

CASHLESS ECONOMY AND ITS EFFECT ON THE FINANCIAL GROWTH OF MSMEs IN RIVERS STATE

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Abstract

This study examines the contributions of cashless policy to the development of Micro, Small and Medium-Scale Enterprises (MSMEs) in Rivers State. This was motivated by the growing transition from traditional banking practices to FinTech where cashless payment options are prioritized to foster the growth and development of businesses including MSMEs. The cashless policy was measured using cheques, ATMs, POS, mobile payment and online banking services. On the other hand, the development of MSMEs was measured using capital growth, increased sales, profitability, customer satisfaction and job creation. The primary data required for this study were obtained from a survey of 419 MSMEs and 411 customers using a well-structured questionnaire. The data analysis techniques comprised descriptive statistics, mean ratings and ordered logit regressions. The ordered regression results showed that the use of cheques does not significantly increase the probability of reporting capital growth, among the MSMEs in the study. The results further showed the use of ATM cards significantly increased the probability of reporting capital growth by 1.88%. This highlights the effectiveness of ATMs as a dominant cashless policy initiative in fostering MSME development. At the same time, the results showed that POS services significantly increased the probability of reporting capital growth by 1.0%. In addition, the results showed that mobile payment options significantly increased the probability of reporting capital growth, by 3.29%. Based on the findings, this study concludes that the cashless policy initiatives in the form of ATMs, POS services and mobile payment options are germane to the development of MSMEs in Rivers State. Thus, this study recommends that the Rivers State Government should synergize with deposit money banks to increase the availability of ATM terminals while enlightening MSMEs on the need for the adoption of ATM cards to improve their capital growth and development. It is also recommended that the Rivers State Government should encourage deposit money banks and microfinance banks to prioritize the distribution of their POS machines to MSMEs to aid business transactions and development.

Keywords Cashless policy, mobile payment, online banking, MSMEs and ATMs:

Introduction

Efficiency in the financial system. This shift has introduced various instruments such as cheques, automated teller machines (ATMs), point of sale (POS) systems, mobile banking, and online banking, fundamentally altering the way businesses conduct transactions (Central Bank of Nigeria, 2012).

Micro, small, and medium-scale enterprises (SMEs) are widely recognized as the backbone of the Nigerian economy, accounting for approximately 60% of the national GDP and over 70% of employment (National Bureau of Statistics [NBS], 2010). Despite their significance, SMEs in Nigeria, particularly in Rivers State, often face challenges in accessing financial services, which impedes their growth and development. In the context of Rivers State, SMEs are vital contributors to the local economy, providing employment, innovation, and fostering economic development. However, one of the primary challenges facing these enterprises is access to capital and the effective management of financial resources. Traditionally, the dominance of cash-based transactions hindered the ability of SMEs to grow and formalize their operations. The introduction of cashless systems holds the potential to alleviate some of these challenges by offering more secure and efficient transaction methods, promoting transparency, and enhancing access to financial services (Ojo et al., 2021). Empirical evidence from Nigeria shows that the adoption of cashless systems correlates with improved financial inclusion and business performance. For instance, a study by Okoye and Ezejiofor (2013) found that SMEs using mobile banking and POS systems experienced higher levels of capital formation and operational efficiency. Similarly, Oginni and El-Maude (2022) reported that online banking significantly reduces transaction time and cost for SMEs, allowing for better capital utilization. Despite these potential benefits, many SMEs, particularly in Rivers State, still face challenges such as limited infrastructure, low digital literacy, and cybersecurity threats, which may hinder the full realization of the benefits of cashless policies. Despite the introduction of cashless policies aimed at enhancing business operations and improving access to capital for SMEs in Nigeria, there remain significant gaps in the adoption and utilization of these systems, particularly in Rivers State. Many SMEs continue to operate predominantly with cash, limiting their growth potential and exposing them to financial vulnerabilities such as theft and fraud. The problem is compounded by infrastructural inadequacies, including unreliable internet connectivity and power supply, which affect the efficient use of cashless tools. Moreover, a large proportion of SME owners in Rivers State lack the requisite digital skills to fully leverage these financial technologies. This study seeks to investigate the extent to which the cashless policy affects the capital on the capital of micro, small, and medium-scale enterprises (SMEs) in Rivers State, Nigeria. While the specific objectives are to: To analyze the relationship between the use of cheques and the capital of SMEs; To evaluate the impact of ATMs on SME financial transactions and capital formation; To examine the influence of POS systems on the liquidity and

operational capital of SMEs; and to determine the role of mobile banking and online banking in enhancing SME cap

2. Literature Review

2.1 Task technology fit Theory (TTF)

The study is based on the Task technology fit theory that was developed by Dishaw and Strong, (1999). According to the theory ICT is more likely to be embraced by its users if it positively affects the user's performance and if the capabilities of the technology are in line with the responsibilities or the tasks that the user is expected to complete. Goodhue and Thompson (1995) point out a few factors that can be used to deduce if the technology fits the task at hand. The factors include system reliability, ease of training or use, quality, relationship with the users, compatibility and authorization and production timeliness. This theory comes in handy when analyzing of different contexts where information technology is being used including in the ecommerce systems and when e-commerce systems are used together with other techniques that lead to outcomes related to information systems. This model purports that for information technology to be successful it must fit in to the task at hand and success is pegged on the improved individual and group performance. There was a task-technology fit theory that was specifically developed for group support systems. This theory was developed and tested by Ziguers, Buckland, Connolly and Wilson, (1999) and came up with the requirements that needed to be met for developed systems to fit into group tasks. The theory of task-technology fit has been especially successful when it comes to mobile based information systems. However, there are still unanswered questions regarding the use of this theory in mobile information systems. The theory looks at the significance of task technology. Additionally, the theory gives more explicit link between technology and the construct at hand which provides a better theoretical basis for coming up with issues that affect the use of technology and its performance. This model emphasis is that there needs to be a match between information technology and the business tasks if information technology use is to be a success (Junglas & Watson, 2016). The current model is useful to this research since it is important to consider the changes and requirements in the business tasks and the technology to be used, it is also important to deduce if the theory can be used in mobile technology contexts and if not if there are any adjustments that can be made to ensure it is used successfully in the said context. This theory looks at how electronic banking technology can be a contributor to Nigerian commercial banks improved performance and competitiveness (Kanyuira, 2012).

2.2 Empirical Review

Monge-Gonzalez (2011) a randomized controlled experiment was used to determine whether the adoption of internet banking by Banco Nacional de Desarrollo's micro and small enterprise (MSE) clients in Costa Rica has an impact on their performance, measured in terms of productivity, increase in sales, and cost reduction. 41,702

firms were effectively identified and classified to represent the population of Banco Nacional de Desarrollo's micro and small enterprise (MSE). Results from the intervention group surveys indicate that Internet use is limited in Mses Daily operations because of limited access to computers and the relatively low penetration of Internet services in employees' activities. In addition, firms have limited knowledge about the uses of the Internet as a business development tool. These results contrast with the reported benefits obtained by a small group of firms. Those benefits include reduced costs, higher sales, and better contact with customers. Nwankwo and Eze (2013), carried out a study to ascertain the extent to which electronic payment affect the cashless economy in Nigeria. The results showed that the electronic payment has a great implication in cashless economy of Nigeria but it will lead to a significant decrease in deposit mobilization and credit extension by Nigerian Deposit Money Banks. The authors finalized their results by saying there should be an improvement in infrastructural development so as to enhance the e-payment system. Research carried out by Humphrey (2017) titled the Influence of Cashless Policy on Small Scale Businesses in Ogoni Land of Rivers State, Nigeria. The purpose of this study is to examine the impact of cashless policy on small scale businesses. The study approved out in Ogoni of Rivers state, using the purposive sampling technique, 250 owners and operators of small-scale businesses were selected and achieved questionnaire. The data collected were coded and analyzed using frequency table and percentage, while regression analysis was used to test the framed hypotheses using SPSS (Statistical Package for Social Sciences). The results specify that: small scale businesses in Ogoni land are predominately involved by sole proprietorship with meager income with a significant statistics of them having a very poor banking habit; it was also initiate out that small scale businesses statistically do not trust on heavy capital outlay; couple with the fact that provision of services is their main business action makes bank transaction, ATMs procedure and online banking of less or no significance since their operation is grossly hinged on cash and carry basis ; the findings from the study also propose that operators of small scale business have zero tolerance to ICT practice in both the operations and transactions of their businesses; and this establish a major challenge to the adoption of cashless policy in the study area and usually, there was a negative significant effect of the introduction of cashless policy on the processes and growth of small scale businesses in Ogoni land. Based on the findings some recommendations among others made are: the need for government to harness efforts which should be directed at enlightening the activities of small-scale businesses through concerted policies, regulations and actions that will encourage and empower small scale businesses monetarily thus making the sector lively and productively ready to withstand a cashless economy. Okeke (2017) investigated how Anambra State's cashless strategy affects the expansion of small and medium-sized companies. The study was descriptive in nature and was founded on a survey. The primary statistical approaches in this study were multiple regression analysis and Pearson's correlation. The study came to the

conclusion that the expansion of SMEs in Anambra State is positively and considerably impacted by ATMs, POS systems, and mobile banking. The results show that if more individuals were made aware of the advantages of cashless transactions, SMEs would perform better. Mobile banking effect on small scale enterprises performance in Nairobi was investigated by Muchiri, (2018). Focus was on the extent of adoption of cashless policy. Descriptive statistics of frequency table, percentage, and bar chart was utilized in addressing the study objectives while the hypotheses were analyzed with multiple regression models. Result revealed that cashless policy is convenient, easily assessable and least cost effective. Cashless policy significantly influenced small scale enterprises.

3. Methodology

3.1 Sample and data collection

A sample of four hundred (400) MSME in Rivers State was selected to participate in the study. But for the purpose of this study, a 10 percent attrition (i.e. about 40 MSME) or instrument mortality will be added to the sample size making it 440. Hence, the sample size to be used for this study will be 440. A rule of thumb states that less 5 percent attrition led to little bias, while more than 20 percent poses serious threats to validity (Bell et al., 2013). Bell et al. (2013) further argues that at least 5 percent of the sample size should be added to the sample size because of attrition or instrument mortality. Hence, the study used 10 percent attrition or instrument mortality. Thus, the sample size from the micro, small and medium scale enterprises to be used in this study was 440 MSMEs that operates in the study area. Thus, the total sample size to be used in this study will be 864 respondents (440 MSMEs and 424 customers) that operates in the study area. The method of data collection for this study was done using both primary and secondary sources. The primary data is sourced using questionnaire while the secondary data was obtained from journals, textbooks and articles, etc.

3.2 Model Specification

The functional form of the model was stated as follows:

$$CPL = f(CHQ, ATM, POS, MBK, ONB) \quad (3.1)$$

Where;

CPT = Capital of micro, small and medium scale enterprises

CHQ = Cheques

ATM = Automated Teller Machines

POS = Point of Sale

MPY = Mobile Pay

ONB = Online Banking

The specifications of ordered logit regression models are provided below:

$$P(CPL_i = j) = \frac{\exp(\lambda_0 + \lambda_1 CHQ + \lambda_2 ATM + \lambda_3 POS + \lambda_4 MBK + \lambda_4 ONB)}{1 + \exp(\lambda_0 + \lambda_1 CHQ + \lambda_2 ATM + \lambda_3 POS + \lambda_4 MBK + \lambda_4 ONB)} \quad (3.6)$$

Where: $P(CPL_i = j)$ = Probability of each MSMEs selecting alternative j from the ordered outcomes for capital growth

3.3 Method of Data Analysis

Descriptive and inferential statistics was used for the analysis of the data. Descriptive statistics included frequency counts, means and percentages which was used to realize the objectives including the socio-economic characteristics of respondents and to measure other variables of interest in the study. Inferential statistical tools using the Ordered logit analysis was used in analyzing the effect of cashless policy on micro, small and medium scale enterprises and testing stated hypotheses.

4. Findings and Discussion

Table 1: Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	223	52.7	52.7	52.7
Female	200	47.3	47.3	100.0
Total	423	100.0	100.0	

Source: Researcher's Computation, 2024

Table 1 shows the size of business distribution of the respondents. It shows that most of the respondents are Small Enterprises representing 41.4 percent followed by Micro Enterprises representing 34.5 percent while the least was Medium Enterprises representing 24.1 percent.

Table 2: Age of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
20-30 Years	226	53.4	53.4	53.4
31-40 Years	127	30.0	30.0	83.5
41-50 Years	47	11.1	11.1	94.6
51-60 Years	18	4.3	4.3	98.8
		1.2	1.2	100.0

Research Article

61 Years and Above Total	5	100.0	100.0	
	423			

Source: Researcher's Computation, 2024

Table 2 shows the age distribution of the respondents. It shows that most of the respondents fall within the age bracket of 20-30 years representing 53.4 percent followed by 31-40 years representing 30 percent while the least fall within 61 Years and above representing 1.2 percent, respectively.

Table 3: Educational Qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
WAEC	86	20.3	20.3	20.3
OND/NCE	50	11.8	11.8	32.2
HND/First Degree	215	50.8	50.8	83.0
Masters	59	13.9	13.9	96.9
PhD	13	3.1	3.1	100.0
Total	423	100.0	100.0	

Source: Researcher's Computation, 2024

Table 3 shows educational qualification of the respondents. It shows that most of the respondents have HND/First Degree representing 50.8 percent followed WAEC holders representing 20.3 percent while the least are those with PhD representing 3.1 percent.

Table 4: Length of Time in Business

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5 years	198	46.8	46.8	46.8
5-10 Years	115	27.2	27.2	74.0
11-15 Years	88	20.8	20.8	94.8
16 Years and Above Total	22	5.2	5.2	100.0
	423	100.0	100.0	

Source: Researcher's Computation, 2024

Table 4 shows the length of time in business of the respondents. It shows that most of the respondents Less than 5 years representing 46.8 percent followed by those with 5-10 Years representing 27.2 percent while the least fall within those with 16 Years and above representing 5.2 percent.

Table 5: Respondents Responses on the Capital of micro, small and medium scale enterprises

S/No.	Capital of micro, small and medium scale enterprises	SD	D	A	SA	Agg. Score	Mean	Decision
1	Micro, small and medium scale enterprises use their own savings as a source of capital	21	104	235	63	423	2.80	Accept
2	Micro, small and medium scale enterprises use government loans as a source of capital	9	133	216	65	423	2.80	Accept
3	Micro, small and medium scale enterprises use private equity as a source of capital	64	84	229	46	423	2.61	Accept
4	Micro, small and medium scale enterprises use family and friends as a source of capital	44	133	171	75	423	2.65	Accept
5	Micro, small and medium scale enterprises use suppliers as a source of capital	9	138	229	47	423	2.73	Accept
6	Micro, small and medium scale enterprises use government grants as a source of capital	47	122	158	96	423	2.72	Accept
7	Micro, small and medium scale enterprises use bank loans as a source of capital	8	148	221	46	423	2.72	Accept
	Grand Mean						2.72	Accept

Source: Researcher's Computation, 2024

Table 5 reveals that most of the respondents agree on the fact that micro, small and medium scale enterprises in Rivers State have their capital from various sources. This is because in most of items like micro, small and medium scale enterprises use their own savings as a source of capital, micro, small and medium scale enterprises use government loans as a source of capital, micro, small and medium scale enterprises use private equity as a source of capital, micro, small and medium scale enterprises use family and friends as a source of capital, micro, small and medium scale enterprises use suppliers as a source of capital, micro, small and medium scale enterprises use government grants as a source of capital and micro, small and medium scale enterprises use bank loans as a source of capital, their calculated mean values are greater than the criterion mean of 2.5.

Table 6: Ordered logit regression results

Dependent variable: CPL						
variable	Odds Ratio	Std. Err.	Z	P> z	[95 percent Conf. Interval]	
CHQ	1.104054	.0697319	1.57	0.117	.9755024	1.249545
ATM	.9115***	.0546389	-3.55	0.000	.8104971	1.025171
POS	1.050623	.0660559	0.79	0.432	.9288154	1.188406
MPY	.8507157***	.056772	-2.42	0.015	.7464145	.9695916
ONB	.9861917	.0626825	-0.22	0.827	.8706806	1.117027
Pseudo R²	0.4122				Prob > chi2	= 0.0451

Source: Regression Output from STATA 17

Note: * p<0.01, ** p<0.05, * p<0.1 denote substantial at 1 percent, 5 percent and 10 percent level respectively**

The results showed that the use of cheques increased the possibility of reporting capital growth (from low too high to very high) among the sampled MSMEs in the study while holding other variables constant. This finding highlights the importance of using cheques for the development of MSMEs. The results also showed that the possibility of reporting increased capital (from low too high to very high) increases with the use of ATM while controlling for other variables in the model. This indicates that ATMs are an important aspect of the cashless policy that drives the development of MSMEs in Rivers State. At the same time, the use of POS and mobile payment increases the possibility of reporting capital growth (from low too high to very high) among the MSMEs. This finding is interesting as it indicates that these cashless payment options provide a pathway for the development of the MSMEs in Rivers. In addition, the results that the possibility of reporting capital growth (from low too high to very high) increases with an increase in online banking options. This finding further attests to the effectiveness of online banking as a cashless payment option in promoting the development of MSMEs in

Rivers State. The pseudo-R-squared of 0.4122 indicates that 41.22% of the total variations in capital growth are collectively explained by changes in the use of the underlying cashless payment options. The results further showed that the probability value (0.0451) of the chi-square statistic is less than 0.05. This finding indicates that cashless payment options are jointly significant in explaining changes in the capital growth of the MSMEs. This finding indicates that the entire model is statistically significant at the 5% level.

Table 7: Marginal effects results

Variable	dy/dx	Std. Err.	Z	P> z	[95 percent C.I.]	X
CHQ	-.0201515	.01284	-1.57	0.117	-.045324 .005021	8.03783
ATM	.0188559***	.00222	8.49	0.000	-.005088 .0428	8.00236
POS	.0100532***	.01279	3.131	0.001	-.035128 .015022	7.94799
MPY	.0329133***	.0136	2.42	0.016	.006252 .059574	7.83924
ONB	.0028306	.01294	0.22	0.827	-.022526 .028187	7.97636

Source: Regression Output from STATA 17

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ denote substantial at 1 percent, 5 percent and 10 percent level respectively

The marginal effects showed the slope parameters indicating the probability of capital growth following a change in each cashless payment option. Specifically, the results showed that the use of cheques decreases the probability of reporting capital growth (from low, high and very high). This finding is not significant at the 5% level and can be attributed to the limited use of cheques as a payment option among the MSMEs. The results further showed that the probability of reporting capital growth (from low, high and very high) increased by 1.88% following the use of the ATM payment option while holding other variables constant. Similarly, the use of POS increases the probability of reporting capital growth (from low, high and very high) by 1.0% while controlling for changes in other variables in the model. The results further showed that the use of a mobile payment option increases the probability of reporting capital growth (from low, high and very high) by 3.29%. This is a pointer that the mobile payment option plays an important in increasing the capital of the MSMEs in the study. It is also evident from the results that the use of online banking options does not significantly increase the probability of reporting capital growth (from low, high and very high). This may be attributed to the perceived risks and complexity of the mobile payment options which affect its widespread acceptability by small businesses in the study area.

5. Conclusion and Recommendations

This study examined the effect of the cashless policy on capital growth of MSMEs in Rivers State. This was motivated by the rapid transition from traditional banking practices to FinTech where cashless policy is prioritized to foster the growth and development of businesses comprising MSMEs. The findings revealed that cheques do not significantly influence the growth of capital, suggesting that cheque usage does not substantially benefit MSME development. However, the utilization of ATMs and POS services significantly enhanced MSME development through positive contributions to capital. This indicates that MSMEs can leverage ATMs and POS services to improve their overall performance. Additionally, mobile payment options were found to have a substantial positive impact on MSME growth, highlighting the effectiveness of mobile payments in driving MSME growth in Rivers State. To this end, this study concludes that cashless policy initiatives such as ATMs, POS services, and mobile payment options are crucial for MSME' capital growth in Rivers State. Based on the findings, this study recommends that policymakers especially monetary authorities should ensure the acceptability of cheques by businesses through the establishment of robust systems for tracking and reporting fraudulent activities related to cheques. Again, the Rivers State Government should synergize with deposit money banks to increase the availability of ATM terminals while enlightening MSMEs on the need for the adoption of ATM cards to improve their business transactions and development.

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