IMPACT OF CREDIT MANAGEMENT ON PROFITABILITY OF BREWERY

SECTOR IN NIGERIA

BY

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND FINANCE, COLLEGE OF HUMANITIES, MANAGEMENT AND SOCIAL SCIENCES IN PARTIAL FUFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE MOUNTAIN TOP UNIVERSITY, IBAFO, OGUN STATE,

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CERTIFICATION

I certify that this work was carried out by OJO DEBORAH TEMITOPE at the Department of ACCOUNTING, Mountain Top University, Ibafo, Ogun State, Nigeria under my supervision.

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DEDICATION

I dedicate this project to GOD ALMIGHTY, for his mercy upon my life. He has been my strength from the beginning till this very moment of completing my Bachelor of Science degree Programme in Accounting. I give him all the glory because he is worthy to be praised, I also dedicate this project to my loving parent Mr. and Mrs. Ojo for their unending support.

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TABLE OF CONTENT

LIST OF TABLES

ABSTRACT

The impact of credit management on the profitability of manufacturing firms has attracted the attention of few researchers in different countries of the world in recent times. This study examines the impact of credit management on the profitability of brewery firm using five quoted firm in Nigeria stock exchange. The research of the study was to determine whether credit management mechanism which are the average collection period, average payment period and credit policy have impact on profitability of brewery firm measured by return on assets (ROA). Data was sourced from annual report of selected companies. It provides empirical evidence for five (5) brewery firm in Nigeria for a period of 2011- 2020. Multiple regression analysis using the Ordinary Least Square (OLS) was used to test the relationship between Average Collection Period, Average Payment Period, Credit Policy and Return on Assets (ROA). The findings showed that the average collection period has a negative relationship with the return on assets and their relationship is not significant, the average payment period also has a negative relationship with return of assets and their relationship is not significant. However, there exist a positive relationship between the return on assets but their relationship is not significant. The study recommended that the Effective credit management strategies, proper undertaking of credit analysis on the prospective buyers, and making efforts to ensure that funds are not tied up in receivables for longer periods and Firms in should strive to keep the receivable period at minimum in order to enhance financial performance, profitability also Firms should avoid holding onto dead stock as it ties up finances hence negatively impacting on the firm's financial performance finally Strategic measures to strengthening partnership with debtors for easier collection of receivables, putting measures to avoid bad debts such as analysis the customer risk on payment, and most importantly instituting effective cash management system in place.

Keywords: Credit Management, Average Collection Period, Average Payment Period, Credit Policy, Return on Assets.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Credit management is certainly important in determining a company's overall viability and profitability, particularly over time. Credit management may simply be characterized as a series of written rules that specify the terms and conditions for delivering products on credit, consumer qualifying requirements, collection processes, and actions to be taken in the event of customer delinquency (Taiwo & Abayomi, 2013).

Credit is a popular selling tactic or weapon used by companies to boost revenue. It also means that credit transactions or customer extensions need to be carefully tracked and handled. If there are no sufficient and effective mechanisms in place to control transactions made to the firm's customers on credit, regardless of the company's market share or demand for its goods, there could be issues, especially those relating to liquidities (Taiwo & Abayomi, 2013).

In order to examine and qualify a customer for commercial credit approval, several elements are used as part of the credit management process. Trade receivables, or simply debtors, are customers from whom future receivables must be collected. They reflect the firm's claim or asset. Next to shares, trade receivables make up a large amount of a company's current assets. It occurs when clients are given the option of purchasing products or services on credit and deferring payment until a later date. As a result, working capital management assumes that trade debtors (accounts receivables) are used efficiently to increase a company's profitability and liquidity. Competent credit management aims to protect not only the vendor from potential losses, but also the customer from incurring additional debt obligations that cannot be paid on time.

In order to examine and qualify a customer for commercial credit approval, several elements are used as part of the credit management process. This may include the collection of data on the current financial condition of the potential customer, including the current credit score.

Profitability is a criterion for evaluating how effective an organization is – and, eventually, whether it succeeds or fails. A business's the power to create a return on an investment based on its capital

in contrast to an alternative investment is another concept of profitability. You may evaluate profitability in a number of ways, including using profitability ratios, which are a measure of a company's ability.

Liquidity and profitability management, as well as the capacity to manage the trade-off between the two, are critical factors for corporate growth and sustainability. Financial managers are concerned about them. Production, survival, sustainability, growth, and efficiency all rely on liquidity management and profitability. Profitability does not necessarily translate to liquidity. Without actually being liquid, a business can be profitable. Liquidity should also be handled in order to achieve an optimum level, that is to say, a level that eliminates surplus liquidity, which can lead to management's lack of ideas.

A good credit management system decreases the amount of money owed to debtors and reduces bad debts. Strong credit management, according to Dina (2007), is vital to a company's cash flow and operations.

The credit management engine functions as a locomotive, propelling revenue and inspiration in the enterprise. As the credit management engine progresses and becomes more refined and efficient, so the company becomes more productive and profitable. Good credit management should be a proactive task, starting even before the sales begin. Effective credit management will protect and prosper the business with regards to profitability however; the opposite is true if ineffective credit management is practiced.

According to Philip (2010), there are four fundamental items that companies must aim for in order to have successful credit management:

- Get to know your customers before you begin trading with them.
- Prior to supplying, settle on payment terms.
- Give an invoice as soon as the items are delivered; and
- Do not hesitate to seek payment when it is due.

As a result, the importance of credit policy for any business enterprise cannot be overstated because it is a factor that has a direct impact on an organization's cash inflow from sales activities, which is crucial for any business. Each credit strategy developed by a company aims to achieve adequate

profitability and cash flow (liquidity), which are the two most important fundamental factors to consider that currently support a company and decide its place in the long term. Given the continuous liquidation (winding-up) of some manufacturing firms in recent years as a result of credit sales, credit management is an issue that deserves to be discussed. Accepting credit increases sales volume and, as a result, profit margins. Growing one's profit margin is one of the simplest ways to ensure sustainability in a volatile market like Nigeria longevity or continuity.

Breweries, like other profit-seeking businesses, strive to increase net income and the present value of their net assets while taking both short- and long-term factors into account. In the long-run, the concern of management is to provide satisfactory returns for their shareholders, which required holding a sufficient volume of safe and productive assets as well as sourcing funds through available source.

In Nigeria, there has been no empirical evidence or ascendancy on the effect of credit management on manufacturing companies' profitability. In light of this, this research uses Lagos as a case study to explore credit management and profitability in Nigerian breweries.

1.2 Statement of Problem

According to Dina (2007), it seems that consumers who pay on time are not the problem, but rather those who cannot or will not pay. Unpaid debts will still have an effect on profitability and liquidity. Regardless, there is still some uncertainty as to whether the results can be implemented in Nigeria, where the market climate is extremely fragile. Furthermore, there is a lack of research on credit management and brewery profitability in Nigeria. Similarly, the importance of the relationship between the two variables has yet to be established empirically.

Thus, the problems inherent in this research study as investigated are as follows:

i. According to (Dina, 2007) it seems that consumers who pay on time are not the problem, but rather those who cannot or will not pay. Unpaid debts will still have an effect on profitability and liquidity.

ii. The poor level of trade credit management is reflected in the profitability position of the firm.

iii.   Failure to comply with the agreed terms of agreed terms of agreement with the company upon when paying the debt.

iv.   It is as a result of the above problem that the researchers deemed it necessary to examine the Impact of credit management on the profitability of Brewery firms quoted in the Nigerian stock exchange by making research's on the problems and providing solutions to the problems.

1.3 Objective of the Study

The main objective of this study is to examine the impact of credit management on profitability of breweries in Nigeria.

The specific objectives are:

i.   To examine the relationship between average collection period and profitability of brewery firms in Nigeria.

ii.   To examine the relationship between average payment period and the profitability of brewery firms in Nigeria.

iii.   To establish the relationship between credit policy and profitability of brewery firms in Nigeria.

1.4 Research Questions

In order to achieve the purpose of the study, the following research questions will be raised:

i.   To what extent does average collection period affect profitability of brewery firms in Nigeria?

ii.   What is the relationship between average payment period and the profitability of brewery firms in Nigeria?

iii.   Is there any significant relationship between credit policy and profitability of brewery firms in Nigeria?

1.5 Research Hypothesis

In order to determine how credit management influences the profitability position of the breweries to be selected in this study, the following null hypotheses were formulated:

Ho$_1$: There is no significant relationship between average collection period and the profitability of brewery firms in Nigeria.

Ho$_2$: There is no significant relationship between average payment period and the profitability of brewery firms in Nigeria**.**

Ho$_3$: There is no significant relationship between credit policy and the profitability of brewery firms in Nigeria.

1.6 Significance of the Study

The research would be extremely useful in a number of ways:

i.   The study will shed some light on the significant relationship between debt policies and brewery firm profitability in Nigeria.

ii.   It will be of great interest to corporate executives in Nigeria's manufacturing and non-manufacturing sectors who want to learn how to improve healthy competition through the use of highly efficient credit management policy.

iii.   It will educate how to use varying credit management policies to improve company profitability and increase shareholder capital.

iv.   Creditors, especially short-term and long-term creditors, would benefit from the study's findings because it will serve as a framework for policy implications for them.

1.7 Scope of the Study

The research is confined to a few breweries in Lagos, Nigeria. However, the study's ability to resolve the issues posed in the previous section may be restricted by Nigeria's data availability. These businesses will be chosen based on the availability of their annual reports, which will allow the researcher to evaluate their targets.

1.8 Limitations of the Study

Many researchers who embark on a project of this scale face substantial financial and resource constraints.

In the early stages of this research, having access to secondary resources including journals, studies, and published audited financial statements, among other things, was a major challenge because finding the right material that suited the research was difficult.

The best available materials had to be sourced and scrutinized, while another difficulty was converging the materials for the project and carrying out a proper analysis which was a bit taskful.

1.9 Operational Definitions of Terms

For easy comprehension of this research work, the writer intends to define the following terms:

Accounts Receivable: Accounts receivable is the amount of money owed to a corporation for goods or services supplied or used by consumers but not yet paid for.

Bad debts: Bad debt is an expense that a business incurs once the repayment of credit previously extended to a customer is estimated to be uncollectible.

Liquidity: This is used to describe the assets of firms which are easily convertible to cash

Profitability: This is the degree to which a business or activity yields profit or financial gain.

Solvency: This is the possession of assets in excess of liabilities; ability to pay one's debts.

Trade credit: This is any amount for goods and or resources which remain unpaid at the time of purchase of such goods or services but which is deferred for future use.

Working Capital: Working capital is the money available to meet your current, short-term obligations.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptual Review

In this section, concepts' relating to the study is discussed.

2.1.1 Credit management

A good credit management system minimizes bad debt by lowering the amount due to debtors. Credit management and profitability, according to Peter (2005), are linked. Dina (2007) claims that good credit management is essential for a company's cash flow and operations.

Optimizing cash flow is an important aspect of successful credit management because it provides stability and maximizes growth potential. When a business sells its goods or services on credit and does not collect payment right away, it is referred to as credit. It's a vital marketing tool that serves as a link between the manufacturing and distribution stages, enabling products to meet consumers. Trade credit is provided by a company to defend its profits from rivals and to entice potential buyers to purchase its goods on favorable terms. Trade credit produces receivables or book debts that the company hopes to recover quickly. Three attributes distinguish book debts or receivables resulting from credit: First and foremost, it requires a degree of risk that should be carefully measured.

According to Philip (2010), there are four fundamental items that companies must aim for in order to have successful credit management:

• Get to know your customers before you begin trading with them.

• Prior to supplying, settle on payment terms.

• Give an invoice as soon as the items are delivered; and

• Do not hesitate to seek payment when it is due.

The importance of excellent credit management cannot be overstated. Good credit management, according to Michael (2007), is an important component and a central part of modern commercial strategy. Extending credit to consumers is a help to selling, according to Michael (1997), and all

employees should be involved. Michael merged credit management and customer service in a way that was both realistic and efficient satisfaction with profitability. Good credit management, according to Steve (1997) of the Association of Credit Professionals (ACP), is all about customer loyalty and benefit. Michael's claim was backed by Steve (1997). According to Michael, consumers who are satisfied are more likely to pay immediately than those who believe they are not receiving a fair bargain.

If revenue is the energy that drives the firm, credit management is the motor that keeps revenue flowing.

The credit management engine is a force to be reckoned with, propelling revenue and inspiration in the enterprise. The business becomes more productive and profitable as the credit management engine refines and becomes more effective.

Credit management should begin before any purchases are made. In terms of profitability, good credit management will protect and prosper the company; however, bad credit management will do the exact opposite. Credit has an effect on every aspect of life, and good credit management decreases delinquency and bad debt losses.

2.1.2 Firm`s Prfitability

Profitability refers to an organization's, company's, firm's, or enterprise's ability to profit from any of its business operations. It assesses the effectiveness of management in optimizing the use of organizational capital to add value to the business. Profitability can be thought of as a relative concept that can be calculated in terms of profit and its relationship to other variables that can have a direct effect on profit. The proportion by which a company's profits outweigh its related expenditures is referred to as corporate profitability. It's an indicator of a company's management's ability to produce revenues from revenue-generating sources. As a result, management is involved in assessing the viability of the company's activities.

As a result, a low profit margin would imply ineffective management, making investors wary of investing in the company. Profitability is characterized as an organization's, company's, firm's, or enterprise's ability to make a profit from all of its business operations, and profitability is the primary concern of any business. Profitability is an indicator of how profitable an organization is.

The management can benefit from using all business capital (Nwaechina 2013). Profitability is also known as the rate of return on investment and is a commonly used financial measure of success. As a result, if there is an unjustifiable overinvestment in current assets, the rate of return on investment will suffer. Credit management's key aim is to maintain a firm's existing financial capital under control such that a balance can be achieved between profitability and risk associated with that profitability (Ifurueze 2013). The higher the risk associated with a business, the more profitable it is assessed, and vice versa. Profitability is influenced by a company's capital structure, size, growth, market discipline, risk, and reputation. Ratio analysis is a methodology for evaluating the profitability of a company. To measure profitability in relation to sales, ratios such as gross profit margin (GPM), net profit margin (NPM), operating expense ratio (OER), and others are used.

Profitability in relation to investment, on the other hand, requires ratios like return on investment, which to a greater degree justifies a firm's productivity and results (ROI),return on equity (ROE), earnings per share (EPS), dividend per share (DPS), dividend pay-out ratio (DPR), dividend yield (DY) and earnings yield (EY), price-earnings ratio (P/E), market value to book value ratio (MV/BV), and Tobin's Q (T-Q). It is related to the goal of optimizing shareholder capital, and current asset investments are only made if a satisfactory return is achieved. As a consequence, managing current asset assets is a part of corporate finance and can have an effect on a company's profitability.

2.1.3 Trade Credit

The main aim of trade credit is to provide efficient means of minimizing account default in order to assist management in assessing the company's profitability. As a result, this set of processes includes deciding whether or not to extend credit to a customer, tracking the receipt and lodging of payments on overdue invoices, conducting collection procedures, and addressing conflicts or questions about charges on a customer invoice. Many businesses are working to incorporate the knowledge needed for credit management through their organizations. Owing to a drive for greater productivity, these tasks, which historically occurred as individual operations aimed at raising all amounts from debtors, have been concentrated on organizations under the control of a single boss. Trade credit, according to I.M. Pandy (2002), is a short-term source of financing. He also said that it is the credit extended to a customer by a product supplier in the ordinary course of business. As

9

a result, since no legal agreements are exchanged, it is primarily an informal agreement between the supplier and the consumer.

According to Pandy (2002) Trade credit can also take the form of bills payable. This occurs when a buyer signs a contract, which is a negotiable instrument used to acquire trade credit which appears as bills payable on the buyer's balance sheet. It is called formal since a bill is a formal acknowledgment of an agreement to repay an outstanding sum. Any trade credit provided to a customer appears to a seller as account receivable, various debtors, or bills receivable, depending on which one is relevant. Trade credit's main goal is to help management determine the company's profitability by reducing default in account selection. As a result, this set of processes includes deciding whether or not to extend credit to a customer, tracking the receipt and lodging of payments on overdue invoices, conducting collection procedures, and addressing conflicts or questions about charges on a customer invoice. Many businesses are working to incorporate the knowledge needed for credit management through their organizations. Owing to a drive for greater productivity, these tasks, which historically existed as individual operations aimed at recovering all debts from debtors, have been concentrated on corporations under the control of a single boss. "Because investment in trade debtors uses a firm's fund," Walter (1987) writes, "it is important for a firm to prepare very carefully before investing in such a venture." This will assist in deciding the selling and payment dates to be funded with working capital. Obinnu (1990) argues that several considerations must be addressed when assessing trade credit. i. The scale of the competition must be considered.

ii. The company is in a competitive market.

iii. The quality of the product being sold, and if it is of poor quality, it would be difficult to sell, making debt repayment appear difficult.

iv. The state of the economy at the time of sale.

v. The degree to which the market is competitive.

Since the amount of credit sales is a feature of the firm's total sales and the ratio of credit sales to total sales, both of these are needed. The ratio of credit sales to overall sales of a corporation is strongly affected by the country of business and industry norms. A financial manager, on the other

hand, can only control the amount of credit purchases, collection duration, and trade credit investment by changing the company's credit policy.

2.1.4 Credit Policy

Credit policy is a set of written rules that specifies the terms and conditions for delivering products on credit, consumer qualification requirements, collection policies, and actions to be taken in the event of customer delinquency. This concept is also known as "collection strategy." It also explains how to assess which goods are sold on open account, the specific payment conditions, the limitations on outstanding balances, and how to manage delinquent accounts. According to Lawrence (2003), the aim of accounts receivable management is to accumulate receivables without sacrificing revenue due to high-pressure collection techniques. Accomplishing this goal entails credit collection and standardization, which entails the use of a methodology to decide which customers should be given credit. This process involves assessing the customer's creditworthiness and comparing it to the firm's credit quality, its minimum criteria for extending credit to customers and credit monitoring which involves the analysis of the firm's account receivable to determine if customers are paying according to the specified credit terms. Slow payments are costly to a firm's investment in account receivables.

A company's credit policy may be lenient. This enables the business to extend credit to customers whose creditworthiness is unknown. The business uses more generous terms and conditions, such as extending credit for longer periods of time and providing credit to consumers who have stable financial situations, among other items. "A firm that adopts a strict credit policy sells on credit to only selected customers who have demonstrated credit worthiness and are also financially stable," according to Obianwu (1990). The trade-off between increasing market share by credit sales and the collectability of accounts receivables has an effect on the firm's liquidity and profitability. If the majority of a company's transactions are in accounts receivable and the collection policy is ineffective, the company may report a large profit while still having a liquidity problem. The standard of accounts approved, the credit period extended, the cash discount granted, some special conditions, and the amount of collection expenditure are all covered by credit and collection policies. In each case, the credit decision is a trade-off between increased profitability and increased costs as a result of a change in any of these factors.

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, 2012). Eugene, (2012), 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.

2.2 Theoretical Review

This part analyzes the theoretical background of the study before presenting several definitions of credit management theories by various research researchers. The key theories utilized in this study as the theoretical framework to evaluate further on the influence of credit management on company profitability are transaction costs theory, portfolio theory, and information theory.

2.2.1 Transactions Costs Theory

This hypothesis, which was first proposed by Schwartz in 1974, contends that suppliers may have an edge over traditional lenders when it comes to determining a client's true financial status or credit worthiness. Suppliers are also better able to monitor and enforce loan repayment. When compared to banking institutions, all of these advantages may provide suppliers a cost advantage. Petersen and Rajan (2014) identified three sources of cost advantage: information collection, buyer control, and salvaging value from existing assets. The first source of cost advantage may be explained by the fact that sellers may receive information on purchasers more quickly and at a cheaper cost since it is gained during routine company operations.

That is, the frequency and 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 deterioration in the buyer's creditworthiness, and sellers visit customers more frequently than financial institutions.

2.2.2 Portfolio Theory

Companies have effectively adapted contemporary portfolio theory to market risk since the 1980s. Value at risk models are increasingly being used by many organizations to manage their interest rate and market risk exposures. Unfortunately, despite the fact that credit risk remains the most

significant risk facing most businesses, the application of current portfolio theory to credit risk has lagged (Margrabe, 2007). Credit concentrations have been shown to have a negative influence on financial performance. This industry is also making tremendous progress in creating credit risk measurement tools for portfolios. Credit derivatives are also being used to efficiently shift risk while maintaining client ties. The quality ratios in the portfolio and the productivity measures have been tweaked. (Kairu, 2009). The combination of these advances has significantly accelerated advances in portfolio credit risk management.

Credit risk management has traditionally been done asset-by-asset in enterprises. While each company's strategy is different, in general, this strategy entails analyzing the quality of credit exposures on a regular basis, assigning a credit risk rating, and aggregating the findings to determine a portfolio's predicted losses. A thorough credit examination and internal credit risk assessment system are the cornerstones of the asset-by-asset approach. This approach allows managers to quickly detect changes in individual credits or portfolio trends. Credit identification, credit review, and credit risk rating system management can make appropriate portfolio strategy adjustments or boost credit supervision in a timely way based on the changes discovered. While the asset-by-asset method is important for managing credit risk, it does not provide you a comprehensive picture of portfolio credit risk, where risk refers to the likelihood that actual losses would exceed planned losses. As a result, organizations are increasingly looking to supplement their asset-by-asset strategy with a quantitative portfolio assessment utilizing a credit model in order to acquire a better understanding of credit risk management (Masonand Roger, 1998).
By pursuing a portfolio strategy, companies are increasingly attempting to solve the asset-by-asset strategy's inability to adequately evaluate unexpected losses. The asset-by-asset methodology has a problem in that it is difficult to identify and measure concentration. Increased exposure to credit extension, or to a collection of connected creditors, creates greater portfolio risk, which is referred to as concentration risk (Richardson, 2002).

2.2.3 Information Theory

According to Derban, Binner, and Mullineux (2005), debtors should be screened, particularly by financial institutions, in the form of a credit evaluation. As symmetric information theory suggests, gathering trustworthy information from potential borrowers becomes crucial in achieving

successful screening. In evaluating borrowers, both qualitative and quantitative methodologies can be utilized, albeit one main drawback of qualitative models is their subjective character. According to Derban, Binner, and Mullineux (2005), qualitative models can assign numbers to borrowers' qualities, with the total of the values compared to a threshold. This method saves time and money by reducing processing expenses, subjective judgements, and biases. If it signals changes in the predicted degree of credit loan loss, the rating systems will be relevant. Bridge (1998) concluded that quantitative models allow for numerically determining which factors are important in explaining default risk, evaluating the relative importance of the factors, improving default risk pricing, screening out bad loan applicants, and calculating any reserve required to cover expected future loan losses.

In conclusion, The theory relevant to this study is **transaction cost theory,** it is best suited to credit management in a manufacturing firm since it has a supplier-client connection, with the supplier being the manufacturing firm giving credit and the client being the business's clients or debtors. The information regarding the customer's capacity to pay on time, the nature of the firm's financial statement, and the fact that it is not expensive to run are all elements that the creditor would evaluate before extending credit to its customers. Finally, **transaction cost theory** is chosen as the theory that will be used for this research study and it best describes credit management since it incorporates all of the qualities of credit management**.**

2.3 Empirical Review

Over the last several decades, the necessity of implementing strong credit management policies has expanded, and several studies have been conducted to explore the policy's function and impact. Studies on credit management and company profitability have produced conflicting results as to why businesses should follow strong credit management policies. The following are the credit mechanisms:

Despite the fact that trade credit policy has a significant influence on profitability and values in everyday company, no research have been conducted to capture this link. The lone exception is Hill, Kelly, Lockhart, and Washam (2010), who looked at the impact of company trade credit policy on shareholder wealth for a sample of big US companies. This study adds to the financial literature in a variety of ways. First, it looked at the relationship between trade credit and

profitability for a group of Spanish SMEs, who were chosen because of their unique institutional setup, which makes trade credit particularly essential in Spain. The fact that Spanish enterprises have one of the longest effective loan terms in Europe (Marotta, 2001) demonstrates this, and so provides a good framework in which to investigate the consequences of trade credit profitability.

Nyawera (2013) investigated the impact of loan policies on the profitability of Kenyan microfinance firms. Although the analysis discovered a link between credit policy factors and profitability, the effect was minor. The study's empirical evidence revealed that there was a negative relationship between credit terms and conditions and collection efforts, which increased the profitability of the organizations while also reducing collection efforts, resulting in a lower default rate and thus improving the financial performance of deposit-taking microfinance institutions. Other characteristics, such as credit criteria, had a beneficial influence on the profitability of micro finance organizations, according to the study. The researchers came to the conclusion that implementing a sound credit strategy in a firm resulted in improved financial performance.

Sound credit policy, according to Simonson et al., (2011), would help improve prudential oversight of asset quality, establish a set of minimum standards, and apply a common language and methodology (assessment of risk, pricing, documentation, securities, authorization, and ethics) for measurement and reporting of nonperforming assets. The credit policy is in place to help a company develop its lending philosophy as well as give precise rules and methods for monitoring loan activity. The driving premise in credit evaluation is to make sure that only those customers who need credit and can afford to repay it may get it. To limit their risks and boost their profitability, marketing firms use the second type of credit rationing.

Owusu (2013), look into how public firms listed on the regulated market in Serbia manage their accounts receivable during periods of recession. A total of 108 businesses are included in the study. During the financial crisis of 2008-2011, the policies on accounts receivables were reassessed. The short-term effects are investigated, and the analysis finds a positive but not significant relationship between accounts receivables and two profitability dependent variables, return on total asset and

operational profit margin. This shows that the influence of receivables on a company's profitability varies depending on the time of year.

Deloof (2003), Laziridis and Tryfonidis (2006), Garcia-Jeruel and Martinez-Solano (2007), Samiloglu and Demrigunes (2008), and Mathura (2010) all point to a negative relationship between accounts payable and firm profitability in Belgium, Greece, the United States of America, Spain, Turkey, and Kenya, respectively. Sharma and Kumar (2011) find contradictory data, finding a positive relationship between ROA and accounts receivable.

Okwo, Ugwunta, and Agu (2012) investigated the factors that influence the profitability of Nigerian breweries. Multiple regressions were used to analyze annual data from the sampled beer brewery firms' annual reports from 2000 to 2011. The findings reveal that the inventory-to-cost-of-goods-sold, account receivable-to-sales, and sales-to-general-expenses-to-sales ratios all have a substantial impact on gross profit margin.

Hasan, Halil, Arzu, and Salih (2011) looked at panel data from companies listed on the Istanbul Stock Exchange from 2005 to 2009 to see if there was an empirical link between working capital management efficiency and corporate profitability. Reduced cash conversion cycle (CCC), a measure of working capital management, was found to have a favorable impact on return on assets (ROA), a measure of profitability.

Abdulrasheed, Khadijat, Sulu, and Olanrewaju (2011) studied inventory management in small enterprises in Nigeria's Kwara State. The study found that a Naira change in stock would produce a Naira (92 Kobo) difference in profitability of chosen enterprises over a ten-year period when using a regression model to explain the effect of inventory value on performance proxy by profit. This finding revealed a strong positive association between inventory and small business profitability in Nigeria's Kwara State. As a result, they came to the conclusion that if small enterprises use excellent inventory management, they are more likely to make a profit.

In Jordanian industrial joint stock enterprises, Al Hayek (2018) identified the association between sales revenue and net profit with net cash flows from operating operations. The researcher used

the descriptive analytical approach to perform an analytical study and then used the statistical method to analyze the study's findings. The study employed a multiple regression equation and found that hypothesis H0, "There is a statistically significant link between sales revenue and net profit with net cash flows from operating activities in Jordanian industrial joint stock enterprises," was correct.

Owusu (2010) investigated Ghana Breweries Limited's financial performance following its merger and listing on the Ghana Stock Exchange. The purpose of the study was to determine the profitability level of Ghana Brewery Ltd (GBL), its solvency and liquidity situation, the efficacy and efficiency of using owners and creditors funds, and the propriety of using a combination of debt and owner's equity to support its operations. The findings reveal that, despite fierce competition from lower-cost brands and an unfavorable economic climate following the merger, the company's performance was satisfactory over the research period. However, despite the growth in net turnover, operating profit before foreign exchange losses fell from 6.97 billion in 2000 to 02.94 billion in 2001, but dramatically increased to 06.3 billion in 2002 as a result of Heineken's $5 million deposit against shares in December 2002.

To investigate the factors of profitability in the liquor sector, Leah (2004) employed multiple measures of profitability. Following in the footsteps of Leahy (1998), Leah (2004) investigated whether a company's profitability is linked to the functions it performs and the risks it takes on. Three profitability measures are investigated in detail, and they are linked to proxies for the services fulfilled and/or risks taken on by those manufacturers. The results vary depending on the profitability metric used, i.e., the importance of the independent variables may be affected by the metric used. The findings of Leah (2004) corroborate those of Leahy (1998), who discovered that the results did not vary systematically depending on the estimating method.

Using a sample of 13,797 SMEs operating in four industries from Swedish data, Yazdanfar and Ohman (2014) investigated the impact of working capital management on firm profitability and discovered that working capital management has a negative connection with firm profitability.

Tauringana and Afrifa (2013) looked at the relative importance of WCM in 133 UK SMEs from 2005 to 2009. Their findings suggest that managing average days payable (ADP) and average days receivable (ADR) is critical for SMEs' profitability, based on panel data regression analysis of a sample of 133 enterprises. Average days inventory (ADI) and return on assets (ROA) had a negative, although not statistically significant, association. ADR has a considerable negative relationship with profitability, as does ADP. In order to be more successful, they propose that SMEs focus their limited resources on managing average receivables (AR) and average payables (AP). In the United Kingdom, Tauringana and Afrifa (2013) discovered that the components of working capital management have a considerable positive effect on SMEs' profitability. Working capital management has a favorable relationship with SMEs' profitability in Portugal and Spain, according to Pais and Gama (2015) and BanosCaballero, GarcaTeruel, and MartnezSolano (2010). For the years 1996-2005, Falope and Ajilore (2009) examined the effects of WCM on profitability performance in fifty Nigerian listed non-financial firms. In a pooled regression, the study employed panel data econometrics. The average payment duration and cash conversion cycle were found to have a substantial negative association with net operating profitability. There were no significant variations in the effects of working capital management across large and small businesses, according to the researchers.

Effect of working capital management on the profitability of Brewery businesses in Nigeria, conducted by Uguru, Chukwu, and Elom (2018), utilizing a sample of Nigerian Breweries Plc and Guinness Nigeria Plc from 2006 to 2014. The data was analyzed using an ex-post facto research methodology and the ordinary least square (OLS) regression technique. The findings show that controlling the number of days accounts receivables remain outstanding, as well as the number of days inventory is kept and the cash conversion cycle, are important elements in achieving the profitability goal of Nigerian brewery enterprises. Breweries should eliminate significant investments in current assets to prevent high inventory expenses, excess cash holdings, and account receivables, according to the report.

Kolapo, Oke, and Ajayi (2015) used two models to examine the impact of WCM on corporate performance of selected Nigerian enterprises from 2001 to 2010. They used the Return on Assets (ROA) and Gross Working Capital (GWC) models (GWC). The data was collected using a panel data technique. WCM has the ability to forecast ROA and GWC, according to the findings.

According to the findings, WCM has a considerable and beneficial impact on company performance through its effect on profitability, which is a typical criterion for evaluating a firm's performance.

Working capital management and firm profitability: Evidence from Nigerian Quoted Companies was the subject of a study conducted by Akindele and Odusina (2015), which looked at the relationship between working capital management and firm profitability for twenty-five companies over a seven-year period from 2005 to 2011. The study's data was derived from the companies' audited financial statements. The data was analyzed using multiple regression analysis, and the findings revealed that working capital management and business profitability have a negative association.

Bhunia and Das (2012) investigated the link between WCM and profitability in Indian small-medium businesses. A linear regression analysis was used to model WCM and profitability metrics from 2003 to 2010. WCM, including the working capital cycle, and profitability were found to have a minor association in the study. A reduced degree of connection between WCM and Profitability was also validated by a multiple regression test.

The influence of WCM on the financial performance of manufacturing businesses in India was investigated by Aeunkumar and Ramanan (2013). The sample was drawn from 1,198 companies during a five-year period, from 2005-2006 to 2009-2010. The results suggested that a faster cash conversion cycle will increase financial performance. To improve their company performance, companies tend to lengthen their inventory conversion period (ICP) and account payables conversion period (APP) while shortening their conversion cycle for short-term assets, according to the study.

Melita, Maria, and Petros (2010) studied the impact of working capital management on a company's financial performance in an emerging market. Working capital management, they reasoned, leads to increased profitability. Their data set includes companies that were listed on the Cyprus Stock Exchange between 1998 and 2007. Their findings, based on multivariate regression analysis, show that the cash conversion cycle, as well as all of its primary components, such as

days in inventory, days sales outstanding, and creditors' payment period, are linked to the firm's profitability.

Mary, John, and Laurie (2010) investigated the impact of inventory on firm profitability before and after the terrorist attacks of September 11, 2001, and Hurricane Katrina, with the goal of determining whether inventory has been used to develop supply chain resiliency and the stability of any such relationship. They used univariate analysis to look at the macro-level effects on firms' profitability, selected growth indicators, and inventory levels across manufacturers, wholesalers, and retailers over three-year periods around the disturbances. Regression models were used to isolate the effect of inventory on profitability and to evaluate if a change in the connection between inventory and firm profitability could be detected using balance sheet and income statement data. The findings reveal the impact of inventory on company profitability, with manufacturing showing a considerable reduction in the post-September 11 period but no change in the post-Katrina period.

Hasan, Halil, Arzu, and Salih (2011) looked at panel data from companies listed on the Istanbul Stock Exchange from 2005 to 2009 to see if there was an empirical link between working capital management efficiency and corporate profitability. Reduced cash conversion cycle (CCC), a measure of working capital management, was found to have a favorable impact on return on assets (ROA), a measure of profitability.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Research Design

A research design is a framework for carrying out study or acquiring data.

According to Saunders and Philip (2012), research design is a basic strategy for how you will answer your research questions, specifying the sources from which you expect to gather data and how you want to evaluate them.

The research design employed for this study is ex post facto research design.

3.2 Population of Study

R Babbie (2006) defines a population as "a collection of items from which the sample is really picked."

The target population is the listed Brewery companies on the Nigerian Stock Exchange

Table 3.1: List of Brewery Industries listed on Nigerian Stock Exchange

S/N	Names of Brewery Industries listed on Nigerian Stock Exchange
1.	Nigerian Breweries PLC
2.	Golden Guinea PLC
3.	Guinness Nigeria PLC
4.	Champion Breweries PLC
5.	International Breweries PLC

3.3 Sampling Unit

The sample is the proportion of the population that is chosen to represent the entire population.

In this study, the whole of the Brewery firms in the sector forms the sample.

3.4 Method of Data Collection

Data is the most significant component of any economic research or analysis, and it is especially crucial in the discipline of econometrics. The researcher must constantly remember that the quality of the data determines the quality of the investigation.

Secondary data is used in the study. The secondary source of data is data gathered from yearly financial reports and accounts of breweries, as well as the Nigerian Stock Exchange fact book. The yearly reports and accounts are retrieved through an internet database that is directed to each company's website. Other data are from the selected Breweries' annual reports from 2011-2020, which have previously been audited.

3.5 Method of Data Analysis

The study analyzed Multiple regression to analyze the data. The data analysis is carried out with the use of SPSS version 23.

3.5.1 Model Specification

An empirical model is created based on the use of panel data methodologies. This study employs panel data analysis, which is cross sectional data analysis, since it is the most useful.

Determination of The Model

Functional variable

ROA= f (ACP, APP, CP)

Where:

ROA= Return on Assets

ACP=Average Collection Period

APP=Average Payment Period

CP = Credit Policy

$\textbf{ROA}_{\textbf{it}} = \beta_0 + \beta_1 ACP + \beta_2 APP + \beta_3 CP + \varepsilon_{it}$

$\boldsymbol{\beta_1} \text{-} \boldsymbol{\beta_3}$=Coefficient of independent variable

$\boldsymbol{\beta_0}$= Intercept

$\boldsymbol{\varepsilon}$ =Error term.

3.5.2 Measurement of Variables

S/N	VARIABLE	DEFINITION	TYPE	MEASUREMENT
1	ROA	Return on Asset	Dependent	Net income after tax/total assets
2	ACP	Average Collection Period	Independent	Receivables/Credit sales*365 days
3	APP	Average Payment Period	Independent	Payable/Cost of sales*365 days
4	CP	Credit Policy	Independent	If disclosed in the annual report it should be given 1, and if not disclosed it should be given 0

CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

Preamble

This chapter is about the statistical analysis used in this study and the supporting interpretation. The statistical analysis was achieved through the use of Multiple Regression analysis

4.1 Results

The model summary in regression analysis displays the model's predictive power. R is the coefficient of correlation between the dependent variable (observed) and the independent variable(s), the predictor (s). The sign of R denotes the relationship's direction (positive or negative), with values ranging from -1 to 1. The strength of a relationship is indicated by the absolute value of R, with a larger absolute value suggesting a strong association. In regression analysis, the R squared (coefficient of determination) indicates the degree of linear-correlation of variables (fitness of fit). This is the percentage of variation in the dependent variable that the regression model can explain. In other words, it illustrates how much variance in the dependent variable can be explained by the independent variable(s). The sample R squared is a conservative approximation of the model's fit to the population. Only the number of variables in the regression model was modified in the adjusted R square. The standard deviation of the residuals represents the standard error of the estimate.

TEST OF HYPOTHESES

Hypothesis 1: The relationship between the return on assets and average collection period of Nigerian Brewery Industry

Table 4.1

(a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120[a]	.014	-.006	.106788

a. Predictors: (Constant), Average Collection Period

(b)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.008	1	.008	.696	.408[b]
	Residual	.547	48	.011		
	Total	.555	49			

a. Dependent Variable: Return on assets

b. Predictors: (Constant), Average Collection Period

(c)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.083	.035		2.358	.022
	Average Collection Period	-.001	.001	-.120	-.834	.408

a. Dependent Variable: Return on assets

From the regression tables above (Table 4.1 a – c), the model summary result indicated that there is a negative and weak correlation between return on assets and average collection period of Nigerian Brewery Industry. This is reflected on the value of the co-efficient of the correlation (R) which is 0.120. This value indicates that the strength of the relationship the two variables under study are about 12% while other variables in the model are constant. The co-efficient of determination (R^2) showed a value of 0.014 which indicates about 1.4%. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in average collection period. This is also explained by the value of t-statistics = -0.834 and its probability value of 0.408. The probability value is above the benchmark of 0.05 (5%). The decision rule follow that if the t-value and its corresponding p-value is above the 5% level of significance, we accept the null hypothesis of no significant relationship and reject the alternative hypothesis of significant relationship. In this instance, it is above, resulting in accepting the null hypothesis of no significant relationship. In essence, the average collection period although has a negative relationship with the return on assets in Nigerian Brewery industry, the relationship is not significant.

Hypothesis 2: The relationship between Average payment period and return on assets on Nigerian Brewery industry.

Table 4.2

(a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.020[a]	.006	-.020	.107539

a. Predictors: (Constant), Average Payment Period

(b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.018	.893[b]
	Residual	.555	48	.012		
	Total	.555	49			

a. Dependent Variable: Return on assets

b. Predictors: (Constant), Average Payment Period

(c)

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.062	.043		1.432	.159
	Average Payment Period	-3.081	.000	-.020	-.135	.893

a. Dependent Variable: Return on assets

From the regression tables above (Table 4.2 a – c), the model summary result indicated that there is a negative and weak correlation between average payment period and return on assets of brewery industry in Nigeria. This is reflected on the value of the co-efficient of the correlation (R) which is 0.020. This value indicates that the strength of the relationship the two variables under study are about 2% while other variables in the model are constant. The co-efficient of determination (R^2) showed a value of 0.006 which indicates about 0.3%. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in average payment period. This is also explained by the value of t-statistics = -0.135 and its probability value of 0.893. The probability value is above the benchmark of 0.05 (5%). The decision rule follow that if the t-value and its corresponding p-value is above the 5% level of significance, we accept the null hypothesis of no significant relationship and reject the alternative hypothesis of significant relationship. In this instance, it is above, resulting in accepting the null hypothesis of no significant relationship. In essence, the average payment period although has a negative relationship with return of assets of Nigeria brewery industry, the relationship is not significant.

Hypothesis 3: The relationship between return on assets and credit policy of Nigeria Brewery Industry.

Table 4.3

(a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.045[a]	.036	-.021	.107559

a. Predictors: (Constant), Credit Policy

(b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.010	.989[b]
	Residual	.555	48	.012		
	Total	.555	49			

a. Dependent Variable: Return on assets

b. Predictors: (Constant), Credit Policy

(c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.056	.023		2.396	.020
	Credit Policy	.036	.031	.002	.014	.989

a. Dependent Variable: Return on assets

From the regression tables above (Table 4.3 a – c), the model summary result indicated that there is a positive and weak correlation between return on assets and credit policy in Nigeria brewery industry. This is reflected on the value of the co-efficient of the correlation (R) which is 0.045. This value indicates that the strength of the relationship the two variables under study are about 4.5% while other variables in the model are constant. The co-efficient of determination (R^2) showed a value of 0.036 which indicates about 3.6%. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in credit policy. This is also explained by the value of t-statistics = 0.014 and its probability value of 0.989. The probability value is above the benchmark of 0.05 (5%). The decision rule follow that if the t-value and its corresponding p-value is above the 5% level of significance, we accept the null hypothesis of no significant relationship and reject the alternative hypothesis of significant relationship. In this instance, it is above, resulting in accepting the null hypothesis of no significant relationship. In essence, credit policy although has a positive relationship with the return on assets of Nigeria brewery industry, the relationship is not significant.

Overall regression between the dependent variable and the independent variable.

Table 4.4

   (a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.125ᵃ	.016	-.049	.109008

a. Predictors: (Constant), Credit Policy, Average
Collection Period, Average Payment Period

(b)

ANOVAᵃ

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.009	3	.003	1..244	.865[b]
	Residual	.547	46	.012		
	Total	.555	49			

a. Dependent Variable: Return on assets

b. Predictors: (Constant), Credit Policy, Average Collection Period, Average

Payment Period

(c)

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.095	.062		1.529	.133
	Average Collection Period	-.004	.001	-.125	-.846	.402
	Average Payment Period	-5.951	.000	-.038	-.255	.800
	Credit Policy	-.016	.031	-.003	-.023	.982

a. Dependent Variable: Return on assets

From the overall regression tables above, the interaction of the dependent variable and the three independent variables (average collection period, average payment period and credit policy) indicate different relationship. All the independent variables have a negative and insignificant relationship with the dependent variable. The f-statistics value of 1.244 and its corresponding value of 0.985 showed the independent variables jointly do not have a significant relationship with return of assets of Nigeria brewery industry. This is because the value is more than the significant benchmark of 5%.

The overall regression model can be stated as:

$$ROA_{it} = 0.095 - 0.004\ (ACP)_{it}\ - 5.951\ (APP)_{it}\ -0.016\ (CP)_{it} +\ \mu_{it}$$

4.2 Discussion of results

This section of the study discussed the result of the estimation in line with the objectives of the study. There are three specific objectives in this study.

4.2.1 The relationship between the return on assets and average collection period.

It was found out from the data in (Table 4.1 a – c), that there is a negative and weak correlation between return on assets and average collection period of Nigerian Brewery Industry. This negative relationship implies that as the ACP increases, the profitability of the firm's decreases which means that greater the average collection period, the lower will be the profitability which is in line with corporate finance theory. According to the corporate finance theory, fewer number of days of accounts collection will add more profits to the firm. This finding contradicts that of Akinlo (2013), who found a positive but insignificant correlation between ACP and profitability. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in average collection period, resulting that the relationship is not significant. This finding contradicts apariori's expectation also Sharma and Kumar (2011) find contradictory data, finding a positive relationship between ROA and accounts receivable.

4.2.2 Relationship between the return on asset and average payment period.

It was found out from the data in (Table 4.3 a – c), that there is a positive and weak correlation between return on assets and credit policy in Nigeria brewery industry. Credit policy bwas expected to have a significant positive relationship with profitability because this policy determines when customer will pay the company and when company is expected to pay its suppliers. In general, it is a huge determinant of available working capital available for the company in the running of its day-to-day activities. A too loose policy will lead to bankruptcy, and a too strict policy will restrict the customers from taking more goods. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in credit policy, the relationship is not significant. The findings of Deloof (2003), all point to a negative relationship between accounts payable and firm profitability in Belgium, Greece, the United States of America, Spain, Turkey, and Kenya, respectively.

4.2.3 Relationship between return on assets and credit policy.

It was found out from the data in (Table 4.3 a – c), that there is a positive and weak correlation between return on assets and credit policy in Nigeria brewery industry. This result implies that on the average, a variation in return on assets within the period under review is systematically explained by changes in credit policy, the relationship is not significant. The findings of Simonson et al., (2011), points out to a positive relationship between credit policy and the firms profitability.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

Preamble

This chapter contains the summary of the research project which includes the purpose and the method of obtaining the results as presented in the study. It contains the conclusion of the findings of the study. Lastly, recommendations were made in line with the summary and conclusion of the study.

5.1 Summary of the Findings

The main objective of this study was to investigate the impact of credit management on profitability of brewery firms in Nigeria. Specifically, the study examined the relationship between average collection period, average payment period, credit policy and the profitability of brewery firms in Nigeria. The study adopted the ex post facto research design. The population was comprises of 5 companies listed on the Nigerian Stock Exchange in Nigeria, and the random sampling method was adopted. The data for the study was gathered from secondary sources mainly from yearly financial reports and accounts of the breweries as well as the Nigerian Stock Exchange fact book of which each of the sample data from year 2011- 2020 were used for the study. The study employed the use of multiple regression analysis to analyse each of the three objectives of the study. The findings showed that the the average collection period has a negative relationship with the return on assets and their relationship is not significant and the average payment period also has a negative relationship with return of assets their relationship is also not of significant. However, there exist a positive relationship between credit policy and the return on assets but their relationship is also not significant.

5.2 Conclusions

From the summary of the findings above, credit policy has a positive relationship with the return on assets suggesting *ceteris paribus* the efficiency of credit policy would result in increase in return of asset of the brewery firm. Average collection period and average payment period had a negative relationship with return on asset which proved that *ceteris paribus* increase of average collection period and average payment period could be detrimental to the profitability of brewery firm. The

34

result however shows the assertion that the average collection period, average payment period and the credit policy all has no significant impact on the return on asset.

5.3 Recommendations

The following recommendations are hereby given considering the results:

1. Effective credit management strategies, proper undertaking of credit analysis on the prospective buyers, and making efforts to ensure that funds are not tied up in receivables for longer periods.
2. Firms in should strive to keep the receivable period at minimum in order to enhance financial performance, profitability.
3. Firms should avoid holding onto dead stock as it ties up finances hence negatively impacting on the firm's financial performance.
4. Strategic measures to strengthening partnership with debtors for easier collection of receivables, putting measures to avoid bad debts such as analysis the customer risk on payment, and most importantly instituting effective cash management system in place.

5.4 Suggestion for Further Research

1. Studies should be carried out to examine why consumers goods firms should pursue small inventory conversion period, low average collection receivable period and small Cash conversion cycle.
2. There is need for further studies to carry the effect of working capital management on profitability of consumer goods companies.

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<div align="center">**APPENDICES**</div>

Appendix 1:

S/N	AUTHOR AND YEAR	TITLE	OBJECTIVE	SAMPLE SIZE AND PERIOD	TECHIQUE/ METHODOL OGY	FINGINGS	GAP
1.	Nyawera, E.M. (2013)	A survey of Credit risk manageme nt practices by commerci al banks in Kenya	The aim of this article is to investigate the impact of loan policies on the profitability of Kenyan microfinance firms	Commercial banks in Kenya in 2013	Regression analysis	This study revealed that there were negative relationship between credit terms and conditions and collection efforts, which increased the profitability of the organisations while also reducing the collection efforts which resulted in a lower default and thus improving the financial performance of deposit-taking microfinance institutions	This is a foreig n study.

2.	Okwo, Ugwunta, and Agu (2012)	An Examination of the Factors that Determine the Profitability of Nigerian Beer Brewery Firms	The aim of this study is to investigate factors that influence the profitability of Nigerian breweries	The authors analysed the annual data from the brewery firms annual reports from 2000 to 2011	Multiple regressions were used	The findings reveal that the inventory-to-cost-of-goods-sold, account receivable-to-sales, and sales-to-general-expenses-to-sales ratios all have a substantial impact on gross profit margin.	There is time gap. the research could have extended the time frame
3.	Abdulrasheed, Khadijat, Sulu, and Olanrewaju (2011)	Inventory Management in Small Business Finance: Empirical Evidence from Kwara State, Nigeria	The aim of this study is to investigate the inventory management in small enterprises in Nigeria's Kwara State.	Selected small businesses in Kwara state in the year 2011	Regression model was used	The findings revealed a strong positive association between inventory and small business profitability in Nigeria's Kwara State.	
4.	Al Hayek (2018)	The relationship between Sales Revenue and Net	The aim of this study is to identified the association between sales revenue and net	Data gotten from Relevant companies from 2010-2017	Multiple regression	The findings revealed that there is a statistically significant link between sales revenue and net	There is gap. The research might

		profit with Net cash flows from Operating Activities in Jordanian Industrial Joint Stock Companies	profit with net cash flows from operating operations			profit with net cash flows from operating activities in Jordanian industrial joint stock enterprises	have exceeded the time frame
5.	Mary, John, and Laurie (2010)	The Relationship between Inventory Management and Firm Profitability: Sector Consequences of Catastrophic Supply Chain Disruptions	The aim this study is to determine whether inventory has been used to develop a supply chain resiliency and the stability of any such relationship	On firms inventory from September 11, 2001 terrorists attack to Hurricane Katrina	Regression model	The findings reveal the impact of inventory on company profitability, with manufacturing showing a considerable reduction in the post-September 11 period but no change in the post-Katrina period.	The research could have extended the time frame.

6.	Melita, Maria, and Petros (2010)	The Effect of Working Capital Management on Firm's Profitability: Empirical Evidence from an Emerging Market	The aim of this study is to know the impact of working capital management on a company's financial performance in an emerging market	Their data set includes companies that were listed on the Cyprus Stock Exchange between 1998 and 2007	Multivariate regression analysis	Their findings, shows that the cash conversion cycle, as well as all of its primary components, such as days in inventory, days sales outstanding, and creditors' payment period, are linked to the firm's profitability.	There is time gap, The research could have extended the time frame.
7.	Hasan, Halil, Arzu, and Salih (2011)	The Relationship between Working Capital Management and Profitability: Evidence from an Emerging Market	The aim of this study is to see if there was an empirical link between working capital management efficiency and corporate profitability	data from companies listed on the Istanbul Stock Exchange from 2005 to 2009	Panel Data Method	The findings revealed that there is a favorable impact on return on assets (ROA) using reduced cash conversion cycle (CCC) which is a measure of working capital management	There is time gap and the research could have extended the time frame
8.	Aeunkumar and Ramanan (2013).	Working Capital Managem	The aim of this study is to know the influence of	The sample was drawn from 1,198	The authors apply correlation	The findings suggested that a faster cash	There is a time

		ent and Profitability: A Sensitivity Analysis	WCM on the financial performance of manufacturing businesses in India	companies during a five-year period, from 2005-2006 to 2009-2010.	analysis and regression analysis	conversion cycle will increase financial performance.	gap. The research could have extended the time frame.
9.	Bhunia and Das (2012)	Affiliation Between working capital management and profitability.	To investigate the link between WCM and profitability in Indian small-medium business	Metrics from 2003 to 2010	Linear regression and multiple regression	the working capital cycle, and profitability were found to have a minor association in the study. A reduced degree of connection between WCM and Profitability was also validated by a multiple regression test.	There is time gap and the research is foreign.
10.	Akindele and Odusina (2015),	Working capital management and firm profitability: evidence	This study aims at knowing the relationship between working capital management and firm profitability	Twenty-five companies over a seven-year period from 2005 to 2011	Multiple regression analysis	The findings revealed that working capital management and business profitability have a negative association.	There is gap

		from Nigerian quoted companies					
11.	Kolapo, Oke, and Ajayi (2015)	Effect of working capital management on corporate performance: Cross-sectional evidence from Nigeria.	The aim of this study is to examine the impact of WCM on corporate performance.	selected Nigerian enterprises from 2001 to 2010	Panel data Technique	According to the findings. WCM has the ability to forecast ROA and GWC and also has a considerable and beneficial impact on company performance through its effect on profitability, which is a typical criterion for evaluating a firm's performance.	There is gap. The research could have extended the time frame.
12.	Uguru, Chukwu, and Elom (2018)	Effect of working capital management on the profitability of brewery firms in Nigeria	The aim of this study is to know the effect of working capital management on the profitability of Brewery businesses in Nigeria	A sample of Nigerian Breweries Plc and Guinness Nigeria Plc from 2006 to 2014	The data was analyzed using An ex-post factor research methodology and the ordinary least square (OLS) regression technique	The findings show that controlling the number of days accounts receivables remain outstanding, as well as the number of days inventory is kept and the cash conversion cycle, are important elements in	There is time gap

						achieving the profitability goal of Nigerian brewery enterprises.	
13.	Falope and Ajilore (2009)	Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria	The aim of this study is to know the effect of WCM on profitability performance in Nigeria listed non-financial firms	Fifty Nigerian listed non-financial firms from 1996-2005	Pooled regression	According to findings the average payment duration and cash conversion cycle were found to have a substantial negative association with net operating profitability. There were no significant variations in the effects of working capital management across large and small businesses, according to the researchers.	There is time gap
14.	Tauringana and Afrifa (2013)	The relative importance of working capital	The relative importance of WCM	133 UK SMEs from 2005 to 2009	Panel data regression analysis	Their findings suggest that managing average days payable (ADP) and average days receivable	This is a foreign Research ch

		manageme nt and its componen ts to SMEs' profitabilit y				(ADR) is critical for SMEs' profitability	
15.	Yazdanfar and Ohman (2014)	The impact of cash conversio n cycle on firm profitabilit y: An empirical study based on Swedish data	To investigate the impact of Cash Conversion Cycle on performance (profitability)in Swedish Small and medium sized enterprises	Using a sample of 13,797 SMEs operating in four industries from Swedish	Seemingly Unrelated regression (SUR) model	The findings revealed that working capital management has a negative connection with firm profitability	This is a Foreig n Resear ch
16.	Owusu (2010)	Evaluation of the financial performan ce of Ghana Breweries Limited after merger and	The purpose of the study was to determine the profitability level of Ghana Brewery Ltd (GBL), its solvency and liquidity situation, the efficacy and	Using GBL after enlistment on GSE	Ordinary Least Square (OLS) Technique	The findings reveal that, despite fierce competition from lower-cost brands and an unfavorable economic climate following the merger, the company's performance was	This is a foreig n researc h.

		enlistment on Ghana Stock Exchange	efficiency of using owners and creditors funds, and the propriety of using a combination of debt and owner's equity to support its operations			satisfactory over the research period	
17.	Ksenija (2013),	Impact of Accounts Receivable management on profitability during the financial crises: Evidence from Serbia	The aim of this study is to know how regulated markets in Serbia manage their accounts receivable during periods of recession	108 businesses from 2008-2011	Purposive Sampling Technique	The short-term effects are investigated, and the analysis finds a positive but not significant relationship between accounts receivables and two profitability dependent variables, return on total asset and operational profit margin.	There is time gap
18.	Owusu (2013)	Profitability During Financial Crisis Evidence from the	The aim of this study is to know how public firms listed on the regulated market in Serbia manage	A total of 108 businesses are included in the study. During the	Regression Model	the analysis finds a positive but not significant relationship between accounts receivables and	There is time gap. The study is

		regulated capital market in Serbia	their accounts receivable during periods of recession	financial crisis of 2008-2011		two profitability dependent variables, return on total asset and operational profit margin	foreig n

Appendix 2: AVERAGE COLLECTION PERIOD

YEAR	CHAMPION	GUINNESS	INTERNATIONAL	GOLDEN GUINEA	NIGERIAN	TOTAL	AVERAGE
2011	39.76342	53.52371	40.47217	40.9228	17.96013	192.6422	38.52845
2012	62.45282	29.7693	51.26573	42	28.78968	214.3645	42.8729
2013	86.8578	45.12072	65.9537	52.30837	19.31177	269.5524	53.91047
2014	63.8236	64.23553	58.12405	56.8674	22.41358	265.4642	53.09283
2015	66.40032	47.75605	64.97054	58.98525	20.50573	258.6179	51.72358
2016	23.81526	94.8881	63.87424	48.22647	23.23722	254.0413	50.80826
2017	95.36572	66.57233	14.80462	46.9877	95.36572	319.0961	63.81922
2018	83.53004	60.98907	0.138252	57.81211	83.53004	285.9995	57.1999
2019	46.68366	72.2201	76.67542	84.58235	23.62929	303.7908	60.75816
2020	2.69477	65.45965	42.13157	50.29077	11.32609	171.9029	34.38057

Appendix 3: AVERAGE PAYMENT PERIOD

YEAR	CHAMPION	GUINNESS	INTERNATIONAL	GOLDEN GUINEA	NIGERIAN	TOTAL	AVERAGE
2011	60.53695	20.85998	536.4055	92.41851	192.8548	903.0757	180.6151
2012	143.39030	162.9446	273.1338	104.2422	176.9963	860.7072	172.1414
2013	207.0076	167.3293	200.894	125.4529	192.8984	2756.65	551.33
2014	330.9888	193.7846	201.5802	118.512	233.9121	1078.778	215.7555
2015	246.6238	183.5502	147.1352	159.4445	209.2106	945.9643	189.1929
2016	167.1176	227.6903	191.0143	221.4385	229.0139	1036.275	207.2549
2017	119.6854	202.4909	152.7828	124.9583	119.6854	2094.648	418.9295
2018	183.8705	120.6051	268.9778	144.6648	183.8705	901.9887	180.3977
2019	150.4425	127.5179	300.4203	183.5673	195.5187	957.4668	191.4934
2020	135.5008	164.1153	348.8364	253.3298	230.4426	1132.225	226.445

Appendix 4: RETURN ON ASSET OF SELECTED BREWERIES

YEAR	CHAMPION	GUINNESS	INTERNATIONAL	GOLDEN GUINEA	NIGERIAN	TOTAL	AVERAGE
2011	-0.26238	0.194387	-0.15207	0.000212	0.178392	-0.04146	-0.00829
2012	-0.1966	0.134088	0.150519	0.000238	0.149991	0.23824	0.047648
2013	-0.03958	0.097998	0.101027	0.134207	0.17044	0.464096	0.092819
2014	-0.00411	0.072346	0.086395	0.209647	0.121599	0.485878	0.097176
2015	0.001693	0.063764	0.064514	0.199109	0.106669	0.435748	0.08715
2016	0.001891	-0.01472	0.079229	0.046731	0.077241	0.190376	0.038075
2017	-0.00525	0.013173	0.00601	0.229719	-0.00525	0.238403	0.047681
2018	0.009417	0.043833	-0.01246	0.264935	0.009417	0.315141	0.063028
2019	0.018812	0.034104	-0.07611	0.236242	0.042104	0.255153	0.051031
2020	0.036783	-0.08726	-0.03318	0.159279	0.016933	0.092548	0.01851