



**EFFECTS OF GOVERNMENT SUPPORT FINANCIAL PROGRAMMES ON THE
FINANCIAL PERFORMANCE OF SMES IN PHARMACEUTICAL BUSINESS IN
KWARA STATE, NIGERIA**

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Abstract

The pharmaceutical industry is essential to the provision of healthcare, yet small and medium-sized enterprises (SMEs) in this industry frequently struggle with funding, which hinders their expansion and viability. Accordingly, this study examined the financial performance of pharmaceutical small and medium-sized businesses in Kwara State, Nigeria, in relation to government support programs and other funding sources. The study used a survey research design. The study selected 109 registered pharmaceutical SMEs in Kwara State from a population of 149 using Yamane's (1967) algorithm, and used structured questionnaires to collect primary data. Using Stata 17, descriptive statistics and Ordered Logistic Regression were used to examine the data. The results showed that the financial performance of pharmaceutical SMEs was positively but statistically insignificantly impacted by government support financial programs ($\beta = 0.038$, $p = .707$). Access to loanable funds, for example, had a favorable and substantial impact ($\beta = 0.597$, $p = .003$). The government support program indicators are jointly significant, according to the Wald Chi-square value of 22.99, $p = .0017$. Additionally, the study discovered that while macroeconomic variables like inflation and insecurity had detrimental effects, commercial bank lending made a substantial contribution to financial performance. The study concluded that although there are government support programs, their influence on pharmaceutical SMEs in Kwara State is still restricted because of problems with implementation and accessibility. According to the report, government organizations should restructure assistance programs to guarantee simple access, prompt payment, and more awareness. To foster a climate that is favorable for pharmaceutical SMEs,

the government should address inflation and insecurity while commercial banks offer flexible credit packages.

Keywords: *Government Support Programmes, Access to Finance, Financial Performance, Pharmaceutical SMEs.*

Introduction

In both developed and emerging economies, small and medium-sized businesses are universally acknowledged as the catalyst for economic growth and development. SMEs make up 96% of enterprises in Nigeria, employ 84% of the labor force, and contribute more than 48% of the country's GDP (SMEDAN & NBS, 2021). Pharmaceutical SMEs are vital to the health sector because they produce, distribute, and sell necessary medications, which increases access to reasonably priced healthcare (WHO, 2020). Despite their significance, Nigerian pharmaceutical SMEs continue to struggle with funding. Because of their poor credit records, erratic cash flow, and insufficient collateral, financial institutions frequently view them as high-risk borrowers (Ayyagari, Demircuc-Kunt & Maksimovic, 2017). Because of this, access to both short-term and long-term financing is still restricted, which limits operational growth and profitability.

The Nigerian government has implemented several financial assistance programs to close this gap through the Central Bank of Nigeria (CBN) and development finance organizations. These consist of the COVID-19 Targeted Credit Facility, BOI SME fund, CBN Anchor Borrowers' Program, and NIRSAL Microfinance Bank intervention fund (CBN, 2022). These programs aim to lower borrowing costs, increase SME sustainability, and offer concessionary loans. But it is still unclear how much these initiatives have helped pharmaceutical SMEs perform financially, especially in Kwara State.

Empirical data indicates conflicting results, even though government support financial programs were intended to close the financing gap for SMEs. According to several studies (Akande, 2020; Adeleke, 2021), commercial bank lending and microfinance greatly enhance SME performance, but government intervention funds' reach has been constrained by bureaucratic bottlenecks and inadequate targeting. Despite the availability of CBN and development bank lending schemes, pharmaceutical SMEs in Kwara State still face low capital bases, high drug procurement costs, and slow sales growth. Less than 30% of the state's registered pharmaceutical SMEs have benefited from any government credit, according to

preliminary PCN statistics. Furthermore, the impact of these programs has been further undermined by macroeconomic issues like inflation, foreign exchange instability, and insecurity (Bello & Dodo, 2022). Considering this, it is critical to conduct an empirical analysis of how government support financial programs affect the financial performance of SMEs in Kwara State's pharmaceutical industry. This will offer proof for improved program delivery and policy improvement.

Literature Review

Conceptual Review

Small and Medium Enterprises

SMEDAN and NBS define small and medium-sized enterprises as those with 10–199 employees and an asset base of between ₦5 million and ₦500 million, excluding land and buildings (SMEDAN & NBS, 2021). SMEs employ 84% of Nigeria's workers, make up 96% of enterprises, and contribute roughly 48% of the country's GDP (SMEDAN & NBS, 2021). Pharmaceutical SMEs in the health sector, such as small-scale manufacturers, drug delivery companies, and retail pharmacies, are vital for increasing access to reasonably priced and necessary medications (World Health Organization, 2020).

Government Support Financial Programmes

To solve market shortcomings in SME finance, government agencies provide intervention funds and concessionary credit packages. The Central Bank of Nigeria (CBN) Targeted Credit Facility (TCF), Anchor Borrowers' Program (ABP), NIRSAL Microfinance Bank loans, Bank of Industry (BOI) SME Fund, and Development Bank of Nigeria (DBN) loans are important initiatives in Nigeria (Central Bank of Nigeria (CBN), 2022). These initiatives aim to lower borrowing costs, increase SME sustainability, and offer accessible finance (Beck & Demirguc-Kunt, 2006).

Financial Performance

The degree to which a company meets its financial goals is measured by its financial performance. Return on Assets (ROA), Return on Investment (ROI), and sales growth are common metrics (Venkatraman & Ramanujam, 1986). Revenue growth and profitability are crucial markers of long-term sustainability, competitiveness, and survival for SMEs (Olaleye & Arogundade, 2021).

Theoretical Framework

Credit Rationing Theory

According to Stiglitz and Weiss (1981), credit rationing results from information asymmetry between lenders and borrowers. Even when borrowers are willing to pay higher interest rates, banks restrict lending to SMEs because of perceived high risk, a lack of collateral, and a poor credit history. The goal of government intervention programs is to address this market failure by giving disadvantaged sectors targeted, subsidized, and guaranteed loans.

Financial Growth Cycle Theory

According to Berger and Udell (1998), SMEs depend on several funding sources depending on their growth stage. Businesses rely on family, personal savings, and unofficial credit when they first start. They have access to institutional financing and bank loans as they expand and mature. This hypothesis explains why, in order to scale operations and maintain their competitiveness, pharmaceutical SMEs need a variety of funding sources, including government assistance.

Empirical Review

According to Onyeiwu (2020), the CBN Agricultural Credit Scheme greatly increased beneficiaries' income and output. But according to Akande (2020), the impact of CBN financing on SMEs in North Central Nigeria was constrained by bureaucratic obstacles, inadequate targeting, and delayed disbursement. Additionally, only 28% of SMEs who applied for the CBN COVID-19 TCF were paid, which lessened the program's effect on performance, according to Adegbite and Machethe (2021). Bello and Dodo (2022) discovered that while the CBN health sector intervention loan increased working capital in the pharmaceutical industry, inflation and foreign exchange volatility had no discernible impact on profitability. Evidence regarding CBN money is therefore still conflicting.

According to Murumba and Okeyo (2021), DBN loans significantly and favorably increased the sales growth of SMEs in Kenya. According to Adeleke (2021), BOI loans enhanced the asset base and capacity utilization of manufacturing SMEs in Nigeria. On the other hand, Olaleye and Arogundade (2021) contended that most pharmaceutical SMEs are unable to obtain development bank loans due to strict collateral requirements and brief moratorium periods. In a similar vein, Eze and Okoye (2019) discovered no connection between ROA of SMEs in South-Eastern Nigeria and development bank credit. This implies that impact is

determined more by loan design, accessibility, and repayment conditions than by availability alone.

Kira and He (2019) found that microfinance credit greatly increased Tanzanian SMEs' income and employment. Ogunleye (2020) discovered that microloans boosted retail SMEs' profitability by 22% in Nigeria. SME performance is also improved by commercial bank funding. According to Beck, Demirguc-Kunt, and Maksimovic (2008), there is a substantial correlation between SME growth and bank loan availability. Ibrahim and Musa (2021) found that commercial bank loans significantly improved pharmaceutical SMEs' sales and return on investment in Kwara State. High borrowing rates of 20–25%, however, continue to be a significant barrier to adoption (Adegbite, 2018).

Fowowe (2017) discovered that among Nigerian SMEs, informal credit increased liquidity and decreased company failure. According to Adebisi and Oladipo (2022), 35% of the first funding for pharmaceutical SMEs in Ilorin came from revolving savings. Aryeetey (2018) added that SMEs find informal credit appealing since it is quick, flexible, and collateral-free despite its high cost.

Inflation lowers consumer purchasing power and raises the cost of acquiring drugs (Bello & Dodo, 2022). Importing raw materials and pharmaceutical products is impacted by exchange rate volatility (Afolabi, 2020). Operating costs are further raised by inadequate infrastructure and insecurity (World Bank, 2021). According to Adegboye and Iweriebor (2018), institutional and macroeconomic issues account for 40% of the variance in SME performance in Nigeria.

METHODS

Research Design

The study adopted a survey research design to enhance a comprehensive understanding of the research entity through an interview in the form of structured questionnaires. Therefore, primary data was collected through questionnaires to critically investigate the phenomenon and achieve the objectives of the study. Survey design is appropriate because it allows the researcher to collect data from many respondents and generalize findings to the population (Creswell & Creswell, 2018).

Population of the Study

The Pharmacists Council of Nigeria (PCN) disclosed that there are about 594 patent medicine shops and 149 pharmacies in Kwara State. Out of these, a total of 520 premises were sealed,

comprising 39 pharmacies and 481 patent medicine shops. Eight compliance directives were issued for various offences such as poor sanitary conditions, poor documentation, and non-display of premises and pharmacists' annual licenses (Pharma-approach, 2021).

With the focus of this study being registered SMEs in the pharmaceutical business in Kwara State, the population of this study is all pharmacies within the senatorial districts of Kwara State, Nigeria that are registered SMEs in the pharmaceutical business. As at 26th of May, 2022, there were one hundred and forty-nine (149) registered SMEs in pharmaceutical business in Kwara State (PCN, 2022).

Sample Size and Sampling Technique

However, for this study, the sample size needs to be scientifically determined as the accuracy of any survey is directly dependent on the sample size. Thus, in the determination of sample size, the formula developed by Yamane (1967) was used. Yamane (1967) provides a simplified formula to calculate sample sizes. A 95% confidence level and $e=0.05$ were assumed. The selected sample size was arrived at using the following formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n= sample size

N = is the population size of registered SMEs in pharmaceutical business in Kwara State

e = The desired level of Precision $e = 0.05$ is assumed.

$$n = \frac{149}{1 + 149(0.05)^2}$$

$$n = \frac{149}{1 + 0.0596}$$

$$n = 140.6191015478$$

$$n = 140 \text{ Respondents}$$

Table 1: Summary of Sampling Procedure and Sample Size

Geopolitical Zone	LGAs	No. of Pharmaceutical SMEs Selected per LGA	Total Samples per District
Kwara Central	Asa, Ilorin East, Ilorin West, & Ilorin South	20	80

Kwara South	Ekiti, Oke-Ero, Offa, Ifelodun, Irepodun, Isin, Oyun	5	35
Kwara North	Baruten, Edu, Pategi, Kiama & Moro	5	25
Total			140

Source: Author, 2026

Results And Discussion

Table 2 shows the descriptive statistics for government support programmes. Item 2, “The beneficiary of government support program grows in profit and revenue.” had the highest mean score ($M = 3.53$, $SD = 1.054$). This was followed by Item 7, “It is easy to access loanable funds within a short duration” ($M = 3.46$, $SD = 1.216$) and Item 3 ($M = 3.33$, $SD = 1.205$). The lowest mean was recorded for Item 6, “Accessing government funding through my financial institution is stress-free” ($M = 3.04$, $SD = 1.245$), followed by Item 5 ($M = 3.26$, $SD = 1.265$). All items had mean scores above the midpoint of 3.00, indicating general agreement with the statements. However, the low mean for Item 6 suggests that respondents were neutral about whether accessing government funding through financial institutions is stress-free.

Table 2: Responses on Institutional & Macroeconomic Factors

S/N	Items	Min	Max	Mean	S. Dev
Descriptive Analytics					
1	Corruption in Nigeria hurts access to finance for pharmaceutical SMEs	1	5	3.52	1.217
2	The insecurity problem in Nigeria hurts access to finance for pharmaceutical SMEs	1	5	3.62	1.187
3	<i>The recent inflation rate in Nigeria harms access to finance for pharmaceutical SMEs</i>	<i>1</i>	<i>5</i>	<i>3.80</i>	<i>1.060</i>

Source: Author's Computation, 2026

Table 2 presents the minimum, maximum, mean, and standard deviation with respect to institutional and macroeconomic factors affecting access to loans. There are three (3) items used to measure institutional quality and macroeconomic factors. Among the constructs, the item with the highest mean score is item 3, which was stated as “Recent inflation rate in Nigeria

hurts access to finance by pharmaceutical SMEs.” (M=3.80, SD=1.060). This was followed by item 2, which was stated as “Insecurity problem in Nigeria harms access to finance by pharmaceutical SMEs” (M=3.62, SD=1.187). The lowest mean score is item 1, which was stated as “Corruption in Nigeria harms access to finance by pharmaceutical SMEs” (M=3.52, SD=1.217).

The mean scores of all the items are above 3, being the midpoint, which suggests that there was a high level of acceptance of the statements. None of the items revealed a mean score less than 3, which implies that the respondents did not disagree with the items used to measure institutional quality and macroeconomic factors.

**Table 3: Ordered Logistic Regression Results for
Government Support Programs’ Indicators**

Variables	Coefficient	Std. Err.	T	p-value
Government Support Programs	0.591	0.224	2.64	0.008***
Profit and Revenue Growth	0.285	0.205	1.39	0.164
Social Welfare and Insurance programs	0.186	0.211	0.88	0.377
Grants from Government	0.232	0.207	1.12	0.261
Soft-loan from Government	0.116	0.134	0.87	0.384
Accessing Government Funds	-0.401	0.212	-1.89	0.059
Loanable Funds Access	0.597	0.197	3.02	0.003***
Wald chi2(12) = 22.99				
Prob > chi2 = 0.0017				
R-Squared = 0.0585				

Source: Author’s Field Computation, 2026

The total model significance is shown in Table 3. The independent variables government support programs, profit and revenue growth, social welfare and insurance programs, government grants, soft loans, access to government funds, and access to loanable funds are jointly significant in predicting the financial performance of pharmaceutical SMEs in Kwara State, according to the Wald Chi-square value of 22.99 with a p-value of 0.0017. Financial performance was positively impacted by government support programs, profit and revenue growth, social welfare and insurance programs, government grants, soft loans, and access to loanable funds, according to individual coefficients. Access to government funding, however,

has had a detrimental impact. Only government assistance programs and loanable capital availability were statistically significant indicators of financial performance. Government subsidies, soft loans, social welfare and insurance programs, profit and revenue growth, and other factors were not statistically significant. Government assistance programs in particular had a positive correlation of 0.591, $p = .008$. This suggests that, while all other factors are held constant, a one-unit increase in government support programs raises the log-odds of having better financial performance by 0.591. Similarly, access to loanable funds had a positive coefficient of 0.597, $p = .003$, meaning that, when all other factors are held constant, an increase of one unit in access to loanable funds raises the log-odds of better financial performance by 0.597. Government support programs and availability to loanable money are the main factors influencing the financial performance of pharmaceutical SMEs in Kwara State, according to the magnitude and significance of the coefficients.

Wald Test for Joint Coefficients (Composite Model Estimation)

Using the composite model in Table 4, a joint significance test was performed to evaluate the hypotheses. The joint significance of the link between each access to finance variable and the financial performance of pharmaceutical SMEs in Kwara State, Nigeria, was investigated using a Wald test.

Table 4: Joint Coefficient Wald Test (Composite Model Estimation)

Variables (Factors)	Chi-Square statistics	Probability
Non-Interest Banking Services: $C(MIC)=C(COM)=C(DEV)=C(GOV)=C(INF)=0$	40.639	0.000

Source: Author's Computation (2026)

Discussion of Findings

Regarding the first goal, the analysis showed that the financial performance of pharmaceutical SMEs in Kwara State was not significantly impacted by government support financial programs ($\beta = 0.038$, $p = .707$). This outcome contradicts the study's hypothesis that government assistance initiatives would greatly improve performance. Nonetheless, a few particular metrics found in government assistance programs were noteworthy. These include access to loanable capital and government assistance through various programs. This implies that while the program as a whole has little effect, certain interventions like direct funding and

loan access give pharmaceutical SMEs the money they need to fulfill their business goals. The survey also discovered that Kwara State's pharmaceutical SMEs' financial performance was negatively impacted by inflation and insecurity. Supply chains are disrupted by insecurity, which also raises the price of obtaining raw materials and distributing goods. Additionally, it weakens investment and demand by decreasing investor confidence and customer patronage. Pharmaceutical SMEs' operational and financial capabilities are strained as a result of the cumulative effect. In a similar vein, growing inflation raises the price of raw materials, production, and distribution while reducing consumers' purchasing power. The financial sustainability of pharmaceutical SMEs in Kwara State has been stressed by the combination of decreased revenues and increased operational expenses. This emphasizes the necessity of flexible tactics to maintain the industry in the face of inflationary pressures.

Conclusion and Recommendations

To address the population's health demands, the pharmaceutical business needs steady funding. During disease outbreaks, funding requirements are sometimes higher because research and development expenditures become crucial. Small and medium-sized pharmaceutical enterprises (SMEs) stay near the public, and their services are always in demand, even in times of epidemic. This emphasizes how crucial it is to have access to suitable funding sources to support their operations and expansion. Government assistance programs are a prominent source of credit in Nigeria. Few studies have particularly addressed pharmaceutical SMEs, even though several have looked at the impact of government support funding programs on SME success.

The choice to investigate the effect of government support financial programs on the performance of pharmaceutical SMEs in Kwara State, Nigeria, was influenced by this disparity. The results of this study demonstrate that the financial performance of pharmaceutical SMEs was positively but statistically insignificantly impacted by government support financial programs ($\beta = 0.038$, $p = .707$). This suggests that there is no discernible impact of government support programs on performance, which is contrary to the study's expectations. On the other hand, the study found that commercial bank lending has a major impact on pharmaceutical SMEs' financial performance. This could be explained by the repayment terms' flexibility, which eases the strain on operating capital and income. The study did not, however, discover any appreciable impacts on development bank lending or government support funding

programs. Further research using a qualitative method may be necessary to determine the causes of these variables' negligible impact.

Recommendations

The following suggestions are given to improve the financial performance of pharmaceutical SMEs in Nigeria based on the study's findings and the inferences drawn from them.

Boost commercial bank lending to pharmaceutical SMEs to improve their financial performance in Nigeria. Banks should create flexible loan packages specifically for pharmaceutical SMEs, since commercial bank lending significantly improved performance. To lessen the strain on operating capital, this should entail longer payback terms, cheaper interest rates, and laxer collateral requirements.

Reform Financial Programs for Government Support: Government support programs' negligible impact points to problems with awareness, disbursement, and accessibility. To enable pharmaceutical SMEs to take advantage of current intervention funds and soft loans, government organizations including CBN, BOI, and DBN should streamline application processes, guarantee disbursement, and raise awareness.

Enhance Loanable Fund Access: Since performance was significantly influenced by loanable funds, legislators should collaborate with financial institutions to provide credit lines specifically for pharmaceutical SMEs. This will guarantee access to funds for working capital requirements, expansion, and procurement.

Pharmaceutical SMEs in Nigeria can increase financing availability, boost operational effectiveness, and make a more significant contribution to healthcare delivery by putting these suggestions into practice.

References

- Akande, O. (2018) Interest rate and SME performance in Nigeria. *International Journal of Economics*, 8, 112-128.
- Adebisi, T., & Oladipo, O. (2022). Informal finance and SME survival in Nigeria. *Journal of African Finance*, 10, 45–61.
- Adegboye, A., & Iweriebor, S. (2018). Institutional factors and SME performance in Nigeria. *International Journal of SME Development*, 5, 22–38.
- Adegbite, O. (2018). Interest rate and SME financing in Nigeria. *Nigerian Journal of Economics*, 12, 112–129.

- Adegbite, S., & Machethe, C. (2021). COVID-19 intervention and SME access to finance in Nigeria. *African Development Review*, 33, 501–515. <https://doi.org/10.1111/1467-8268.12501>
- Adeleke, A. (2021). Development bank financing and SME growth in Nigeria. *Journal of African Business*, 22, 345–361. <https://doi.org/10.1080/15228916.2020.1718012>
- Afolabi, M. (2020). Exchange rate and pharmaceutical importation in Nigeria. *Journal of Health Economics*, 8, 67–80.
- Akande, O. (2020). CBN intervention funds and SME performance in North Central Nigeria. *International Journal of Economics and Finance*, 8, 112–128.
- Aryeetey, E. (2018). Informal finance for small enterprises in Africa. *World Development*, 45, 78–89. <https://doi.org/10.1016/j.worlddev.2017.03.004>
- Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2017). SME finance. *Journal of Financial Economics*, 125, 243–265. <https://doi.org/10.1016/j.jfineco.2017.06.006>
- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-sized enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30, 2931–2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Beck, T., Demirguc-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: Are small firms different? *Journal of Financial Economics*, 87, 154–178. <https://doi.org/10.1016/j.jfineco.2007.02.001>
- Bello, S., & Dodo, I. (2022). Macroeconomic instability and SME performance in Nigeria. *African Development Review*, 34, 45–60. <https://doi.org/10.1111/1467-8268.12612>
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22[6–8], 613–673. <https://doi.org/10.1016/S0378-426600038-7>
- Central Bank of Nigeria. (2022). CBN intervention funds guidelines. Abuja: CBN Publications.
- Eze, C., & Okoye, P. (2019). Development bank loans and SME profitability in South East Nigeria. *Journal of Business Research*, 11, 89–102.
- Fowowe, B. (2017). Access to finance and firm performance: Evidence from African countries. *Review of Development Finance*, 7, 6–17. <https://doi.org/10.1016/j.rdf.2017.01.001>
- Ibrahim, M., & Musa, K. (2021). Bank credit and pharmaceutical SME performance in Kwara State, Nigeria. *Ilorin Journal of Business*, 6, 34–49.
- Kira, A. R., & He, Z. (2019). The impact of microfinance on small business performance: Evidence from Tanzania. *Journal of Small Business Management*, 57, 1120–1136. <https://doi.org/10.1111/jsbm.12400>
- Murumba, S., & Okeyo, W. (2021). Development bank financing and SME growth in Kenya. *International Journal of SME*, 7, 201–215.
- Ogunleye, E. (2020). Microfinance and profitability of SMEs in Nigeria. *Nigerian Journal of Banking and Finance*, 14, 78–94.
- Olaleye, S., & Arogundade, B. (2021). Access to finance and SME sustainability in Nigeria. *Journal of Entrepreneurship and Innovation*, 9, 55–70.
- Onyeiwu, C. (2020). Agricultural credit and SME output in Nigeria. *Nigerian Agricultural Journal*, 51, 88–99.

- Pharmacists Council of Nigeria. (2022). Register of licensed pharmaceutical premises. Abuja:PCN.SMEDAN & NBS. (2021). National survey of micro, small and medium enterprises. Abuja: SMEDAN.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71, 393–410.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11, 801–814. <https://doi.org/10.5465/amr.1986.4205248>
- World Bank. (2021). Nigeria economic update: Resolving economic challenges. Washington, DC: World Bank.
- World Health Organization. (2020). Access to medicines and health system strengthening. Geneva: WHO Press.