

## Research Article

# Impact of Credit Procedure and Credit Requirement on Non-Financial Performance of Small and Medium Enterprises in Bauchi Metropolis, Nigeria

Lawan Garba<sup>1\*</sup>, Muktar Haruna<sup>2</sup>, Hafiz Usman Ahmed<sup>3</sup>, Sirajo Ladan<sup>4</sup>

<sup>1,2,3,4</sup>Dept. of Accounting and Finance, Faculty of Management Sciences, Abubakar Tafawa Balewa University Bauchi, Nigeria

\*Corresponding Author: garbalawan91@gmail.com. Tel +2347036832025, +2348143691854.

Received: 18/Dec/2023; Accepted: 20/Jan/2024; Published: 31/Mar/2024

**Abstract**— This study seeks to explore the influence of credit procedures and credit requirements on the non-financial performance of small and medium enterprises (SMEs) in Bauchi metropolis. The aim is to evaluate the correlation between credit procedures, credit requirements, and the non-financial performance of SMEs in Bauchi metropolis. Two null hypotheses were formulated to guide the research objectives. The study is theoretically grounded in Growth theory. A survey design method was employed for the research design, utilizing a structured questionnaire to gather data from a sample of Three Hundred and Thirty-Five (335) SMEs. Regression analysis, conducted using the Statistical Package for Social Sciences (IBM SPSS) software version 21, was applied to analyze the collected data. The findings indicated that the independent variables (i.e., credit procedures and credit requirements) were significant joint predictors of non-financial performance. Recommendations include SMEs gaining clarity on a substantial proportion of changes in SME financing, and the study suggests that Banks Credit has the potential to empower SMEs.

**Keywords**— Small and Medium; Enterprises; Credit Procedure; Credit Requirement; Non Financial Performance; Nigeria.

## 1. Introduction

The acknowledged importance of small and medium enterprises (SMEs) as a driving force for growth in developing nations is recognized. Viewing the progress of SMEs as efforts directed towards achieving broader economic and socio-economic goals, including poverty reduction, is essential. SMEs play a pivotal role in their country's development by creating job opportunities and contributing to the overall gross domestic product (GDP). It is highly likely that SMEs will embrace labor-intensive technologies, leading to a decrease in unemployment, particularly in developing countries, thereby promptly influencing job creation [1].

In contrast to large corporations, there is a significantly greater number of small and medium-sized enterprises, employing a notably larger workforce. SMEs are also credited with stimulating innovation and fostering competition across various economic sectors in all nations [2].

The primary objective of commercial banks is to provide financial services to the general public and businesses, ensuring economic and social stability as well as sustainable economic growth. In this context, one of the most crucial

functions of commercial banks is credit creation. When granting a loan to a borrower, they do not physically provide cash; instead, they establish a deposit account from which the borrower can withdraw funds. Essentially, when a loan is approved, commercial banks automatically generate deposits, a phenomenon known as credit creation [3].

As a result, the SME segment in Nigeria faces challenges in accessing funds. Financial sector reforms, as reported by [12], are expected to facilitate a more efficient allocation of resources and ensure that financial intermediation occurs as efficiently as possible. This implies that financial sector liberalization introduces competition in the financial markets, raises interest rates to encourage savings, making funds available for investment, and consequently leads to economic growth. Therefore, it is logical to assume that financial liberalization enhances funds mobilization and accessibility, crucial for SMEs' performance. It is noted that the banking sector helps make credit available by mobilizing surplus funds from depositors who have no immediate needs for such money and channeling it in the form of credit to investors who have brilliant ideas on how to create additional wealth in the economy but lack the necessary capital to execute these ideas. The study further reveals that the role of credit in an economy has been acknowledged, as credits are obtained by

economic agents to enable them to meet operating expenses. For instance, business firms obtain credit to buy machinery and equipment, and farmers obtain credit to purchase farm inputs such as fertilizers and seeds. However, the role of bank credit in an economy varies, and various banking reforms have been established by the monetary authority in Nigeria to enhance credit accessibility. The overall intention of these reforms has been to ensure financial stability to influence the growth of the economy and enhance banks' critical role in financial intermediation, providing and accessing credit in the Nigerian economy [7].

Despite the increase in credit supply to SMEs, the performance of the sector in Nigeria has been declining. Therefore, this study examines the impact of bank credit on the performance of small and medium-scale enterprises in Bauchi metropolis. The study posits a relationship between certain bank credit variables that can impact or determine the level of performance in small and medium-scale enterprises of a nation. The model specifies the dependent variable, measured with non-financial performance, as dependent on credit procedure, credit requirement, and the availability of credit to SMEs, representing the independent variables [18].

### Statement of the Problem

Despite persistent efforts to implement policy strategies aimed at attracting funding for small and medium-sized enterprises (SMEs) in Nigeria, a significant number of these businesses have struggled to secure adequate credit from banks. The lack of appeal for bank credit among Nigerian SMEs is apparent in reports from the Central Bank of Nigeria [4], indicating that banks consistently provided loans and advances to the SME sector below the prescribed minimum during various regulatory periods. Furthermore, despite improved financial intermediation resulting from financial reforms, there has been limited progress in the proportion of total bank credits allocated to SMEs.

A major challenge faced by SME operators in Nigeria is the insufficient consideration given to them by the government when formulating policies, which often prioritize larger organizations. This circumstance significantly hampers the availability of financing for SME growth and hinders their potential contribution to economic development in Nigeria [5].

Consequently, numerous small and medium-sized enterprises (SMEs) in the nation have continued to heavily rely on internally generated funds, restricting their operational capacity. This study will specifically concentrate on the most effective way to enhance the economic progress of the country: the financial support of SMEs by commercial banks.

### Objective of the Study

The main objective of the study is assessing the impact of credit procedure and credit requirement on the non-financial performance of SMEs in Bauchi while specific objectives are:

1. Investigating the effect of credit procedure on the non-financial performance of SMEs.

2. Assessing the impact of credit requirements on the non-financial performance of SMEs.

### Research Questions

1. How does the credit procedure for SMEs affect their non-financial performance?
2. Is there an impact on the non-financial performance of SMEs based on credit requirements?

### Statement of Hypotheses

**H01:** The credit procedure for SMEs does not have a statistically significant impact on non-financial performance.

**H02:** The overall credit requirement for SMEs does not significantly affect non-financial performance.

## 2. Related Work

The origin and establishment of Bank Credit in Nigeria took place in the latter part of the 19th century, introduced by colonial rulers to create a secure facility for storing money and accessing credit when needed. This practice has endured to the present day. The evolution in the banking sector led to significant reforms concerning bank credit, aiming to provide a broader range of financial services, including financial guidance, stockbroking, insurance, mortgages, retail banking, merchant banking, and currency exchange services. Additionally, the mandated minimum capital for Nigerian banks was increased to twenty-five billion naira (N25 billion) [6].

As a result, numerous consolidations occurred as financial institutions sought to meet the specified capital requirements. This resulted in a reduction in the number of operational banks in Nigeria to twenty-five. Additionally, regulations limited foreign investors from owning more than 10% of banks primarily owned by Nigerians.

Bank loans, facilitated by their intermediary role, serve as crucial financial support for small and medium enterprises (SMEs). Previous studies have acknowledged the significant challenge of a lack of funds affecting SME performance. For SMEs to effectively contribute to the economy, they require sufficient funding in the form of both short and long-term loans [7].

Several studies have explored the impact of various factors on SME financing and performance in different regions:

[17] Investigated the effect of 2004 banking reforms on loan financing for small and medium industries in Nigeria through a survey study conducted in 2005.

[2] Examined the impact of bank loans to SMEs on manufacturing output in Nigeria from 1992 to 2010, using error correction modeling techniques.

[31] Studied the impact of post-bank consolidation on SMEs' performance in Nigeria, specifically in Lagos State.

[6] Compared the performance of loans granted to SMEs by banks with that of micro-credit institutions in Nigeria, using Ondo State as a case study.

[12] Examined the effect of access to credit on the growth of SMEs in the Ho Municipality of the Volta region of Ghana through survey and econometric methods.

[9] Explored how diversified operations of banks impact their loans to SMEs, using panel data on 28 banks.

[25] Investigated the relationship between interest rates and the demand for credit and loan repayment by the poor and SMEs in Ghana.

[15] Examined the contribution of commercial banks to the growth of SMEs in Nigeria between 1980 to 2009.

[33] Argued that in Ghana, SMEs primarily rely on personal savings, business profits, and support from family or friends for their financial needs.

[20] Stated that for US firms, sources such as principal owner funds, bank loans, and trade credit constitute 70% to 80% of total financing for SMEs.

[27] Presented evidence on the state of micro and small enterprises finance in Ethiopia based on a survey of 1000 micro and small enterprises in six major towns.

[8] Demonstrated the significant reliance of Belgian business start-ups on debt financing.

[19] Examined the effective factors on the survival of SMEs in Iran, highlighting the importance of financial factors.

[35] Identified consistent policy changes as an obstacle for SMEs in accessing financial assistance for project finance.

These studies collectively provide insights into the multifaceted aspects of SME financing and performance across different regions and economic contexts.

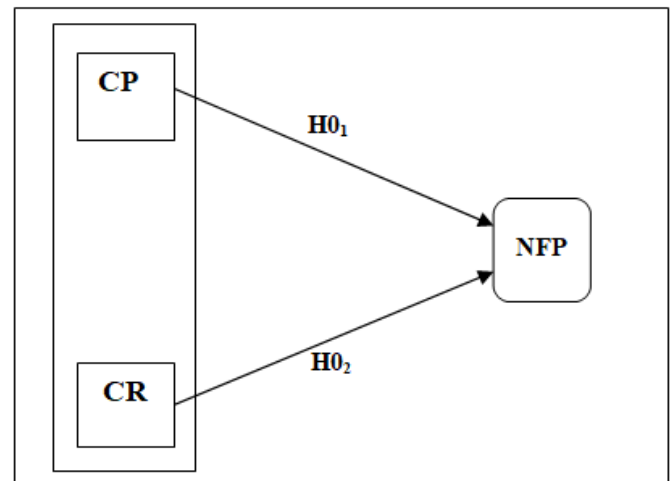
### 3. Theory/Calculation

The theory proposing growth driven by finance asserts that the functions carried out by financial institutions play a significant role in enhancing the economy's productivity capacity. Advocates of this theory argue that countries with more advanced financial systems tend to undergo accelerated economic growth. The crucial role of financial institutions in stimulating economic growth has been extensively examined in academic literature. Pioneering economists like Schumpeter [8] initially acknowledged the role of banks in promoting technological innovation through intermediary activities, such as providing credit to productive sectors. He believed that effectively directing savings towards identifying and funding entrepreneurs with the highest potential for successfully implementing innovative products and production processes is a strategy to achieve this objective. Subsequent scholars [9], [10], [11], [12] have further supported the aforementioned proposition regarding the pivotal role of banks in driving economic growth.

Various channels exist through which monetary policy influences economic activities, and these transmission channels have been thoroughly investigated within the framework of monetarist economic theories. Monetarist principles propose that alterations in the money supply directly result in changes in the actual value of money. The process of transmission is delineated as follows: [13] outlines that when the Central Bank engages in expansive open market operations, it boosts the money stock. Consequently, this action triggers an augmentation in the reserves of

Commercial Banks, enhancing their capacity to generate credit. As a result, the money supply grows through the multiplier effect. To diminish the quantity of money held in their portfolios, both banks and non-bank institutions acquire securities with attributes similar to those offered by the Central Bank. This course of action subsequently stimulates economic activities in tangible sectors, including small and medium-sized enterprises (SMEs) [14].

There are different transmission channels through which monetary policy affects economic activities, and these channels have been broadly examined under the monetarist schools of thought. Monetarist principles state that a change in the money supply leads directly to a change in the real magnitude of money. Describing the transmission mechanism, [24] reported that expansive open market operations by the Central Bank increase the money stock, leading to an increase in Commercial Bank reserves and the ability to create credit, thereby increasing the money supply through the multiplier effect. To reduce the quantity of money in their portfolios, banks and non-bank organizations purchase securities with characteristics similar to those sold by the Central Bank, thus stimulating activities in the real sector, such as SMEs [4].



**Figure 1:** Conceptual Framework

*Conceptual model of impact of credit procedure and credit requirement on non financial performance*

*Source: field survey 2023.*

The framework employed in this research postulates a connection between certain credit variables of banks that can impact or ascertain their performance levels on small and medium-scale enterprises within a nation. The model delineates the dependent variable, assessed through Non-Financial Performance (NFP), hinging on Credit Procedure (CP) and Credit Requirement (CR), representing the independent variables.

### Measurement of Credit Procedure and Credit Requirement

#### a. Credit Procedure:

It is imperative to undergo a credit assessment process to ensure that a business does not extend credit to customers lacking the capacity to make payments. The credit evaluation

is overseen by the credit department, which is tasked with managing this procedure. In this non-automated environment, the receipt of a sales order initiates a manual assessment process, wherein the credit personnel have the authority to halt sales orders from progressing to the shipping department unless they provide an authorized version of the sales order to the shipping manager [17].

For new customers or those with limited recent business history with the company, a credit application is sent, and it is requested to be completed and returned directly to the credit department. This can be done via email to expedite the application process. The credit application is collected and reviewed upon receipt of a completed sales order, ensuring that all fields are completed. If some fields are incomplete, the customer is contacted for more information. Following this, a credit report, customer financial statements, bank references, and credit references are collected. A credit level is then assigned based on the gathered information and the company's algorithm for granting credit. It may be possible to adjust the credit level if a customer is willing to sign a personal guarantee. An optional step is to hold the order if it is from an existing customer with an outstanding unpaid invoice. The customer is contacted, and the order is kept on hold until the outstanding invoice is paid.

If credit insurance is utilized, relevant customer information is forwarded to the insurer to determine if it will insure the credit risk. Optionally, the credit staff verifies the remaining credit for an existing customer who has already been granted credit. In this case, the credit staff compares the remaining available credit to the sales order amount and approves the order if there is sufficient credit. If not, the credit staff considers a one-time increase in the credit level or contacts the customer to arrange an alternative payment arrangement. Upon approval of the credit level needed for a sales order, the credit staff stamps the sales order as approved, signs the form, and forwards a copy to the shipping department for fulfillment while retaining a copy. Credit documentation is filed by creating a file for the customer and storing all information collected during the credit examination process [10].

#### **b. Credit Requirement:**

To apply for a personal loan, specific requirements must be fulfilled, involving various aspects. Whether you need funds for home renovations, medical expenses, or routine financial needs, opting for a personal loan can offer the required financial support. Meeting particular criteria is essential when acquiring a personal loan, be it from a traditional bank or an online lending platform. Enhancing the likelihood of approval can be achieved by familiarizing yourself with the necessary documents and details before making an application [18].

If the company employs credit insurance, relevant customer information is sent to the insurer for evaluation of whether it will cover the credit risk. Optionally, the credit staff may verify the remaining credit. In cases where a sales order is submitted for an existing customer with an outstanding credit, the credit staff compares the remaining available credit to the

order amount. If there is sufficient credit, the order is approved. If not, the credit staff may consider a one-time increase in the credit level to accept the order or contact the customer to arrange an alternative payment. Upon approval of the needed credit level for a sales order, the credit staff stamps the sales order as approved, signs the form, sends a copy to the shipping department for fulfillment, and keeps a copy. Finally, a customer file is established, and all information gathered during the credit examination process is stored within it [17].

### **Measurement of Non-Financial Performance**

#### **a. Non-Financial Performance**

The importance of non-financial metrics gained substantial recognition with the introduction of the "Balanced Scorecard" by Kaplan and Norton [20]. Nevertheless, existing literature in the field indicates that non-financial performance indicators, particularly those related to human resources and factors like 'employee morale,' such as individual employee turnover rates, absenteeism, and punctuality, have been utilized for an extended period, dating back as early as 1920 [21].

Customer retention and churn represent two facets of the same coin. While numerous marketing organizations focus on customer acquisition, the addition of customers alongside a significant number of existing customers departing signifies an issue. Retention gauges how many customers continue to make purchases, while churn measures the number of existing customers who no longer engage with your products or services. The objective is to increase retention and decrease churn, with the crucial aspect being the definition of when a customer is no longer considered as such. For instance, if your company provides a subscription-based product, defection/churn might be defined as 30 days after the renewal date [23].

Customer experience has a direct impact on customer retention and churn. To assess customer experience, it is essential to consider all major touchpoints where a customer interacts with your company and establish key criteria for distinguishing between a superior and subpar experience. Innovation assesses your ability to successfully introduce new products/services to the market. The number of new products in the pipeline and the adoption rate of these products reflect your company's capability to deliver value to customers and the market.

Market share, influenced by metrics such as preference, customer retention, take rate, customer experience, and innovation, is a primary measure of both the company and marketing's success. An increase in market share brings various benefits, including improved operating margins. To measure market share, you must determine the available customers and dollars in the market and then calculate how many of these are in your portfolio of products and services [17].

Monitoring and measuring these six non-financial metrics can benefit almost every company. While these metrics aren't the

sole ones to measure, they effectively communicate marketing's contribution and impact on the business. Additional insights on creating key metrics for your organization can be found in our workbook, "It's More than Money on the Line: Creating Metrics to Measure Marketing's Effectiveness, Impact and Value," included in our Marketing Metrics Workshop [9].

#### 4. Experimental Method/Procedure/Design

The study employed a survey design approach, serving as a structured framework for executing research projects. This survey design was selected to assist the researcher in comprehending and delineating the characteristics of the specific variable of interest. In this particular investigation, the entire study population comprised 2066 SMEs businesses in Bauchi metropolis, as indicated by the National Bureau of Statistics' first-quarter report [22]. Consequently, the study's population was established as 2066 SMEs [23].

For sampling, the researcher utilized random sampling techniques, ensuring an equal chance of selection for each participant. This method led to the random selection of 335 SME samples using Yamane's formula [24]. The instrument's reliability and validity were scrutinized, revealing a Cronbach's alpha coefficient of approximately 0.880, indicating the internal consistency of the tool. The research instrument was validated by four experts, allowing the main survey to proceed.

The study's hypotheses were tested using multiple regression coefficients at a significance level of 0.05. The decision rule was established to reject the null hypothesis if the p-value was less than 0.05; otherwise, the null hypothesis would be supported and accepted if the p-value exceeded 5%.

#### 5. Results and Discussion

##### Demographic Characteristics

Demographic information of the participants was collected, and a frequency and percentage analysis was conducted. The findings were presented to gain insights into the respondents' profiles. A total of 335 questionnaires were distributed, and an equal number of responses were received. In the Gender category, the tabulated data indicates that 69.6%, equivalent to 257 participants, are male, while 30.4%, representing 78 participants, are female. Regarding Marital Status, the table demonstrates that 37.7%, comprising 97 respondents, are married, while 62.3%, totaling 160 respondents, are single. The Age breakdown displays that 28.8% (74 respondents) fall within the 18-30 age range, 40.5% (104 respondents) are aged 31-40, 18.3% (47 respondents) fall within 41-50 years, and 12.5% (32 respondents) are above 50 years old. The Level of Education chart reveals that 15.6% (40 respondents) hold a First degree qualification, 3.9% (10 respondents) possess a Master's degree, 3.9% (10 respondents) have a Ph.D., and the majority at 76.7% (197 respondents) hold Other qualifications. In terms of Location, 46.7% (120 respondents) are from Yalwa, while 38% (98 respondents) hail from Wunti, and 15.2% (39 respondents) are associated with

Central market. The Profession distribution shows that 12.8% (33 respondents) are engaged in Manufacturing, 24.1% (62 respondents) are involved in Trading, and 63.0% (162 respondents) belong to another category.

##### Regression Coefficient

Table 1

| Model              | Understandardized coefficients |           | Standardized Coefficient | T     | Collinearity statistics Sig | Tolerance | VIF   |
|--------------------|--------------------------------|-----------|--------------------------|-------|-----------------------------|-----------|-------|
|                    | B                              | std Error | Beta                     |       |                             |           |       |
| Constant           | 3.362                          | .341      | -                        | 9.862 | .000                        | -         | -     |
| Credit procedure   | -.041                          | .057      | -.045                    | -.719 | .473                        | .991      | 1.009 |
| Credit requirement | .035                           | .055      | .040                     | .629  | .530                        | .966      | 1.03  |

a. Dependent variable non-financial performance

Tolerance and Variance Inflation Factor (VIF) are utilized to evaluate factors such as multicollinearity. Using tolerance as an illustration, the credit procedure shows a value of 0.991, and credit requirement has a value of 0.966, both surpassing the threshold of 0.10. This suggests minimal multicollinearity among the variables. As for the Variance Inflation Factor (VIF), the credit procedure registers a value of 1.009, and credit requirement stands at 1.036, both below 10 and statistically significant.

##### Regression Analysis

From the model summary, the R value is 0.172, indicating that 17.2% of the variation in the dependent variable (non-financial performance) is attributed to the explanatory variables (credit procedure, credit requirement, and availability of credit) included in the model summary. The remaining 82.8% is explained by other variables not included in the model but still influencing the dependent variable. This suggests that the model is suitable for the research, as the R value is not close to 1, signifying a reasonable fit to the model. The result indicates that 17.2% of the variation in the model is explained by the explanatory variables.

##### Model Summary

Table 2

| Model | R                 | R square | Adjusted R square | Std error of estimate | Durbin Watson |
|-------|-------------------|----------|-------------------|-----------------------|---------------|
| 1     | .172 <sup>a</sup> | .029     | .018              | .4357                 | 1.949         |

a. predictor (constant) credit procedure and credit requirement  
b. non-financial performance

Furthermore, the ANOVA table, utilized for testing statistical significance, yields a value of 0.000b, which is below the P value of 0.05. This indicates that credit procedure, credit requirement, and availability of credit not only significantly influence non-financial performance but also exert a less positive impact on it. This suggests that the impact will have a somewhat diminished positive influence on non-financial performance.

## ANOVA

Table 3

| Model      | Sum of square | Df  | Mean square | F     | Sig               |
|------------|---------------|-----|-------------|-------|-------------------|
| Regression | 1.457         | 3   | .486        | 2.563 | .055 <sup>b</sup> |
| Residual   | 47.934        | 253 | .189        |       |                   |
| Total      | 49.391        | 256 |             |       |                   |

a dependent variable non-financial performance

b predictors ( constant) credit procedure and credit requirement

**Hypothesis one**

**H1:** There is a significant impact of credit procedures on the non-financial performance of SMEs.

**H0:** There is no significant impact of credit procedures on the non-financial performance of SMEs.

From the coefficient table, the Beta value under credit procedure is 15, representing the unique contribution of credit procedure to the dependent variable (non-financial performance). In this case, the significance level for credit procedure is 0.172, which exceeds the P value of 0.05. Additionally, it demonstrates a relatively lesser positive increase in non-financial performance. As a result, it can be concluded that there is no significant impact between credit procedure and non-financial performance. Therefore, the null hypothesis is accepted, and the alternative hypothesis, which posits a significant impact between credit procedures and non-financial performance, is rejected.

**Hypothesis two**

**H1:** There is a significant impact of credit requirements on the non-financial performance of SMEs.

**H0:** There is no significant impact of credit requirements on the non-financial performance of SMEs.

The Beta value for credit requirements is 0.040, indicating its relatively modest contribution to the dependent variable, non-financial performance, with a value of 0.530, which exceeds 0.05. Consequently, the hypothesis can be rejected. Therefore, the null hypothesis, stating that there is no significant impact between credit requirements and non-financial performance, should be accepted.

**Discussion of Results**

This section provides an explanation and discussion of the main findings, considering past literature and interpreting the results. The study aimed to address two research questions regarding the impact of credit procedure and credit requirements on the non-financial performance of small and medium enterprises (SMEs) in Bauchi metropolis. The discussion is organized based on the sequence of the research questions.

The findings indicate a positive and significant relationship between credit procedure, credit requirement, and non-financial performance, as reflected in the R value statistics at a 5% level of significance in all models. This suggests that the models are statistically suitable for predicting the non-financial performance of SMEs in Bauchi metropolis, affirming the appropriateness of the variables used in the

study. Moreover, credit procedure and credit requirement indicators collectively accounted for 17.3% of the variation in the models. Examining the individual contributions of each bank credit indicator, credit procedure and credit requirement significantly contributed to customer trust, with coefficient values of -0.045 and probability values of 0.003 and 0.0000, respectively.

This detailed discussion is essential given the study's focus on assessing the impact of credit procedure and credit requirement on the non-financial performance of SMEs in Bauchi metropolis. Consequently, all relevant inferential statistics results are reported.

The study's observations align with the findings of Yu et al. [25], [26] but contradict the results of [27], which identified a negative impact in their study.

Regarding the relationship between credit requirement and credit procedure on non-financial performance, a positive impact is identified, statistically significant, with coefficient values of 0.104 and a probability value of 0.004, below the 5% level of significance. This result deviates from the initial hypotheses stated in Chapter One. It corresponds with the results of [28], [29], [30], and [31], indicating that credit requirements and credit procedures have a positive and significant influence on non-financial performance. However, it disagrees with the findings of [32] and [33].

**6. Conclusion and Future Scope**

This paper concludes by evaluating the impact of banks' credit on small and medium-sized non-financial enterprises in Nigeria. The results confirm the ongoing importance of bank credit as a vital funding source for SMEs, promoting their development. To optimize advantages, SMEs should consider bank credit as a financial asset for expanding their activities. Government intervention is crucial to encourage deposit banks to lend to SMEs, providing incentives and expressing a preference for them. Concurrently, SMEs should maintain thorough financial records, a prerequisite for securing loans. Additionally, the study indicates that bank credit to SMEs, government spending, and bank density have a moderate influence on SMEs' output, potentially due to restrictions in credit accessibility and the impact of government expenditure on the economy. The research also observes that interest rates negatively affect SME output, aligning with expectations and reflecting the stable macroeconomic management of interest rates in Nigeria. Shifting its focus, this study explores the impact of internet and mobile banking on customer satisfaction in Nigeria.

**Recommendations**

1. The government should proactively improve the business environment in Nigeria by providing necessary infrastructure, thereby lowering the costs associated with business operations. This initiative will encourage the growth of small and medium-sized enterprises (SMEs).
2. The interest rates for loans granted to SMEs should be substantially reduced. Commercial banks ought to offer

favorable loan terms to this crucial economic sector and ease stringent regulations on credit provision to SMEs. These measures will enhance the positive influence of bank loans on the expansion of the SME sector.

### Suggested Areas for Further Research

The following research areas are hereby recommended.

i. The study exclusively focused on a specific set of Nigerian SMEs from 2021 to 2023. As a result, there is a need for further investigations involving different banks and spanning a more extended period in Nigeria.

ii. Scholars in this field have the opportunity to conduct similar research using alternative non-financial performance metrics as their dependent variables. This effort can assist in providing precise recommendations to the Nigerian banking sector regarding the provision of suitable e-service quality that maximizes a bank's value. This is especially relevant since many prior studies have relied on evidence from foreign nations.

iii. Future research should aim to broaden the scope of this study to include additional geographical regions within Nigeria. This expansion will contribute to the enrichment of knowledge, considering that the current survey was exclusively conducted in Bauchi state, Nigeria.

### Contribution to Knowledge

The findings of the study hold implications for theoretical, practical, policy, and managerial domains. The significant and meaningful effects observed in the study provide an opportunity for well-informed decision-making among bank executives and managers, enabling them to develop enhanced strategic policies. The insights gained from this research will also be employed by practitioners and stakeholders to communicate the benefits associated with bank credit, particularly in improving non-financial performance and customer support.

### Conflict of Interest

This unique duplicate has not been disseminated and is not under consideration for publication elsewhere. Consequently, there are no conflicts of interest to declare.

### Funding Source

External funding was not obtained for this study.

### Author Contributions

All authors contributed equally to this research endeavor. They collectively reviewed and approved the final version of the original manuscript.

### Acknowledgments

We express gratitude and give all glory to God. Additionally, we extend our heartfelt appreciation to the entire staff of the Accounting and Finance Department, Management Sciences, ATBU Bauchi, as well as our family, for their support and encouragement, which significantly contributed to the success of this study.

## References

- [1] Onyeiwu, C., "Small and Medium Enterprises Finance and Economic Development of Nigeria," *An unpublished Article*. University of Lagos. Lagos State, Nigeria pp. **1-88, 2022**.
- [2] Mamman, A. & Aminu, K. S., "Effect of 2004 Banking Reforms on Loan Financing of Small and Medium Scale Industries in Nigeria," *International Journal of Small Business and Entrepreneurship Research*, Vol. **3**, Issue.2, pp. **44-53, 2015**.
- [3] Kadiri, I. B., "Small and Medium Scale Enterprises and Employment Generation in Nigeria: The Role of Finance," *Kuwait Chapter of Arabian Journal of Business and Management Review*, Vol.1, Issue.9, pp.79-94, **2016**.
- [4] Huyghebaert, N. & L. M. Van de Gucht, "The determinants of financial structure: New insights from business start-ups," *European Financial Management*, Vol.10, Issue.13, pp.101-133, **2018**.
- [5] Arogundade, K. K., "Effective Microfinance and SME: The True Story," *Journal of Management and Society*, Vol.1, Issue.2, pp. **51-54, 2017**.
- [6] Nwosa, P. I. & Oseni, I. O., "The Impact of Bank Loans to SMEs on Manufacturing Output in Nigeria," *Journal of Social and Development Sciences*, Vol.4, Issue.5, pp. **212-217, 2013**.
- [7] Yusuf, T. O. & Dansu, F. S., "SMEs Business Risks and Sustainability in Nigeria," *European Journal of Business and Social Sciences*, Vol.2, Issue.9, pp. **76-94, 2013**.
- [8] Esuh, O. L. & Adebayo, I. O., "Is Small and Medium Enterprises (SMEs) an Entrepreneurship," *International Journal of Academic Research in Business and Social Sciences*, Vol.2, Issue.1, pp. **487-496, 2013**.
- [9] SMEDAN., "Survey Report on Micro, Small and Medium Enterprises (MSMEs) in Nigeria" National SMEDAN, Guide to NEDEP on OLOP Opportunities in Nigeria, pp. **1-14, 2014**.
- [10] Adigwe, P. K., "Project Finance for Small and Medium Scale Enterprises (SMEs) in Nigeria," *An International Multidisciplinary Journal Ethiopia*, Vol.6, Issue.1, pp. **91-100, 2018**.
- [11] Akingunola, R. O., "Small and medium scale enterprises and economic growth in Nigeria: An assessment of financing options," *Pakistan Journal of Business and Economic Review*, Vol.2, Issue.1, pp. **56-65 2021**.
- [12] Isa, G., "Financing Small and Medium Scale Enterprises (SMEs) by commercial banks in Nigeria; A case study of union Bank of Nigeria," *Unpublished MBA project*, Ahmadu Bello University, Zaria, Nigeria, pp. **1-98, 2021**.
- [13] Aliyu, S. M. & Bello, G. B., "An Assessment of the Contribution of Commercial Banks to the Growth of Small and Medium Scale Enterprises in Nigeria," *International Journal of Research in Social Sciences*, Vol.2, Issue.4, pp. **47-55, 2017**.
- [14] Obamuyi, T. M., "Comparative Loan Performance in Banks and Micro-Credit Institutions in Nigeria: A Case Study of Ondo State," *Global Journal of Management and Business Research*, Vol.8, Issue.11, pp. **44-58, 2019**.
- [15] Obitayo, K. M., "Government Industrial Policies in Respect of Small and Medium Enterprises in Nigeria," *An unpublished Article*. University of Lagos, Lagos State Nigeria, pp. **23-32, 2019**.
- [16] Chenhall R. H., "Theorizing contingencies in management control systems research handbooks manage," *International Account Research*, Vol.1, Issue.2, pp. **163-205, 2016**.
- [17] Ahiawodze, A. K. & Adade, T. C., "Access to Credit and Growth of Small and Medium Scale Enterprises in the Ho Municipality of Ghana," *British Journal of Economics, Finance and Management Sciences*, Vol.6, Issue.2, pp. **34 – 51, 2020**.
- [18] Dionco-Adetayo, E. A., Awoniyi, M. O., Adetayo, J. O. & Elumilade, D. O., "Enterprise Promotion Policy on the Development of Small Scale Industries in Nigeria," *An Assessment. Refereed Paper; SME-Entrepreneurship Global Conference*, pp. **20-32, 2021**.
- [19] Terungwa, A., "An empirical evaluation of small and medium Enterprises equity investment scheme in Nigeria," *Journal of Accounting and taxation*, Vol.12, Issue.14, pp. **223-234, 2016**.

- [20] Guturu, I. N. & Ngahu, S., "Effect of Computerized Audit System on Financial Management at water Resource Management Authority in Nairobi Country, Kenya," *International Journal of Economics, commerce and Management*, Vol.3, Issue.11, pp. **224-240, 2015**.
- [21] Amonoo, E., Acquah, P. K. & Asmah, E. E., "The Impact of Interest Rates on Demand for Credit and Loan Repayment by the Poor and SMEs in Ghana (IFLIP Research Paper 03-10). Geneva, *International Labour Organization*. Vol.4, Issue.2, pp. **23-32, 2018**.
- [22] Hamilton, D. I. & Nwokah, "Dynamics of Corporate Innovation in Small and Medium Enterprises," *Journal of Management Sciences*, Vol.23, Issue.30, pp. **234-245, 2022**.
- [23] Asikhia, O. U., "Attitudinal Response of Small and Medium Scale Business Owners to Microfinance Banking in Nigeria," *European Journal of Social Sciences*, Vol.11, Issue.4, pp. **468-479, 2019**.
- [24] Chiou, J., Wu, P. & Huang, B., "How Derivatives Trading Among Banks Impacts SME Lending," *Interdisciplinary Journal of Research in Business*, Vol.1, Issue.4, pp. **1-11, 2021**.
- [25] Berger, A. & G. Udell, "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle," *Journal of Banking & Finance*, Vol.22, Issue.19, pp. **613-73, 2022**.
- [26] Omika, O., "Repositioning Commercial Banks to Enhance the Productive capacities of Small and Medium Scale Enterprises (SMEs) for Economic Growth Development," *International Journal of Public Administration and Management Research (IJPAMR)*, Vol.2 Issue.2, pp. **193-198, 2004**.
- [27] Kazemy, M., Yaghoubi, N.M., Ghodsi, F. & Saghafi, H., "Evaluating the Effective Factors on Survival of SMEs: Case Study of Iran," *American Journal of Scientific Research*, Vol.14, Issue. 30, pp. **141-150, 2011**.
- [28] Afolabi, M. O., "Growth effect of Small and Medium Enterprises (SMEs) Financing in Nigeria," *Journal of African Macroeconomic Revie*, Vol.3, Issue.1, pp. **193-205, 2013**.
- [29] Babagana, S. A., "Impact assessment of the role of micro finance banks in promoting small and medium enterprises growth in Nigeria," *Journal of Economic Development*, Vol.6, Issue.5, pp. **344-372, 2020**.