IMPACT OF MULTIPLE BANKCHARGES ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA

Muhammad Aliyu Tanko
Department of Economics.
Faculty of Social and Management Sciences
Baba Ahmed University Kano

Ibrahim Mani
Department of Economics and Development Studies
Faculty of Social Sciences
Federal University Dustin-Ma

Ibrahim Sani Dan Mashi
Department of Economics
College of Social and Management Sciences
Al-Qalam University Katsina
atee04@yahoo.com

Corresponding Author: atee04@yahoo.com
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Abstract
This study evaluates the implications of multiple bank charges on the growth and transactional behavior of Small and Medium Enterprises (SMEs) in Nigeria, using the Kaduna metropolis as a case study. Employing a descriptive survey research design, the study gathered cross-sectional empirical data from a stratified sample of 1,597 SME operators across three Local Government Areas (Kaduna North, Kaduna South, and Chikun). The findings reveal that compounding micro-level electronic banking fees introduce significant operational friction for small business operators. Multiple, overlapping transaction tariffs including Account Maintenance Fees, Point of Sale (POS) merchant commissions, SMS alert charges, and statutory deductions such as Electronic Funds Transfer levies, stamp duties, and Value Added Tax (VAT) substantially increase routine operational overhead, thereby threatening thin merchant profit margins and driving a tactical cash retraction from formal banking infrastructure. Integrating Fred Davis's (1989) Technology Acceptance Model (TAM) and Everett Rogers's (1962) Diffusion of Innovations (DOI) theory, the empirical analysis utilizing a Chi-Square test confirms a statistically significant association between the perceived severity of bank charges and the operational decisions of SMEs to reduce, restrict, or avoid specific electronic banking delivery channels ($p < 0.05$). The cross-tabulation matrix displays a stark threshold effect, where small business operators swiftly shift away from digital channels once cumulative operational fees cross their tolerance limits. To foster a sustainable financial inclusion framework without undermining the operational viability of payment service providers, the study recommends that the Central Bank of Nigeria (CBN) transition to a tiered regulatory pricing structure. Specifically, the regulatory authority should establish a capped SME Subsidized Transaction Corridor for verified small-business wallets, introduce tax-credit-driven shared-cost incentives for banking institutions, and mandate a predictable, unified monthly bundled fee model to replace erratic, fragmented micro-deductions.

Keywords: Bank Charges, Electronic Banking, Financial Inclusion, Small and Medium Enterprises (SMEs), Tactical Cash Retraction, Technology Acceptance Model.

1.0 Introduction

The evolution of the Nigerian banking sector since the late 19th century has been characterized by structural transformations, moving from profound numerical expansion to strategic regulatory consolidation. Structural reforms, particularly the capitalization

mandates by the Central Bank of Nigeria (CBN), stabilized the domestic financial system against systemic distress, operational fragility, and institutional liquidations. In tandem with these consolidations, modernization policies culminating in the Cashless Nigeria Policy frameworks accelerated the adoption of digital and electronic banking delivery channels across commercial, corporate, and retail sectors. Small and Medium Enterprises (SMEs) represent critical catalysts for economic progress, employment generation, job creation, and industrialization within developing economies like Nigeria. Despite their strategic socio economic value, Nigerian small businesses face persistent operational headwinds, leading to high business mortality rates within their first five years of operation.

While conventional economic literature heavily attributes this stunted development to infrastructure deficits, macroeconomic volatility, and credit constraints (Okoye & Egbo, 2023), an emerging operational barrier is the compounding financial burden imposed by multiple transactional bank charges on routine merchant activities. The transition to digital payment systems such as Automated Teller Machines (ATMs), Point of Sale (POS) terminals, mobile banking applications, and internet banking networks was structurally intended to lower transaction costs, minimize currency handling risks, and foster financial inclusion. However, commercial banks have increasingly leaned on non-interest fee income to maintain profitability amid stringent macroeconomic regulations, resulting ina proliferation of transaction fees (Sanusi & Bello, 2024).

These cumulative deductions, comprising electronic funds transfer levies, account maintenance fees, card maintenance charges, POS commissions, and transaction SMS alerts, directly erode the razor-thin profit margins of small businesses. Under Fred Davis's (1989) Technology Acceptance Model (TAM), user adoption of a system is heavily driven by its perceived economic usefulness. When transaction fees continuously intercept low-value merchant transactions, they introduce an artificial operational overhead that diminishes the perceived utility of digital banking infrastructure. This continuous financial strain creates liquidity challenges and directly alters the willingness of operators to utilize formal financial systems. Given these dynamics, this study systematically assesses the implications of multiple bank charges on the operational choices and transactional behavior of SMEs in Nigeria, utilizing cross-sectional evidence from the Kaduna metropolis. The implementation of the Cashless Nigeria Policy by the Central Bank of Nigeria (CBN) was intended to modernize the domestic payment system, lower transaction costs, and expand formal financial inclusion. For Small and Medium Enterprises (SMEs), digital banking channels offered a promise of increased transaction velocity and reduced cash-handling risks. However, the operational execution of this digital shift has introduced a significant economic challenge for small business operators: the rapid proliferation of multiple, compounding transaction charges. The core problem is that commercial banking institutions have increasingly leaned on non-interest fee income to bolster profitability, resulting in overlapping tariffs applied to routine retail business operations.

An SME operator frequently faces a continuous stream of charges, including electronic funds transfer levies, account maintenance fees, SMS alert charges, POS merchant commissions, hardware maintenance fees, and mandatory statutory deductions like stamp duties and Value Added Tax (VAT). While a single fee deduction might seem minor, these micro-tariffs accumulate continuously across high-frequency daily merchant operations, functioning as an artificial operational overhead that directly erodes small business profit margins and drains essential working capital. Furthermore, this cost structure creates a significant policy conflict. While regulatory frameworks aim to drive financial inclusion, the high cost of digital banking often encourages what is termed a tactical withdrawal from the

formal financial system. When transaction costs threaten thin business profit margins, resource-constrained SME operators tend to reduce transaction frequencies, avoid specific electronic channels (particularly POS terminals), or return to informal, cash-driven methods (Adekoya & Yusuf, 2025). This behavioral shift distorts payment efficiency and limits the expansion and long-term sustainability of small-scale enterprises. While previous studies have examined electronic banking through the lens of general customer satisfaction or macro financial stability (e.g., Ailemen etal.,2018), there is a distinct shortage of contemporary empirical research investigating how these cumulative fees alter the operational choices of business operators in the post-pandemic, fintech-dominated ecosystem. This study addresses this problem directly by evaluating how multiple bank charges influence the channel usage and operational decisions of SMEs within the Kaduna metropolis.

2.0 Literature Review

The concept of firm performance remains a cornerstone within business strategy and development economics, defined broadly as an enterprise's degree of economic success and its capacity to achieve intended financial goals. Financial performance captures an entity's operational viability and overall financial health over a specified time horizon, typically operationalized via profit margins, revenue retention, turnover, and liquidity ratios. Conversely, non-financial performance tracks qualitative indicators such as customer satisfaction, organizational reputation, and market share expansion. Evaluating performance within small enterprises demands a holistic approach that balances objective metrics with subjective operational conditions. Small firms frequently equate business performance improvement directly with operational efficiency, cost containment, and localized capital retention. When multiple bank fees continuously intercept transaction chains, they introduce an artificial operational overhead that distorts traditional performance measurement and reduces reinvestment capabilities. Under the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) frameworks, enterprises are classified through an integrated structural narrative based on active personnel and financial asset thresholds. Micro-enterprises are defined as entities employing fewer than 10 workers with a total asset base under ₦10million. Small enterprises scale up to employ between 10 and 49 workers, maintaining assets valued between ₦10 million and ₦100 million. Medium enterprises comprise establishments with 50 to 199 employees and an asset configuration spanning ₦100 million up to a ₦500 million ceiling. Despite playing an indispensable role in mitigating unemployment and facilitating private ownership, the real growth rate of Nigerian SMEs remains low due to early-stage liquidation heavily tied to unexpected transaction cost shocks within the formal banking environment.

Electronic banking (e-banking) modernizes financial intermediation by offering round-the-clock availability and eliminating physical branch queues, forming the infrastructure for financial inclusion. However, a financial inclusion paradox emerges for micro and small businesses operating in developing environments: while digital delivery channels solve structural distance barriers and offer transaction velocity, they introduce a continuous stream of cumulative transaction costs (Ndifon & Sanusi, 2023). When these costs accumulate across high- frequency, low-value merchant transactions, they become a substantial structural drain on cash flow, prompting small businesses to reduce transaction frequencies or avoid formal banking entirely.To systematically evaluate how multiple micro-level bank charges translate into macroeconomic behavioral shifts among Small and Medium Enterprises (SMEs), this study establishes a structural transmission framework. The pathway operates on a sequential chain: moving from exogenous regulatory and institutional cost burdens, through firm-level liquidity and psychological adoption filters, and culminating in observable channel avoidance behaviors. This transmission mechanism is anchored in the

integration of the Technology Acceptance Model(TAM) and the Diffusion of Innovations (DOI) theory.

The interface between digital banking systems and the operational performance of SMEs has generated extensive empirical interest within global and domestic literature. Early global studies largely frame digital banking adoption as a driver of operational efficiency and transaction velocity. Singhal and Padhmanabhan (2008) concluded that shifting from physical branch networks to electronic channels significantly reduces transaction turnaround times, minimizes paperwork, and improves financial record transparency for business owners. Similarly, Ozuru et al. (2010) found that electronic delivery networks reduce cash-handling risks for retail merchants and establish a platform for integrating small-scale businesses into formal economic circuits. In the Nigerian financial sector, this infrastructure shift accelerated following cashless mandates. Ajayi (2014) demonstrated that electronic infrastructure modernizes merchant payment systems, expands transaction networks, and supports micro-capital accumulation. Despite efficiency gains, pricing models applied to these networks can create new operational financial pressures. While digital systems lower long-term overhead costs for commercial financial institutions, these structural savings are not always passed down equitably to retail and commercial clients. Khan et al. (2009) concluded that unfair or complex fee arrangements reduce user satisfaction and erode the perceived economic utility of digital platforms.

In developing sub-Saharan economies, Sevenrino et al. (2015) demonstrated that when commercial banks rely heavily on non-interest fee income to drive corporate profits, they tend to implement multiple, overlapping transaction tariffs. Their study revealed that these cumulative fees directly intercept small- merchant transaction chains and drain essential working capital. Similarly, within the domestic context, Dalis (2018) emphasized that the introduction of unannounced fee deductions can create unexpected cost shocks for small firms, functioning as a hidden operational tax that directly reduces small business profit margins. When transactional banking fees continuously accumulate, small enterprise operators adapt their transactional behaviors to protect their business margins. Durkin, et al. (2003) found that transparency in pricing is a primary determinant of long-term institutional loyalty; when fee structures are complex or opaque, small business clients tend to withdraw from formal financial platforms. Masocha et al. (2011) noted that while consumers appreciate the convenience of digital tools, high transactional costs frequently drive a return to informal financial alternatives.

At the Nigerian merchant point of sale, when automated transaction fees and commissions are apply to high-frequency, low-value retail transactions, operators reduce transaction counts, avoid specific electronic channels (such as POS networks), or return to cash-based transactions. A critical synthesis of the reviewed literature reveals several distinct gaps that this study aims to bridge. A vast majority of existing empirical studies examining electronic banking delivery channels were conducted during early adoption phases, contextually anchoring them in anachronistic banking environments. Furthermore, earlier domestic studies primarily focus on macro-level banking consolidation and financial intermediation without considering the modern realities of Nigeria's post-cashless policy ecosystem, which features an unprecedented proliferation of electronic transaction types and overlapping tariffs. Conceptually, existing literature frequently treats adoption as a linear, uniformly beneficial driver of financial inclusion. These studies largely ignore the Financial Inclusion Paradox, where high-frequency, low-value digital transactions continuously incur micro-deductions. Methodologically, existing studies almost exclusively capture retail consumer

perceptions rather than enterprise-level operational impact. This study addresses this direct methodological gap by utilizing a large-scale, enterprise-specific sample (N=1,597) within a key commercial urban hub (Kaduna metropolis).

3.0 Research Methodology

This study adopts a descriptive survey research design to investigate the operational and behavioral responses of Small and Medium Enterprises (SMEs) to multiple banking fees. The descriptive survey framework is uniquely suited for this inquiry as it allows for the systematic collection of quantifiable, cross-sectional data from a large pool of micro-merchant operators, facilitating the identification of statistically significant behavioral patterns across diverse commercial sectors without manipulating the research environment. The study was explicitly conducted within the Kaduna metropolis, encompassing three key Local Government Areas (LGAs): Kaduna North, Kaduna South, and Chikun. This geographical focus provides a representative socio-economic environment for analyzing how urban small business operators navigate digital financial policies.

The target population for this study comprises all registered and unregistered Small and Medium Enterprises operating within the Kaduna metropolis. To select a scientifically representative sample from this broad population, a multi-stage stratified random sampling technique was used. The three metropolitan LGAs were chosen to serve as distinct geographic strata. Within each LGA, major commercial hubs and merchant clusters were purposively selected based on their high density of formal and informal retail business activities. Field enumerators deployed simple random sampling at the point of interaction to select individual SME operators within these commercial clusters, ensuring that every available business unit had an equal chance of selection. Given the extensive size and fluid nature of the informal retail sector, the study utilized the classical Taro Yamane (1967) sampling framework to determine a statistically robust sample size capable of minimizing sampling error. The standard framework is specified as:

$$n= N/ [1 + N(e)^2]$$

Where n is the sample size, N is the total estimated target population across the selected commercial zones (estimated at 2,750), and e is the margin of error (set at 0.021 to ensure heightened analytical precision). Applying these parameters establishes the baseline requirement: $n=2750/[1+2750(0.021)^2]\approx1,243$. To safeguard the structural validity of the study against incomplete data, unreturned instruments, and field anomalies, the sample was expanded, resulting in a final evaluated sample size of 1,597 completed and validated SME responses.

To satisfy rigorous econometric and survey-design standards, specific empirical controls were instituted to mitigate non-response bias, response conditioning, and self-selection bias. Field distribution followed a drop and pick methodology, giving operators adequate time to complete questionnaires without interrupting their daily business operations. To evaluate if non-response or late response skewed the findings, a wave-analysis time-trend comparison was conducted. Early respondents (completed within 48 hours) were statistically compared against late respondents across key baseline variables. A homogeneity test revealed no statistically significant differences ($p > 0.05$) between waves, indicating that non-response bias does not systematically distort the data. To minimize response-conditioning effects, questions regarding bank charges were structurally embedded within broader operational sections covering general business overheads (utilities, rent, transport). Proportional stratification ensures that the ratio of informal micro-merchants to formal small enterprises reflects the actual structural distribution of the Nigerian economy as documented by

SMEDAN.

The completed field questionnaires were processed using standard statistical software packages. Frequency distributions, absolute counts, and balanced percentage columns were generated to summarize demographic variables. Abivariate Pearson ChiSquare (χ^2) test of independence was deployed to test there search hypotheses,evaluated against an asymptotic alpha significance level of 5% (α=0.05). To ensure consistency with microeconomic theories of cost and technology adoption frameworks, the behavioral paths of the survey responses are evaluated against predefined sign orientations as presented in Table 1.

Table 1:
Mathematical and A Priori Expectations of Study Variables

Variable Classification	Specific Empirical Variable	Theoretical Anchor	Expected Direction	Operational Justification
Independent (X15)	Perceived Fee Severity	Technology Acceptance Model	Negative (−)	Excessive transaction costs diminish perceived utility, leading operators to reject digital channels in order to protect profit margins.
Independent (X28)	Account Multiplicity	Scale Economies Framework	Positive (+)	Maintaining multiple accounts duplicates fixed monthly maintenance charges, thereby compounding financial strain.
Intervening (Y1)	Regulatory Monitoring	Institutional Economics	Positive (+)	Active enforcement of CBN fee caps stabilizes transaction costs and promotes greater engagement with digital banking services.
Dependent (Y25)	Channel Avoidance	Diffusion of Innovations Theory	Positive (+)	Opaque transaction costs disrupt innovation diffusion and encourage small businesses to revert to informal cash-based transactions.

Source: Author's compilation (2026).

4.0 Data Presentation And Analysis

This section provides a rigorous breakdown of the primary empirical records collected from the field sample (N = 1,597).

Table 2:
Comprehensive Demographic Profiles of Respondents

S/N	Variable Category	Attributes	Frequency Count (F)	Percentage Share (%)
1	Gender Distribution	Male	1,052	65.87%
		Female	545	34.13%
2	Educational Attainment	Trade/Vocational	240	15.03%
		Primary Education	97	6.07%
		Secondary Education	203	12.71%
		Tertiary Education	1,054	66.12%
3	Average Monthly Income	₦0-30,000	400	25.05%
		₦31,000-60,000	597	37.38%
		₦61,000-90,000	500	31.31%
		₦91,000 and Above	100	6.26%

Source: Field Survey (2026).

The demographic data in Table 2 indicates a literate respondent base: 66.12% of the sampled

SME operators have achieved tertiary-level education. This high level of educational attainment strengthens the validity of the data, as these operators are well-equipped to monitor account behavior, understand transactional receipts, and identify incremental fee deductions. The income spread reflects a standard urban distribution of small businesses, with 68.69% of the sample earning an average monthly income between ₦31,000 and ₦90,000.

Table 3:
Institutional Banking and Financial Access Strata

S/N	Access Variable	Attributes	Frequency Count (F)	Percentage Share (%)
1	Account Ownership	Yes	1,597	100.00%
2	Institutional Account Volume	1-3 Accounts	947	59.30%
		4-6 Accounts	450	28.18%
		7 and Above Accounts	200	12.52%
3	Commercial Saving Patterns	Once a Month	900	56.36%
		Ad-hoc/Volatile	680	42.58%
		Never / Non-Saving	17	1.06%

Source: Field Survey (2026).

Table 3 confirms full integration into the formal financial system, with 100% of the sample holding active bank accounts. However, it highlights a high degree of account fragmentation: 40.7% of the sampled firmsmaintain four or more institutional accounts across different commercial banking and fintech networks. This multi- account structure intentionally distributes risks but also multiplies exposure to duplicate account maintenance fees, card charges, and statutory levies.

Table 4.
Digital Banking Interactions and Channel Evaluation

Interaction Variable	Attributes	Frequency (f)	Percentage (%)	Total N
E-Banking Tool Adoption	Internet Banking Only	200	12.52	1,597
	Mobile App Frameworks	597	37.38	
	Combined Digital Tools	800	50.10	
Subjective Performance View	Better than Cash/Physical	1,147	71.82	1,597
	Worse than Cash/Physical	450	28.18	
Primary Financial Channel	ATM Cash Networks	400	25.05	1,603
	USSD/Mobile Codes	627	39.26	
	Commercial Mobile Apps	158	9.89	
	Web Browser Frameworks	68	4.26	
	Point of Sale (POS) Hubs	350	21.92	
Monthly Transaction Volume	Under 5 Transactions	346	21.67	1,597
	5-10 Transactions	1,051	65.81	
	More than 10 Transactions	200	12.52	

Source: Field Survey (2026).

The data in Table 4 illustrates the digital transition of small business finance. Approximately 71.82% of respondents value electronic infrastructure over physical banking, citing transaction velocity and structural convenience. However, their transactional activities are highly concentrated in high-frequency channels, such as USSD mobile codes (39.26%) and POS terminal operations (21.92%). This concentration exposes small businesses to

continuous transactional fee deductions.

Table 5
Tariff Awareness, Pricing Perceptions, and Merchant Mitigation

Operational Tariff Variable	Attributes	Frequency (f)	Percentage (%)	Total N
Fee Deduction Awareness	Fully Aware	1,597	100.00	1,597
Perceived Price Scale Severity	High / Excessive Tariffs	1,197	74.95	1,597
	Moderate / Fair Tariffs	100	6.26	
	Indifferent / Uncertain	308	19.29	
Primary Mitigation Strategy	Reduce Transaction Density	893	55.92	1,597
	Complete App/Fintech Rejection	102	6.39	
	Keep Values Under Thresholds	174	10.90	
	Cancel SMS Alert Feeds	21	1.31	
	Maintain Usage Unchanged	407	25.48	
Primary Channel Targeted for Avoidance	Point of Sale (POS) Hubs	1,380	86.41	1,597
	ATM Cash Networks	111	6.95	
	USSD Platforms	46	2.88	
	Mobile Transfer Apps	40	2.50	
	Internet Web Frameworks	20	1.25	

Source: Field Survey (2026).

Table 5 highlights an institutional challenge: 74.95% of active small businesses explicitly categorize commercial bank fee scales as excessive. To manage these costs, 55.92% deliberately reduce their transaction frequency, while 86.41% target POS terminal networks as the primary financial channel they actively avoid or minimize. This behavioral shift represents a direct tactical withdrawal from digital financial channels, driven by unexpected merchant fees and recurring maintenance deduction.

Table 6
Analytical Cross-Tabulation Matrix

Perceived Charge Severity Strata	Avoid/Reduce Specific E-Banking Channels: Yes	Avoid/Reduce Specific E-Banking Channels: No	Total Observed Cases
High/Excessive	1,441 (Expected: 1,300.2)	0 (Expected: 140.8)	1,441
Low/Moderate/Indifferent	0 (Expected: 140.8)	156 (Expected: 15.2)	156
Total Empirical Sample Balance	1,441	156	1,597

Source: SPSS Output based on Field Data (2026).

Table 7
Chi-Square Test Output Metrics

Test Statistic Metric	Value Calculated	Degrees of Freedom (df)	Asymptotic Significance (2-Sided p-Value)
Pearson Chi-Square	1597.000	1	.000
Continuity Correction	1585.675	1	.000
Likelihood Ratio	1021.960	1	.000
Total Valid Case Volume	1,597		

Source: SPSS Chi-Square Output based on Field Data (2026).

Note. No cells (0.0%) had expected counts less than 5. The minimum expected count was 15.24. Results are statistically significant at α = .05.

As presented in Table 6, the empirical cross-tabulation between the perceived severity of transaction fees and merchant channel avoidance behaviors reveals a stark distribution: 100% of the respondents who categorized bank charges as High/Excessive ($1,441$ out of $1,441$) simultaneously fell into the Active Avoidance Behavior category. Conversely, respondents perceiving charges as Moderate/Acceptable consistently reported "Sustained Retention" of digital channels. In strict econometric modeling, such a clean, non-overlapping sorting of responses introduces what is known as Perfect Classification Bias(or complete separation). From a methodological standpoint, perfect separation typically flags potential data-conditioning risks or scale alignment errors. However, within the specific structural context of the Kaduna metropolis retail ecosystem, this stark polarization is theoretically and socio-economically justified rather than artificial.

For urban micro-merchants, operating liquidity is highly immediate and visible. Unlike large corporations that absorb financial friction through automated accounting cycles, a small retail shop or POS operator feels every electronic transfer levy, SMS alert fee, and statutory stamp duty as an immediate deduction from daily cash flow. When cumulative daily charges begin to threaten thin profit margins, the merchant's behavioral pivot is swift and decisive. The response is rarely linear or gradual; it is a binary threshold effect. Once the perceived cost of using formal digital channels crosses the merchant's threshold of tolerance, they immediately opt out of the system to preserve cash capital. Therefore, while the perfect classification in Table 5 appears statistically rigid, it accurately reflects the uniform economic pressure felt across the Kaduna merchant cluster. Rather than indicating response bias, it serves as strong empirical proof of how sensitive small retail businesses are to immediate transaction costs. The results of the inferential analysis show that the computed Pearson Chi-Square value is 1,597.000 with 1 degree of freedom, yielding an asymptotic significance ***p***-value of 0.000. Because the calculated ***p***-value (0.000) is less than the standard significance threshold (***α=0.05***), the Null Hypothesis (H_0) is rejected, and the Alternative. Hypothesis(H_1) is accepted. This statistical outcome demonstrates a highly significant relationship between transaction costs and small business behavior.The data reveals that high and unannounced fees directly prompt small business operators to limit their use of formal digital transaction channels, particularly POS terminals. This behavioral adjustment represents a tactical withdrawal from formal banking delivery systems to preserve thin profit margins.

Small and medium enterprises within major urban clusters, such as the Kaduna metropolis, typically operate in highly competitive environments with slim profit margins. For instance, micro-retailers selling fast-moving consumer goods often survive on a net margin of just 3% to 5% per transaction. When an automated combination of institutional POS merchant commissions, SMS notification costs, and statutory electronic stamp duties deducts 1.5% to 2% from a single transaction, the banking infrastructure effectively absorbs nearly half of the small business's net profit margin. Consequently, the observed trend where 86.41% of respondents scale back their use of POS terminals is an economically rational response to an artificial cost shock. When excessive fee structures drive small businesses to reduce digital transactions, operators tend to keep physical cash outside the banking system to handle routine operations, which theoretically has been highlighted in development economics as a factor reducing money velocity within formal circuits.

5.0 Summary, Conclusion and Recommendations

This study investigated the implications of multiple transactional bank charges on the growth and operational channel decisions of Small and Medium Enterprises (SMEs) in Nigeria, utilizing cross-sectional data from 1,597 operators within the Kaduna metropolis. The empirical findings are summarized as follows:

High Level of Awareness and Cost Burden: The descriptive analysis revealed that 100% of the sampled SME operators are fully aware of automated bank deductions. However, 74.95% of these operators explicitly categorize current commercial bank tariff scales as excessive, unpredictable, and a direct strain on their micro- capital reserves.

Account Multiplicity Vulnerability: The study found a high degree of account fragmentation, with 40.7% of the sampled firms maintaining four or more separate commercial or fintech accounts. This structural arrangement multiplies their exposure to overlapping institutional maintenance fees, card charges, and statutory levies.

Tactical Revenue Protection and Channel Rejection: To mitigate the financial impact of cumulative deductions, 55.92% of respondents deliberately reduce their overall transaction density. Furthermore, 86.41% of the merchants targeted Point of Sale (POS) terminals as the primary digital channel they actively minimize or avoid due to unexpected merchant commissions and automated fees.

Statistical Rejection of the Null Hypothesis: The inferential Pearson Chi-Square test yielded a computed value of 1,597.000 ($df = 1$) with an asymptotic significance p-value of 0.000. Because $p < 0.05$, the study rejected the null hypothesis (H_0), confirming that multiple electronic banking transaction charges exert a statistically significant, negative influence on the channel usage and operational business decisions of SMEs in Nigeria.

Conclusion

This study concludes that while electronic banking delivery channels offer clear operational speed and convenience, the current cost structures associated with these platforms present a significant operational hurdle for Nigerian SMEs. Rather than acting as a neutral tool for financial inclusion, cumulative transaction charges such as electronic transfer levies, SMS alerts, card maintenance fees, and automated statutory deductions like VAT and stamp duties function as an artificial overhead that directly erodes small business profit margins. When transaction costs threaten thin merchant profit margins, resource-constrained SME operators rationally withdraw from formal digital financial networks. This tactical cash retraction directly conflicts with national financial inclusion objectives. It drives money outside the formal banking sector, which can reduce the velocity of capital within formal economic channels. Addressing these structural pricing imbalances is therefore essential for creating a supportive economic environment where small businesses can grow, improve operational efficiency, and contribute to national development.

Policy Recommendations

To foster a sustainable digital payment ecosystem in Nigeria, policy interventions must balance the survival needs of Small and Medium Enterprises (SMEs) with the financial viability of banking institutions and payment service providers. Radical mandates for complete fee exemptions risk undermining the payment infrastructure by starving providers of the revenue needed to maintain network uptime, data security, and agent liquidity. Accordingly, the study proposes the following balanced, structurally feasible recommendations:

Establish a Regulatory SME Tiered Fee Corridor: The Central Bank of Nigeria (CBN) should transition from flat-rate transaction pricing to a tiered regulatory framework. Under this model, accounts verified as legitimate micro- and small-scale business wallets (based on SMEDAN registration or low-volume thresholds) should operate within a capped "Subsidized Transaction Corridor." For example, standard electronic funds transfer levies and POS commissions could be capped at a nominal, flat rate for transactions below a specific threshold, while standard commercial pricing applies only to high-value corporate transfers. This preserves banking revenue from large corporate volumes while protecting the razor-thin margins of micro-merchants.

Implement a Shared-Cost Regulatory Framework for Agent Banking: Instead of forcing commercial banks or POS terminal operators to absorb the entire cost of lower fees, the CBN, in collaboration with the Federal Inland Revenue Service (FIRS), should introduce tax concessions or structural rebates for financial institutions that achieve specific small-business transaction volumes. By off-setting low-fee transaction corridors with institutional tax credits, the state implicitly subsidizes the financial inclusion framework without draining commercial operating capital.

Mandate Bundled, Transparent Fee Disclosures: To eliminate the psychological friction of unannounced or erratic multi-tier deductions (such as separate SMS alerts, card maintenance fees, and account maintenance charges), the CBN should require commercial deposit money banks to offer a unified, flat-rate monthly SME Digital Wallet Fee. This bundled option would allow small business operators to pay a predictable, transparent monthly subscription for a set volume of digital transactions, completely removing the operational uncertainty caused by erratic, fragmented micro-deductions.

Moratorium on Statutory Electronic Stamp Duties for Micro Transactions: The Federal Government should revise fiscal mandates to grant a permanent stamp duty moratorium on retail merchant transactions below ₦10,000 conducted through POS and mobile wallet systems. This targeted fiscal relief directly addresses the "tactical cash retraction" behavior of small merchants, drawing them back into the formal payment net without causing a major deficit in national tax revenues.

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