

Innovations

Credit Management Policy and Growth of Selected Biomedical Firms in Lagos, Nigeria

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Abstract

The major goal of this study was to examine how credit management affected the viability of a few Lagos, Nigeria-based biomedical companies. Trade credit, a form of financing that enables customers to make purchases on credit terms, can help small and medium-sized businesses (SMEs) enhance their earnings. However, many small business owners have struggled with improper trade credit management. This study aims to fill this vacuum and investigate how credit management affects the viability of businesses. The issue found in this study is that small business owners lack strategies to become profitable within the first five years of starting up their companies as a result of poor trade credit management. One of the main causes of small business failure around the world has been a lack of liquidity brought on by bad debts and overdue customer payments. Prior studies have concentrated on financing and account payables. Selected biomedical companies in Lagos State were the focus of the inquiry. A descriptive study methodology was used, and a high response rate of 95.86% was achieved with the return of 162 out of 169 distributed questionnaires. To evaluate the gathered data and test various hypotheses, statistical analysis was used with tools like SEM-PLS (Structural Equation Model) and Statistical Packages for the Social Sciences (SPSS). The research showed that credit management policies had a big influence on growth. According to the study's conclusions, it is advised that businesses should improve their credit management policies. By putting these suggestions into effect, businesses will be able to boost their credit management procedures, spur economic expansion, and increase sustainability overall.

Keywords: *Biomedical firms, Business sustainability, Credit management, Small and medium-sized enterprise, Trade credit.*

Introduction

Small enterprises are growing rapidly in Nigeria today in an effort to combat unemployment and the country's underdeveloped economy. Researchers such as Okyere (2018) suggested that growing SMEs increase the size of the directly productive sector of the economy, producing tax money for the government and aiding in poverty reduction through financial transfers, income through employment, and firm

ownership. The number of new small business firms that open each year is almost equal to the number of small businesses that close due to failure (Seyoum, 2021).

People starting small business endeavors without sufficient planning is the main issue facing the industry (Seyoum, 2021). The utilized organizational management policies and techniques may thus indicate the gap in this regard. Yet, most biomedical company, particularly in Nigeria, has not used a thorough investigation on these techniques.

A small business is an organization with less than 500 employees, according to research conducted by the Small Business Administration. In order for emerging and growing SMEs to adopt these methods for their survival and profitability, it is important to learn the strategies employed by firms with over 500 employees and more years of existence. Past research has demonstrated that the collapse of SMEs globally was caused by limited liquidity to start viable investments, which led to reduced profitability level to maintain operations. A substantial portion of the liquidity issues were linked to bad debts from clients who were unable to make timely payments for the goods offered to them on credit. (Li, 2019).

Some SMEs sacrifice liquidity by giving consumers a lot of credit in an attempt to boost sales volume and hold a fair portion of the industrial market. Without the right credit policy to manage debts, long-term credit would negatively affect liquidity and profitability Okyere, (2018). As a result, a business should use credit management tools and rules created by credit experts to assess credit, manage credit, and prevent bad debts. The management of a company increases debt recovery through good credit sales, achieves credit cost savings, and only extends credit to creditworthy customers in an effort to reduce bad debts and increase cash inflow. In order to outperform the competition, businesses should create competitive financing terms.

The use of trade credit can help increase a business's profitability. However, if there is too much investment in trade credit, it can lead to an increased likelihood of income loss or expense growth, which can then result in decreased profitability (Hoang *et al.*, 2019). The connection between profitability and credit sales is not straightforward. Research by various authors (Pham & Huynh, 2020) has shown that there is a non-linear connection between the two. Most studies on trade credit have focused on the financing aspect of business by offering loans for trade, while some have focused on account payables, but not much study has been done on account receivable and trade credit, which involves the supply of goods on credit for later payment.

Everyday life and virtually every business that engages in any type of trade credit investment depend heavily on the availability of credit. Regardless of the nature of the company, credit management is among the most crucial jobs in any organization that deals with money. For this reason, it cannot be neglected by any enterprise that deals with credit.

The goal of this study is to evaluate the connection between SMEs' growth and credit management practices and how that link affects the development and survival of small-scale businesses. This is crucial since SMEs' development would affect the country's overall progress. Assessing the impact of trade credits on small businesses would also assist SMEs in routinely and consciously reviewing their credit strategies to make sure they are optimal and lead to higher profitability.

This study therefore focuses on credit management strategy as a means of increasing profit and sustaining small business growth. It is designed to help the company in obtaining organizational credit targets, winning over customers' trust, enhancing one's competitiveness through increasing sales, and also gaining a dominant position in the market. A firm will move towards its intended position if these combinations of well-thought-out aim and deeds are used. This organizational strategy seeks to be efficient (increase sales), handle

problems (financial risk), Utilize resources completely (raise cash flow), take advantage of opportunities (make wise investments), and address hazards (lower bad debt losses). All of them are considered applicable as tactics for promoting growth and for the survival of SMEs in Nigeria.

2.0 Literature Review

Credit Management and Business Sustainability

To guarantee stability and maximize development potential, a modern business plan must include sound credit management. It is risky and requires forethought and action well before sales start. Grzegorz (2020) argues that businesses may engage in excellent credit management by creating relationships with customers, communicating clearly about payment policies, invoicing promptly, and following up on overdue balances. Good credit management has several advantages, including reduced costs for suppliers related to risk and storage, higher earnings thanks to the stimulation of implicit interest rates, and better financial results for purchasers. The analysis concludes that biomedical firms will see increased profitability as a result of expanding trade credit receivables.

Good credit management is also crucial to a company's day-to-day operations and cash flow. Credit management is essential for increasing earnings and keeping customers happy, according to ACP members Otto (2022), Botha (2022), and Els (2022). If money coming in is what keeps a firm afloat, then managing credit is what drives it forward, and it becomes better and better as time goes on. A credit policy is a collection of rules that specifies the circumstances under which credit is offered to clients, how their creditworthiness is determined, and how payments are collected and delinquent accounts are handled.

Accounts receivable management's end goal is to be paid without losing out on sales to overzealous collectors. Customers' compliance with the company's credit conditions may be monitored by conducting credit checks, establishing credit criteria, and keeping an eye on the accounts receivable. A company may save money and time by practicing good credit management. The trade-off model proposed by Jibrin *et al.* (2013) suggests that, while managing accounts receivable, businesses need to find a happy medium between liquidity and profitability. As it may have a significant effect on a company's financial performance, development, and sustainability, effective credit management is seen as crucial in striking this equilibrium. As the financial management landscape of corporations changes, trade credit is gaining in popularity, as noted by Almasria *et al.* (2021). Businesses are taking the necessary precautions to control for reliable financial reporting.

To be sustainable as a firm is to be able to run and stay in business for the long haul while minimizing negative effects on the environment, society, and the bottom line. Sustainable business requires incorporating environmental considerations into every stage of the manufacturing, distribution, and sales processes. Instead of prioritizing short-term gains, sustainable businesses aim to develop a successful organization that positively impacts both society and the natural world.

Adopting sustainable practices in the management of a company's credit operations is a key component of business sustainability in this context. To ensure the company's long-term financial, social, and environmental viability, it is necessary to create and execute credit policies and processes that take these factors into account.

Customers' creditworthiness might be evaluated in terms of their overall sustainability practices, including their environmental and social effect, as part of sustainable credit management practices. Creating sustainable credit terms and conditions may also include rewarding or punishing clients based on their adoption of environmentally friendly behaviors.

Credit risk is decreased, financial performance is enhanced, and societal and environmental impacts are positively impacted when sustainability is included into credit management practices.

2.1 Credit

According to Kaaya (2013), corporations may raise product demand by extending credit to customers, but this strategy is profitable only if the revenue gained from the extra sales is more than the interest and other expenses associated with the receivables. To supply products or services without immediate payment in exchange for an agreement for future payment is an example of "credit." Since high default rates may result in fewer cash flows, reduced liquidity, and financial trouble, it is vital for businesses to recognize possible credit default in a timely way. Conversely, a debtor level that is just right, with fewer bad debts and improved financial health, may be achieved by limiting credit exposure.

2.2 Credit Management

A key component of overseeing a company's finances is credit management, which includes prudent financing of receivables and efficient handling of debtors. (Asante, 2018).

Protecting the company's investment in debtors and maximizing operational cash flows are the main goals of credit management. To do this, businesses must set up and implement procedures for extending credit to clients, collecting overdue payments, and reducing the high-risk element of unpaid debt. Al-Zararee (2019) emphasizes the importance of formal policies and procedures to ensure proper credit granting, granting credit only to economically and technically viable businesses, granting the appropriate size of credit, ensuring credit is recoverable, and monitoring credit activity.

According to Almasria (2021), good credit management is essential to lowering the risk of bad debts, overbooking, and insolvency. To lower the risk of credit default, financial institutions should be aware of their clients' financial stability, credit account history, and payment preferences. Sound underwriting concepts, efficient evaluation processes, and a reliable monitoring system are also necessary for good credit management. Technology must be used to automate procedures like credit scoring, debt collection, and credit reporting in order for a credit policy to be effective (Kamau *et al.*, 2020).

2.3 Credit Policy

A credit policy can be viewed as a set of written guidelines that outline the conditions and terms for granting things on credit, the qualifications for consumers, the procedures for recovering outstanding balances, and what to do in the event that a customer is in default. These rules also specify which items can be purchased on credit, the precise conditions of payment, the maximum amounts that can be owed, and the procedures for dealing with past-due debts.

The main goal of managing accounts receivable, according to Li (2019), is to collect receivables without losing revenue as a result of aggressive collection efforts. By using credit selection and standards, this is achieved which involve evaluating assessing a customer's creditworthiness in relation to the minimum requirements established by the company for extending credit, and credit monitoring, which involves looking at accounts to

ascertain whether clients are paying in accordance with the agreed-upon credit terms. The investment a company makes in its accounts receivable can suffer from slow payments.

Trompeter and Weber (2019) claim that although strategies are plans to accomplish market position and company objectives, policies are guidelines developed by an organization for decision-making. Policies are operational documents that specify the procedures for extending credit to consumers, while credit management policies are operational documents that take precedence over policies. Contrarily, a credit management strategy is a planned approach that enables a business to meet its credit objectives, win over customers' trust, obtain a competitive edge through sales volume, and secure a favorable position in the market.

2.4 Growth

Gupta, Guha, and Krishnaswami (2019) explain that different terms have been used to describe the various stages of growth, the fundamental experiences that businesses go through tend to be consistent. Most researchers agree that every enterprise must begin, progress through different challenges and difficulties, and ultimately reach a point of maturity before potentially experiencing decline. Several factors contribute to the success of a business, and there are specific precursors that enable companies to move from one growth stage to the next.

There are two different schools of thought among researchers about the growth path of enterprises: some believe it is predictable and linear (Alalade,2014) while others think it is relatively unpredictable and opportunistic (Chen,2010). Understanding a business's growth depends on factors such as its definition, how much it has grown, its offerings in the market, its assets, and legal structure. Studying how a business manages its growth transitions and what patterns it follows is crucial. In this paper.

2.5 Credit Information Scoring and Analysis

A company's ability to lend money to reliable consumers depends on accurately assessing their creditworthiness, and there are a number of ways to do so. Ratio analysis of the potential client's financial accounts is one option; other considerations include the client's payment history, significant assets, trade credit references, and director details. Customers with poor credit histories may need to provide a credit bond from a respectable financial institution before they may open an account (Werner, 2018). Character, capacity, capital, collateral, and condition are the "5Cs" of credit, which are accepted standards for assessing credit risk. Condition refers to economic and other factors that may affect the customer's ability to pay, While the customer's desire to fulfill credit commitments is referred to as their character, capacity to pay debts from operating cash flows is measured by financial ratios, capital is the assets pledged as security, and collateral is the assets pledged as security. These factors may be considered when deciding whether or not to extend a consumer credit.

2.6 Factoring in Credit Management

Accounts receivable factoring refers to the practice of selling or assigning debt collection rights to a third party. The factor buys the debt from the original owner at a discount, freeing up cash flow and allowing business to continue as usual. The debt is pursued by the buyer until the whole amount is recovered, at which point the buyer makes a profit. The component also offers its customers insightful data and research on market tendencies.

The finance manager must keep an eye on outstanding balances to guarantee timely payment of all accounts receivable. Debt may be tracked in a number of ways, such as using an ageing schedule, a collection experience matrix, or the typical collection timeframe. Credit guidelines will compare the period of credit to the typical collection timeframe in order to ascertain the typical amount of time to collect an account receivable. Longer collection times increase the likelihood of bad debt (Eniola, 2018).

2.7 Track the progress of your client's payments.

To minimize the risk of late payments from customers, businesses should regularly monitor their payment progress and ensure they are complying with the contract agreement. According to Jibrin *et al.*, (2013), effective credit management techniques such as monitoring payment progress can help businesses avoid unpleasant surprises and ensure financial stability. If a payment becomes late, it is recommended to start with a friendly phone call and follow up with a written reminder. However, if the invoice remains unpaid after two or three months, seeking help from a professional debt collector such as a debt collection agency may be necessary. Additionally, seeking further credit management services can provide additional support to businesses. Although credit management strategies can help minimize risks, it is important to remember that not all risks can be completely eliminated (Almasria *et al.*, 2021).

2.8 The Contribution of Small Businesses to the Growth of the Nigerian Economy

Small scale businesses have significantly contributed to the economic development of Nigeria, reducing dependence on imported goods and materials by utilizing locally made machines and raw materials as inputs. The definition of small-scale firms varies depending on the geographic location and the nature of economic activity being performed. Small and Medium Scale Enterprises (SMEs) have contributed significantly to the gross domestic product, export earnings, and development opportunities of the country, and have been identified as an important element in the development of the nation's economy.

After gaining independence, Nigeria has placed significant emphasis on the growth of SMEs to reduce poverty and promote economic growth. The importance and role of small-scale businesses may vary from one industry to another, but their contribution to the continuous growth of the economy cannot be overemphasized (Ogundele *et al.*, 2021).

2.9 Technology's Impact on Credit Management

Technology provides companies with new tools and strategies to improve credit risk assessment, reduce processing time, and improve collections.

One significant impact of technology on credit management is the use of credit scoring models, which automate credit decisions and provide more accurate predictions of credit risk. These models use data analytics and machine learning to analyze credit history, financial data, and other relevant information to determine the likelihood of default. Studies have shown that credit scoring models can significantly reduce credit risk and increase profitability (Mester, 2018).

Another impact of technology on credit management is the use of electronic invoicing and payments, which streamline the billing process, reduce errors, and improve collections. Electronic invoicing has been shown to reduce processing time by up to 80%, improve accuracy, and speed up collections (Sawhney, 2019).

Furthermore, advances in artificial intelligence (AI) have enabled companies to leverage data and analytics to improve credit management further. AI algorithms can analyze vast amounts of data to identify trends and

patterns, helping companies make more informed credit decisions and develop more effective risk management strategies (Columbus, 2019).

In conclusion, technology has revolutionized credit management by providing companies with new tools and strategies to improve credit risk assessment, reduce processing time, and improve collections. The use of credit scoring models, electronic invoicing and payments, and AI algorithms has been shown to reduce credit risk, improve accuracy, and increase profitability.

2.10 Credit Management Policy and Growth

When discussing how businesses handle credit risk and collections, the term "credit management policy" is often used. Tsegay and Woldu (2019) note that a company's credit risk may be efficiently handled via the use of policies such as credit scoring and approval procedures, establishing credit limits and conditions, monitoring and handling collections, and so on.

There are several aspects that might affect the correlation between credit management policy and company expansion. A company's ability to spend and develop is bolstered by its cash flow, which is in turn aided by prudent credit management procedures. Companies may better manage their cash flow and lower their exposure to bad debts by, for instance, utilizing credit scoring to identify high-risk clients and establishing suitable lending terms and restrictions. Firms may boost their liquidity and financial stability, which in turn can assist expansion, by keeping an eye on collections and taking measures to recover late payments (Han & Park, 2017).

On the other hand, overly restrictive credit management policies can also hinder business growth by limiting firms' ability to take on new customers and invest in new opportunities. For example, if a firm sets credit limits that are too low or imposes strict credit terms, it may struggle to attract new customers or retain existing ones, which can limit its ability to grow (Pihlajamäki, 2018). Moreover, if a firm's collections policies are too aggressive or poorly managed, it may damage its reputation and customer relationships, which can also limit its ability to grow (Chen *et al.*, 2018). For instance, Nyawera (2013) discovered that successful credit policies lead to better financial results for businesses. Financial success has been shown to correlate with credit policy factors. Gatuhu (2013) examined Kenyan microfinance organizations and found that customer assessment, credit risk management, and collection policies all influenced the firms' financial success. There was a correlation between a company's collection policy and its bottom line, with stricter policies resulting in greater amounts recovered in bad debt situations. According to the findings, MFIs should have a stricter collection procedure in order to effectively recover debt.

The relationship between credit management policy and business growth is complex and context specific. Firms need to develop credit management policies, taking into account factors such as industry, customer base, and competitive environment. By adopting effective credit management policies, firms can improve their financial performance and support sustainable growth.

Table 2.1: An Empirical Summary of a Few Selected Journal Articles

Study Title	Authors & Date of publication	Key Findings
Credit Management Policy and Company Expansion	Tsegay & Woldu (2019)	The use of credit management policies, such as credit scoring, approval procedures, credit limits, and collections monitoring, can efficiently handle a company's credit risk. These policies help manage cash flow, reduce exposure to bad debts, and enhance financial stability, which aids in company expansion.
Impact of Restrictive Credit Management Policies	Pihlajamäki (2018)	Overly restrictive credit management policies, such as low credit limits and strict credit terms, can hinder business growth.
Negative Effects of Aggressive Collections Policies	Chen <i>et al.</i> (2018)	Aggressive or poorly managed collections policies can harm a firm's reputation and customer relationships, negatively impacting business growth.
Relationship between Credit Management Policy and Expansion	Han & Park(2017)	Prudent credit management procedures, including credit scoring, appropriate lending terms, and efficient collections, contribute to better cash flow management, lower bad debt exposure, and improved liquidity. These factors support company expansion by increasing financial stability and resources.

Source: Researcher, 2023

2.2 Theoretical Review

Financing Advantage Theory of Trade Credit (Schwartz, 1974)

According to the financing advantage hypothesis of trade credit, merchants can more effectively monitor and enforce repayment of loans from their customers than can conventional lenders. Because of this, the supplier may have lower costs than banks when extending credit to customers. Credit providers may save money by taking advantage of opportunities including acquiring new knowledge, exerting influence over the buyer, and reclaiming depreciated assets.

Unlike banks, suppliers may pay more frequent visits to the buyer's location in order to gather necessary data. The amount and frequency of orders, as well as the buyer's reaction to early payment reductions, may all be gauged in this way, providing valuable information to the provider. If the buyer is no longer able to take advantage of early payment reductions, the supplier may infer that the customer's creditworthiness has

declined. The seller's position and the kind of products supplied are relevant factors in exercising influence over the customer. Suppliers might threaten to shut off future supplies in the case of default. In the case of customer default, the provider may also take the items given, particularly if the commodities are long-lasting.

According to the financing advantage hypothesis of trade credit, if a preexisting market exists for the suppliers' wares, the suppliers will have an advantage over financial institutions since they will be able to recover and resell their assets at a reduced cost. Threatening to withhold future financing may have minimal impact on the borrower's activities in the short-term, and the capacity to withhold previous financing may be restricted by bankruptcy regulations. The theory's applicability to credit management in the biomedical industry is highlighted. In this model, the manufacturer that extends credit to a customer is seen as the supplier, and the consumer, or debtor, is viewed as the client. The creditor takes into account the firm's financial records, the customer's payment history, and the cost of credit management before extending credit.

Several research, such as those by Alalade, Binuyo, and Oguntodu (2014), have relied on the financing advantage hypothesis of trade credit. In sum, the theory indicates that suppliers may have special benefits when extending credit to customers, benefits that may be used to reduce credit risk and boost profitability.

3.0 Methodology

The study adopted interpretivism research philosophy, emphasizing how individuals interpret social occurrences (Bryman, 2017). Contextual factors that shape human views and behaviors was acknowledged, making interpretivism suitable for exploring the subjective experiences of participants in the biomedical industry (Gibbs, 2018). A quantitative research strategy was employed. The quantitative component involved a cross-sectional survey administered to distributors and suppliers in the biomedical business in Lagos. The survey aims to gather data on credit management and growth (Creswell & Creswell 2017). The population comprised selected small and medium-sized enterprises (SMEs) involved in supplying consumables and equipment in the biomedical industry in Lagos. Lagos was chosen due to its significance in Nigeria's economy and the concentration of biomedical businesses in the state. Using a statistical formula by Elavarasan & Pugazhendhi (2021) a sample size of 169 participants was determined, ensuring a 95% confidence level and a margin of error of 5%. Purposive sampling was used to select SME owners, managers, and staff responsible for credit management and financial decision-making within the biomedical sector. The sampling frame includes selected registered biomedical companies in Lagos, obtained from the Corporate Affairs Commission (CAC) and the Lagos State Ministry of Commerce and Industry. Stratified random sampling was chosen as the sampling technique to ensure a representative sample of biomedical companies in Lagos (Adetunji et al., 2020). This method allocated the population into subsets based on criteria like population size or geography and draws random samples from each subset (Yusuf et al., 2019). Both primary and secondary sources was used. Primary data will be collected through structured questionnaires (Taiwo & Alao, 2021). Secondary data included existing literature, studies, and publications on credit management and growth in the biomedical sector (Olatunji et al., 2019). In order to acquire quantitative data of high quality, the distribution of questionnaires was facilitated by the utilization of Google Forms. The survey instrument was partitioned into two distinct portions, denoted as A and B. The demographic information of the respondents, including their gender, educational status, and years of experience in the field of human resources, was provided in Section A. Section B included the independent variable, namely Credit Management and Dependent variable, namely Business Sustainability. The present study utilised a Likert-scale consisting of five items, with response options ranging from "strongly agree" to "strongly disagree" (Strongly Agree-5, Agree-4, Undecided-3,

Disagree-2, Strongly Disagree-1). The research instrument consists of structured questionnaires (Adetunji& Adekunjo, 2021). These tools will be designed to capture information on credit management practices and business sustainability in the biomedical industry. Content validity, construct validity, and criterion-related validity was considered during the research instrument's construction. Pilot testing and statistical methods like Cronbach's alpha and test-retest reliability was employed to ensure the instrument's validity and reliability (Adeyemo et al., 2020). Descriptive and inferential statistical methods was used to analyze the data collected. Descriptive statistics summarizes the data in tables, charts, and graphs (Eze&Eze, 2019). Smart-PLS software was utilized for the analysis of the PLS route model, and statistical tests was conducted (Osibanjo, Adeniji, Salau, Atolagbe, Osoko, Edewor& Olowu,2020). Ethical considerations will be crucial in the study, ensuring participants' privacy, confidentiality, informed consent, and protection from harm (Oyewole et al.,2019) Ethical clearance was obtained from relevant authorities before conducting the research.

4.0 Data Presentation and Analysis

Staff from certain Lagos, Nigeria, small and medium-sized businesses (SMEs) that sell goods and services in the biomedical sector filled out the questionnaire through Google online forms. Personal information was the first focus of the data analysis. The second section of the survey was to compile data from the respondents on the connection between Credit Management and Business Sustainability.

Table 4.1: Response Frequency

Questionnaire	Frequency	Valid Percentage
Valid	162	95.86%
Invalid/unfilled	7	4.14%
Total	169	100%

Source: Researcher's Survey, 2023

The table above shows the details of the response rate. The reply rate was way up as an outcome of the investigator's unswerving follow-ups. However, out of the 169 copies sent out, 7 copies (4.14%) could not be retrieved, while 162 copies (95.86%) were retrieved for the analysis. This reflected a 95.86 percent response rate that is relevant enough to draw conclusions on the relationship between the variables.

Table 4.2: Demographic Profile

Demographic Variables	Construct	Frequency	Percentage
Gender	Male	115	71.0
	Female	47	29.0
Total		162	100.0
Age	Under 30	19	11.7
	31 - 35	31	19.1
	36 - 40 years	58	35.8
	41- 50 years	42	25.9
	Above 50 years	12	7.4
Total		162	100.0
Tenure in organization	1 - 5 years	72	44.4
	6 - 10 years	54	33.3
	11 - 15 years	19	11.7
	16 - 20 years	7	4.3
	Over 20 years	10	6.2
Total		162	100.0
Education	BSc	76	46.9
	B.A/B. Tech/B.Ed	9	5.6
	B.Eng	50	30.9
	MSc/MBA	4	2.5
	Ph.D.	23	14.2
Total		162	100.0
Level	Upper	79	48.8
	Middle	83	51.2
Total		162	100.0

Source: Researcher's Survey, 2023

Table 4.2.1 Distribution of Frequency for Credit management policies

S/N	Items	Frequency And Percentage					Total
		SD	D	U	A	SA	
1	Our business has a written credit management policy in place.	0 0.0%	11 6.8%	23 14.2%	58 35.8%	70 43.2%	162 (100.0%)
2	Our credit management policy sets clear credit limits and payment terms for customers	1 0.6%	6 3.7%	20 12.3%	61 37.7%	74 45.7%	162 (100.0%)
3	Our credit management policy includes clear procedures for following up on overdue payments	2 1.2%	10 6.2%	21 13.0%	73 45.1%	56 34.6%	162 (100.0%)
4	Our credit management policy outlines clear procedures for assessing customer credit worthiness	3 1.9%	11 6.8%	23 14.2%	74 45.7%	51 21.5%	162 (100.0%)

Source: Researcher’s Survey, 2023

The frequency displayed the respondents' responses when inquiries were made about Credit management policies;

None of the respondents strongly disagreed that our business has a written credit management policy in place, 11 of the respondents disagreed with a 6.8%, 23 respondents were undecided with a percentage of 14.2%, 58 respondents agreed with a fraction of 35.8%, while 70 respondents strongly agreed with a proportion of 43.2%.

Additionally, 1 respondent strongly disagreed that our credit management policy sets clear credit limits and payment terms for customers with a percentage of 0.6%, 6 respondents disagreed with a percentage of 3.7%, 20 respondents were undecided with a percentage of 12.3%, 61 respondents agreed with a fraction of 37.7%, whereas 74 participants strongly agreed with a ratio of 45.7%.

Furthermore, 2 respondents strongly disagreed that our credit management policy sets clear credit limits and payment terms for customers with a percentage of 1.2%, 10 respondents disagreed with a percentage of 6.2%, 21 respondents were undecided with a fraction of 13.0%, 73 respondents agreed with a percentage of 45.1%, while 56 respondents strongly agreed with a ratio of 34.6%.

Finally, 3 respondents strongly disagreed that our credit management policy outlines clear procedures for assessing customer credit worthiness with the percentage of 1.9%, 11 respondents disagreed with a

percentage of 6.8%, 23 respondents were undecided with a percentage of 14.2%, 74 respondents agreed with a percentage of 45.7%, while 51 participants strongly agreed with a percentage of 21.5%.

Table 4.2.5 Distribution of Frequency for Growth

S/N	Items	Frequency And Percentage					Total
		SD	D	U	A	SA	
1	Our business has experienced an increase of over 5% in revenue over the past 5 year.	0 0.0%	1 0.6%	16 9.9%	78 48.1%	67 41.4%	162 (100.0%)
2	Our business has expanded its product or service offerings in the past 5 year.	0 0.0%	2 1.2%	11 6.8%	83 51.2%	66 40.7%	162 (100.0%)
3	Our business has increased its market share in the past 5 year.	0 0.0%	3 1.9%	26 16.0%	75 46.3%	58 35.8%	162 (100.0%)
4	In the past 5 years, our business has opened new locations every year.	10 6.2%	22 13.6%	59 36.4%	38 23.5%	33 20.4%	162 (100.0%)

Source: Researcher's Survey, 2023

The frequency displayed the respondents' responses when inquiries were made about Growth;

0 of the respondents strongly disagreed that our business has experienced an increase of over 5% in revenue over the past 5 years, 1 of the respondents disagreed with a 0.6%, 16 respondents were undecided with a percentage of 9.9%, 78 respondents agreed with a fraction of 48.1%, while 67 participants strongly agreed with a proportion of 41.4%.

Additionally, 0 respondent strongly disagreed that Our business has expanded its product or service offerings in the past 5 years, 2 respondents disagreed with a percentage of 1.2%, 11 respondents were undecided with a percentage of 6.8%, 83 respondents agreed with a share of 51.2%, while 66 participants firmly agreed with a proportion of 40.7%.

Furthermore, none of the respondent strongly disagreed that our business has increased its market share in the past 5 years, 3 respondents disagreed with a percentage of 1.9%, 26 respondents were undecided with a

percentile of 16.0%, 75 respondents agreed with a ratio of 46.3%, while 58 respondents strongly agreed with a fraction of 35.8%.

Finally, 10 of the respondents strongly disagreed that in the past 5 years our business has opened new locations every year with a 6.2%, 22 respondents disagreed with a percentage of 13.6%, 59 respondents were undecided with a percentage of 36.4%, 38 respondents agreed with a proportion of 23.5%, while 33 participants firmly agreed with a fraction of 20.4%.

Test of Hypotheses

For this research, the structural and measurement model was adopted. Specifically, under the measurement model, all constructs and items are a factor loading and reflective minimum acceptable value of 0.5 (Fornell & Larcker, 2016), interestingly, the constructs under all hypotheses have an acceptable value above 0.50. Although few items not up to 0.50 values are to be detached, and the outcomes are presented in Figures 4.1 to 4.8 respectively. According to Hussain, Fang-Wei and Ali (2019), the structural model is the internal model used to compute numerical simulations this is because it evaluates the R² which is the path coefficients and significant values. Bootstrapping method on the other hand helps find the significance of the constructs (Osibanjo, Adeniji, Salau, Atolagbe, Osoko, Edewor, & Olowu, 2020). The default bootstrapping in partial least square is 5000 subsamples increases the significance of the results. However, the calculation of the 5000 research subsamples in bootstrapping achieves a higher rate of accurate results and path coefficients (β) values which shows the relationship between credit management policies and growth in the biomedical industry in Lagos Nigeria. The results showed that the employees in the case study used had similar opinions. The hypothesis is formulated thus:

4.3.1 Hypothesis One:

H₀ = Credit management policies cannot lead to growth in the organization

This hypothesis consists of one exogenous variable (Credit management policies) and one endogenous variable (growth)

The path coefficient, coefficient of t-statistic value and determination/ r- squared, effect size (f^2), as demonstrated in Figures 4.1 and 4.2. The primary criteria for assessing the structural model were the predictive relevance of the framework and the predictor variable of the model index. All research variables were examined with a standardized questionnaire and a 5-Likert scale. Tables 4.3.1 and 4.3.2 show that the credit management policies, which is the latent variable, has four items, while the endogenous variable has four items. PLS-SEM is mostly utilized for small datasets since no distribution claims are made into account. Figure 4.1, on the other hand, depicts the hypothesis one structural equation modelling with standardized estimates indicating the influence of credit management policies on growth. Also, as suggested by Nordhoff, Malmsten, Arem, Liu, and Happee (2021), a well statistically significant at a 0.05 degree of importance. The data in this study was analyzed at the organizational and model levels and combined for data analysis using the approach of partial least squares structural equation modelling.

Table 4.3.1 Factor loading for policies on credit management and growth

	Factor loading	VIF	Composite reliability	AVE	Cronbach alpha	No. of indicators
Indicators	> 0.7	< 5	≥0.8	≥0.5	≥0.7	
Credit management policies			0.928	0.763	0.896	4
CMP1	0.835	2.222				
CMP2	0.881	2.567				
CMP3	0.896	3.418				
CMP4	0.880	3.158				
Growth			0.817	0.528	0.709	4
G1	0.696	1.588				
G2	0.704	1.580				
G3	0.803	1.628				
G4	0.697	1.225				

Source: Researcher's Survey, 2023

The threshold was recommended by Fornell and Larcker (2016) for all scales and measuring objects. To commence, the factor loading should indeed exceed the recommended limit value of 0.50. Second, the design composite dependability must be at least 0.80. Thirdly, the retrieved estimate of average variance has to be more than 0.50. Cronbach alpha ought to be equal to or greater than 0.70 for instruments to be considered reliable (Chin, 2010). Table 4.3.1 demonstrates that, all dimensions of credit management policies and growth exhibit composite internal consistency and Cronbach 's alpha reliability values more than 0.70 and 0.80. The factor loadings for various construct measures ranged from 0.696 to 0.896. They are all above 0.7 except G1 and G4. The instrument is deemed reliable and valid because the primary requirement for the degree of fitness has been satisfied. The results of the inner structural model are depicted in figures 4.1 and 4.2.

Evaluation of Inner Structural Model

The structural model is the underlying framework in structural equation modelling. Calculating the factor structure using the weights and significant values of path coefficients (R^2) (Chin, 2010). The findings in Figure 4.1 and Table 4.3.2, also depict that a 17.6% variance of growth is explained by credit management policies.

The R-value/ variance represents the correlation between the dependent variable (growth) and the independent variable (credit management policies). Hence, credit management policies have a weak relationship on growth.

Fig 4.1 also revealed that the link involving variables had predictive potential. The result demonstrated that, when variables are held constant, a unit shift in credit management policies will lead to a 41.9% increase in growth.

Figure 4.1 Predictive value (Path coefficient) of credit management policies (CMP) and growth (G)

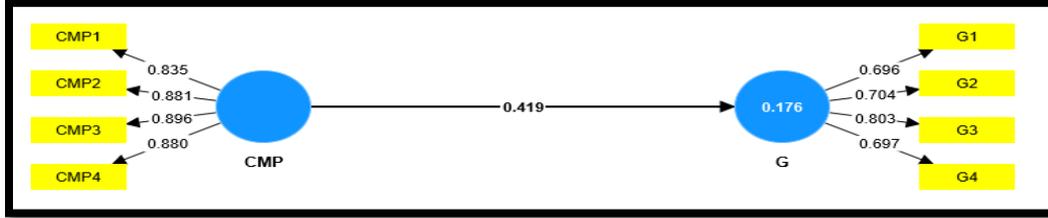
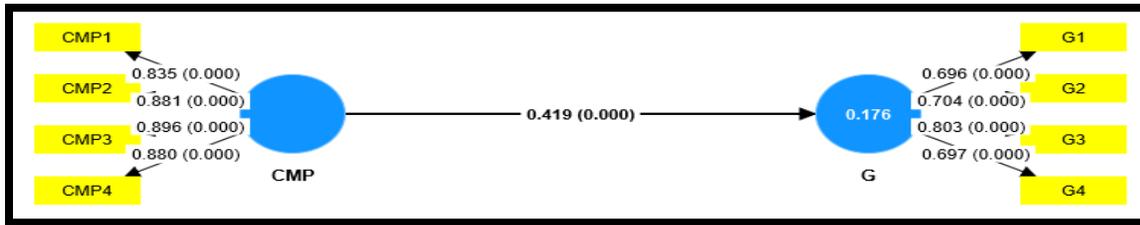


Figure 4.2 Path Co-efficient and P-values for credit management policies and growth



The Path Coefficients (β) and T- statistics Estimation

Using Partial Least Squares, the path coefficients and the standardized β coefficient were obtained (PLS). Using the value, the relevance of the proposition was evaluated. The larger the value, the more significant the influence on the endogenous construct. However, the bootstrapping credit management policies on growth is shown in Figures 4.2

Table 4.3.2 Path coefficients for credit management policies and growth

Variables and Cross Leading			Path co-efficient (O)	Std. Dev (STDEV)	T-statistics (O/STDEV)	P-values
Credit management policies		Growth	0.419	0.063	6.622	0.000
			R-Square (R²)		R2 Adjusted	
Credit management policies		Growth	0.176		0.171	
			F²			
Credit management policies		Growth	0.213			

Source: Researcher’s Survey, 2023

The path coefficient indicates that credit management policies directly and significantly influence growth at <0.05 . To simplify it, it was noticed that a unswerving influence, positive and noteworthy influence on credit management policies and growth (i.e., $b=0.419$, $T_{val} = 6.622$, $f^2=0.213$, $p < 0.05$).

Generally, the connection amongst business sustainability and credit management in the biomedical industry in Lagos, Nigeria is significant based on the beta value of the aforementioned constructs, which also demonstrates a high grade of interconnection.

Subsequently, the p value is below 0.05. As a result, the null hypothesis must be rejected. The R -value represents the association between the dependent variable (growth) and the independent variable (credit management policies).

Conclusion

There is a lot riding on how well credit management works for a few chosen biomedical businesses in Lagos, Nigeria. Biomedical companies in Lagos need to prioritize efficient credit management policies if they are to survive in the city's fast-paced and competitive market. Firms may improve cash flow, maintain liquidity, and reduce financial risks by applying solid credit management practises which includes optimizing credit policies.

The empirical data shows that credit management policies significantly affect these businesses' financial health and development prospects. Credit evaluation of healthcare institutions and reimbursement cycle management are only two examples of the specific issues and features of the biomedical sector that call for industry-specific methods to credit management.

The study's findings have wider ramifications for legislators, trade groups, and banks than just for individual businesses. Using these findings, policymakers may create enabling frameworks and policies that improve the biomedical industry's access to financing and promote sustainable business practises. Associations in a certain field may serve as a valuable resource for advice and tools that can improve a company's credit management practises.

References

1. Almasria, A., Eid, R., & Haddad, N. (2021). *Financial controls and reliable financial reporting in the Lebanese context. Journal of Financial Reporting and Accounting, 19(2), 199-215.*
2. Asante, S. (2018). *Credit risk management and profitability of selected rural banks in Ghana. Journal of Finance and Accounting, 3(1), 1-9.*
3. AL-Zararee, A., Almasria, N. A., & Alawaqleh, Q. A. (2019). *The effect of working capital management and credit management policy on Jordanian banks' financial performance. Journal of Economic and Administrative Sciences, 35(2), 105-125*
4. Adetunji, A. O., Akinwumi, I. I., Ayoade, A. A., & Akinyelu, R. A. (2020). *Sampling techniques and challenges of small and medium-sized enterprises (SMEs) in Nigeria: Empirical evidence from manufacturing firms. Data in Brief, 30, 105634.*
5. Adetunji, A. O., & Adekunjo, F. O. (2021). *Credit management practices and performance of small and medium enterprises in Nigeria. Journal of Small Business Management and Entrepreneurship Development, 8(1), 1-14.*

6. Alalade, O. A., Binuyo, A. O., & Oguntodu, F. A. (2014). Trade credit and small business growth in Nigeria. *Journal of Applied Accounting Research*, 15(2), 167-183.
7. Chin, W.W. (2010) How to write up and report pls analyses. In: Esposito Vinzi, V., Chin, W.W., Henseler, J. and Wang, H., Eds., *Handbook of partial least squares: concepts, methods and applications*, Springer, Heidelberg, Dordrecht, London, New York, 655-690.
8. Chen, H., Huang, W., & Qian, X. (2018). Credit management policy and business growth: Evidence from Chinese SMEs. *International Journal of Economics, Commerce and Management*, 6(10), 40-51.
9. Chen, L., Tan, Y., & Zhang, Y. (2018). The effect of credit risk management on corporate liquidity: Evidence from Chinese commercial banks. *International Journal of Financial Research*, 9(3), 66-76.
10. Columbus, L. (2019). AI is revolutionizing credit risk management. *Forbes*. Retrieved from www.forbes.com
11. Creswell, J. W., & Creswell, J. D. (2017). *Research design: qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications.
12. Eniola, A. A., & Entebang, H. (2018). Impact of trade credit on financial performance of manufacturing firms in Nigeria. *Journal of Accounting and Finance in Emerging Economies*, 4(2), 01-12.
13. Elavarasan, R. M., & Pugazhendhi, R. (2021). Determination of sample size in social science research: An overview. *Journal of Social and Political Sciences*, 4(1), 75-81.
14. Eze, O. R., & Eze, V. C. (2019). Determinants of Business Performance in the Healthcare Industry: Evidence from Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 9(2), 236-254.
15. Fornell, Claes & Larker, David. (1981). Evaluating structural equation models with unobservable variable sand measurement error. *Journal of Marketing Research*. 18. 39-50. 10.2307/3151312.
16. Gupta, R. K., Guha, S., & Krishnaswami, V. (2019). Growth stages and transition patterns of small and medium-sized enterprises. *Journal of Small Business Management*, 57(4), 1465-1484.
17. Grzegorz, K. (2020). Management of trade credit in modern conditions. *Journal of Entrepreneurship, Management and Innovation*, 16(1), 5-16.
18. Gatuhu, A. G. (2013). Microfinance institutions' credit risk management practices and financial performance in Kenya. *European Journal of Business and Management*, 5(23), 37-46.
19. Hussain, S., Fangwei, Z., Siddiqi, A. F., Ali, Z., & Shabbir, M. S. (2018). Structural equation model for evaluating factors affecting quality of social infrastructure projects. *Sustainability*, 5, 1415.
20. Jibrin, A. D., Akingunola, R. O., & Onaolapo, A. A. (2013). Credit management and firm performance: A study of selected listed firms in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 4(1), 26-31.
21. Kaaya, I. T. (2016). The effects of credit sales on firm profitability: Evidence from listed firms in Kenya. *International Journal of Economics, Commerce and Management*, 4(5), 61-77.
22. Kamau, S. M., Nyamwange, C., & Kihoro, J. M. (2020). The role of technology in credit management in microfinance institutions in Kenya. *Journal of Finance and Investment Analysis*, 9(4), 47-56.
23. Li, F. (2019). The impact of credit risk management on the profitability of commercial banks. *Journal of Banking and Finance*, 100, 1-15.
24. Mester, L. (2018). How has fintech changed banking? Remarks at the Federal Reserve Bank of Philadelphia. Retrieved from www.clevelandfed.org
25. Nordhoff, S., Malmsten, V., Arem, B. v., Liu, P., & Happee, R. (2021). A structural equation modeling approach for the acceptance of driverless automated shuttles based on constructs from the unified theory of acceptance and use of technology and the diffusion of innovation theory. *Transportation Research Part f: Traffic Psychology and Behavior*, 58-73.

26. Nyawera, F. M. (2013). *Credit policy and its effect on financial performance of commercial banks in Kenya*. *International Journal of Economics and Financial Issues*, 3(4), 852-860.
27. Otto, W. H., Botha, I., & Els, G. (2022). *The impact of the South African business environment on SMEs trade credit management effectiveness*. *Southern African Journal of Entrepreneurship and Small Business Management*, 14(1), 563.
28. Ogundele, O. J., & Akande, T. M. (2019). *Determinants of credit access and its impact on small and medium-sized enterprises in Lagos State, Nigeria*. *Heliyon*, 5(12), e03087.
29. Olatunji, O. A., Alimi, O. Y., & Adegboyega, O. A. (2019). *Corporate sustainability in the Nigerian healthcare industry: An analysis of secondary data sources*. *Journal of Health Management*, 21(4), 514-527.
30. Osibanjo, A., Adeniji, A., Salau, O., Atolagbe, T., Osoko, A., Edewor, O., & Olowu, J. (2020). *Bolstering human capital management and engagement in the health sectors*. *Cogent Business & Management*, 7(1).
31. Oyewole, B. K., Ogundele, M. O., & Oladimeji, B. Y. (2019). *Ethics in social science research: A review of Nigerian universities' research ethics committee*. *Journal of Humanities and Social Science Research*, 1(1), 1-6.
32. Park, M., Han, S., & Kim, N. (2018). *Trade credit in the Korean Market: Determinants and effects on firm value*. *Korean Journal of Financial Studies*, 47(3), 379-409.
33. Pihlajamäki, M. (2018). *Credit management policy and firm growth: Evidence from Finnish SMEs*. *Journal of Small Business Management*, 56(4), 546-561.
34. Sawhney, S. (2019). *The impact of technology on credit management*. *CIO Review*. Retrieved from www.cioreview.com.
35. Taiwo, A. A., & Alao, O. R. (2021). *Credit management practices and financial performance of SMEs in Nigeria: A study of selected SMEs in Lagos State*. *Journal of Economics and Business*, 4(2), 358-370.
36. Trompeter, M., & Weber, C. (2019). *The impact of credit control procedures on trade credit*. *The European Journal of Finance*, 25(2), 104-120.
37. Tsegay, Y. A., & Woldu, W. M. (2019). *The impact of credit management policy on business growth: Evidence from Ethiopian micro and small enterprises*. *Journal of Small Business Management*, 57(2), 591-607.
38. Werner, O. (2018). *Management of trade credit by small and medium-sized enterprises*. *Journal of Business Research*, 89, 230-235.
39. Yusuf, O. O., Adebowale, B. A., & Oke, M. O. (2019). *Sampling techniques and challenges of small and medium enterprises (SMEs) in Nigeria: Empirical evidence from the agricultural sector*. *Data in Brief*, 23, 103698.