cash, inventory, account receivables and account payables. Atrill, (2013) defines net working capital as a net of the short-term assets and liabilities that continuously flow into and out of the business that are important for daily operations.

Working capital management deals with the management of all aspects of both current assets and current liabilities to minimize the risk of going bankrupt and at the same time increasing returns on assets (Foulks, 2015). It involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet short term obligations as they fall due and avoiding excessive investment in the current assets (Eljelly, 2014). This requires a combination of techniques which include cash management, inventory management, cash payables management and receivables management. According to Falope and Ajilore, (2014), the main objective of working capital management is to maintain an optimal balance between each of the working capital components. Many scholars contend that company success heavily depends on the ability of financial executives to effectively manage receivables, inventory and payables.

According to Metcalf and Titard (1976), financial performance is the process of measuring the results of a firm's policies and operations in monetary terms. Financial performance of a firm can be measured using variables such as profitability and liquidity. Profitability measures the extent to which a business generates a profit from the factors of production. Four useful measures of firm's profitability are Return on Assets (ROA), Return on Equity (ROE), Operating Profit Margin and Net Income. Liquidity on the other hand, measures the ability of the firm to meet financial obligations as they fall due, without disrupting the owner equity, using the market value of assets. Liquidity can be measured using the current ratio which is the ratio of current assets to current liabilities. WCM has significant impact on both profitability and liquidity of firms (Shin & Soenen, 1998). In regards to liquidity, WCM seeks to ensure that the investment in working capital components is neither too little nor too great.

### Statement of the Problem

Working Capital Management is a very sensitive area in the field of financial management. It involves the decision of the amount and composition of current assets and the financing of these assets. With the rising cost of capital and scarce funds, the importance of working capital needs special emphasis. The ultimate objective of any firm is to maximize profits at the same time preserve liquidity. A trade-off between these two objectives is critical. Profitability guarantees survival while poor liquidity invites insolvency or bankruptcy.

Several studies have been carried out on working capital management. Gill (2011) studied theory and practice of working capital management and concluded that WCM is a tool used to immunize corporations from financial upheavals and when managed strategically can improve a company's competitive position and profitability. Fess (2011) noted that the measure of working capital has long been accepted as a useful tool for financial analysis. Moreover, Oroka, (2013) studied working capital management practices required by small and medium scale enterprises for effective operations in delta state, Nigeria. The study found that SMEs highly require both long-term and short-term sources in financing their working capital especially cash management practices.

Locally, Kamula (2012) Relationship between working capital management and profitability of cement companies in Kenya. Findings of the study indicated that working capital management increases profitability, and hence a negative relationship existed between the working capital management and profitability variables. Runyora, (2013) studied the impact of working capital management on the profitability of the oil industry in Kenya. The study found that efficiency in working capital management is so vital in a production firm.

Waithaka, (2012) assessed the relationship between working capital management practices and financial performance of agricultural companies listed at the Nairobi Securities Exchange. The findings of the study were that, financial performance was positively related to efficiency of cash management (ECM), efficiency of receivables management (ERM) and efficiency of inventory management (EIM). Further, the efficiency in working capital management practices as measured by efficiency in cash management, efficiency in receivables management and efficiency in inventory

management has an influence on the growth rate of businesses' sales, market share, profits and total assets. While this is the case there is no published study that has been carried out determine the effects of working capital management on financial performance of state corporations in Kenya focusing on Rural Electrification Authority. This leads to the question what are the effects of working capital management on financial performance at Rural Electrification Authority?

### **Objectives of the Study**

This study will be guided by both general and specific objectives.

#### **General Objective**

The overall objective of this study was to determine the effects of working capital management on financial performance of state corporations in Kenya focusing on Rural Electrification Authority.

#### **Specific Objective**

The study sought to achieve the following specific objectives:

- i. To establish the effect of cash management on the financial performance of Rural Electrification Authority in Kenya.
- ii. To determine the effect of inventory management on the financial performance of Rural Electrification Authority in Kenya.
- iii. To establish the effect of accounts receivable management on the financial performance of Rural Electrification Authority in Kenya.
- iv. To determine the effect of accounts payable management on the financial performance of Rural Electrification Authority.

#### **Research Questions**

The study sought answers to the following research questions:

- i. What is the effect of cash management on financial performance of Rural Electrification Authority?
- ii. What is the influence of inventory management on financial performance of Rural Electrification Authority?
- iii. What is the effect of accounts receivable management on financial performance of Rural Electrification Authority?
- iv. What is the effect of accounts payable management financial performance of Rural Electrification Authority?

## **2. LITERATURE REVIEW**

### **Cash Management**

Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2004). Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little Ross, (2013) and as stressed by Atrill, (2013) that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold.

A study by Kwame (2017) established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. This finding agree with the findings by Kotut, (2012) who established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms. The assertion by Ross, (2013) that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value furthers the significance of efficient cash management practices in improving business performance.

### **Inventory Management**

Inventory is another important current asset. Depending on the industry the company is active in; the inventories may consist of different things for example raw materials, work in progress or finished goods. Managing and optimizing levels

of inventory is very tedious task which require balancing between sales and tied up capital. Efficient inventory management practices should answer the questions: how much should be ordered? And when should it be ordered? These questions relate to the problem of determining the economic order quantity and the problem can be answered by the analysis of the costs of maintaining certain levels of inventory as there are costs involved in holding too much stock and there are also costs involved in holding too little, hence the need to put in place an effective stock management system to ensure reliable sales forecasts to be used in stock ordering purposes (Atrill, 2013).

Maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. The inventory conversion period has a negative effect on a business's performance. For instance, shortening the inventory conversion period could increase stock out costs of inventory which results in losing sales opportunities and leads to poor performance (Deloof, 2003). Managers of firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations (Lyrondi & Lazardis, 2015). In case the inventory levels are too low the company might miss out on sales when demand arises or might not be able to deliver goods on time. On the other hand too much inventory ties up capital that can be used elsewhere more effectively. The trend has been to lower inventory levels over the past decades (Brealey, 2012). Instead of the conventional inventory management system where the firm maintains a stock of materials in the warehouse, a firm can also adopt a Just in time (J.I.T) purchasing system.

It refers to inventory management system where raw materials are only purchased when they are needed for production. Under this system, the company or the firm do not maintain stock of raw materials. The objective of the system includes to eliminate inventory storage cost; to eliminate raw material wastage due to obsolescence, theft and pilferage; and finally to eliminate other inventory handling costs for example insurance of inventory stock, costs of maintaining a store keeper among others.

### **Accounts Receivable Management**

Accounts receivable (A/R) are amounts owed by customers for goods and services a company allowed the customer to purchase on credit. Accounts receivable is an important factor in a company's working capital. If it's too high, the company may be relax in collecting what's owed to it and may soon be struggling to find the cash to pay the bills; if it's too low, the company may be unwisely harming customer relationships or not offering competitive payment terms.

According to Dava, (2015) the management of debtors is implemented through the formulation of sound credit policies. Companies can sometimes use their receivables as collateral for borrowing money. The level of accounts receivable also affects several important financial-performance measures, including days payable, the current ration, and others. It is important to note that uncollectible receivables do not qualify as assets (these uncollectible amounts are reclassified to the allowance for doubtful accounts, which is essentially a reduction in receivables); thus, companies usually allow only creditworthy customers to pay days, weeks, or even months after they have received the company's services or goods. Sometimes companies sell their receivables for cents on the dollar to other companies that focus solely on collecting the owed amounts (Eljelly, 2015).

Cash discount policy to attract customers to enjoy the benefits and pay in advance to shorten the average collection period of the enterprise. Therefore, enterprises in the development of credit policy, should be in the credit period, credit standards and trade-offs among cash-discount policy, and strive to achieve the minimum risk of accounts receivable, firms maximize profits (Bhattacharya, 2014).

Enterprises should operate within the responsibility of collection accounts, accounts receivable recovery and internal business units linked to performance appraisal and reward and punishment. When customers cannot repay the loan when due, the enterprise may require the customer to open the acceptances to offset accounts receivable. Accounts receivable is secured by accounts receivable as collateral enterprises, to obtain loans from financial institutions in advance, customers pay the arrears before it transferred to another, for example the number of loans of financial institutions as part of the return. In the event of bad debt losses, the enterprises need not to take any responsibility. Debtors turnover ratio =  $\frac{\text{Net credit sales}}{\text{Average trade debtors}}$  .

### Accounts Payable Management

Accounts payable ratio (AP) represents the rate firms pay to their suppliers. It is one of the major sources of secured short-term financing (Gitman, 2014). Utilizing the value of relationship with payee is a sound objective that should be highlighting as important as having the optimal level of preventions. Accounts payable are suppliers whose invoices for goods or services have processed but who have not yet been paid. Organizations often regard the amount owing to creditors as a source of free credit. As a consequence, strong alliance between company and its suppliers will strategically improve production lines and strengthen credit record for future expansion.

Singh, (2014) stated that the liquidity of positionary firm mainly depends upon accounts receivable and payable deferred policy as well as inventories conversion period of firm. Creditor is a vital part of effective cash position. Purchasing initiates cash outflows and overzealous purchasing function can create liquidity problem. Karaduman, *et al.*, (2015), examines the empirical relationship between efficiency of working capital management and corporate profitability of selected companies in the Istanbul stock exchange for the period of 2005 – 2009. The panel data methods were employed in order to analyze the mentioned relationship. The cash conversion cycle (CCC) was used as a measure of working capital management efficiency, and return on assets (ROA) used as a measure of profitability. He found out that reducing cash conversion cycle (CCC) positively affects return on assets.

Padachi, (2016) in his study also studies on the trends in working capital management and its impact on firms' performance: analysis of Mauritian small manufacturing firms, to identify the causes for any significant difference between the industries. The dependent variable return on total assets is used as a measure of profitability and the relation between working capital management and corporate profitability was investigated for a sample of 58 small manufacturing firms, using panel data analysis for the period 1998-2003. The regression result shows that high investment in inventories and renewable is associated with lower profitability. The key variable used in the analysis was inventories days, accounts receivables days, accounts payable days and cash conversion cycle. A strong significant relationship between working capital management and profitability has been found in previous empirical work. It is clear that analysis of the liquidity, profitability and operational efficiency of the five industries trend in the short – term component of working capital financing.

Lyrondi and Lazardis, (2015) investigate the cash conversion cycle and liquidity position of the food industry in cycle as a liquidity level indicator of the food industry in Greece and tried to determine its relationship with the traditional liquidity measurement and profitability measurement on return on investment, return on equity and net profit margin, they found significant, positive relationship between cash conversion cycle and payable deferred period. The relationship between liquidity measurement variables and profitable measurement variable was not statistically significant and there was no relationship between cash conversion cycle and leverage ratio. To determine the solvency level of firms according to existing obligation of firms different techniques may apply as measurement of liquidity Current ratio, quick ratio and cash ratio are among the most traditional liquidity measurement techniques and the most recent dynamic techniques, cash conversion cycle is applied for measurement of liquidity level of firms.

### Measurement of Financial Performance

Profitability of an organization is measured in the form of ratios which are normally reported by organizations in their annual reports. DevingaRasiah, (2015) claims that the use of profitability ratios are not influenced by changes in price levels. And it is said to be the most appropriate way of measuring profitability as one make use of time series analysis. This is because the real value of profits cannot be affected by the varying inflation rates. According to DevingaRasiah, (2015) for one to realize how well an organization is performing it is much more useful to consider return on assets (ROA) and return on equity (ROE); Bourke, (2014) and (Molyneux & Thornton, 2014). Return on assets (ROA) is the ratio of Net Income after Taxes divided by Total Assets.

The ROA signifies managerial efficiency in other words it depicts how effective and efficient the management has been as they seek to transform assets into earnings. And the higher ratio indicates the higher performance. It is a useful tool for comparing profitability of one organization with other. Moreover, the ROE is said to measure the rate of return on the organizations shareholders equity and it is calculated by dividing net income after taxes by total equity capital which includes common and preferred stock, surplus, undivided profits, and capital reserves; Bourke, (2014), and (Molyneux &

Thornton, 2014). This measure of profitability gives an indication of what the organization earns on the shareholders' investment (DevingaRasiah, 2015)

According to Krakah and Ameyaw, (2014) many researchers have presented ROA as an appropriate measure of profitability. Among them are Rivard and Thomas, (2013) who argued that profitability is best measured by ROA in the sense that, ROA cannot be distorted by high equity multiplier? However, Hassam and Bashir, (2014) also claims that as ROA tend to be lower for financial intermediaries, most organizations heavily utilized financial leverage to increase their ROE to competitive levels.

### 3. RESEARCH METHODOLOGY

#### Research Design

Kombo and Tromp, (2014) argue that research design is the structure, scheme, or plan that is used to generate answers to research problems. This study adopted descriptive research which describes the characteristics of the population and factor as they exist at present, minimizing biasness and maximizing the reliability of data collected. This study was about the effect of working capital management on financial performance of state corporations. The research brought out the characteristics of financial performance and factors affecting them.

#### Target Population

Bryman and Bell, (2015) explained that the target population should have some observable characteristics to which the researcher intends to generalize the results of the study. A researcher has the responsibility of selecting a target population in which to generate the results of his study. The population consisted of 181 employees of Rural Electrification Authority headquarters. The population is summarized in table 3.1 with the number of employee in the different departments.

**Table 3.1 Target Population**

| Level                 | Frequency  | Percentage % |
|-----------------------|------------|--------------|
| Top level Managers    | 24         | 13           |
| Middle level managers | 31         | 17           |
| Lower level staff     | 126        | 70           |
| <b>Total</b>          | <b>181</b> | <b>100</b>   |

#### Sampling Design

Sampling is the process of selecting a sufficient number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho and Kombo, 2013). The sample of respondents was determined using stratified sampling which relies on mere chance to determine who was selected in the sample and called for random selection in the inclusion of the cases into the sample. According to (Bryman and Bell, 2015), it was a statistical determination of the appropriate sample size and it enabled the researcher to generalize results to the population. Stratified sampling eliminates the possibility of biasness in the selection of a sample under investigation.

#### Sampling and Sample Size

A sample size of 123 respondents out of a total frame of 181 population was given questionnaires which was a fair number and yielded fair results. This sample is recognized as being representative of the entire population. To determine the sample size, the following formula suggested by Kothari and Gang, (2014) was used.

$$n = \frac{X^2 N p q}{\{d^2(N-1) + X^2 p q\}}$$

Where

n=Desired sample size

N=Target population

P=population proportion

$$q = 1 - p$$

d = corresponding to significance level which was the degree of accuracy reflected by amount of error that was associated with the sample size of the population

$X^2$  = chi square value for one degree of freedom relative confidence at 95% confidence level  $X=1.96$

$$n = 1.96^2 \times 181 \times 0.5 \times 0.5 / \{0.05^2(181-1) + 1.96^2 \times 0.5 \times 0.5\}$$

$$= 173.8324 / 1.4104$$

$$n = 123 \text{ respondents}$$

The researcher selected 123 respondents from all levels of the organization randomly.

### Data Collection Procedure

Primary data was used for the purpose of this study. Primary data was obtained through a semi-structured questionnaire with both closed and open ended questions. The questionnaire comprises of two sections. Section one collects information on personal profile of the respondent and section two addresses the perceived factors influencing financial performance. The respondents were drawn from REA staff based in Nairobi. Electronic mail, drop and pick later methods were used to administer the questionnaire. Follow up was done through personal visits, telephone calls and emails to facilitate responses and also enhance the response rate.

### Data Collection Instrument

As a method of data collection, this study used questionnaires with both open ended questions and closed ended questions. Open ended questions were used because they provide detailed answers and enabled the researcher to get what was in the mind of the respondents freely. Closed ended questions were used in some areas so as to save on time and where specific answers were required.

### Data Processing and Analysis

Data analysis is a process of inspecting, cleaning, transforming, and modelling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data analysis has multiple facts and approaches, encompassing diverse techniques which may include the statistical method (Sekaran, 2015)

Data was edited, coded and then analyzed by help of SPSS. Quantitative techniques were used in the data analysis. Descriptive data was presented in the form of frequency tables, bar charts, histogram, grouped frequency distributions and pie charts for ease of understanding and analysis. Narrative interpretation of the data was applied for qualitative data. This study used the multiple regression equation to find out what relationship, if any, exists between the independent variables and the dependent variable.

$$Y = \beta_0 + \beta_1 C_m + \beta_2 I_m + \beta_3 A_{r_m} + \beta_4 A_{p_m} + \epsilon$$

Dependable variable  $Y$  = Financial Performance

Independent variable  $C_m$  = Cash Management,

Independent variable  $I_m$  = Inventory Management

Independent Variable  $A_{r_m}$  = Accounts Receivable Management

Independent Variable  $A_{p_m}$  = Accounts Payable Management

While  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are coefficient of each independent variable ( $i=1,2,3,4$ ) and  $\epsilon$  is the error term.

## 4. DATA ANALYSIS RESULTS AND DISCUSSIONS

### Correlation Analysis

To establish the relationship between the independent variables and the dependent variable the study conducted correlation analysis which involved coefficient of correlation and coefficient of determination.

### Coefficient of Correlation

Pearson Bivariate correlation coefficient was used to compute the correlation between the dependent variable (financial performance) and the independent variables (cash management, inventory management, accounts receivable management and accounts payable management). According to Sekaran, (2015), this relationship is assumed to be linear and the correlation coefficient ranges from -1.0 (perfect negative correlation) to +1.0 (perfect positive relationship). The correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables (Kothari and Gang, 2014).

In trying to show the relationship between the study variables and their findings, the study used the Karl Pearson's coefficient of correlation ( $r$ ). This is as shown in Table 4.1 below. According to the findings, it was clear that there was a positive correlation between the independent variables, cash management, inventory management, accounts receivable management and accounts payable management and the dependent variable financial performance. The analysis indicates the coefficient of correlation,  $r$  equal to 0.388, 0.198, 0.212 and 0.464 for cash management, inventory management, accounts receivable management and accounts payable management respectively. This indicates positive relationship between the independent variable namely cash management, inventory management, accounts receivable management and accounts payable management and the dependent variable financial performance.

**Table 4.1 Pearson Correlation**

| Correlations   |                      |                          |                               |                               |                             |
|--|----------------------|--------------------------|-------------------------------|-------------------------------|-----------------------------|
|  | Financial management | Cash management practice | Inventory management practice | Account receivable management | Accounts payable management |
| Financial management   | 1                    |                          |                               |                               |                             |
|  | 94                   |                          |                               |                               |                             |
| Cash management practice                                     | .388**               | 1                        |                               |                               |                             |
|  | .000                 | 94                       |                               |                               |                             |
| Inventory management practice                                | .198                 | .141                     | 1                             |                               |                             |
|  | .056                 | .177                     | 94                            |                               |                             |
| Account receivable management                                | .212*                | .308**                   | .158                          | 1                             |                             |
|  | .040                 | .003                     | .129                          | 94                            |                             |
| Accounts payable management                                  | .464**               | .284**                   | .250*                         | .048                          | 1                           |
|  | .000                 | .006                     | .015                          | .647                          | 94                          |
|  | 94                   | 94                       | 94                            | 94                            | 94                          |
| **. Correlation is significant at the 0.01 level (2-tailed). |                      |                          |                               |                               |                             |
| *. Correlation is significant at the 0.05 level (2-tailed).  |                      |                          |                               |                               |                             |

### Coefficient of Determination ( $R^2$ )

To assess the research model, a confirmatory factors analysis was conducted. The four factors were then subjected to linear regression analysis in order to measure the success of the model and predict causal relationship between independent variables (cash management, inventory management, accounts receivable management and accounts payable management), and the dependent variable (financial performance).



**Table 4.2 Coefficient of Determination (R<sup>2</sup>)**

| Model Summary  |                   |          |                   |                            |
|--|-------------------|----------|-------------------|----------------------------|
| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .785 <sup>a</sup> | .616     | .606              | 1.07123                    |
| a. Dependent variable: Financial Performance   |                   |          |                   |                            |
| b. Predictors: (Constant), Accounts payable management, Account receivable management, Inventory management practice, Cash management practice |                   |          |                   |                            |

The model explains 61.6% of the variance (Adjusted R Square = 0.606) on financial performance. Clearly, there are factors other than the four proposed in this model which can be used to predict financial performance. However, this is still a good model as Cooper and Schinder, (2013) pointed out that as much as lower value R square 0.10-0.20 is acceptable in social science research.

This means that 61.6% of the relationship is explained by the identified four factors namely cash management, inventory management, accounts receivable management and accounts payable management. The rest 38.4% is explained by other factors in the financial performance management not studied in this research. In summary the four factors studied namely cash management, inventory management, accounts receivable management and accounts payable management, or determines 61.6% of the relationship while the rest 38.4% is explained or determined by other factors.

**Regression Analysis**

**Analysis of Variance (ANOVA)**

The study used ANOVA to establish the significance of the regression model. In testing the significance level, the statistical significance was considered significant if the p-value was less or equal to 0.05. The significance of the regression model is as per Table 4.3 below with P-value of 0.00 which is less than 0.05. This indicates that the regression model is statistically significant in predicting factors of financial performance. Basing the confidence level at 95% the analysis indicates high reliability of the results obtained. The overall Anova results indicates that the model was significant at F = 14.092, p = 0.000.

**Table 4.3 ANOVA**

| ANOVA <sup>a</sup>   |            |                |    |             |        |                   |
|--|------------|----------------|----|-------------|--------|-------------------|
| Model  |            | Sum of Squares | df | Mean Square | F      | Sig.              |
| 1  | Regression | 321.501        | 4  | 80.375      | 14.092 | .000 <sup>b</sup> |
|  | Residual   | 507.605        | 89 | 5.703       |        |                   |
|  | Total      | 829.106        | 93 |             |        |                   |
| a. Dependent Variable: Financial management  |            |                |    |             |        |                   |
| b. Predictors: (Constant), Accounts payable management, Account receivable management, Inventory management practice, Cash management practice |            |                |    |             |        |                   |

**Multiple Regression**

**Table 4.4 Multiple Regression**

| Coefficients <sup>a</sup>                   |                               |                             |            |                           |       |      |
|---|-------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model                                       |                               | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|   |                               | B                           | Std. Error | Beta                      |       |      |
| 1   | (Constant)                    | 23.826                      | 4.422      |                           | 5.389 | .000 |
|   | Cash management practice      | .406                        | .096       | .387                      | 4.211 | .000 |
|   | Inventory management practice | .178                        | .130       | .119                      | 1.369 | .002 |
|   | Account receivable management | .568                        | .151       | .336                      | 3.758 | .000 |
|   | Accounts payable management   | .403                        | .118       | .308                      | 3.417 | .001 |
| a. Dependent Variable: Financial management |                               |                             |            |                           |       |      |

The regression equation was:

$$Y = 23.826 + 0.406X_1 + 0.178X_2 + 0.568X_3 + 0.403X_4$$

Where;

Y = the dependent variable (Financial Performance)

X<sub>1</sub> = Cash Management

X<sub>2</sub> = Inventory Management

X<sub>3</sub> = Account Receivable Management

X<sub>4</sub> = Accounts Payable Management

The regression equation above has established that taking all factors into account (financial performance as a result of cash management, inventory management, accounts receivable management and accounts payable management) constant at zero financial performance was 23.826. The findings presented also shows that taking all other independent variables at zero, a unit increase in cash management will lead to a 0.406 increase in the scores of financial performance; a unit increase in inventory management will lead to a 0.178 increase in financial performance; a unit increase in account receivable management will lead to a 0.568 increase in the scores of financial performance; a unit increase in accounts payable management will lead to a 0.403 increase in the score of financial performance. This therefore implies that all the four variables have a positive relationship with accounts receivable management contributing most to the dependent variable.

From the table we can see that the predictor variables of cash management, inventory management, accounts receivable management and accounts payable management got variable coefficients statistically significant since their p-values are less than the common alpha level of 0.05.

## 5. SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

### Conclusions

The following were the conclusions drawn from the study in regards to the relationship between the dependent and the independent variables reviewed

#### **Influence of Cash Management on Financial Performance**

Cash management practices has an impact on financial performance of the organization, management of cash conversion cycles is the work of the lower level staff and that shorter cash conversion cycles are better than longer ones. Cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms

#### **Influence of Inventory Management on Financial Performance**

Inventory management practices have an impact on financial performance of the organization and organizations need to set Economic Order Quantity (EOQ) to ensure adequate stocks are maintained. A longer inventory holding period has a negative effect on financial performance while the length of inventory holding period has a material impact on financial performance. Management of inventories ensures organizations achieve substantial growth in its financial strength

#### **Influence of Accounts Receivables Management on Financial Performance**

Management of accounts receivables affects financial performance and a proper debt management policy and ensures that bad debts are provided. Adequate plan and management of debtors and provision for doubtful debts goes a long way in establishing a solid ground for organizational financial growth. Companies can sometimes use their receivables as collateral for borrowing money. The level of accounts receivable also affects several important financial-performance measures, including days payable, the current ration, and others.

**Influence of Accounts Payable Management on Financial Performance**

Accounts payable management had an impact on financial performance of the organization in that determine the solvency level of firms according to existing obligation of firms different techniques may apply as measurement of liquidity current ratio, quick ratio and cash ratio are among the most traditional liquidity measurement techniques and the most recent dynamic techniques, cash conversion cycle is applied for measurement of liquidity level of firms and this affects their performance.

**Recommendations**

The study recommends the following recommendation to institutions in regards to effects of working capital management on financial performance.

**Cash Management**

It is clear that cash management has an effect on the financial performance thus organizations need to have in place effective and efficient cash management systems. Institutions need to put more emphasis to practice good cash management policy because its enables growth and improvement in the financial performance. Good cash management practices is very critical factor in achieving financial growth in organization and therefore organizational leaders must put great effort in ensuring that they put in place good systems to manage cash cycles in their organizations. Organization leaders must that they put into place substantive cash management systems and policy that safeguards loss of cash and improper utilization of cash within their organizations, good cash handling procedures should be put into place, cash budgeting also is critical factor and so should be strictly adhered to.

**Inventory Management Policy**

Organizations who are performance oriented should design good inventory management systems which will ensure there are lean productions and efficiency in service provisions. Organizations need to use inventory management systems like JIT and MRP which will greatly improve organizational efficiency and in the long run improve organizational financial performance. Managers of firms should keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations. Leaders have the major responsibility of putting measures on managing movement of inventory from reorder to delivery; these measures should take into considerations issues like inventory holding policy, inventory management systems like JIT and MRP.

**Management of Accounts Receivables**

Debtors' collection period should be reduced by granting short credit period this is due to the fact that the shorter accounts receivable period are better to the firm indicating that customers can come to buy on credit many times thus paying within a short period. Management of debtors should be implemented through the formulation of sound credit policies and companies should sometimes use their receivables as collateral for borrowing money. Efforts should be made by leaders in organizations to ensure that all accounts receivables are strictly monitored and followed to prevent accrual of bad debts; good debt management policy is a necessity which profit centered organizations should embrace.

**Accounts Payable Management**

Accounts payable management had an impact on financial performance of the organization and proper creditors' management policies can help a firm to enjoy benefits of credit discounts. Organizations need to negotiate for a longer credit period with the suppliers and that creditor should be paid as late as possible in order to maximize returns.

**Suggestion for Further Studies**

This study focused on effect of working capital management on financial performance of state corporations in Kenya-a case study of REA Kenya. Since only 61.6% of results were explained by the independent variables in this study, it is recommended that a study be carried out on other factors on financial performance in another firm or country. The research should also be done in other government corporation or private sector and the results compared so as to ascertain whether there is consistency on financial performance.

### REFERENCES

- [1] Apuoyo, J. (2014). The Relationship Between Cash Flow and Profitability of Small & Medium Enterprises in Nairobi County. *Journal of Financial Management International*, 4 (2) 9-10.
- [2] Atrill, H. (2013). *The Impact of Firms' Capital Expenditure on Working Capital Management: An Empirical Study*. New York: John Wiley & Sons Ltd.
- [3] Bhattacharya, J. K. (2014). Effects of Accounts Receivable on Profitability of Firms. *Journal of Business & Finance Management*, 12 (2) 23 -31.
- [4] Bourke, G. P. (2014). The Removal of Mortgage Market Constraints and the Implications for Econometric Modelling of UK House Prices. *Oxford Bulletin*, 25, 52.
- [5] Brealey, M. (2012). *Principles of Corporate Finance, ' in ed. 6, .* New-York: Mc Graw-Hill Book Company.
- [6] Bryman, A., & Bell, E. (2015). *Business Research Methods*. London: Oxford University Press.
- [7] Cohen, L., Manion, L., & Morrison, K. (2013). *Research Methods in Education 5th Edition*. London & New York: Routledge Falmer Taylor & Francis Group.
- [8] Cooper, R., & Schinder, S. (2013). *Business Research Methods*. New York: McGrawHill.
- [9] Dava, M. (2015). Debt Management. *Journal of Finance*; 20(2), 35-40. *Journal of Finance*, 20(2), 35-40.
- [10] DevingaRasiah, T. (2015). Theoretical Framework of Profitability as Applied to Commercial banks in Malaysia. *European Journal of Economics, Finance & Administrative Science*, 19.
- [11] Eljelly, A. (2015). Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market. *International Journal of Commerce & Management*, 4, (2) 48-61.
- [12] Erkki, K. (2013). Cash Management Behaviour of Firms and Its Structural Change in an Emerging Money market. *Journal of Business Management International*, 67 (2) 89-109.
- [13] Falope, H., & Ajilore, T. (2014). Impacts of Working Capital Management on Financial Performance of Non-Financial Firms Listed on Nigerian Stock Exchange. *Journal of Financial Management*, 12 (2) 67-80.
- [14] Filbeck, G., & Krueger, T. M. (2015). An Analysis of Working Capital Management Results Across Industries. *Mid-American Journal of Business*, 20 (2), 10-17.
- [15] Gakure, R., Cheluget, K. J., Onyango, J. A., & Keraro, V. (2015). Working Capital Management and Profitability of Manufacturing Firms Listed at the Nairobi Securities Exchange. *Prime Journal of Business Administration and Management*, 2 (9) 680 - 686.
- [16] Gitman, K. L. (2014). The relationship between working capital, management and profitability Evidence from the United State. *Business and Economic Journal*, 45, (2) 78-90.
- [17] Hassam, M., & Bashir, K. (2014). Sustainability Banking in Africa, African Institute of Corporate Citizenship & UNEP Finance. *Journal of Deutsche Bank*, 56.
- [18] Ikram, H., Mohammad, S., Khalid, Z., & Zaheer, A. (2014). The Relationship Between Working capital Management Profitability: A Case Study of Cement Industry in Pakistan. *Mediterranean Journal of Social Sciences*, 2 (2) 63-74.
- [19] Jose, W., & Lancaster, H. (2013). *Working Capital management under Inflation, 1 st Ed*. New Jersey: Anmol Publishers,.
- [20] Kamula, W. K. (2012). Relationship between working capital Management and Profitability of Cement Companies in Kenya. *Unpublished MBA University of Nairobi*, Retrieved from <https://www.uonbi.ac.ke>.
- [21] Karaduman, H. A., Aknas, H. E., Calismkan, A. O., & Durer, S. (2015). The relationship between working capital management and profitability: Evidence from and Emerging market,. *International research Journal of Finance and Economics*, 62, 61 – 67, 62, 61 – 67.
- [22] Kombo, D. K., & Tromp, D. L. (2014). *Proposal and Thesis Writing*. London: Pauline Publication.

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- [23] Kothari, C. R., & Gang, W. (2014). *Research Methodology Methods and Techniques*. New Delhi: New Age International (P) Ltd Publishers.
- [24] Kotut, P. K. (2012). Working Capital Management Practices by Kenyan Firms: A Case Study of Firms' Listed in the Nairobi Securities Exchange. *Egerton University*, Retrieved from <https://www.egertonuniversity.ac.ke>.
- [25] Krakah, A. K., & Ameyaw, A. (2014). Determinants of Bank's Profitability in Ghana. *Journal of Finance International*, 5, (2) 7 - 10.
- [26] Kungu, J. N., Wanjau, K. L., Waititu, A. G., & Gekara, G. M. (2014). Influence of Aggressiveness & Financing Policies on Performance of Industrial Firms in Kenya. *Journal of Economics & Finance*, 2 (5), 27-32.
- [27] Lyrondi, T., & Lazardis, G. (2015). Short term financial management of business increases and in Cyprus Business and Economicsociety international. *Journal of Finance International*, 56, (1) 78.
- [28] Mathuva, K. M. (2013). Effect of Trade Receivable Management on the Profitability of Manufacturing Firms Listed in the Nairobi Securities Exchange. *Unpublished University of Nairobi*, Retrieved from <https://www.uonbi.ac.ke>.
- [29] Mbithi, G. K. (2015). Effects of Working capital Management (WCM) Practices on the Financial Performance of Tourist Hotels at the Kenyan Coast. *Unpublished MBA University of Nairobi*, Retrieved from <https://www.uonbi.ac.ke>.
- [30] Miller, M. H. (2016). Debt and Taxes. *The Journal of Finance*, 32 (4) 1151.
- [31] Molyneux, K., & Thornton, M. S. (2014). Expanding Housing Lending in Africa. *Cape Town Conference*. Cape Town: Urban Institute for OPIC.
- [32] Mousavi, Z., Jari, A., & Saied, A. (2012). The Evaluation of Corporate Governance Monitoring Mechanisms on Capital Structure in Tehran Stock Exchange. *International Journal of Business & Social Science*, 3 (1) 192-197.
- [33] Nyabwanga, R. M., Ojera, P., Lumumba, M., Alphonse, J. O., & Otieno, H. (2012). Effect of Working Capital Management Practices on Financial Performance: A Study of Small Scale Enterprises in Kisii South District, Kenya. *African Journal of Business Management*, 6 (18), 5807 - 5817.
- [34] Orodho, A. J., & Kombo, D. K. (2013). *Research Methods*. Nairobi: Kenyatta University, Institute of Open Learning.
- [35] Oroka, V. O. (2015). Working capital Management Practices Required by Small & Medium Scale Enterprises for Effective Operations in Delta State, Nigeria. *Journal of Financial Management*, 12 (2) 78.
- [36] Padachi, K. (2016). Trends in working capital management and its impact on firm's performance: An analysis of Mauritian small manufacturing firms. *International review of business research papers*. 2, (2), 45 – 58, 2, (2), 45 – 58.
- [37] Rivard, R. Y., & Thomas, C. (2013). Mortgage Default Risk & Lending Policy, A Study of the Mortgage Lending in Hong Kong. *Australian Land Economics Review*, 2, 12-17.
- [38] Ross, A. (2013). Working Capital Management and Profitability. A Case Study of Pakistani Firms. *International Review of Business Research* 3(2) 275-296, 3(2) 275-296.
- [39] Runyora, E. (2013). The Impact of Working Capital Management on Profitability of Oil Industry in Kenya. *Unpublished MBA University of Nairobi*, Retrieved from <https://www.uonbi.ac.ke>.
- [40] Sekaran, U. (2015). *Research Methods for Business: A Skills Building Approach*. New Delhi: John Wiley & Sons.
- [41] Singh, P. (2014). Management of Accounts Payable on the Financial Performance of Industrial/Domestic Manufacturing Companies in Nigeria. *Journal of Humanities & Social Sciences*, 21 (7) 54 -61.
- [42] Uyar, T. (2015). Relationship Between Duration of Cash Conversion Cycle with Firm's Size & Profitability. *Journal of Finance International*, 2 (4)100.
- [43] VanHorne, J. C., & Wachwicz, J. M. (2014). *Fundamentals of Financial Management*. New Delhi: Pearson Education.