JOURNAL OF GLOBAL ACCOUNTING
9 (4) December, 2023.
ISSN: 1118 – 6828
https://journals.unizik.edu.ng/joga

DEBTORS MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED PHARMACEUTICAL COMPANIES IN NIGERIA

Paper Type: *Original Research Paper.*
Correspondence: *frankakpoazaa@gmail.com*
Key words: *Average Collection Period, Debtors Management; Debtor Turnover, Financial Performance;*

CITATION: Igbojindu, F.O. & Okafor, G.O. (2023). Debtors management and financial performance of listed pharmaceutical companies in Nigeria, *Journal of Global Accounting*, 9(4), 302 – 313.

Available:https://journals.unizik.edu.ng/joga

Frank O. Igbojindu[1] Gloria O. Okafor[2]

[1]Research Scholar, [2]Professor
Department of Accountancy, Nnamdi Azikiwe University, Awka, Nigeria
1. Email: frankakpoazaa@gmail.com
2. Email: go.okafor@unizik.edu.ng

ABSTRACT:

The study examined the effect of debtors management on financial performance of listed pharmaceutical companies in Nigeria. The ex post facto research design was adopted. The population of the study comprised of seven (7) listed pharmaceutical companies on the Nigeria Exchange Group in 2023. The entire seven (7) listed pharmaceutical companies was chosen as the sample size using the census approach. Data was obtained from the financial report of selected listed pharmaceutical companies on the Nigerian Exchange Group for the period of 2015-2019. The data collected was analysed using the Pearson correlation coefficient and multiple regression computed with the aid of Stata12 software. The study revealed that average collection period has a significant effect on net profit margin whereas debtor turnover does not have any significant effect on net profit margin of listed pharmaceutical companies in on the Nigerian Exchange Group. The study recommended that pharmaceutical companies should reduce average collection period in order to improve their financial performance. Finally, Pharmaceutical companies should maintain their debtor turnover to have a good net profit margin.

1. INTRODUCTION

The performance of firm is aimed at meeting the interest of various stakeholders through effective and efficient operating activities such as increase turnover and efficient noncurrent asset utilization. The firm's level of goal achievement in terms of shareholders wealth maximization is well articulated by the information presented in the financial statements (Chimaleni et al., 2015). Financial performance will be positive if all things and strategies are well in the organization, and it would be negative if things are not working in favour of the company (Bhasin, 2020). Bhasin, (2020) further asserts that long term financial performance is essential to understand the future of

the company, while short term financials is crucial to understand if an implemented policy is working or not.

Financial performance is an essential measure to access the wellbeing of a company. This measures the ability of the company to utilize its resources efficiently and effectively to achieve the desired result. In the view of Kenton (2021), financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues". Turyahebya (2018) defines financial performance as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats. For a firm to achieve significant improvement in its financial performance indicators, there must be efficient debtor's management which entail proper management of their receivables. Poor management of receivables will definitely result into bad debts which lowers the business financial performance (Oyodonghan & Bingilar., 2014). Debtors management is a strategy that involves the process of designing and monitoring the policies that governs how a company extents credit to its customer base. The idea behind this process is to minimize the amount of bad debt that the company will eventually incur due to customers failing to honour their commitments to repay the total amount of the credit purchase (Iyekoroghe, 2020). The primary goal of debtors management is to optimize cash flow by converting credit sales into cash as quickly as possible while minimizing the risk of non-payment or late payment (Raheman & Nasr, 2017).

Pharmaceuticals companies in Nigeria are faced with a lot of problem when management its debtors. Offering extended credit terms to customers can result in the delayed payments and negatively impact the company's cash flow. In the pharmaceutical industry, there are stringent regulations that companies must comply with. Managing debtors while adhering to these regulations can be complex. Also, inefficient debtor management can lead to a lengthy receivables turnover cycle, impacting the company's liquidity and ability to invest I research and development. To address these issues, pharmaceutical companies needs to oprerate a robust debtors management. Prior researches have been carried out on the relationship between debtors management and financial performance in various sectors like Manufacturing, construction, insurance and banking both Nigeria and abroad. Although many of scholars agree that effective debtors management influence firms financial performance. Contradictory results were found about the effect of debtors management on financial performance. Some researchers found a positive relationship (Dan 2020; Wasike, 2019; Cheptum, 2019) while others found out a negative relationship (Dirie & Ayuma, 2018; Otieno et al., 2016; Kevin & Omagwa, 2017). Therefore, this present research aims to fill this gap through an empirical investigation into the effect of debtors management on financial performance of listed pharmaceutical companies in Nigeria.

1.1 Objectives of the Study

The broad aim of this study is to determine the effect of debtors' management on financial performance of listed pharmaceutical companies in Nigeria. Specifically, the study intends to:

1. ascertain the influence of average collection period on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.
2. ascertain the influence of debtor turnover on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.

1.2 Research Hypotheses

The following research hypotheses were formulated and tested in this study.

$Ho_{1:}$ Average collection period does not have any significant influence on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.

$Ho_{2:}$ Debtor turnover does not have any significant influence on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.

2. LITERATURE REVIEW

2.1 Conceptual review

2.1.1 Debtors Management

Debtors management also known as credit management refers to all the activities that a firm adopts when it comes to delivering and collection of payments upon issuing credit (Murkhejee, 2014). Debtor management is a strategy that involves the process of designing and monitoring the policies that govern how a company extends credit to its customer base. The idea behind this process is to minimize the amount of bad debt that the company will eventually incur due to customers failing to honour their commitments to repay the total amount of the credit purchases. Typically, the process of debtor management begins with evaluating potential customers in terms of credit worthiness, identifying a credit limit that carries a level of risk that the company is willing to assume, then monitoring how well the customer makes use of that available credit, including making regular payments within the terms and provisions associated with the credit account (Tatum, 2022). Debtor management is central to the effective cash flow of business. Without an effective debtor control system, the finance of a business will be vulnerable.

Debtor management is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business (Bhunia, 2017). Dilemma in debtor management is to achieve desired trade-off between credit and profitability (Raheman & Nasr, 2017). Debtor management is a prerequisite for any entity dealing with credit transactions since it is impossible to have a zero credit or default risk.

2.1.2 Average collection Period

Accounts receivable is the money owed to the company as a result of having sold its products to customers on credit (Kontus, 2013). Accounts receivable management includes establishing a credit and collection policy. Credit policy consists of four variables namely credit period, discount given for early payment, credit standards and collection policy. The three primary issues in accounts receivable management are to whom credit should be extended, the terms of the credit and the procedure that should be used to collect the money (Kontus, 2013).

The average collection period also referred to as debtor days or days sales outstanding (DSO), measures the number of days, weeks or months debts remain uncollected or unpaid. A higher ratio indicating longer collection period shows inefficient debtors/credit management, while a shorter or lower ratio is a sign of efficient debtor's management (Ogaluzor, 2022).

It is measured as

$$\text{Average Collection Period} = \frac{\text{Trade Receivables}}{\text{Annual Sales}} * 365$$

2.1.3 Debtor Turnover

Debtor turnover also known as account receivable turnover, measures the frequency at which debtors are turned over into cash. A high debtor's turnover ratio is an indication of good debtor's management while a lower ratio portrays inefficient debtor's management (Ogaluzor, 2022). It measures how many times in a given time period (usually a month, quarter, or year) a company collects its average accounts receivable. One of the most commonly used metrics for determining the operational efficiency and overall effectiveness of your company's accounts receivable performance is the accounts receivable turnover ratio. Accounts receivable turnover is the period when receivables are tied from the occurrence of receivables until they can be collected in cash and finally can be bought back into inventory and sold on credit to become receivables back (Harjito & Martono, 2011).

Debtor turnover is measured as

$$\text{Debtor Turnover} = \frac{\text{Annual Sales}}{\text{Trade Receivables}}$$

2.1.4 Financial Performance

Financial performance is viewed as the degree to which financial objectives being or has been accomplished and is an important aspect of finance risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Verma, 2021).

Financial performance predominantly shows the sector of a business outcome as well as results, showing the overall financial health condition of the business sector over a particular time period (Naz et al., 2016). They further asserted that it shows how well a firm utilizes her resources in minimizing the wealth and profitability of the shareholders. It measures a company's health condition financially over a given period (Matar & Eneizan, 2018; Naz et al., 2016) and shows the performance by the leadership (executive) of the organization (Matar & Eneizan, 2018). In this study net profit margin and return on asset will be used as a measure for financial performance.

2.2 Theoretical Review

2.2.1 Agency Theory

The proponents of the agency theory are Jensen and Meckling in 1976. This theory involves the principal (shareholder) and the agent (management). As opined by Jensen and Meckling (1976), an agency relationship occurs when the principal delivers decision-making authority to an agent to perform some services on the behalf of the principal. Shareholders (and debt holders) act as principals in seeking to obtain maximum utility from the actions of management (who serve as the agents). However, both parties in the relationship are utility maximises and it is reasonable to believe that the managers will not always act in the best interests of the shareholders but will pursue self-interest creating the agency problem. As a result of having conflicting aspirations, both shareholders and managers incur monitoring and bonding costs respectively, known as agency costs. This theory was corroborated by various researchers (Darussamin et al., 2018, Abata & Migiro 2016; Alotaibi, 2014, Walid & Ameur, 2013). This theory is relevant to this study because it highlighted the issue of agency cost and how best it can be address for enhanced financial performance.

2.3 Empirical Review

Wasike (2019) examined the impact of accounts receivable on Nzoia Water Services Company's financial performance. Secondary data were obtained from Kenya national audit office and Nzoia Water Services Company published financial statements for a period of 2012 to 2016. The study employed explanatory research design and data collected were analysed using regression and correlation analysis. The results showed that NZOWASCO, financial performance variable Return on Equity (ROE) was significantly affected with average collection period with negative correlation-0.232 and positive correlation on accounts receivable turnover ratio of 0.401 and Size of the region with positive correlation of 0.911. The study recommended that organization should reduce average collection period, accounts receivable turnover in order to improve their financial performance.

Cheptum (2019) examined the effect of credit collection practices on financial performance of manufacturing firms in Kenya. Descriptive and causal research designs was adopted for the study. The accessible population for the study was 558 registered manufacturing firms from which a sample size of 233 manufacturing firms was arrived at using Yamane's formula. Both descriptive and inferential statistics were utilized in data analysis. Multivariate analysis was also carried using the multiple regression analysis. The study revealed that the credit collection practices have a significant positive effect on the financial performance of the manufacturing firms.

Otieno et al. (2016) examined the relationship between debtor's risk management and financial performance of microfinance banks in Kenya. The population comprised of 12 licensed microfinance banks. Pearson's correlation coefficient was used in data analysis. The results of the study revealed that debtors risk management has a negative effect on return on assets.

Kevin and Omagwa (2017) examined the effect of debtor's management on the financial performance of selected microfinance institutions (MFIs) at Nairobi County in Kenya. Primary data was collected by the aid of self-administered questionnaires and analysed using multiple regression analysis. Both descriptive statistics and inferential statistics were determined. The nine licensed MFIs in Nairobi City, Kenya by the CBK as at 31st December 2014 were the target population of the Study. The study revealed that debt collection policy, legal framework and internal control systems are statistically significant in influencing financial performance of selected MFIs at Nairobi City in Kenya. The study further established client appraisal had no statistically significant effect on financial performance of MFIs at Nairobi city in Kenya. The study found out that internal control systems had a significant effect on financial performance of MFIs in Nairobi city Kenya.

Dan (2020) examines the effect of account receivable period on Corporate Performance of quoted manufacturing firms in Nigeria for the period of 2010 to 2019. Secondary data were extracted from published financial reports of the sampled companies and ordinary least square (OLS) regression technique was used as econometric tool employed in testing the hypotheses. the study revealed that there is a positive effect between account receivable period and return on asset of listed manufacturing firms in Nigeria.

Dirie and Ayuma (2018) examined the effect of accounts receivables management on financial performance in small and medium firms in Mogadishu-Somalia. Survey research design comprising of quantitative for data collection approach was adopted for this study. The target populations had 102 SMEs from three sectors. The study applied both probability and non-

probability sampling procedures to obtained a sample of 81 SMEs required for the study based on Slovene formula. Inferential statistics such as Pearson correlation coefficient and coefficient correlation were used to analyse quantitative data and descriptive statistics are employed for variables of the study. The study revealed a strong negative and highly significant correlation between debt management and financial performance.

Iyekoroghe (2020) examined the impact of credit management of the financial performance of quoted manufacturing firms in Nigeria for the period of five years; from 2015 – 2019 and the basis of the study is to determine if credit management, credit policy, credit granting policy, have impact on financial performance of manufacturing firm. Measured by Return on Asset (ROA) and Return on Equity (ROE), the data utilized, which are secondary data in nature. The data collected was tabulated and analysed using the statistical package for the social science software package (SPSS) 21 these includes mean and standard deviation, descriptive statistic was used to analyze the data. The finding revealed that the measure of financial performance of manufacturing companies ROA and ROE showed that they are affected negatively by the measure of credit management.

Wafula et al. (2019) examined the effect of the average collection period and financial performance of Nzoia water services company. Secondary data spanning from 2012 to 2016 from Kenya national audit office and Nzoia Water Services Company published financial statements were used. The study employed explanatory research design and data was collected from secondary data and analysed using regression and correlation analysis and found the relationship between financial performance. From the findings the mean average collection period was 309.90 days, accounts receivable turnover had a mean of 1.1980, size of the region (7.5870). The results showed that NZOWASCO, financial performance variable Return on Equity (ROE) was significantly affected with average collection period with negative correlation-0.232. The study recommended that the organization reduce average collection period in order to improve their financial performance of the organizations.

Waweru (2011) carried out a study on the relationship between receivables management and the value of companies quoted at the NSE. The study used secondary data obtained from annual reports and audited financial statements of companies listed on the NSE. A sample of 22 companies listed on the NSE for a period of seven years from 2003 to 2009 was studied. The 27 average stock prices were used to measure the value of the firm. The regression models indicated that there was some relationship between receivables management and the firm's value while the result of the Pearson correlation indicated a negative relationship between average cash collection period, inventory turnover in days, cash conversion cycle and the value of the firm.

Manyo et al (2013) investigated the effects of the number of days accounts receivable on the return on assets of some selected Nigerian firms between 2000 and 2009 by use of cross sectional and regression analysis. It was found that the days accounts receivable had a negative relationship with the profitability which was measured by the return on assets. The conclusion was that profitability increased with decrease in days accounts receivable.

3. MATERIAL AND METHOD

The research design adopted for this study was the ex post facto research design. The population of this study comprised of seven (7) listed pharmaceutical companies on the Nigeria Exchange Group in 2023. The entire seven (7) listed pharmaceutical companies was chosen as the sample size using the census approach. Data collection for this study was the financial report of selected listed pharmaceutical companies as obtained from the Nigerian Exchange Group for the period of 2015-2019. The data collected was analysed using the Pearson correlation coefficient and multiple regression computed with the aid of Stata12 software.

FP= f (ACP + DET + it) …… (3.1)

Therefore, the model appears thus;

$NPM_{it} = \beta_0 + \beta_1 ACP_{it} + \beta_2 DET_{it} + \beta_3 FZE_{it} + \varepsilon_{it}$ ……. (3.2)

NPM= Net profit Margin

FP= Financial Performance

ACP= Average Collection Period

DET = Debtor Turnover

FZE= Firm Size

$_{it}$ = Regression Constant

$\beta_0, \mu_0, Z_0, a_{0=}$ Regression Coefficient

ε = Stochastic term

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
acp	34	309.4118	247.6972	98	1250
det	34	1.764706	.9865404	0	4
npm	34	-18.32	42.61028	-137.55	44.49
fze	34	15.47059	1.30814	13	17

Source: Output from STATA version 12

JOURNAL OF GLOBAL ACCOUNTING
9 (4) December, 2023.
ISSN: 1118 – 6828
https://journals.unizik.edu.ng/joga

4.2 Test of Hypotheses

4.2.1 Hypothesis One

$Ho_{1:}$ Average collection period does not have any significant influence on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.

Table 2: Regression on the effect of average collection period on net profit margin

Source	SS	df	MS	Number of obs =	34
Model	43472.7725	3	14490.9242	F(3, 30) =	26.44
Residual	16443.204	30	548.1068	Prob > F =	0.0000
				R-squared =	0.7256
Total	59915.9765	33	1815.63565	Adj R-squared =	0.6981
				Root MSE =	23.412

npm	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
acp	-.0846497	.030535	-2.77	0.009	-.1470106	-.0222888
det	4.000591	6.566668	0.61	0.547	-9.410333	17.41152
fze	13.43768	3.970456	3.38	0.002	5.32893	21.54644
_cons	-207.0771	73.31197	-2.82	0.008	-356.8001	-57.3541

Source: Output from STATA version 12

Table 2 above shows the regression result on average collection period on net profit margin. The F statistics and its probability shows that the model is perfectly fit at F(3, 30) = 26.44, Prob>*F* = 0.0000 and the independent variables in the model explained 73% of the variation in net profit margin. Also, the table revealed the existence of a negative but significant influence on average collection period on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group (p-value= 0.009). It means that a 1% increase in average collection period will bring about a 0.085% decrease in net profit margin all other variables held constant. Since the p-value of the independent variable is less than 0.05, we therefore reject the null hypothesis and concluded that "Average collection period have a significant influence on net profit margin of listed pharmaceutical companies in on the Nigerian Exchange Group.

4.2.2 Hypothesis Two

$Ho_{2:}$ Debtor turnover does not have any significant influence on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group.

JOURNAL OF GLOBAL ACCOUNTING
9 (4) December, 2023.
ISSN: 1118 – 6828
https://journals.unizik.edu.ng/joga

Table 3: Regression on the effect of debtor turnover on net profit margin

Source	SS	df	MS	Number of obs =	34
				F(3, 30) =	26.44
Model	43472.7725	3	14490.9242	Prob > F =	0.0000
Residual	16443.204	30	548.1068	R-squared =	0.7256
				Adj R-squared =	0.6981
Total	59915.9765	33	1815.63565	Root MSE =	23.412

npm	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
acp	-.0846497	.030535	-2.77	0.009	-.1470106	-.0222888
det	4.000591	6.566668	0.61	0.547	-9.410333	17.41152
fze	13.43768	3.970456	3.38	0.002	5.32893	21.54644
_cons	-207.0771	73.31197	-2.82	0.008	-356.8001	-57.3541

Source: Output from STATA version 12

Table 3 above shows the regression result on debtor turnover on net profit margin. The F statistics and its probability shows that the model is perfectly fit at F(3, 30) = 26.44, Prob>*F* = 0.0000 and the independent variables in the model explained 73% of the variation in net profit margin. Also, the table revealed the existence of a positive but insignificant influence of debtor turnover on net profit margin of listed pharmaceutical companies on the Nigerian Exchange Group (p-value= 0.547). It means that a 1% increase in debtor turnover will bring about a 4.0% increase in net profit margin all other variables held constant. Since the p-value of the independent variable is greater than 0.05, we therefore accept the null hypothesis and concluded that "Debtor turnover does not have any significant inluence on net profit margin of listed pharmaceutical companies in on the Nigerian Exchange Group.

CONCLUSION AND RECOMMENDATIONS

The study explored the effect of debtors' management on financial performance of listed pharmaceutical companies in Nigeria. The study concluded that average collection period has a significant effect on net profit margin whereas debtor turnover does not have any significant effect on net profit margin of listed pharmaceutical companies in on the Nigerian Exchange Group. The study therefore, makes the following recommendations;

1. Pharmaceutical companies should reduce average collection period in order to improve their financial performance.
2. Pharmaceutical companies should maintain their debtor turnover to have a good net profit margin.

REFERENCES

Alotaibi, B. M. N. A (2014). Corporate governance and voluntary disclosure in Kuwait. Digitized version of a dissertation submitted to the University of Bedfordshire.

Bhasin, H. (2020). Financial performance definition, analysis & measures explained. https://www.marketing91.com/financial-performance

Bhunia, A. (2017). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry, *International Journal of Research in Commerce and Management, 1*(5), 21-33.

Cheptum, F. J. (2019). The effect of credit collection practices on financial performance of manufacturing firms in Kenya. *International Journal of Finance and Accounting, 4*(1), 31– 55.

Chimaleni, J., Muganda, M., & Musiega, D. (2015). Relationship between sources of business financing and financial performance of small and medium enterprises in lurambi sub-County. *International Journal of Business and Management Invention, 4*(7), 35-45.

Dan, P. B. S. (2020). Account receivable management and corporate performances: An empirical evidence from quoted manufacturing companies in Nigeria. *International Network Organization for Scientific Research, 6*(1), 116-129.

Darussamin, A. M., Ali, M. M., Ghani, E. K. & Gunardi, A. (2018). Effect of corporate governance mechanisms on level of risk disclosure: evidence from Malaysian government linked companies. *Journal of Management Information and Decision Sciences, 21*(1), 1-19.

Dirie, A. O., & Ayuma, C. (2018). Effect of accounts receivables management on financial performance in small and medium firms in Mogadishu-Somalia. *International Journal of Management and Commerce Innovations, 6*(1), 378-383.

Harjito, A., & Martono, I. (2011). *Manajemen Keuangan*, Edisi kedu. Yogyakarta: Ekonisia.

Iyekoroghe, A. G. (2020). Impact of credit management of the financial performance of quoted manufacturing firms in Nigeria. *Bingham University Journal of Accounting and Business (BUJAB),* 190-202.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Kenton, W., Boyle, M. J., & Kazel, M. (2022). Average collection period formula, how it works, example. https://www.investopedia.com/terms/a/average_collection_period.asp

Kevin, M. G., & Omagwa, J. (2017). Debtors management and financial performance of selected microfinance institutions at Nairobi City county in Kenya**.** *International Journal of Scientific and Research Publications, 7*(12), 464-485.

Manyo (2013). The effect of accounts receivable on return on assets of selected Nigerian firms. *International Journal of Current Research, 5*(12), 3767-3772.

Matar, A., & Eneizan, B. M. (2018). Determinants of financial performance in the industrial firms: Evidence from Jordan. *Asian Journal of Agricultural Extension, Economics and Sociology*, 22(1), 1-10.

Naz, F., Ijaz, F., & Naqvi, F. (2016). Financial performance of firms: Evidence from Pakistan cement industry. *Journal of Teaching and Education*, *5*(1), 81-94.

Ogaluzor, O. I. (2022). *Advanced financial accounting.* Branded favour Media.

Otieno, S., Nyagol, M., & Onditi, A. (2016). Relationship between credit risk management and financial performance. Empirical evidence from microfinance banks in Kenya. *Research Journal of Finance and Accounting, 7*(6), 2222-2847.

Raheman, A. & Nasr, M. (2017). Working capital management and profitability: case of Pakistani firms, *International Review of Business Research Papers, 3*(1), 279- 300.

Sartono, A. (2010). *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE.

Tatum, M. (2022). What is debtor management? https://www.smartcapitalmind.com/what-is-debtor-management.htm

Turyahebya. A. (2018). Financial performance in the selected microfinance institutions in Uganda (unpublished master's thesis) Kampala International University, West campus.

Verma, E. (2021). Financial performance: Understanding the concepts and its areas. https://www.simplilearn.com/financial-performance-rar21-article

Wafula, W. M., Tibbs, C. Y., & Ondiek, A. B. (2019). Average collection period and financial performance of Nzoia water services company. *International Journal of Multidisciplinary and Current Research, 7,* 273-279.

Walid B., & Ameur B. (2013). Factors explaining corporate governance disclosure quality: Canadian evidence. https://www.researchgate.net/publication/228429839, 1-36.

Wasike, M. W. (2019). Accounts receivable management and the financial performance of Nzoia water service company limited, Kenya. (A Thesis, Masinde Muliro University of Science and Technology).