# ACCOUNTS RECEIVABLE MANAGEMENT AND FINANCIAL PERFORMANCE OF KERICHO WATER AND SANITATION COMPANY LIMITED, KERICHO, KENYA

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#### **ABSTRACT**

Account receivables have been a major problem for most utility service providers especially those still dealing with the post payment method where services are rendered before payment is made. This study sought to find out if financial performance Kericho of Water Sanitation Company (KEWASCO) was attributed to management of accounts receivable. The study collected secondary data spanning from 2010 to 2014 from Kenya national audit office KEWASCO published financial statements to find out average collection period and accounts receivable turnover. The target population included employees KEWASCO in two regions, Kericho and Bureti working in finance. Data was collected using questionnaires where a census was employed and data analyzed using regression and correlation analysis to find if there is any relationship between financial performance and accounts receivable at 5% significance level. From the findings inventory turnover period and average payment period is averagely 30.14

days and 105.45 days respectively, accounts receivable turnover had a mean of 24.54, average collection period (29.8) size of the region (1.547). The results financial showed that KEWASCO, performance variable Return on Equity (ROE) was significantly affected on Size of the region with positive correlation of and Inventory Turnover with 0.688 negative correlation of 0.245. According to the regression equation established, taking all factors into account; size of the region, Average Payment Period (in Days), Accounts receivable turnover, Average collection period) financial performance of KEWASCO, measured by ROE was 0.752 (75.2%). This study recommended that the organization should collection period, increase average inventory period, accounts receivable turnover and debt levels in order to improve their financial performance.

Key Words: accounts receivable management, financial performance, Kericho Water and Sanitation Company Limited, Kericho, Kenya

# **INTRODUCTION**

As noted by Kontuš (2013), accounts receivable denotes the amount owed to a company and arising from past activities of sale of services or products on credit to its customers. Joy (1978 stated that when services and/or goods are sold to the customer by a company under an agreement allowing the former to make payments at a later date, then such an amount outstanding is recorded as accounts receivables. In other words, Joy expounded that receivables were the asset in accounts that represented the money owed to an entity and having risen from credit sale of services and products during the normal course of business. According to Maksimovic and Demirguc (2001) accounts receivable constitute 25% of working capital and therefore care should be taken in their management. Some of the activities undertaken in the management of accounts receivable include the establishment of a credit and collection policy. The credit policy has four main variables and includes the credit period, credit standards, discount terms, and collection policy. In other words, the primary issues that an entity must consider in its accounts receivable management effort are: to whom

the credit should be extended, the credit terms, and the procedures to be used in collecting the money.

The two most useful measures of financial performance of an entity are the liquidity and profitability ratios. Liquidity measures the position and strength of an entity on a short-term basis by establishing whether it had sufficient cash on an ongoing basis to pay its obligations when they mature. On the other hand, profitability evaluates the profit earnings ability of an entity, or how effective it has been in meeting its overall returns goals. All this can be attained by better management of accounts receivable. The efficient management of accounts receivable ensures the survival, liquidity, solvency as well as the profitability of a business entity. An organization which is liquid has the capacity to meet its short term obligation as they arise.

Kericho Water & Sanitation Company bills its customers on credit and it takes four to five weeks to distribute invoices to customers and six to eight weeks to claim its money. Pandey (2008) noted that average collection period determines the accounts receivable turnover, which is the measure of the speed at which customers came to make their payments thereby reducing the amount owed to it. It is imperative to underscore that the delayed payments of receivables becomes the ground for bad debts that ultimately impact negatively on the company's financial performance. According to WASREB (2011) the debtors' days' ratio indicates how quickly cash is being collected from debtors. The debtors conversion period in days for WSP range from 200 to 250 days (WASREB, 2011).

Accounts receivable is of importance to any organization which has to attain its objective of profit maximization. Companies that are able to manage their accounts receivable well will not need to borrow funds from outside and can be able to sustain themselves. As posited by Backman (1962) trade receivables arise from selling of services and products on credit, and it requires efficient management because there are risks relating to the future and, and which has a greater economic value. These risks basically arise from defaults in the future as the money is receivable at a future date which is inherently uncertain and economic value because goods and services are exchanged at a monetary value. Under the class of total assets, the trade receivables are considered third after the property, plant and equipment, and stock, while second in class in reference to the current assets and come after inventory. Additionally, in reference to the working capital management, trade receivables are regarded a crucial element behind cash and stock. Firms must institute efficient credit policy in order to boost their profitability as well as the liquidity levels. According to Foulks (2005) firms need to ensure proper accounts receivable management to avoid situations of considerable strain of their liquidity, and to remain profitable.

To attain maximum trade receivables management, a company is required to consider these factors: volume of the credit trade, terms and conditions for issuing credit, payment pattern of customers, existing credit sales management practices and policies, and collection policies. Receivables constitute large investments in an entity's assets making them like capital budgeting projects, which are measured in reference to their net present value (Emery, 2004). Receivables have been associated with stimulated sales because it permits the customers to

assess the quality of their purchases before paying for them. However, debtors involve money that is an opportunity cost to the company.

A company's credit management and policy guides its decision to extend credit to its customers, and the credit is aimed at facilitating sales. On his sentiments, Al-Mwala (2012) noted that sales were irrelevant without due payment. Therefore, the author advised that all functions relating to the sales and trade receivables must collaboratively work to achieve the sales maximization goal within the shortest time possible. Obida and Owolabi (2012) stated that credit sales were indications that an organization was managing to increase its sales and consequently its financial performance. Organizations that work to increase their trade receivables to an optimal level raise their profitability owing to the increased sales as well as the market share. Sushma (2007) posited that a growth in the accounts receivables level of a company leads to an increase in the net working capital as well as the cost of holding and managing trade receivable, which in turn result into a dip in the firm's value.

Gitau, Nyangweno, Mwencha, and Onchagwa (2014) noted that the credit control function is aimed at ensuring that the accounts receivable are timely recovered before they become uncollectible thereby becoming bad loss to the business. Kilonzo, Memba, and Njeru (2016) noted that the credit managers needed to consider these six Cs of credit on their credit issuance decisions: capital, collateral, condition, character, capacity, and contribution. Through these Cs, companies get to better understand their customers leading to a decrease in the default rates. Some of the sources where the data and information on the Cs could be obtained by the credit managers include: the past experience of the firm with its clients, financial statements from prior periods, and credit reporting. Credit standards denote the needed financial strength of admissible credit buyers. Therefore, the credit analyst uses financial analysis and non-financial data to assess the suitability of every credit applicant by exceeding the credit standard. Lower credit standards have been linked to an increase in sales as well as the bad debts. Both the credit period, which stipulates how long it should take from the invoice date until the customer pays, and the cash discount constitute the seller's credit terms, and in most cases these terms are very similar to those of other entities in its industry.

The metrics used to assess the collection policy are its toughness or laxity in its pursuit of collecting dues from the slow-paying accounts. A tough policy is likely to speed up collections, though it might annoy most clients making them to take their business elsewhere. In WSP factoring is not common because of fear of losing customers and eventually sales. Gill, Bigger and Atnur (2010) states that the core goal of accounts receivable management is to attain an optimal balance among the components of cash flow management. As noted by Samilogu (2008) cash flow management involves the processes and activities of planning and controlling cash flow into as well as out of the business. In other words, the management of cash movements within the company and cash balances it holds at a point in time. Through sound accounts receivable management practices, the company is able to boost its profitability through the reduction of transaction costs of raising money from other sources in the event of liquidity crisis (Ahmet & Emin, 2012).

#### STATEMENT OF THE PROBLEM

According to the WASREB (2011) the debtors' conversion period in days for WSP range from 200 to 250 days. As per the assessment conducted in 2011, the average debtor days were established to be 220 days. However, a notable improvement has been recorded across the board with the average debtor collection period at 188 days. The average debtor collection period is however, still very far from the industry set norm of 45 to 60 days (WASREB & WSP, 2015). This shows a longer period of Accounts Receivable collection revealing a poor management of Accounts Receivable in these WSP. Kericho water & Sanitation Company is rated as BB Company and, therefore, has a 250 days debtor's conversion period. The longer debtors' conversion period indicates that the company will be illiquid and not able to meet its obligation and operation expenses as they arise. Proper accounts receivables management is crucial for a health financial performance of any entity. KEWASCO is not able to access capital from NSE since it's not listed and it does get little funds from the government, an indication of financing limitations from the capital markets and financial institutions such as the short-term bank loans to fund its operations. Their financial sustainability and performance depends on proper management of accounts receivable which is their sole revenue source. The Kenyan water services sector has been dogged by poor financial performance for quite long period of time. These challenges have been attributed to poor and weak working capital management policies. In addition, Schwartz (2002) noted that there is the problem of financial unsustainability arising from a number of factors that include low tariffs, inefficient billing, poor accounts receivable and collection practices. The research question is therefore "is the poor financial performance at KEWASCO attributed to the Accounts Receivable management? " Before the Water Act 2002 was passed and enacted into law, water management responsibilities were under the Municipalities and District Water Officers. In its report, the Netherlands Development Organization (2009) noted that majority of these Water Service Providers were unprofessionally managed and conducted in a non-commercially oriented manner leading to poor financial performance and eventually lack of sustainability. From the foregoing literature, it is clear that accounts receivable plays a bigger role in the financial performance of WSP who do not access any funds from capital markets. Therefore, the study seeks to find out the contribution of accounts receivable management on the financial performance of Kericho Water & Sanitation Company.

#### **GENERAL OBJECTIVE**

To assess the effect of accounts receivable management on financial performance of Kericho water & Sanitation Company.

# **SPECIFIC OBJECTIVES**

- 1. To examine the effect of debtors collection period/Average Collection Period (ACP) on the financial performance of Kericho Water & Sanitation Company.
- 2. To determine the effect of accounts receivable turnover on the financial performance of Kericho Water & Sanitation Company.

- 3. To establish the effect of credit period on financial performance of Kericho Water & Sanitation company
- 4. To evaluate the effect of the regional size on the financial performance of Kericho Water & Sanitation Company.

# **RESEARCH HYPOTHESES**

 $H_{01}$ : Average Collection Period (ACP) has insignificant effect on the financial performance of Kericho Water &Sanitation Company.

 $H_{02}$ : Accounts receivable turnover has no significant effect on the financial performance of Kericho Water & Sanitation Company.

 $H_{03}$ : Credit period has no significant effect on the financial performance of Kericho Water & Sanitation Company.

 $H_{O4}$ : The regional size has no significant effect on the financial performance of Kericho Water & Sanitation Company.

#### THEORETICAL REVIEW

# **Transaction Costs Theory**

Transaction costs denote those expenses born in the course of arranging, managing, and monitoring various activities across the markets. Some of these costs include the costs related to negotiation, contracts development, logistics management, and monitoring accounts receivable. According to Feris (1981) transaction costs have been considered as one of the reasons to sustain credit sales. As per the transaction costs theory, paying for several shipments collectively and at once saves transaction costs and allows flexibility in settlements. In addition, maintaining smaller cash balances helps to save money. The common costs associated with receivables include:

**Administrative Cost:** The main reasons why KEWASCO has liberalized its credit policy are billings maximization and minimization of billings erosion. Under this category, it incurs two types of costs as follows:

**Collection Cost:** KEWASCO has to strengthen its collection efforts to have the outstanding bills paid, especially in the case where the customers financially challenged. The collection costs include the extra expenses of credit department arising from the creation and maintenance of stationary, accounting records, staff, and postage among other items.

**Credit Investigation and Supervision Costs:** An entity with a soft credit policy ends up with a substantial rise in the number of debtors. Consequently, KEWASCO has been forced to analyze and supervise this increased volume of accounts in its regions of operation leading to payment of expenses for related credit information acquisition either using its own staff or outside specialist agencies.

**Production and Selling Costs:** These types of costs remain directly proportional to the rise in volume of sales. In this respect, a company is confronted by two situations. First, when the

sales expand as per the existing production capacity, then, only the variable costs related to the production and sale rises. Secondly, when the sales expand beyond the current production capacity leading to an increase in the production of goods and services, then, there is incremental production and selling costs due to the rise in both variable and fixed costs.

Capital Cost: The fact that KEWASCO has to maintain its receivables, it ends up experiencing capital costs since there is a blockage of its financial resources due to the time lag between the invoice date and the date the customers settle their dues. The situation is aggravated by the fact that KEWASCO must pay its bills to the suppliers of raw materials, employees and so on irrespective of the delay in its receipts. Consequently, KEWASCO remains liable to take the necessary steps to meet such additional obligations from other sources other than solely depending on sales. Therefore, in its bid to expand sales extending credit to the customers, a firm ends up incurring additional capital costs.

**Delinquency Costs:** This cost arise when the customer delays to pay or fails to pay for the services and goods as and when they fall due, even after the credit period has expired. As a result, these debts are accounted for as doubtful debts and involve costs in relation to overheads collection through an SMS, blocking of company's money for an extended time period, demand notice, legal and other collection efforts.

**Default Costs:** These costs are similar to the delinquency costs, and arise when a defaulter (customer) completely fails to pay anything or return goods to the firm that sold him on credit. Similar to other firms, KEWASCO also fails to realize the money due from its debtors irrespective of all the efforts owing to the customer's complete inability to pay. As a result, these debts are treated as bad debts after five years when they are written off as they cannot be recovered.

# **Price Discrimination Theory**

As noted by Miravete (2005) price discrimination arises when a firm bills the same item to different customers with different prices, even where distribution costs are same. The act of price discrimination also arises when a company offers the homogenous service or sells two identical units of a product at different prices to the same buyer or different customers. Price discrimination is mostly practiced by monopolists since they are able to use their leading power for discrimination. This theory was supported by Schwartz and Whitcomb (1978, 1979) who argued that market structures as well as legal arrangements often restricted an organization's profitability by constraining price competition. As a result, the trade credit becomes an effective tool in creating hidden price-cuts as well as a way of practicing price discrimination, which make companies unable to outsource their receivable management practices. KEWASCO practice this theory by classifying their customers into categories of domestic consumers, Schools and institutions, Commercial and Government of which they bill them differently for same provision of water.

#### **EMPIRICAL REVIEW**

# Effect of Average Collection Period on Profitability of the Firm

A study by Nyaga (2011) to establish the impact of receivables management on the Technical, Industrial, Vocational, and Entrepreneurship Training (TIVET)'s financial performance revealed that a positive interlink between receivables management and performance of these institutions subsisted. Further findings showed a majority of these TIVET institutions at (77%) had put in place formal receivables management practices.

A study conducted by Mbula, Memba, and Njeru (2016) on effect of accounts receivable on financial performance of Kenyan firms financed by the government venture capital revealed that shows that there was a positive association between accounts receivables and financial performance of these firms. Ikechukwu and Nwakaego (2015) conducted a study to find out the effect of accounts receivable management on the bottom line of Nigerian listed building material/chemicals and paint companies. The authors established that the accounts receivable impacted positively and significantly on the profitability of Nigerian listed building material/chemicals and paint companies. Further findings showed that the debt ratio and sales growth rate had negative but insignificant effect on the profitability of building material/chemicals and paint companies.

A study conducted by Venkataramana, Ramakrishnaiah, and Chengalrayulu (2013) on the effect of receivables management on profitability and working capital of cement companies in India showed that receivable management had significant impact on working capital management as well as on the profitability.

In their study, Lazaridis and Tryfonidis (2006) established a negative interaction between accounts receivables collection period and the profitability (as measured using gross operating profit) of their target firms. These negative results imply that organisations can boost their bottom line by lowering the credit term given to their customers. Similar results were obtained by Deloof (2003) who found that there was a significant and negative relationship between the debtors collection period and the corporation's profitability as measured using gross operating income.

Over a time period of 15 years spanning from 1990-2004, Boisjoly (2009) established that organisations had focused on improving their accounts receivable management as their accounts receivable turnover increased. As established by Boisjoly (2009) a number of techniques that were applied included strengthening of the collection procedures, use of receivables factoring, and issuance of cash discount and trade credit. A study by Samiloglu and Demirgunes (2008) to determine the effect that the working capital management had on the profitability of manufacturing companies listed on Istanbul Stock Exchange over the 1998 to 2007 period. The independent variables through which the working capital management was measured were the accounts receivable period, cash conversion cycle, and inventory period while profitability was measured using the return on assets ratio. The data was analysed using regression analysis and it was found that the accounts receivable period had a significant negative association with profitability. These results were supported by Raheman

and Nasr (2007)'s findings that established that accounts receivable had negative and significant effect on net revenues. Further results from Alipour (2011)'s study showed that the average collection period had a negative relationship with profitability.

Mubashir (2012) conducted a study on assess the factors considered by the Pakistan Textile Sector companies in determining their accounts receivable and payable management policies. The author established that the level of accounts receivable that firms maintained was influenced by the companies' incentive to use credit as price discrimination avenues, and the level of internal financing. Further findings showed that the accounts receivables were affected by the size of the firm. In his study to empirically analyse the effect of working capital on the profitability of Ghanaian listed manufacturing firms, Thomas (2013) found that the working capital cycle had statistically significant but negative connection with the profitability of these companies. The correlation analysis results further showed that the accounts receivable collection period was negatively interrelated with firms' profitability.

Onami (2008) conducted a study to establish the factors affecting accounts receivable management among the Kenyan Agro-manufacturing companies. The study concluded that although the accounts receivable management affected several departments including the finance department, and sales and marketing, and thus needs special attention. In their study, Ramchandran, and Janakiraman (2009) assessed the association between working capital efficiency and the operating incomes of the Indian paper industry. Through regression analysis, the researchers found that cash conversion cycle and inventory days were negatively correlated with operating incomes. They also established that creditors days and debtors collection period had positive association with operating incomes.

Basing his study on the portfolio management theory, Grzegor, (2008) conducted a research on the portfolio management approach used in the management of accounts receivable management by a firm to determine the level of accounts receivable it should have at any given time. The author noted that a rise the accounts receivable level saw a rise in both the cost of holding and managing debtors, and net working capital.

Inksenija (2013) used 108 public firms listed on the Republic of Serbia regulated market to investigate how they managed their accounts receivable during recession with a focus on the 2008-2011 crisis period. The results indicated that accounts receivables had positive but nonsignificant interaction with profitability as measured using the operating profit margin and return on total assets. The researcher concluded that the effect of accounts receivable on the net revenues of a firm was changing in times of crisis. Other studies include the researches by Deloof (2003) in Belgium, Laziridis and Tryfonidis (2006) in Greece, Garcia-Jeruel and MartinezSolano (2007) in the U.S.A, and Samiloglu and Demrigunes (2008) in Spain who found who established a negative association between firm profitability and accounts receivable.

Other studies have found contradicting evidence. Notably Sharma and Kumar (2011) established that accounts receivables had a positive relation with the return on assets. In his study to determine the influence of working capital management on the net bottom line

profitability of an entity, Mathuva (2010) established that a significant and negative association between the cash collection cycle and profitability existed.

In his study, Olufisayo (2011) found that the account receivables, sales growth, cash conversion cycle, and inventory period affected firms' profitability positively while account payable and leverage affected the profitability in negative manner. In their study, Samiloglu and Demirgunes (2008) considered the 1998-2007 period in analyzing the effect of working capital management on Turkish firms' profitability. The findings revealed that the debtors collection period, inventory turnover and leverage had significant and negative effect on the profitability of firms in Turkey. Further results showed that the firm's size, cash conversion cycle and fixed assets had insignificant effect on profitability.

Carden (2014)'s study focused on the effect of trade receivables management on the profitability of manufacturing and allied firms listed on Kenyan Nairobi Securities Exchange. The researcher established that the trade receivables insignificantly influenced the return on assets of Kenyan listed manufacturing and allied entities. As a result, the author noted that the trade receivables were used for price discrimination, as source of financing, and to boost sales and growth. These companies appreciate that their receivables are very important and second in level of current assets, and have thus instituted proper policies to control their level.

Makori (2013) executed a study to assess the association between the working capital management and profitability of Kenyan listed manufacturing and construction firms. The results indicated that the average debtors period and cash conversion cycle had a negative interrelationship with the return on assets of these firms. The researcher concluded that the management of the Kenyan listed manufacturing and construction firms can reduce the debtors collection period, increase the accounts payables period and inventories to reasonable levels to create value for their shareholders.

García-Teruel and Martínez-Solano (2007) study focused on a sample of 8,872 SMEs in Spain over the period of 1996 to 2002 to examine the effect of working capital management on their net revenues. The constructs used to measure the working capital were the accounts receivable period, days in inventory, days payable outstanding and cash conversion cycle while profitability was assessed using return on assets (ROA) ratio. From the correlation matrixes, the results indicated that the days in accounts receivable had significant and negative relationship with return on assets.

## Effect of Size of a Firm on Financial Performance

In their study, Akbas and Karaduman (2012) sought to assess the effect of firm size on the net revenues of the manufacturing sector firms listed on Istanbul Stock Exchange between 200 and 2011. The obtained results indicated that the firm size positively affected their profitability. Dogan (2013)'s study considered the size, liquidity, age and leverage of 200 firms listed on Istanbul Stock Exchange and the effect they had on the profitability of these companies over the 2008-2011 period. The researcher established that both the size and the liquidity affected the profitability in a positive way. However, the age and leverage were found to have a negative effect on the profitability. A study by Kipesha (2013) aimed at

examining how the size and age of Tanzania microfinance institutions affected the performance. The results revealed that the size and age of these institutions impacted on their performance in terms of profitability, revenue generation capacity, efficiency and sustainability.

In a study to establish the determinants of firms' bottom line in developing economies, Ehi-Oshio (2013) established that the firm size had a positive association with profitability. A study by Niresh and Velnampy (2014) assessed the effects of firm size of 15 quoted manufacturing companies listed in Colombo Stock Exchange, Sri Lanka, on their profitability over the years 2008 to 2012. The researcher found out that there was no sign of association between the size of the firm size and profitability these manufacturing firms. Ghafoorifard (2014)'s study focused on companies listed on Tehran Stock Exchange and sought to examine the link between the size of the firm, age and financial performance of these companies. The results showed that a material relationship between the size of the firm and their financial performance.

#### RESEARCH METHODOLOGY

# **Research Design**

According to Mugenda and Mugenda (2008) a research design is the conceptual structure used to guide the conduct of a study. It refers to the overall study conception including the description of all concepts, variables as well as the categories, the relational propositions and the data collection and analyses methods. Cooper and Schindler (2006) described the research design as how data collection and analysis is structured in order to meet the objectives of the study through empirical evidence and in an economical way. This research adopted a causal research design since this design was the most appropriate in bringing out the cause and effect relationship between accounts receivables and KEWASCO's financial performance.

# **Target Population**

Mugenda (2008) noted that the target population denotes all, objects, elements and individuals that the researcher uses to can reasonably generalize her findings to. The population of the study was all the 50 employees in the two regions of KEWASCO, Kericho and Bureti doing accounting work.

# **Sample Size**

Mugenda and Mugenda (2003) posited that a sampling procedure is the systematic approach to identifying and selecting elements of study to act as a representation of the larger group. Census was employed in this study because the population is small where all KEWASCO accounts office employees from the two regions were included and totaled fifty (50).

#### **Data Collection**

The study employed questionnaire as a tool for obtaining primary data from KEWASCO employees. Chandran (2004) stated that the primary data is the first-hand information and is directly obtained from respondents while the secondary data is one that has already been

collected and passed through a statistical process. Primary data is the information that is collected afresh and for the first time thus making it original in character (Kothari, 2004). Primary data was collected by administering questionnaires to 50 employees of KEWASCO. The secondary data was obtained from KENAO for the period of 2012 to 2016.

# **Data Validity and Reliability**

Bernstein (2001) defined reliability as the degree to which a given test is capable of consistently yielding similar results or scores each time the test is administered to the same individuals. Pilot testing through test-re-test method was used by the researcher to distribute 18 questionnaires to the respondents of Kisumu Water and Sanitation Company Limited in Kisumu County, Kenya. After piloting, the Cronbach's alpha of the items or questions in the questionnaires was computed by the aid of SPSS. Cronbach's alpha is used in establishing reliability coefficient for a set of variables by determining how items in the questionnaires correlate among themselves. After subjecting all the items of the main questionnaires in the SPSS, a Cronbach's alpha of 0.83 was computed. In social sciences, Mugenda and Mugenda (2008) recommended a reliability value of 0.7. Therefore, since 0.834 is greater than 0.7, a high internal consistency of questionnaire items was present, thereby implying that the data was reliable.

#### **Data Analysis**

According to Cooper and Schindler (2003) data analysis is the entire process that immediately begins after the collection of data and extends to the point of processing data and its interpretation. Sounders, Lewis and Thornhill (2009) stated that data analysis is the act of processing the collected data to make meaningful inference out of them. Data analysis is always an important activity as raw data have very little meaning. This paper analysed the data through inferential statistics that included correlation and regression analysis, and results were presented in tables to offer a clear picture of the findings at a glance. Regression analysis took the form of a multiple regression model since there were more independent variables, and aimed at establishing the relationship between the study variables.

# **RESEARCH RESULTS**

The study established that Receivables have significant effect on the financial performance of an organization. This study sought to find the levels of agreement with the sentence that when the company limits its credit sales then the default rates will reduce. Proper credit guidelines created by the organization will prevents the danger of over lending meaning that the lending policies are properly observed. From the findings inventory turnover period and average payment period is averagely 30.14 days and 105.45 days respectively, accounts receivable turnover had a mean of 24.54, average collection period (29.8) size of the region (1.547). The results showed that KEWASCO, financial performance variable, return on equity (ROE), was significantly affected by the size of the region with a positive correlation of 0.688. However, the ROE and the inventory turnover had a negative correlation of 0.245. Taking all factors (size of the region, average payment period (in days), accounts receivable turnover, and

Average collection period) into account and regressing them against the financial performance of KEWASCO, the ROE was 0.752 (75.2%).

# **CORRELATION ANALYSIS**

Correlation analysis was necessary in measuring the degree of association between the accounts receivables management and the firms' financial performance. Average payment period (in Days), accounts receivable turnover, average collection period and size of the region and to check whether they increase financial performance of Kericho Water and Sanitation Company.

**Table 1: Correlation Analysis** 

Variables		Return on Equity (ROE)
Average Payment Period (In days)	Correlation	-0.203**
	(p-value)	(0.01)
Accounts receivable turnover	Correlation	-1.458**
	(p-value)	(0.02)
Average Collection Period	Correlation	(0.001)
	(p-value)	(0.00)
Size of the region	Correlation	0.688
-	(p-value)	(0.01)

It is observed in Table 1 that the correlation analysis among the firms 'financial performance variables. The result shows that Kericho Water and Sanitation Company's financial performance variable, return on equity (ROE) was significantly affected by the size of the region with a positive correlation of 0.688 and inventory turnover with negative correlation of 0.245. Net collection period is also negative correlated with the ROE. Further results show that the REO of Kericho Water and Sanitation Company had significant and negative correlation with accounts receivable turnover and average payment period in Days with the value of 1.458 and 0.203 respectively.

These results are in agreement with the findings of Mathuva (2009) who established that debtors management and creditor management had negative and positive relationship respectively with firm's performance. In addition, the findings concur with Falope and Ajilore (2009)'s findings that the average collection period, cash conversion cycle, inventory turnover, and average payment period had a significant negative relationship with net operating profitability of fifty listed Nigerian firms.

# **REGRESSION ANALYSIS**

The multiple regression analysis aimed at establishing the relationship among the variables of study. The regression equation after estimations was as shown below:

$$Y_{it} = 0.752 + 0.760 X_1 + 0.688 X_2 + 0.785 X_3 + 0.668 X_4$$

**Table 2: Regression Coefficients** 

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.752	.292	·	2.579	.001
	Size of the region	.760	.080	2.411	4.652	.000
	Average Payment Period	.688	.070	1.534	5.529	.002
	Accounts receivable turnover	.785	.040	3.180	2.124	.004
	Average Collection Period	.668	.041	4.162	1.664	.001

a. Dependent Variable: Financial Performance

From the multiple regression equation model that took all factors into account (size of the region, average payment period, accounts receivable turnover, and average collection period), the financial performance of Kericho Water and Sanitation Company measured by ROE was 0.752 (75.2%). As shown on Table 2 size of the region, average payment period, accounts receivable turnover and average collection period had a positive and significant influence on financial performance of Kericho Water and Sanitation Company, as shown by beta values. The relationships (p < 0.05) are all significant with size of the region ( $\beta$ =2.411, p < 0.05), average payment period ( $\beta$  = 1.534, p < 0.05), accounts receivable turnover ( $\beta$  = 2.124, p < 0.05) and average collection period ( $\beta$  = 4.162, p < 0.05).

The standardized beta coefficients indicate the contribution of every variable to the model. A higher value implies that the variation in one unit of the predictor variable also results into a large effect on the criterion variable. The t and sig values are important in showing the impact of every independent variable. When t value is big and p value is small, the implication is that the predictor variable has a higher effect on the criterion variable. At 5% significance level and 95% confidence interval, the size of the region had a p-value of 0.000; Average payment period had a p-value of 0.002; accounts receivable turnover had a p-value of 0.004; average collection period had a p-value of 0.001. Therefore, the most significant factor was inventory turnover period. The findings of this study corroborates the previous literature as was established by Ganesan (2007) that days of the average payment days positively affected the profitability of telecommunication equipment industry.

Further this study performed hypothesis testing between accounts receivables management and financial performance of Kericho Water and Sanitation Company.

# $H_{04}$ : Size of the region has no significant effect on the financial performance of Kericho Water & Sanitation Company.

The null hypothesis was thus rejected because t statistics 4.652 has a p value of 0.00 less than 0.05.

# $H_{03}$ : There is no significant effect on average payment period and financial performance

The null was thus rejected based on the fact that t statistics 5.529 has a p value of 0.00 which is less than 0.05.

# $H_{02}$ : There is no significant effect on accounts receivable turnover and financial performance

The null hypothesis was not rejected because t statistics 2.124 has a p value of 0.035 which is less than 0.05.

# $H_{01}$ : There is no significant effect on average collection period and financial performance

The null hypothesis was rejected based on the fact that t statistics 1.664 has a p value 0.001 which is higher than 0.05.

**Table 3: Accounts Receivables and Financial Performance** 

<b>Accounts Receivables</b>	Financial Performance
Pearson Correlation	0.812
Sig. (2-tailed)	0.001
N	15

The Pearson coefficient results in Table 3 show a value of 0.812 and p-value of 0.001 indicating a strong, significant as well as a positive association between accounts receivable management and financial performance of Kericho Water and Sanitation Company. Therefore based on the study's findings the study rejects the null hypotheses and accepts the alternatives that there is a significant association between accounts receivables and financial performance of Kericho Water and Sanitation Company.

#### **CONCLUSIONS**

The objective of this study was to determine the effect of accounts receivable management on financial performance of Kericho Water and Sanitation Company. Descriptive and inferential statistics were used for data analysis over the time period of 2012 to 2016. The study established that inventory turnover had negative relationship with return on equity implying that firms can increase their financial performance by reducing inventory in days. Average collection period and size of the region was established to be statistically significant and had positive relationship with return on equity, indicating that if time period of debtor's payment is increased then overall financial performance of Kericho Water and Sanitation Company, also improves.

# RECOMMENDATIONS

The study recommended that Kericho Water and Sanitation Company should increase its average collection period, inventory turnover periods and accounts receivable turnover in order to improve their financial performance. To improve their financial performance there is need to increase the leverage ratios currently present. Higher leverages will lead to higher

financial performance. This can be improved by increasing the debt levels. The study also recommends that proper inventory management system be implemented in the organization to avoid overstocking and lead to efficient outcome of investment, and cultivate better relationship with suppliers who grant long credit time period as well as those allowing short payment periods.

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