

TRADE CREDIT IMPACT ON SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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ABSTRACT: *The connection between trade credit and SMEs cannot be belittled which enable this study to examine the impact of trade credit on small and medium enterprises using Nigeria as a case study. The study employed frequency analysis, logistic regression and correlation analysis as the estimation techniques. The study found that cost of trade credit has a coefficient value of 0.036, standard error of 0.093, with the sig value of 0.701, indicating that cost of trade credit is positively important, but it is not significantly accessible to the SMEs. More so, credit flexibility has the coefficient value of 0.018, standard error of 0.091 with the sig value of 0.846, indicating that credit flexibility has a positive impact but not significant to influence SMEs. The study concluded that cost of trade credit affects SMEs, and credit flexibility has a positive impact on SMEs, while credit grant revealed a positive effect on the performance of SMEs, though government restriction has a negative impact on SMEs but not significant during the study period.*

KEYWORDS: trade credit, SMES, loan, business, and government restriction

INTRODUCTION

Trade is an important stimulator of growth and development. Trade credit usually involves short-term delayed payment of purchases of intermediate goods. Trade credit is defined as holding of payment permitted by the creditor or supplier of raw materials, against the goods purchased. In a broader view, it is referred to both trade payables and trade receivables, while trade payables serve as a source of funds, the receivable represents the supply for funds (Bhole & Mahakud, 2004). When the goods and services are traded, the supplier often allows the purchasers some time before payment are made. During this interval of time, the buyers receive credit whose volume is not under the

control of the authorities. Comparing trade credit with loans, trade credit is usually not subjected to formal contracts between the borrower and the lender (Cuñat & Garcia-Appendini, 2012). Small and Medium-Scale Enterprises are basic for the development of any economy since its structure the weight of financial stability in economy formulation. SMEs in Nigeria are those business establishment of at least 5m Naira and not more than 500m Naira, with the quantity of representatives at the very least 10 and not more than 200 (NBS, 2013). SMEs are major contributors to key development indicators which are confronted with many difficulties that limit their profitability, growth and survival (Aliero & Yusuf, 2015). Researches on SMEs profitability and development have showed that low profit and failure rate in developing economies is higher than in the developed economies (Arinaitwe, 2006). SMEs are very important component of the industry sector of the Nigerian economy, but they are still faced with challenges that hinder their performance and growth. In developing country such as Nigeria, SMEs contribute a much higher proportion to GDP than currently observed compared to other emerging markets (Oyelaran-Oyeyinka, 2010). SMEs face the best jumps in getting to financing on moderate terms. Patrick (1966) notes out that the biggest impediment to SMEs 'access to growth is lack of adequate to a cheap and productive means of funding and classified small and medium-sized enterprises as a prerequisite in ensuring that the Government's objectives in the areas of alleviating poverty, job development, creation of wealth and value orientation are achieved. This is of specific worry as SMEs are a main driver of trade and improve financial stability. Literature appears that SMEs face obstacles mostly in the lower income nations.

Studies Review

Some available research has been focused on firms supplying trade credit and not on the firms that seek trade credit as a source of finance. Martinez-Sola *et al.* (2014) tested the relationship between a firm's provision of trade credit and its profitability in Spain and revealed that managers can improve firm's profitability by increasing their investment in the provision of trade credit. The problem here is that the conclusion cannot be employed for firm seeking trade credit as an alternative source of finance. There have also been some findings that contradict the perceived positive impact of trade credit on profitability. Li, Yu and Yang (2013) conducted a study to reveal if trade credit does boost firm's performance in China, using instrumental variable approach to solve potential endogeneity issues, and the study concluded that trade credit play a limited role in improving firm performance. Also, Kohler, Britton and Yates (2000), examining trade credit and the monetary transmission mechanism, found that in the period of tight monetary policy, firms both extend and receive less trade credit, which questions the offsetting hypothesis that states that firms should use more trade credit under conditions of monetary tightening. This further pose problem that need to be address. Furthermore, most of the available study on trade credit and SMEs were researched in developed economy. It is essential to understand that the problems facing SMEs development in Africa differ significantly and are unique from those being faced in developed economies (Okpara, 2011).

In the face of recent financial crisis and reduced revenue, it has become imperative for businesses to seek alternative financing for operation and investment. Trade financing is an example of such alternative financing and it offers immense opportunities particularly for SMEs. An efficient trade financing system offer a developing economy, like Nigeria, opportunities and benefits. Rehman and Khurshid (2016) wrote on trade credit impact on profitability of the firms in Pakistan, and their investigation depicted that providing trade credit, providers could improve the non-financial firms' growth and profitability. Akinbobola and Obanuyi (2018) studied the dynamics of trade credit on SMEs profitability in Nigeria contents using panel data analysis and GMM between 2014 and 2016. They found out that negative and insignificant contribute reveal between trade credit and SMEs profitability. Aliero and Yusuf (2015) wrote on the impact of credit on the performance of SMEs in Sokoto State of Nigeria. The research uses primary data collected from 294 respondents out of a population of 1710 registered SMEs in Sokoto metropolis using the random sampling technique, and it was discovered that credit is a major factor of employment generation of SMEs. Kpakiyai and Mugo (2015) focused on the effect of trade credit on SMEs financial performance in Kenya. The study used statistical tools such as inferential and descriptive, and they found that trade credit exhibits positive impact on financial performance.

Also, a study carried out by Tang (2014) on the connection between trade credit and profitability of SMEs of Holland. The study used a sample 71 SMEs between 2009 and 2013. Meanwhile, the investigation showed that account payable depicted a positive related to SMEs profitability. Eferakeya (2014) carried out an investigation on the impact of bank consolidation on credit access and availability to SMEs in Nigeria for the period 1999-2012. The main goal was to examine whether bank consolidation in Nigeria brought about increased lending to SME's. The study revealed that bank consolidation in Nigeria led to reduction of SME's financing 0.37% on average. The lending risk of banks to SME's in post consolidation reduced while there is no significant difference between SME's financing in pre and post consolidation era. The findings contrasted with the assumption that bank consolidation will result in increased SME's financing in Nigeria. Abiodun and Ivanivna (2015) studied the effect of trade credit on firms' profitability in Nigeria using panel data from a sample of 80 quoted firms between the periods of 2000 to 2009. The study showed that trade credit positively influenced the profitability of firms in Nigeria.

Li, Yu and Yang (2013) studied whether trade credit boost performance of the firms in China. OLS was used as the estimation technique. The study revealed that trade credit exhibited a significant and positive connection with the performance of the firms. Kim (2016) wrote on the reason for trade credit in Korean firms employing 14,660 firm-year observation, and it was deducted that trade credit reveals consistence with the funding restraint supposition, but it does not blend with growth supposition. Kwenda and Holden (2014) investigated trade credit on company financing in South Africa. They found out and deducted that firms ought to have a target account payable for competent alternate source finance. Chant and Walker (1988) investigated the demand for trade credit and

concluded that trade credit was a complement to bank credit in some instances, and a substitute in some other instances. This finding suggested the presence of financing motive in the use of trade credit by small business. In a similar study conducted by Andrieu, Stagliano and Zwan (2016) on bank debt and trade credit for SMEs among European SMEs. Simultaneous technique was used and revealed that age and size showed positive related to debt capacity since new and small firms are more subject to refusal as a result of the higher risk they pose to financing.

Fukuda *et al.* (2006) studied the role of trade credit for small firms during the banking crisis in Japan, revealed that both bank credit and trade credit contracted simultaneously during banking crisis, hence the complementary hypothesis also holds. Biais and Gollier (1997) studied trade credit and credit rationing, and the study revealed that asymmetric information between companies and financial institutions can hinder financing of positive projects. Peterson and Rajan (1997) investigated some evidence of trade credit and revealed that firms used trade credit rather more when credit from financial institutions is not available and further showed some evidence of discrimination in price through trade credit among firms. McMillan and Woodruff (1999) investigated into inter-firm relationship and informal credit in Vietnam and found that trade credit tends to be offered when suppliers have information about the buyer's credibility through prior investigation or experience of trading with the buyer. Nilsen (2002) studying trade credit and the bank lending channel have indicated that under tight money policy, trade credit increases while bank lending decreases.

Demirguc-Kunt and Maksimovic (2001) explored the role of trade credit in economic development. Using the firm-level data in a cross-country framework, they found that large non-financial firms do act as intermediaries for smaller ones. The study also discovered that the provision of trade credit is complementary to the development of financial institutions. Mateut *et al.* (2002) examined the trade credit, Bank lending and monetary policy transmission and found that there is a reduction in bank lending, and an increase in trade credit, under tight monetary policy. The study further found that the measures of financial health such as size, age, solvency, credit rationing, level of indebtedness, and quotation on the market in respect of the firms are used to assess the creditworthiness of firms by both the banks and suppliers of trade credit. Ojenike and Olowoniyi (2014) studied the determinant of trade credit in Nigeria and the empirical findings revealed that firms are credit constrained and therefore resort to trade credit as alternative source of finance. Some government also uses trade credit as a source of short-term finance. Alphonse, Ducret and Severin (2006) investigated if trade credit facilitate access to bank finance and concluded that trade credit can also be considered as a complementary source of short-term finance with bank debt. The research also reviewed that trade credit can work as a signal about firm's quality, and as such facilitate access to bank credit. Burkart and Ellingsen (2004) investigated trade credit as in-kind finance and they observed that it is less profitable for an opportunistic borrower to divert good than to divert cash, therefore, trade credit can be offered by suppliers liberally than bank will offer debt finance.

METHODOLOGY

Study Population

The population of this study focused on small and medium enterprises in the sixteen Local Government areas of Ekiti State, Nigeria.

Sample and Sampling Techniques

The sample consists of a few selected SMEs within Ekiti State Rural and Urban areas. 300 SMEs was the study target from all sixteen Local Government areas of the Ekiti State using multistage sampling technique. The first phase is the random selection of two Local Government Areas from each of the three senatorial districts, giving a total of six Local Government areas in total. The second phase is the choice of one rural area and one urban area of each of the six areas of local government. Finally, a random selection of fifteen SMEs from each of the selected rural and urban areas a total of 300 participants.

Instruments of Data Collection and Technique

Questionnaire remains the primary tool of gathering data in this study. Meanwhile, closed ended form of the questionnaire was employed which was structured as items in the questionnaire. The structured questions evaluate different reactions from the participants, while enhancing the study's conclusion. The researcher employed trained study participants to obtain information from the target audience. The study employed frequency analysis and logit regression as the estimation techniques.

Study Model

This study model is specified as:

$$\text{SMEsPerf} = f(\text{TC}, U)$$

Where

Prof = Profitability of the SMEs

TC = Trade Credit

U = Others

Where

$$\text{SMEsPerf} = \frac{1:\text{if trade credit increases performance of the SMEs}}{0:\text{if otherwise}}$$

$$\sum Prof = b_0 + b_1 \sum TC + b_2 \sum U$$

Where

b_0 is the intercepts or constants;

$b_1 - b_4$ are the shift parameters or the coefficients

Reliability Statistics

Table 1: Reliability Report

Cronbach's Alpha	N of Items
.501	20

Source: Researcher's compilation

The content of the questionnaire was subjected to reliability testing to examine whether the contents are reliable and the report reveals that the 20 items contain in the questionnaire has the value of 0.501 implying that the items are moderately reliable to achieve the objectives of the study.

Demographic Analysis

Table 2: Sex

	Frequency	%	Valid	Cumulative %
Male	117	45.2	45.2	45.2
Female	142	54.8	54.8	100.0
Total	259	100.0	100.0	

Source: Researcher's compilation

Table 1 displays the sex category of the respondents and 45.2 percent is for the male with 117 frequency while 54.8percent is for the female with 142 frequency indicating that female participants are more than the male participants during the survey.

Table 3: Marital status

	Frequency	%	Valid	Cumulative %
Single	81	31.3	31.3	31.3
Married	159	61.4	61.4	92.7
Divorce	19	7.3	7.3	100.0
Total	259	100.0	100.0	

Source: Researcher's compilation

The respondents' marital status presented in Table 4.4 shows that 31.3percent are single with 81 frequency, 61.4 percent are married with 159 frequency and 7.3 percent are divorce with 19 frequency. This shows that married respondents are more than the single and divorce respondents.

Table 4: Age

	Frequency	%	Valid	Cumulative %
Below 30years	88	34.0	34.0	34.0
31-40years	118	45.6	45.6	79.5
41-50years	37	14.3	14.3	93.8
Above 51years	16	6.2	6.2	100.0
Total	259	100.0	100.0	

Source: Researcher's compilation

Table 4 shows the age bracket of the participants, 34 percent are below 30years with 88 frequency, 45.6percent of the participants are within bracket of 31-40years, 14.3 percent are within age bracket of 41-50years while 6.2percent are within age bracket of above 50years, indicating that age bracket 31-40years has the higher respondents followed by below 30years, 41-50years and above 51years respectively.

Table 5: Qualification

	Frequency	%	Valid	Cumulative %
O'Level	21	8.1	8.1	8.1
OND	42	16.2	16.2	24.3
HND/B.Sc	111	42.9	42.9	67.2
M.Sc/MB A	79	30.5	30.5	97.7
PhD	6	2.3	2.3	100.0
Total	259	100.0	100.0	

Source: Researcher's compilation

The qualification of the participants presented above shows that 21 frequency with 8.1percent owns O'Level, 42 frequency with 16.2percent owns Ordinary National Diploma (OND), 111 frequency with 42.9percent owns Higher National Diploma (HND)/ Bachelors' Degree (B.Sc.), 79 frequency with 30.5percent owns Masters while 6 frequency with 2.3 percent owns Doctorate Degree (Ph.D.). This implies that most of the participants own HND/B.Sc. followed by M.Sc./MBA, OND, O'Level and Ph.D.

Table 6: How long have you been trading

	Frequency	%	Valid	Cumulative %
Less than 5years	90	34.7	34.7	34.7
5-8years	80	30.9	30.9	65.6
9-12years	73	28.2	28.2	93.8
13-16years	13	5.0	5.0	98.8
17years and above	3	1.2	1.2	100.0
Total	259	100.0	100.0	

Source: Researcher's compilation

The above table and figure show that 34.7percent with 90 frequency has less than 5years trading experience, 30.9 percent with 80 frequency has between 5-8years, 28.2percent

with 73 frequency has between 9-12years trading experience, 5.0percent with 13 frequency has between 13-16years trading experience while 1.2percent with 3 frequency has 17years and above experience, implying that most of the participants have less than 5years trading experience, followed by between 5-8years, 9-12years, 13-16years and 17years and above.

Logistic Regression

Table 7: Dependent Variable Encoding

Original Value	Internal Value
No	0
Yes	1

Source: Researcher's compilation

Table 8: Variables in the Equation

	B	S.E.	df	Sig.	Exp(B)
Cost of Trade Credit	.036	.093	1	.701	1.036
Credit Flexibility	.018	.091	1	.846	1.018
Credit Grant	.034	.090	1	.709	1.034
Government Restriction	-.003	.088	1	.970	.997
Constant	-.553	.434	1	.202	.575

Source: Researcher's compilation

The report shows that the coefficient value of cost of trade credit is 0.036, standard error of 0.093, and the sig value of 0.701, indicating that cost of trade credit affects SMEs positively but not significant. This implies that cost of trade credit is positively important to the SMEs in accessing loans, but it is not significantly accessible to the SMEs. Credit flexibility has the coefficient value of 0.018, standard error of 0.091 with the sig value of 0.846, indicating that credit flexibility has a positive impact but not significant to influence SMEs. Credit grant reveals a coefficient value of 0.34 with standard error of 0.090 and the sig value of 0.709, signifying that credit grant has a positive effect on the SMEs but it is not significant. More so, government restriction has the coefficient value of -0.003 with the standard error value of 0.088 with sig value of 0.970, implying that government restriction has a negative impact on SMEs, and it was not significant.

Correlation Analysis

Table 2: Pearson Correlations

		SMEsP erf.	Cost of Trade Credit	Credit Flexibility	Credit Grant	Government Restriction
SMEsPerf.	Correlation	1	.028	.015	.027	-.005
	Sig.		.659	.809	.667	.930
Cost of Trade Credit	Correlation	.028	1	.067	.118	.155*
	Sig.	.659		.280	.057	.013
Credit Flexibility	Correlation	.015	.067	1	.066	.102
	Sig.	.809	.280		.291	.101
Credit Grant	Correlation	.027	.118	.066	1	.122
	Sig.	.667	.057	.291		.051
Government Restriction	Correlation	-.005	.155*	.102	.122	1
	Sig.	.930	.013	.101	.051	

Source: Researcher's compilation

Table 9 reveals the correlation analysis between SMEs performance and trade credit. It was showed that SMEsPerf and cost of trade credit has the correlation coefficient value of 0.028 with sig value of 0.659, indicating that positive correlation exists between SMEsPerf and cost of trade credit, but it was not significant. This means that the cost of trade credit affects the SMEs performance positively though it was not significant during the survey period. The relationship between SMEs performance and credit flexibility shows the correlation coefficient value of 0.015 with sig value of 0.809, implying that positive correlation exists between SMEs performance and credit flexibility but not significant. This connotes that credit flexibility has impact on SMEs performance, but it is not easily accessible. The correlation coefficient value of SMEs and credit grant is 0.027 with sig value of 0.667, showing that positive relationship exists between SMEs performance and credit grant, but it was not significant, that is, credit grant is positive to stimulate SMEs performance. More so, the correlation between SMEs performance and government restriction has the correlation value of -0.005 and its sig value of 0.930, signifying that a negative relationship exists between SMEs performance and government restriction, that is, any levy or restriction introduce by the government will affect the SMEs performance negatively. Furthermore, cost of trade credit, credit flexibility, credit grant, and government restriction reveal a positive correlation but not significant.

CONCLUSION

This study had examined the impact of trade credit on small and medium enterprises performance in Nigeria and from the findings, it was concluded that small and medium enterprises do not easily get access to trade credit from suppliers and most of the participants of SMEs have not received financial aid from any financial institutions before though banks and other non-banking have specific focus in financing small and medium enterprises.

The analysis made the study to conclude that the required cost of trade credit is extremely not reasonable, that the process for granting trade credit by suppliers is not always flexible, and the amount of trade credit approved by providers does not meet the credit requirement of most business. More so, trade credit facilities offered by suppliers does not stimulate entrepreneurs go into SMEs.

The suppliers of credit visit SMEs by way of monitoring and showing awareness for granting credit, and they ensure that the purpose of trade credit granted is met through proper monitoring, though they are not often restricted by the government in creates public awareness regarding offer of credit.

It was concluded that the rate at which SMEs obtained trade credit from suppliers is decreasing due to collateral issues and the inability of SMEs to manage risk deprived them from getting credit, though some of the SMEs are prone to poor debtor systems.

References

1. Akinbobola, D. A. & Obanuyi, T. (2018). Trade Credit Dynamics on Profitability of Small and Medium-Scale Enterprises in Nigeria. *International Journal of Management, IT & Engineering*, 8(8), 200-213.
2. Aliero, I. H., & Yusuf, M. M. (2015). Analysis of impact of credit on the performance of SMEs in Sokoto metropolis of Sokoto state of Nigeria. *International Journal of Small Business and Entrepreneurship Research*, 3(4), 22-31
3. Alphonse, P., Ducret, J., & Séverin, E. (2006). When trade credit facilitates access to bank finance: evidence from US small business Data. *MFS (Istanbul) meetings Paper.and Row*.
4. Arinaitwe, S. K. (2006). Factors constraining the growth and survival of small-scale businesses: a developing countries analysis. *Journal of American Academy of Business, Cambridge*, 8(2), 167-178.
5. Biais, B., & Gollier, C. (1997). Trade credit and credit rationing. *Review of Financial Studies*, 10(4), 903-937.
6. Bhole, L. M., & Mahakud, J. (2004). Behaviour of trade credit: time series and panel data analysis. *Economic and Political Weekly*, 15(1), 1277-1290.
7. Burkart, M., & Ellingsen, T. (2004). In-kind finance: a theory of trade credit. *The American economic review*, 94(3), 569-590.
8. Chant, E. M. & Walker, D. A. (1988). Small business demand for trade credit. *Applied Economics*, 20(7), 861-876.
9. Cuñat, V., & Garcia-Appendini, E. (2012). Trade credit and its role in entrepreneurial finance. *Oxford Handbook of Entrepreneurial Finance*, 7(5), 526-557.

10. Demirgüç-Kunt, A., & Maksimovic, V. (2002). Funding growth in bank-based and market-based financial systems: evidence from firm-level data. *Journal of Financial Economics*, 65(3), 337-363.
11. Eferekeyo, I. (2014). Nigerian small and medium scale enterprises' access to finance: what is the story since bank consolidation in 2005. *International Journal of Innovation and Applied Studies* 6(4), 1111-1122
12. Fukuda, S. I., Kasuya, M., & Akashi, K. (2006). The role of trade credit for small firms: an implication from Japan's banking crisis. *The University of Tokyo: CIRJE Discussion Papers Series*, 6(18)
13. Kapkiyai, C., & Mugo, R. (2015). Effect of trade credit on financial performance of small-scale enterprises: evidence of Eldoret town, Kenya. *International Journal of Economics Commerce and Management*, 3(9), 184-189
14. Kohler, M., Britton, E., & Yates, T. (2000). Trade credit and the monetary transmission mechanism, Bank of England Discussion Paper. Retrieved from: <http://www.bankofengland.co.uk/wplist.htm>
15. Kwenda, F., & Holden, M. (2014). Trade credit in corporate financing in South Africa: evidence from a dynamic panel data analysis. *Investment Management and Financial Innovations*, 11(4) 14-26.
16. Lawson, B. (2007). Access to finance for SMEs, Financial System Strategy 2020, *International Conference*, Abuja. Available: <http://www.cenbank.org/fss/mon/FSS2020Presentation%20at%20International%20Conference.ppt>
- Li, D, Lu, Y. & Yang J (2013). Does trade credit boost firm performance? *Economic Development and Cultural Change*, 64(3), 573-602.
17. Martínez-Sola, C., García-Teruel, P. J., & Martínez-Solano, P. (2014). Trade credit and SME profitability. *Small Business Economics*, 42(3), 561-577.
18. McMillan, J., & Woodruff, C. (1999). Interfirm relationships and informal credit in Vietnam. *The Quarterly Journal of Economics*, 114(4), 1285-1320.
19. Okpara, J. O. (2011). Factors constraining the growth and survival of SMEs in Nigeria: implications for poverty alleviation. *Management Research Review*, 34(2), 156-171.
20. Ojenike, J. O., & Olowoniyi, O. (2014). The determinants of trade credit: evidence from Nigeria. *Journal of Finance and Investment Analysis*, 3(4) 27-39.
21. Oyelaran-Oyeyinka, B. (2010). FSS 2020 international conference SME: Issues, challenges and prospects. Retrieved from: https://www.cbn.gov.ng/fss/wed/SME_Issues,%20Challenges%20and%20Prospects_Oyeyinka%20Banji.pdf

22. Patrick, H. (1966). Financial Development and Economic Growth in underdeveloped Countries. *Journal of Economic Development and Culture Change*, 14, 174-189.
23. Peterson, M. A., & Rajan, R. G. (1997). Trade credit: theories and evidence. *Review of financial studies*, 10(3), 661-691.
24. Rehman, M. A. & Khurshid M. K. (2016). A review of impact of trade credit on firm's profitability: a study of non-financial firms in Pakistan. *Journal of Poverty, Investment and Development*, 5(1), 33-36.
25. Saurabh, P. (2015). Cloud can help increase gdp for india. Asia Cloud Computing Association. Retrieved from: <https://www.slideshare.net/HPC-Asia/cloud-can-help-increase-gdp-for-india>
26. Tang, Y. (2014). Trade credit and profitability in small and medium enterprises. *3rd IBA Bachelor Thesis Conference*. Retrieved from: http://essay.utwente.nl/65357/1/Tang_MB_IBA.pdf