

Impact of Credit Management of the Financial Performance of Quoted Manufacturing Firms in Nigeria

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Abstract

This study examines 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 analyzed 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 reveals that the measure of financial performance of manufacturing companies ROA and ROE. For the time of the study showed that they are affected negatively by the measure of capital structure. The study therefore recommends that there is need for manufacturing companies to maintain adequate liquid assets, and eliminate bad debt losses and other associated costs of credit. Furthermore, manufacturing companies should intensify efforts to engage the services of factoring agents, as it will reduce the incidence of bad debts losses and other associated costs of credits.

Keywords: Credit management, Credit policy, Credit granting policy, Financial performance, Return on assets

INTRODUCTION

Credit management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. It is the process to ensure that customers will pay for the products delivered or the services rendered. According to John and Sollenberg (2017) credit management as procedures adopted by organization to ensure that they maintain an optimal level of credit and its effective management. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting. Frank (2016) views credit management as simply the means by which an entity manages its credit sales. It is a prerequisite for any entity dealing with credit transactions since it is impossible to have a zero credit or default risk. The higher the amount of accounts receivables and their age, the higher the finance costs incurred to maintain them. If these receivables are not collectible on time and urgent cash needs arise, a firm may result to borrowing and the opportunity cost is the interest expense paid. Myers and Brealey (2017) opined that credit management greatly influences the success or failure of commercial banks and other financial institutions. This is because the failure of deposit banks is influenced to a large extent by the quality of credit decisions and thus the quality of the risky assets. He further notes that, credit management provides a leading indicator of the quality of deposit banks credit portfolio. A key requirement for effective credit management is the ability to intelligently and efficiently manage customer credit lines. In order to minimize exposure to bad debt, over-reserving and bankruptcies, companies must have greater insight into customer financial strength, credit score history and changing payment patterns.

Credit management starts with the sale and does not stop until the full and final payment has been received. It is as important as part of the deal as closing the sale. In fact, a sale is technically not a sale until the money has been collected. It follows that principles of goods lending shall be concerned with ensuring, so far as possible that the borrower will be able to make scheduled payments with interest in full and within the required time period otherwise, the profit from an interest earned is reduced or even wiped out by the bad debt when the customer eventually defaults. Credit management is concerned primarily with managing debtors and financing debts. The objectives of credit management can be stated as safeguarding the companies' investments in debtors and optimizing operational cash flows. Policies and

procedures must be applied for granting credit to customers, collecting payment and limiting the risk of non-payments. According to the business dictionary financial performance involves measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firms return on investment, return on assets and value added. Stoner (2003) as cited in Turyahebya (2018), defines financial performance as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats. In agreement with this, Sollenberg and Anderson (2015) assert that, performance is measured by how efficient the enterprise is in use of resources in achieving its objectives. Credit management is the method by which you collect and control the payments from your customers. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting.

A proper credit management will lower the capital that is locked with the debtors, and also reduces the possibility of getting into bad debts. According to Edwards (2014), unless a seller has built into his selling price additional costs for late payment, or is successful in recovering those costs by way of interest charged, then any overdue account will affect his profit. In some competitive markets, companies can be tempted by the prospects of increased business if additional credit is given, but unless it can be certain that additional profits from increased sales will outweigh the increased costs of credit, or said costs can be recovered through higher prices, then the practice is fraught with danger. Most companies can readily see losses incurred by bad debts, customers going into liquidation, receivership or bankruptcy. The writing-off of bad debt losses visibly reduces the Profit and Loss Account. The interest cost of late payment is less visible and can go unnoticed as a cost effect. It is infrequently measured separately because it is mixed in with the total bank charges for all activities. The total bank interest is also reduced by the borrowing cost saved by paying bills late. Credit managers can measure this interest cost separately for debtors, and the results can be seen by many as startling because the cost of waiting for payment beyond terms is usually ten times the cost of bad debt losses. Sound credit management is a prerequisite for any manufacturing company's stability and continuous profitability, while deteriorating credit quality is the most frequent cause of poor organization performance and condition. According to Gitman (2017), the probability of bad debts increases as credit standards are relaxed. Firms must therefore ensure that the management of receivables is efficient and effective. Such delays on collecting cash from debtors as they fall due has serious financial problems, increased bad debts and affects customer relations. If payment is made late, then profitability is eroded and if payment is not made at all, then a total loss is incurred. On that basis, it is simply good business to put credit management at the front end" by managing it strategically. The hypothesis underling this study is stated thus:

H₀: There is no significant relationship between Credit policy and return on assets of manufacturing companies in Nigeria.

H₀: There is no relationship between credit policy and return on equity of manufacturing companies in Nigeria

LITERATURE REVIEW

Conceptual framework

Concept of credit management

Credit management is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. The concern of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability and shareholder's wealth (Owolabi & Ibida, 2016). The importance of credit management as it affects financial performance in today's business cannot be over emphasis. The crucial part in managing credit is required in maintaining its liquidity in day-to-day operation to ensure its smooth running and meets its obligation (Eljelly, 2014). Credit management plays a significant role in the successful functioning of a business firm. A firm should ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions. A study of

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credit 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 (Bhunja, 2017). Dilemma in credit management is to achieve desired tradeoff between credit and profitability (Raheman & Nasr 2017). Credit policy of a firm depends on the peculiar nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability.

Accordinging to Pandey (2014), bad debt losses arise when the firm is unable to collect its accounts receivable. The size of bad debt losses depends on the quality of accounts accepted by the firm. In the words of Uchegbu (2015), it is wise to discourage bad debts and efforts should be made to encourage discount more importantly cash discount. Donald and Penne (2017) posited that debtors or accounts receivable in a firm are claims held against others in the operating circle. Trade debtors are further classified into trade debtors and nontrade debtors. The amount which is owed by customers for goods and services sold in the course of carrying on a business is termed trade debtors while on the other hand any amount owed by customers arising from a variety of transitions that are oral or written promises to pay other than goods at a later date is called non-trade debtors. A company's credit policy refers to the actions taken by a business to grant, monitor, and collect the cash for outstanding accounts receivable (Maysami, 2014). The credit policy of a typical organization contains the following variables: collection policy, cash discount, credit period and credit standard, while Miller (2016), classified it as credit limits, credit term, deposits, customer information and documentation. And each of the components of a company's credit policy is used as a tool for monitoring account receivables which is the outcome of credit sales; it covers from the kind of customers that credit may be extended to when actual collections would be made (Ojeka, 2015). Credit policy is the most popular medium of managing and regulating receivables. To ensure optimal investment in receivables, a business is required to have an appropriate credit policy.

Krueger, (2015) believes credit policy is designed to minimize costs associated with credit while maximizing the benefits from it. Credit policy refers to guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts According to (Pandey, 2017; Atkinson, Kaplan & Young, 2017) credit policy is defined in the manner as the combination of such terms as credit period, credit standards, collection period, cash discounts and cash terms. Therefore, despite the fact that organizations have different credit policies, the content of these policies must touch on credit period, credit standards, collection period and credit terms. A lenient credit policy tends to give credit to customers on very liberal terms and standards such that credit is granted for longer periods even to those customers whose credit worthiness is not well known. A stringent credit policy on the other hand is restrictive and allows credit only to those customers whose credit worthiness have been ascertained and are financially strong. There are no two organizations with a similar credit policy. Whether lenient or stringent credit policy is adopted by an organization, it must ensure that it attracts and retains good customers, without having a negative impact on the cash flow (Kalunda, Nduku & Kabiru, 2014).

Credit Policy

Credit Policy can be viewed as written guidelines that set the terms and conditions for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. This term can also be referring to as collection policy. It is also the guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts. Lawrence (2016), the objective of managing accounts receivable is to collect receivable without losing sales from high-pressure collection techniques. Accomplishing this objective encompasses; credit selection and standard which involve the application of technique for determining which customer should receive credit. This process involves evaluating the customer's creditworthiness and comparing it to the firm's credit standard, its minimum requirements for extending credit to customers and credit monitoring which involves ongoing review of the firm's account receivable to determine whether customers are paying according to

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the stated credit terms. Slow payments are costly to a firm's investment in account receivable. Debtor management means the process of decisions relating to the investment in business debtors. In credit selling, it is certain that we have to pay the cost of getting money from debtors and to take some risk of loss due to bad debts. To minimize the loss due to not receiving money from debtors is the main aim of debtor management. Economic conditions and firms credit policies are the chief influence on the level of a firm's account receivable (James, 2016). The trade-off between increase in the market share through credit sales and the collectability of the account receivable affects firm's liquidity and its eventual profitability. Credit and credit granting policy encompasses the quality of accounts accepted, the credit period extended, the cash discount given, certain special terms and the level of collection expenditure. In each case, the credit decision involves a trade-off between the additional profitability and the cost resulting from a change in any of these elements. Receivable management begins with the decision of whether or not to grant credit.

Where goods are sold on credit, a monitoring system is important, because without it, receivable will be built up to excessive levels, cash flow (liquidity) will decline and bad debts will offset the profit on sales. Corrective action is often needed and the only way to know whether the situation is getting out of hand is to set up and then follow a good receivable control system (Eugene, 2014). Eugene, (2014), states that optimal credit policy, hence the optimal level of accounts receivable, depends on the firm's own unique operating conditions. A firm with excess capacity and low variable production cost should extend credit more liberally and carry a higher level of receivable than a firm operating at full capacity on slim profit margin. Manufacturing companies in Nigeria feel the necessity of granting credit for several reasons. According to Pandey (2014) companies sometimes extend credit to dealers to build long-term relationship with them or to reward them for their loyalty. Efficient credit sales management is necessary for achieving liquidity and profitability of a company (Reddy & Kameswarri, 2014). According to Rogers (2016), he opined that a firm's investments in receivables are affected by some external factors such as the general economic conditions: - Industry norms, competitive activities, political regulations and Technological change. Management naturally wants to make efficient use of the available capital in the business and is also interested in rapid turnover of accounts. Given the circumstance, a firm should formulate a policy suitable for the firm and the commercial environment upon which credit sales will be based. There are three major credit policy variables (factors):

- i. credit standards
- ii. credit limit
- iii. collection period/policy.

The implication of the above policy is many, for instance, it will result to less bad debt losses and cost of credit administration. But such a firm adopting the policy may not be able to expend sales. That is, the profit sacrificed on lost sales may be more than the cost saved by the firm on the contrary, if credit standards are loose, the firm may have large sales volume.

But the firm will have to carry large receivables (debtors). The cost of administering credit and bad debts losses will also increase; thus, the choice of optimum credit standards involves a trade-off between incremental return and incremental cost. Weston and Brigham (1986), they enumerated the different types of cost associated with credit sales.

Measures of credit Management

The credit management of a company is measured with use of some financial ratios refers to as liquidity ratios. This group of ratios measures the ability of the firms to meet its current obligations (Liabilities). Analysis of liquidity needs the preparation of cash budgets and cashflow statement; but liquidity ratio, by establishing a relationship between cash and other current assets to current obligations, provided a quick measure of liquidity (Pandy, 2015). The most common ratios, which indicate the extent of liquidity or lack of it, are:

Debtors Collection Period (DCP)

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DCP ratio is calculated by dividing Trade debtors by Turnover and multiplies by 365 days, thus
$$\frac{\text{averagetradedebtors} * 365 \text{ days}}{\text{turnover} * 1}$$

This ratio shows number of days it takes an organization to recover its credit sales, the shorter the period the better for the organization. Account receivable with longer recoverable period possesses the risk of bad debt for the company and also affects liquidity in the short run.

Creditor Payment Period (CPP)

CPP ratio is calculated by dividing Average Trade Creditors by Cost of Goods Sold and multiplies the result by 365.

$$\frac{\text{averagetradedebtors} * 365 \text{ days}}{\text{costofgoodssold} * 1}$$

This ratio shows the number of days the company is required to settle its short term obligations. The longer the period the better for the company as it gives the company leverage to recover its receivables. Where the period is shorter than the debtor's collection period, it exerts pressure on the liquidity of the company. Liquidity according to Pringle (2014) liquidity refers to the ability of a firm to meet its current liabilities as they fall due out of its current assets. Some common ratios connected with evaluating liquidity are the current ratio, the quick or acid ratio, debtor's turnover and inventory turnover.

Measures of financial performance (Profitability)

Profitability is the ability to make profit from all the business activities of and an organization, company, firm, or an enterprise. It measures management efficiency in the use of organizational resources in adding value to the business. Profitability may be regarded as a relative term measurable in terms of profit and its relation with other elements that can directly influence the profit. Profitability is the relationship of income to some statement of financial position measure which indicates the relative ability to earn income on assets. Irrespective of the fact that profitability is an important aspect of business, it may be faced with some weakness such as window dressing of the financial transactions and the use of different accounting principles.

Empirical Framework

Nagarajan (2018) in his study of credit management in firms in Mozambique found that credit management is a dynamic process that could ideally be developed during normal times and tested at the wake of risk. It requires careful planning and commitment on part of all stakeholders. It is encouraging to note that it is possible to minimize risks related losses through diligent management of portfolio and cash-flow, by building robust institutional infrastructure with skilled human resources and inculcating client discipline, through effective coordination of stakeholders. Pyle (2016), in his study on credit management strategies in manufacturing firms need to meet forthcoming regulatory requirements for risk measurement and capital. However, it is a serious error to think that meeting regulatory requirements is the sole or even the most important reason for establishing a sound, scientific credit management system. It was held, managers need reliable risk measures to direct capital to activities with the best risk/reward ratios. They need estimate of the size of potential losses to stay within limits imposed by readily available liquidity, by creditors, customers and regulators. They need mechanisms to monitor positions and create incentives for prudent risk taking by divisions and individuals. Achou and Tenguh (2016) also conducted research on financial performance and credit management of firms in Thailand and found that there is a significant relationship between firms' performance (in terms of profitability) and credit management. Better credit management results in better performance. Thus, it is of crucial importance that firms practice prudent credit management and safeguarding the assets of the institutions and protect the investors' interests. This is also true for micro finance institutions.

Matu (2018) carried out a study on sustainability and profitability of manufacturing companies and noted that efficiency and effectiveness were the main challenges facing Kenya on service delivery. Soke Fun

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Ho and Yusoff (2017), in their study on credit management strategies of selected manufacturing firms in Malaysia the majority of manufacturing firms stem from outright default due to inability of customers to meet obligations in relation to lending, trading, settlement and other financial transactions. Credit risk emanates from a firm dealing with individuals, corporate, financial institutions or sovereign entities. A bad portfolio may attract liquidity as well as credit risk. The aim of credit management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable boundary. The efficient management of credit risk is a vital part of the overall risk management system. It is therefore important that credit decisions are made by sound analyses of risks involved to avoid harms to firms' profitability.

Theoretical Discussion

Asymmetric Information Theory

Information asymmetry refers to a situation where business owners or manager know more about the prospects for, and risks facing their business, than do lenders (PWHC, 2002) cited in Eppy. I (2005). It describes a condition in which all parties involved in an undertaking do not know relevant information. In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The lender on the other hand does not have sufficient information concerning the borrower (Edwards and Turnbull, 2014). Binks *et al.*, (2016) point out that perceived information asymmetry poses two problems for the banks, moral hazard (monitoring entrepreneurial behavior) and adverse selection (making errors in lending decisions). Banks will find it difficult to overcome these problems because it is not economical to devote resources to appraisal and monitoring where lending is for relatively small amounts. This is because data needed to screen credit applications and to monitor borrowers are not freely available to banks. Bankers face a situation of information asymmetry when assessing lending applications (Binks and Ennew, 2016). The information required to assess the competence and commitment of the entrepreneur, and the prospects of the business is either not available, uneconomic to obtain or difficult to interpret. This creates two types of risks for the Banker (Deakins, 1997). The risk of adverse selection which occurs when banks lend to businesses which subsequently fail (type II error), or when they do not lend to businesses which go on to become "successful, or have the potential to do so (type I error) Altman (1999).

Transactions Costs Theory

First developed by Schwartz (1974), this theory conjectures that suppliers may have an advantage over traditional lenders in checking the real financial situation or the credit worthiness of their clients. Suppliers also have a better ability to monitor and force repayment of the credit. All these superiorities may give suppliers a cost advantage when compared with financial institutions. Three sources of cost advantage were classified by Petersen and Rajan (2017) as follows: information acquisition, controlling the buyer and salvaging value from existing assets. The first source of cost advantage can be explained by the fact that sellers can get information about buyers faster and at lower cost because it is obtained in the normal course of business. That is, the frequency and the amount of the buyer's orders give suppliers an idea of the client's situation; the buyer's rejection of discounts for early payment may serve to alert the supplier of a weakening in the credit-worthiness of the buyer, and sellers usually visit customers more often than financial institutions do.

Aggressive Theory

This theory is applied where the firm plans to take high risk and where short-term funds are used to a very high degree to finance current and fixed assets. This approach is characterized by low interest rates. However, it's important to note that that the risk associated with short term debt is higher than long term debt. This applies mostly to companies/ firms operating in a stable economy and is quite certain about future cash flows. A company with an aggressive working capital policy offers short credit periods to

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customers, holds minimal inventory and has a small amount of cash in hand. This policy increases the risk of defaulting due to the fact that a company might face lack of resources to meet short term liabilities but

METHODOLOGY

The ex-poste investigative type of research design was adopted in this study. The data required are obtained from appropriate sources and analyzed accordingly. The technique was appropriate as it involved a careful in-depth study and analysis on the effect of credit management on the financial performance of manufacturing firms in Nigeria. Ibeaja (2015) defines “population as all elements, subsets, or observations that are of primary interest to a research or a study”. Thus, the population of the study consists of quoted manufacturing firms in Nigeria. Currently, there are 13 manufacturing firms quoted in the Nigerian Stock Exchange (NSE). This population of is hence, considered as a whole. They are Austin Laz & Company Plc, Berger Paints Plc, Beta Glass Plc., Cap Plc, Cement Co. Of North.Nig. Plc., Cutix Plc., Dangote Cement Plc., Greif Nigeria Plc., Lafarge Africa Plc., Meyer Plc., Notore Chemical Ind Plc., Portland Paints & Products Nigeria Plc., and Premier Paints Plc. For the purpose of meeting the set aim of the study, secondary data was used in analyzing and making inferences in this report.

This research makes use of secondary data such as Credit Sales, Credit Limit, Returns on Assets and Returns on equity. These data are gotten from annual financial statements of respective manufacturing firms and Nigeria stock exchange for a period of 5 years (2015 to 2019).

The data that collected was tabulated and analyzed using the Statistical Package for the Social Sciences software package (SPSS) 21 these includes mean and standard deviations. Descriptive statistics was used to analyze the data. Furthermore, descriptions were made based on the results of the tables. In analyzing the relationship between the independent and dependent variable of the study based on data collected, the Pearson Product Moment Correlation was used. The Pearson Product Moment Correlation co-efficient denoted by r is calculated as follows:

$$r = \frac{\sum xy - \bar{x}\bar{y}}{\sqrt{(\sum x^2 - n\bar{x}^2)(\sum y^2 - n\bar{y}^2)}}$$

n = number of samples

x and y = variables under consideration

For this study, the researcher was interested in establishing the impact of Credit Management on financial performance of manufacturing firms in Nigeria. Hence, Ordinary Linear Regression Technique was induced. The model used in the study took the form below:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

$$Y_2 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where: Y = financial performance as measured by ROA and ROE α = Constant Term

β = Beta Coefficient –These measures how many standard deviations a dependent variable will change, per standard deviation increase in the independent variable.

X_1 = Credit policies X_2 = Credit granting policy ϵ = Error term

Y = Independent variable

X = Dependent variable

Model specification refers to the determination of which independent variables should be included in or excluded from a regression equation. The model specification for this research is given below:

Functionally;

$$ROE = F(CL, CS)$$

$$ROA = F(CL, CS)$$

Mathematically;

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$$ROE = b_0 + b_1 CL + b_2 CS$$

$$ROA = b_0 + b_1 CL + b_2 CS$$

It is stated econometrically;

$$ROE = b_0 + b_1 CL + b_2 CS + e$$

$$ROA = b_0 + b_1 CL + b_2 CS + e$$

Where $b_0 = y - \text{intercept at time zero}$

$b_1 \wedge b_2 = \text{regression coefficients}$

$E = \text{random error} \in \text{prediction}$

CL = Credit Limit

CS = Credit Sales

ROA = Return on Assets

ROE = Return on equity

Summary of variables and measurement

Variable	Definition	Formulae
Y1	Financial performance	ROA = Return on Assets = net operating income-taxes/ average total assets
Y2	Financial performance	ROE = Return on Equity = net income/total assets
X1	Credit policy (Credit Limit)	Credit limit refers to the internally agreed maximum amount of credit a company extends to a client
X2	Credit grant policy (Credit Sales)	Credit Sales = Total sales – (Sales Returns + Sales Allowances + Cash Sales)

Validity can be defined as the extent to which data collection methods accurately measures what they were intended to measure. Validity refers to the extent to which a test measures what we actually want to measure. The validity of the research was tested using face validity method. The reliability of a research instrument refers to the degree to which the instrument is able of yielding similar/consistent results overtime. The reliability of the data was tested using the Cronbach al

RESULTS AND DISCUSSIONS

Table 4.1. Descriptive Statistics of data.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Credit Sales	65	1.85	33.39	13.2954	8.86042	.472	.297	-1.021	.586
Credit Limit	65	.34	8.50	2.4472	1.89348	1.575	.297	2.108	.586
Returns on Asset	65	.20	4.45	2.1326	.98054	.368	.297	-.193	.586
Returns on Equity	65	-1.46	30.79	13.1789	6.10800	.086	.297	.674	.586

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Valid N (listwise)	65								
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From the table above, it is seen that the minimum credit sales and credit limit are 1.85 and 0.34 million naira respectively for the time frame of study. The maximum values of the variables for the time frame are respectively 33.4 and 8.5 million naira respectively. Their mean values are 13.3 and 2.4 respectively. The data is seen to be platykurtic for Credit sales and Credit limit. Also, they are seen to be skewed to the right with positive kurtosis value. Both measures of financial performance, Returns on Assets and Returns on Equity are seen to have minimum values of 0.2 and a negating value of 1.46. The indicator of maximum values for both measures shows their values to be 4.45 and 30.79 respectively. The mean of both variables are 2.1 and 13.18 respectively. Both variables are platykurtic since their kurtosis values are below 3. While ROA is seen to be positively skewed, ROE is seen to be an approximately normal distribution.

Table 4.2 Correlation analysis of data

		Correlations			
		Credit Sales	Credit Limit	Returns on Asset	Returns on Equity
Credit Sales	Pearson Correlation	1	.394**	.639	.540
	Sig. (2-tailed)		.001	.017	.027
	N	65	65	65	65
Credit Limit	Pearson Correlation	.394**	1	.554	.357
	Sig. (2-tailed)	.001		.055	.021
	N	65	65	65	65
Returns on Asset	Pearson Correlation	.639	.554	1	.185
	Sig. (2-tailed)	.017	.055		.140
	N	65	65	65	65
Returns on Equity	Pearson Correlation	.540	.357	.185	1
	Sig. (2-tailed)	.027	.021	.140	
	N	65	65	65	65

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

Credit sales has a strong correlation with Returns on assets and returns on equity. These results, with the dependent variables, are seen to be significant with the p values lesser than the 0.05 level of significance. Also, Credit is seen to have weak correlation with ROE and has a strong one on ROA. This finding with ROE, is seen to be significant with at 0.05 level of significance since the significant value is lesser than 0.05. However, the result is seen to be insignificant with Returns on Assets.

Table 4.3: Regression Analysis of ROA against CS and CL

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.861	.240		7.762	.000
	Credit Sales	-.017	.015	-.156	-1.150	.025
	Credit Limit	.027	.070	.033	.241	.811

a. Dependent Variable: Returns on Asset

Table 4.4 above shows the regression coefficient of Returns on Assets against Credit Sales and Credit Limit. And from deductions made, it is seen that as credit sales increases, there is seen to be a decrement in ROA by 0.017. Also, as credit limit increases, there is seen to be an increment in ROA by 0.027. These

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results are seen to be significant only with Credit Sales and not significant with Credit Limit at 0.05 level of significance.

Table 4.4: Regression Analysis of ROA against ATM and POS.

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	14.976	1.492		10.040	.000
	Credit Sales	-.063	.094	-.092	-.677	.040
	Credit Limit	-.390	.438	-.121	-.889	.037

a. Dependent Variable: Returns on Equity

There is observed to be a 0.063 decrement in Returns on Equity as Credit Sales increases by a unit. Also, ROA decreases by 0.39 as Credit Limit increases by 1. These findings are seen to be significant at the 0.05 level of significance.

Discussion of Results

The data gathered for the purpose of this research work was analyzed and several depictions were made which are tailored to meet the aim of the study. These are hence discussed. Both ROA and ROE which are measures for financial performance for the time frame of study showed that they have strong correlation values with the respective credit management. These results shown in Table 4.3, are significant except for the relationship between Credit Limit and ROA which is insignificant. This is because their correlation values are the ones that are below the 0.05 level of significance. The regression analysis of ROA against credit sales and credit limit depicts that there is a negative effect of ROA on financial performance of banks. This is because CS is seen to cause significant decrement in ROA as they increase by a unit while Credit limit causes an insignificant increment in ROA. Also, both ATM and POS numbers have fair effect on ROA as they both correlate it with a coefficient of 0.172. They are both seen to affect ROA by 30% as shown by the r squared value (Appendix Table 1). The regression linearity, measured by the F statistics is seen to affirm linearity between the measured variables as the p value is seen to be lesser than 0.05 which is the set level of significance (Appendix Table 2).

Also, the regression analysis of ROE against Credit Sales and Credit limit depicts that there is a negative effect of the both independent variables on the financial performance of banks with ROE as the considered variable. This is because they cause significant decrement in ROE during the time frame of study. Also, credit sales and credit limit together have weak effect on ROE as they both correlate it with a coefficient of 0.178. They are both seen to affect ROE by 32% as shown by the r squared value (Appendix Table 3). The regression linearity, measured by the F statistics is seen to affirm the linearity between the measured variables as the p value is seen to be lesser than 0.05 which is the set level of significance (Appendix Table 4).

CONCLUSIONS AND RECOMMENDATIONS

The measures of financial performance of insurance companies, ROE and ROA, for the time frame of study, showed that they are affected negatively by the measures of capital structure. These effects are generally significant but can depend on the variable of financial performance tested. Also, there is seen to be a generally weak relationship between the factors of credit management. We may say this is so as there are other managerial determinants that can dictate the eventual financial performance of industries. However, the changes they cause are significant meaning they are factors to be considered well in managerial planning and decision making. From the overall study, there are certain depictions that were made to satisfy the aim of the research. These findings are made to ensure they conform to the set aim of the study. effective management of credit grant has a positive relationship with the organizational performance of the companies in the corporate organizations. This implies that for companies to maximize their profit, they should grant credit to trustworthy customers with an appropriate credit control mechanism. It was discovered that credit sales decreases turnover and profitability in the domains of effective implementation of optimum credit policy in the firms. Hence, sales in credit should be reduced and proper recall for debts should be made annually. From the findings made during the course of study, the following recommendations are hence made to manufacturing companies, basically to bring about increment in productivity of manufacturing companies in Nigeria:

- i. There is need for Manufacturing companies to maintain adequate liquid assets and eliminate bad debt losses and other associated costs of credit.
- ii. Manufacturing companies should intensify efforts to engage the services of factoring agents. This will reduce the incidence of bad debts losses and other associated costs of credit.
- iii. Manufacturing companies should increase the rate of credit sales to trustworthy customers only despite the fact that credit sales are a marketing tool to maintain or expired sales.

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