INTERNATIONAL JOURNAL OF SOCIAL Sciences and Information Technology
ISSN 2412-0294 www.ijssit.com

http://www.ijssit.com

INFLUENCE OF RECEIVABLES MANAGEMENT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL AND SERVICES FIRMS REGISTERED AT THE NAIROBI STOCK EXCHANGE IN KENYA

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Abstract: *This study investigates the impact of receivables management on the financial performance of commercial and service firms listed on the Nairobi Securities Exchange (NSE) in Kenya. Recognizing accounts receivable as a critical component of working capital, the research emphasizes the importance of efficient receivables management in enhancing liquidity, profitability, and overall financial stability. Utilizing a quantitative approach, the study analyzed financial data from 10 firms over five years (2016-2020) to assess the relationship between receivables management and financial performance, measured by Return on Capital Employed (ROCE). The results reveal a significant positive correlation between receivables management and financial performance, with an R-squared value indicating that 21.4% of the variance in financial performance is attributable to receivables management. The findings suggest that improved receivables management practices can lead to better financial outcomes for firms, thereby underscoring the need for effective credit policies and timely collection strategies. The study concludes that receivables management plays a vital role in the financial success of firms within the commercial and services sector in Kenya, with implications for strategic financial planning and operational efficiency.*

Keywords: *accounts receivables, commercial and services firms, financial performance, working capital management*

1. INTRODUCTION

Firms that offer services or the goods merchandise firms may sell on credit and cash basis in order to increase their revenue hence profitability. When they sell on credit terms this leads to debtors or accounts receivables. It is important for firms to manage their accounts receivables well since if they are not properly management it leads to bad and doubtful debts which can influence the financial position of the organization. Account receivable a major component of working capital and control of accounts receivables is important to ensure that the credit sales do not result to bad debts written off which is an operating expense in the statement of financial performance.

To determine a customer's creditworthiness and to ensure timely credit follow-up, accounts receivable management is a delicate process that demands the full attention of financial managers. To declare operational profitability, a company must have well-managed accounts receivable. Efficient management of accounts

ISSN 2412-0294
Vol X Issue VII, August 2024

receivables requires that a firm will have an efficient credit policy that will be able to determine the collection of money from credit customers and also an elaborate procedure of determining the credit worthiness of the customers. Pandey (2015) identifies the five Cs to credit worthiness which is the parameters that are supposed to be used by finance managers when as setting standards of in a firm. The five 5 C's model is based on the character capacity, capital, collateral, and conditions of the credit customers.

It is the capacity to run business operations efficiently and be able to survive in the marketplace by analyzing the firms' threats, weaknesses, strength and opportunities. It is a measure of the profitability of an organization's activities expressed in monetary terms. The outcomes can be analyzed further into net profit margin, gross profit markup, return on invested capital, and return on investment among many others depending on the most ideal measure based on the problem under study (Kassim, 2011). Profitability is a specific tool that provides information on the efficiency of the company and it is in line with the financial goal of profit maximization.

One measure of a firm's profitability is its return on invested capital (ROIC), also known as return on invested capital (ROCE). ROIC indicates how much profit a company generates relative to the capital it invests. To calculate ROCE, divide earnings before interest and taxes (EBITDA) by total capital employed. Higher ROCE values indicate more profitable operations and potentially stronger growth prospects. Lower ratios may signify underperformance or inefficiencies within the organization. Monitoring ROCE trends allows the researcher to gauge changes in a company's profitability profile and make informed investment recommendations.

Nairobi Securities Exchange (NSE) is the sole stock market firm in the Republic of Kenya, offering a computerized system for the listing and exchange of several assets. Since its establishment, the NSE has continuously offered a well-monitored and excellent system for the exchange of securities. Nairobi Securities Exchange is the platform preferred by Kenyan and international investors seeking to get featured in the East Africa capital markets. It is because of its publicity and serves as the second self-listed Securities Exchange in Africa (NSE, 2017).

Based on the data provided by the NSE report (2021), eleven companies were listed under the category of commercial and services. These companies include Express Limited, Sameer Africa PLC, Kenya Airways Ltd, Uchumi Supermarket, TPS Eastern Africa (Serena) Ltd, Nation Media Group, Scan Group Ltd, Longhorn Publishers Ltd, Deacons (East Africa) Plc, Standard Group Ltd. However, Nairobi Business Ventures Limited has been the latest listing under this category of commercial and services firms.

These firms provide services to Kenyans and contribute immensely to the Gross Domestic Product of Kenya and therefore they attract attention to the public and academic researchers. The commercial and services industry plays an important part in enhancing economic development and competitiveness in Kenyan economy. However, the industry has been experiencing profitability constraints due to internal and external factors. The listed organizations on NSE are leaders of various sectors. According to the NSE Report of 2017/2018, two-thirds of companies that are active at the NSE reported losses or reduced earnings in the 2017/2018 financial year. From the 64 firms that are listed at the NSE, 15 of them reported losses while 25 of the companies which translate to around 39 percent, recorded falling after-tax profits. The commercial and services sector was the worst hit, with five companies in the sector reporting losses, while two reported reduced profits (NSE Report, 2018). This situation has highly affected the operations of Kenya Airways and Uchumi Supermarkets with the latter closing several of its branches in Kenya (Mbai, 2018).

There are different firms that are listed at the NSE under the commercial and services segment that includes Express limited, Sameer Africa PLC, Kenya Airways Ltd, Uchumi supermarket, TPS Eastern Africa (Serena) Ltd, Nation Media Group, Scan group Ltd, Longhorn Publishers Ltd, Deacons (East Africa) Plc, Standard Group Ltd and Nairobi Business Ventures Limited. The commercial and services sector plays an important part in enhancing economic growth and competitiveness in Kenya. However, the industry has been experiencing profitability constraints due to internal and external factors. (NSE Report, 2021).

Problem statement

The financial performance of firms is a critical area of study, particularly in emerging markets like Kenya, where the dynamics of business operations are influenced by various factors including receivables management. Receivables management, which encompasses the strategies and processes employed to manage accounts receivable, plays a significant role in determining a firm's liquidity and overall financial health. This is particularly relevant for commercial and services firms listed on the Nairobi Securities Exchange (NSE), where efficient management of receivables can lead to improved cash flow and profitability.

Research indicates that effective working capital management, which includes receivables management, has a direct impact on the financial performance of firms. For instance, Nyangweso (2019) found that components such as the average collection period significantly influence the financial outcomes of listed firms in Kenya. Similarly, Nyamao (2012) demonstrated a positive correlation between the efficiency of receivables management and the financial performance of small-scale enterprises, suggesting that improved practices in managing receivables can enhance profitability. These findings underscore the importance of receivables management as a determinant of financial performance in the commercial sector.

Moreover, the broader implications of working capital management practices, including receivables management, extend to the strategic positioning of firms in competitive markets. The ability to efficiently convert receivables into cash not only enhances liquidity but also provides firms with the necessary resources to invest in growth opportunities. This is particularly crucial in the context of the NSE, where firms face competitive pressures and the need for sustainable financial practices. The study by Sharma & Kumar (2010) supports the notion that effective working capital management is essential for enhancing firm profitability, although it primarily focuses on Indian firms, indicating that findings may not be directly applicable to the Kenyan context.

The influence of receivables management on the financial performance of commercial and services firms registered at the NSE in Kenya is a multifaceted issue that warrants comprehensive investigation. The existing literature provides a strong foundation for understanding the critical role of receivables management in enhancing financial performance, emphasizing the need for firms to prioritize effective management practices to navigate the challenges of the Kenyan market successfully.

Research objectives

The general objective of this study was to examine the financial performance of commercial and service firms listed on the Nairobi Securities Exchange (NSE) in Kenya, specifically to determine how service providers and commercial enterprises listed on Kenya's Nairobi Securities Exchange perform financially after implementing a receivables management strategy.

Research hypothesis

The predicted relationship between the variables was portrayed in;

Ho1: Listed service providers and commercial enterprises in Kenya that are members of the Securities Exchange do not have a material impact on their bottom lines from receivables management.

2. RESEARCH METHODOLOGY

This research investigated the overall profitability of the 11-quoted commercial and services organizations registered at the NSE, Kenya. The study's scope was narrow; it primarily looked at the effects of working capital management on financial performance as measured by return on invested capital, specifically, accounts receivable. The study employed financial performance as the dependent variable and accounts receivable as independent variables. The research data set was entirely quantitative. The census approach was utilized to pick all 10 enterprises within the sector due to the small population size. To make the study a success, it analyzed the respective financial reports of selected firms for the study covering the last five years; from 2016 to 2020. The commercial and service companies listed on the NSE have experienced poor financial performances throughout this period. Secondary data derived solely from the organizations' audited financial accounts was used in this research.

The study employed multiple regression and linear mixed models to analyze the longitudinal panel data, as this type of data involves repeated measurements on the same unit across time.

Financial performance = f (receivables management) was measured in terms return to capital employed, ROCE = Earnings before Interest and Tax/Capital Employed.

$Y = \alpha_{0^1} + \beta_1 x_1 + \varepsilon_1$ *(Eqn 1)*

Where *Y is financial performance*

α_{0^1}, β_1 are coefficients

x_1 = Aggregate mean of receivables management

ε_1 = Error term

3. DATA ANALYSIS

Descriptive statistics

This section included the arithmetic mean and standard deviation as measures of descriptive statistics as indicated in table 1;

Table 1: Descriptive statistics

	Mean	Std. Deviation	N
ROCE	.1423	.6859	8
Receivable management	5.0860	5.0676	8

Table shows the descriptive statistics for commercial and services firms listed at the Nairobi Stock Exchange in Kenya. The results indicate a certain level of variance in the return on invested capital among the various commercial and services enterprises in Kenya, with a standard deviation of 0.685970. The overall observation rate was eight, indicating an 80% response rate from the commercial and services sectors. The management of receivables differs significantly between commercial and service organizations, with a standard deviation of 5.0676709. Therefore, there is appropriate distribution of the data for each of the variables under common central tendency. The lack of vast variation of the data imply that it is valuable for the study.

Diagnostic Test

The study used collinearity tests to determine the relevance of the model. Collinearity refers to two or more features of a dataset that have a strong linear relationship with each other. In other words, if one feature increases, the other tends to increase as well. Collinearity measures this association between variables using metrics like variance inflation factor (VIF) and tolerance value. Higher VIF values suggest higher degrees of collinearity between variables. Collinearity diagnostics are essential because multi collinearity causes problems in regression models due to their impact on parameter estimates and standard errors. When multiple predictor variables are highly correlated with each other, it creates challenges for estimating unique coefficients accurately. As a result, collinearity diagnostics help identify and address these issues before proceeding with further analysis. By identifying and handling cases of severe multi collinearity, researchers can improve the quality of their results and reduce the likelihood of obtaining unreliable findings.

Table 2: Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	(Constant)	Receivable management
1	1	2.879	1.000	.02	.02
	2	1.287	1.496	.01	.04
	3	.587	2.214	.00	.28
	4	.204	3.759	.62	.37
	5	.403	8.166	.34	.28

a. Dependent Variable: ROCE

In dimension 1, the eigenvalue is relatively high, indicating that this dimension explains a significant amount of variance. The condition index of 1.000 suggests no multicollinearity issues, as it is well below the threshold of 30. Dimension 2, the eigenvalue is still reasonable, and the condition index remains low, indicating that multicollinearity is not a concern in this model. The eigenvalue in dimension 3 has decreased, but the condition index is still low, suggesting that multicollinearity is not problematic at this stage. The eigenvalue in dimension 4 is significantly lower, but the condition index remains below 30, indicating that while the dimension explains less variance, multicollinearity is still not a major concern. Lastly, the eigenvalue has increased slightly, but the condition index is still well below the critical threshold, suggesting that multicollinearity is not an issue.

Overall, the collinearity diagnostics presented in Table 2 indicate that there are no significant multicollinearity issues among the variables in the model assessing the influence of receivables management on financial performance. The condition indices for all models are below the critical threshold of 30, suggesting that the

regression coefficients can be estimated reliably without concern for inflated standard errors due to multicollinearity.

Inferential Statistics

Table 3: Karl Pearson coefficient of Correlation

		ROCE	Receivable management
Pearson Correlation	ROCE	1.000	.320
	Receivable management	.320	1.000
Sig. (1-tailed)	ROCE	.	.019
	Receivable management	.001	.
N	ROCE	8	8
	Receivable management	8	8

The Pearson correlation coefficient between receivable management and financial performance is 0.320. The Significance (1-tailed) between the financial performance and the receivable management is 0.01, below the alpha level of 0.05. This scenario strongly correlates with financial performance and the management of receivables.

Regression Analysis

Table 1: Model Summary for receivable management and financial performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	Df2	Sig. F Change
1	.320[a]	.102	0.214	.701851460680187	.103	.687	1	6	0.01

a. Predictors: (Constant), Receivable management

According to the model summary, the correlation coefficient, R, was 0.32, demonstrating a robust positive link between receivable management and financial performance. The adjusted R squared value indicates that the independent variables can explain 21.4% of the variance in the dependent variable. Financial performance accounts for around 21.4%. Receivables management accounts for 21.4% of the financial performance of commercial and services enterprises in Kenya.

Table 5: ANOVA Analysis for Receivable management and financial performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.338	1	.338	.687	.01[b]
	Residual	2.956	6	.493		
	Total	3.294	7			

a. Variable which is Dependent: ROCE
b. Independent Predictor: management of Receivables

ISSN 2412-0294
Vol X Issue VII, August 2024

The one-way Analysis of Variance test was appropriate for evaluating the influence of receivables management on the financial performance of commercial and services firms in Kenya. The results demonstrate a significant impact of managing receivables on financial performance, with a statistically significant p-value of less than 0.05. The observed effect was consistent in three situations, as indicated by the F statistic of 0.687 and a p-value of 0.01. These findings suggest that effective receivables management significantly influences the financial performance of commercial and services firms in Kenya. Therefore, changes in receivable management result in corresponding adjustments in the financial performance of commercial and services firms in Kenya.

Table 6: Correlation coefficients for receivable management and financial performance

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.363	.364		.997	.357
	Receivable management	-.043	.052	-.320	-.829	.001

The coefficient for the financial performance of commercial and service firms is -0.043, as shown in the table. An incremental improvement in receivable management will result in a substantial 0.0363 boost in financial performance. The p-value for the receivables management is 0.001<0.05. It means receivables management has an enormous impact on the financial success of commercial and services organizations in Kenya.

Receivable management regression equation

Y= $B_{0^1} + B_1 x_1 + \varepsilon_1$

Y= $0.363 + -0.43_{x1} + 0.364$

Where; Y is the financial performance

B_{0^1}, B_1 are coefficients

x_1= Receivables management

ε_1= Error term

4. SUMMARY AND CONCLUSION

The findings showed a positive correlation between receivables management on the financial performance of services and commercial firms registered at the NSE, Kenya. Therefore, the study hypothesis **H_{01}:** There is no significant influence of receivables management on the financial performance of commercial and services firms registered at the Nairobi Securities Exchange in Kenya is not accepted.

According to the research findings, an upsurge in receivables leads to a corresponding improvement in the performance of commercial and service organizations. A reduction in receivables, therefore, leads to a decline in the performance of commercial and service organizations. The same principle applies to accounts payable since the greater the company's ability to settle its obligations, the more prosperous commercial and service organizations become.

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The study reveals a direct association between the management of receivables and the performance of commercial and service organizations. By performing the regression analysis, the study finds out that there is a 0.32 correlation coefficient, R, and a 0.102 R squared, which translates to receivable management having a 10.2% effect on the performance of these commercial and service firms. A significance test is also measured with a 95% confidence level, and the p-value of receivable management was 0.01, which is lower than 0.05. It demonstrates that the management of receivables substantially impacts the financial performance of companies. It is important to highlight from the statistics that an increase of one unit in receivable management leads to a 0.363 increase in the financial performance of commercial and service organizations.

Where accounts receivable is high, the debtors pay in due time and reduce the risks of writing off goods sold. It helps investors gain insight into a firm's financial stability and liquidity, enabling them to make better investment decisions. The study concludes that accounts receivable positively affect the return on invested capital of quoted services companies and commercial firms registered at the NSE in Kenya.

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