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EDITORIAL

Governance, management and entrepreneurship are the major challenges that contemporary organisations in particular, and world economy in general, face. Hence, this volume focuses on developing strategies for enhanced governance, effective management and better entrepreneurial practice for the wellbeing of *ALL*. Thus, Adewumi et al, examine relationship between firm-level governance and the likelihood of corporate failure in Nigeria and the UK. They conclude that increased board gender diversity (BGD) lowers manufacturing companies' risk of failing as a business. Thus, they advised having an adequate number of independent directors. Conflict management is vital to every organisation. In view of this, Adewale and Emiola investigate the extent to which conflict handling techniques and employee competence improve organisation's performance with interest on customer retention and quick service delivery. The study concludes that to boost customer loyalty and service efficiency, organisations must refine conflict management strategies and invest in continuous development of employee skills. Parts of their contribution to this edition, Francis et al study the effect of effective gender diversity management on organisational performance in the Nigerian business context. The study recommends establishment of formal policies and programmes that promote gender diversity and inclusivity within an organisation. Karofi et al consider the need of unemployment reduction. As such, they recommend for comprehensive approach to entrepreneurship development, emphasising the need for targeted policies that enhance job creation potential. To Abdurrahman, the end target of business is survival. Therefore, his study recommends SMEs to use personal saving, loans from friends, donation and contributions as bootstrapping techniques to enhance financial performance and survival.

Just like Francis et al, Omofowa and Akhidue-Ogogo consider inclusivity vital for effective management. This motivates them to investigate determinants of work incivility on alienation sensitivity in organisation, in South-South Nigerian manufacturing companies. Consequently, they recommend adoption of an inclusive policy that portrays best practices in a healthy work environment. Nonetheless, to serve a purpose, organisations need marketing strategies. In view of this, Azamzu et al examine a link between entrepreneurial marketing and performance of SMEs in Nasarawa State, Nigeria. The study concludes that, SMEs must adopt entrepreneurial marketing practices to maximise value and improve overall performance. Fraud deters progress. Hence, Osifo et al focus on opportunity red flags and likelihood of fraud detection in Nigeria. The study recommends forensic accounting services be given the needed legal teething in Nigeria. In response to human resource management, Ekwoaba and Ayodele recommend SMEs to constantly provide hygienic training sessions for employees and invest in technologies, to ensure staff acquaintance with tele-work tools for effective communication. Beauty and Magnus consider the importance of entrepreneurship education. Therefore, they reiterate vitality of the introduction of entrepreneurship education on institutions' curriculum. It is helpful in training and motivating students toward entrepreneurial behavior. Ndubuisi like Adewale and Emiola, underscores the importance of effective conflict management on organisational performance.

Business today is influenced by innovation in all ramifications. Therefore, Ishaq writes on Islamic financial innovation and diversity of *shariah* interpretations: challenges and way forward. However, no matter the level of innovativeness, poor audit affects performance. Thereof, Ibrahim et al conceptually investigate the moderating role of audit quality on the relationship between corporate governance and firm performance. Part of innovation is Business Process Reengineering (BPR). This instigates Abideen to study relationship between BPR and organizational sustainability in Selected Deposit Money Banks in Abeokuta Metropolis, Ogun State, Nigeria. Workforce diversification is another aspect of innovative human resource management. As a result, Onumoh et al felt motivated to investigate gender diversity and intellectual capital efficiency of listed consumer goods firms in Nigeria, moderated by executive compensation. To reiterate the importance of innovation, Sabo et al search the effect of innovation on women entrepreneurs' performance, in consideration of the moderating effect of organisational culture. Risk is inherent to every business. So, Usman and Muhammad discover how management committee attributes influence the value of listed deposit money banks, in consideration of the mediating effect of profitability. On their part, Ali et al consider the need of finding the influence of CEO tenure and blockholders' ownership on corporate social responsibility.

Nonetheless, management of environmental factors is critical for business success. Therefore, Ibrahim et al assess how external business environments affect the growth of women entrepreneurs in South-West Nigeria. Part of the management's role is ensuring employee satisfaction. Absence of job satisfaction leads to employee turnover. Thence, Masoud et al study job satisfaction and employee turnover in the Nigerian health sector, focusing on Gbagada General Hospital, Gbagada, Lagos. Unerringly, poorly managed organisational politics affects employee satisfaction. As such, Kanene and Faruk recommend effective leadership practices, equitable reward systems and transparent communication to mitigate the negative effects of organisational politics on employee satisfaction. In addition, uncertainty affects both employee satisfaction and productivity. Therefore, Peter et al investigate relationship between uncertainty avoidance index and employee productivity in Kwara State public service. Innovative organisations tend to be agile. Thence, Mukhtar et al recommend SMEs to invest in robust market intelligence systems to effectively monitor and anticipate environmental changes. In another study, Mukhtar et al recommend SMEs particularly in Bauchi State to invest in digital infrastructure, such as media visibility among others, to enhance operational efficiency and maintain competitiveness. Still on SMEs performance, Gawuna et al recommend SMEs to pay more attention to external environmental factors, to exploit the untapped opportunities prevailing in the contemporary marketing settings, be proactive and take considerable level of risks to survive.

Sustainability is endangered without investment. Therefore, Iroro conducts a critical review of investment indicators and economic growth, from the Nigerian perspective. However, stability in every spheres augments investment. Hence, Abdullahi's study recommends incidence of tax leakages, avoidance and evasion should all be reduced to make the stabilisation power of automatic fiscal stabilisers more effective. Meanwhile, Kunle et al investigate the determinants of the manufacturing sector-which mainly relates to investment-output in Nigeria. However, investor requires competent employee. On this, Abogunrin et al recommend comprehensive training strategies, continuous professional development, and policy reforms to support a skilled and efficient workforce. Finally, Adewumi et al recommend continuous monitoring and adaptation of corporate governance practices for stability and effectiveness among Nigerian Deposit Money Banks in particular, and entire organisations, in general.

In conclusion, this edition sets to provide solutions to organisations' problems, bordering around governance, management and entrepreneurship. When the recommendations are implemented, organisations and broader economic environment would be well off.

Editorial Secretary,

Muhammad Baffa Sani, PhD

For: Editor-in-Chief.

FIRM LEVEL GOVERNANCE AND CORPORATE FAILURE LIKELIHOOD: EMPIRICAL LESSONS FROM THE UK AND NIGERIA.

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Abstract
The study examines the relationship between firm-level governance and the likelihood of corporate failure in Nigeria and the UK. It examines 15 manufacturing firms listed on the Nigeria Exchange Group and 15 on the London Stock Exchange from 2010 to 2022, using logistic regression analysis. The findings reveal differing impacts of board size on corporate failure risk in the two countries. In Nigeria, a larger board size correlates with a decreased risk of corporate failure, while in the UK, a larger board size correlates with an increased risk of corporate failure, a result significant at the 5% level. Regarding board independence, the study finds that in Nigeria, increased board independence is significantly associated with a lower risk of corporate failure. On the other hand, a higher chance of company failure is associated with more board independence in the UK, however this relationship is not significant at the 5% level. Both nations concur that increased board gender diversity (BGD) can lower manufacturing companies' risk of failing as a business. According to the study, independent board members in the UK ought to take on more active monitoring responsibilities. Shareholders should also think about the qualifications, background, and performance history of possible independent directors. It's also advisable to increase the number of independent directors.

Key Words: Corporate governance, Failure likelihood and Binary Regression

1. Introduction

When companies realize they face a high risk of failure, it is often too late to reverse the situation, leading to significant impacts on numerous stakeholders. Consequently, early detection of corporate failure or distress likelihoods is increasingly recommended in the accounting literature (Brédart, 2014). Financial difficulties and eventual failure of businesses affect investors, debt holders, creditors, workers, and society at large. Numerous studies noted that The 2007 financial crisis, which saw many businesses struggle and file for bankruptcy, underscored the need to identify financial distress. Historically, models for detecting corporate failure have relied heavily on financial and accounting data alone (Platt & Platt, 2012), which are deemed insufficient to comprehensively understand why firms experience distress.

Recently, there has been a growing emphasis on the role of firm-level governance in precipitating corporate failure (Ozili, 2020). This research examines the role of corporate governance in the likelihood of corporate failure by comparing the UK and Nigeria. The UK has experienced more severe corporate failures, such as Lehman Brothers, and has implemented several policy reforms to strengthen its corporate governance environment. Nigeria can learn valuable lessons from these reforms. Although developing countries recognize the importance of corporate governance, its benefits are only realized when properly adopted and implemented, an area where many developing countries fall short. Furthermore, there is a lack of clear scientific data in developing nations supporting the benefits of corporate governance in reducing financial risk (Li et al., 2021; Younas et al., 2021).

To the best of the researcher's knowledge, no study has empirically compared corporate governance and failure likelihood between the UK and Nigeria to provide insights that can minimize failure risks using firm-level governance. This study addresses this gap and makes significant contributions by examining the relationship between corporate governance structure and corporate failure likelihood in the UK and Nigeria. The findings will offer valuable insights into corporate governance practices and suggest how developing countries like Nigeria can enhance firm-level governance to reduce the risk of corporate failure.

2. Literature Review and Hypothesis

2.1 Board Size and Corporate Failure

Muqaddas et al. (2018) examined the manufacturing sector in Pakistan from 2006 to 2010, using logit-regression to study distressed and non-distressed firms. They defined financially troubled firms as those with five consecutive years of negative earnings per share. Their findings suggest a positive relationship between board size and financial trouble, indicating that each additional board member increases the likelihood of financial distress. Conversely, Darrat et al. (2016) found a negative association between board size and corporate failure, suggesting that larger boards reduce the probability of bankruptcy for complex firms, potentially due to the additional networks, knowledge, experience, and skills they bring. Additionally, Manzaneque et al. (2015) explored corporate governance's impact on financial distress risk in Spanish publicly traded firms from 2007 to 2012. Their research, using conditional logistic models, revealed a negative correlation between board size and financial distress risk. These findings lead to the formulation of the hypothesis.

Null Hypothesis H_0: Board size has no significant impact on corporate failure likelihood of firms in Nigeria and the UK

Alternative Hypothesis H_1: Board size has a significant impact on corporate failure likelihood of firms in Nigeria and the UK

2.2 Board Independence and corporate failure/distress

Younas et al. (2021) studied 152 non-financial companies listed on the PSX from 2003 to 2017 to assess the impact of the Pakistan Stock Exchange's corporate governance index (PAKCGI) on financial distress. They utilized the Altman Z-Score model as an indicator of financial difficulty. Their findings suggest that PAKCGI reduces the likelihood of businesses experiencing financial difficulties.

Similarly, Zhiyong et al. (2021) examined the effectiveness of corporate governance components in predicting financial distress using a dynamic discrete-time survival analysis model in China over 17 years. While corporate governance enhances the predictive power of financial ratios and macroeconomic indicators, it alone is insufficient for effectively anticipating financial distress. Their approach also highlights the role of independent board members.

Furthermore, Muqaddas et al. (2018) investigated financially distressed and healthy manufacturing firms in Pakistan from 2006 to 2010. Their logit-regression analysis indicated a negative and significant association between the coefficient of board independence and the likelihood of financial crisis, suggesting that an increase in the number of independent directors reduces the probability of financial distress. These studies provide valuable insights into the relationship between corporate governance and financial distress, setting the stage for the hypothesis to be tested in the present study.

Null Hypothesis H_0: Board independence has no significant impact on the corporate failure likelihood of firms in the U.K. and Nigeria.

Alternative Hypothesis H_1: Board independence has no significant impact on corporate failure likelihood of firms in the U.K. and Nigeria.

2.3. Board Gender Diversity and Corporate Failure/distress

Murhadi et al. (2018) analyzed 337 businesses with 1,685 observations from non-financial enterprises listed on the Indonesian Stock Exchange (ISE) between 2011 and 2015. Their study revealed a statistically significant positive correlation between board gender diversity and financial distress. Similarly, Atosh (2016) investigated the impact of corporate governance standards on financial distress among Nairobi Securities Exchange-listed businesses, using the Altman Z score model. While board diversity showed a beneficial effect, it was not statistically significant. Likewise, Chandra (2017) explored the influence of corporate governance on consumer product businesses in Indonesia and Malaysia's ability to avoid financial difficulty. Their findings highlighted the substantial impact of gender diversity on financial distress in both countries. These studies contribute to understanding the complex relationship between corporate governance and financial distress. From the above analysis, the third hypothesis is formulated

Null Hypothesis H_0: Board gender diversity has no significant impact on the corporate failure likelihood of firms in the UK and Nigeria.

Alternative Hypothesis H_1: Board gender diversity has no significant impact on corporate failure likelihood of firms in the UK and in Nigeria.

2.4. Theoretical Framework -Resource Dependency Theory

Resource dependence theory (R.D.T.) is highly relevant to studying firm-level governance and the likelihood of corporate failure in the U.K. and Nigeria, providing a robust framework to understand how corporate boards can influence firm survival. According to R.D.T., a company's sustainability relies heavily on its ability to secure and control critical resources (Pfeffer & Salancik, 2003). Directors play a pivotal role in this resource provision, which aligns with their responsibilities as outlined by the theory. Directors enhance the company's access to essential resources by acquiring resources, improving credibility with external stakeholders, facilitating information exchange, and contributing to strategic planning (Haynes & Hillman, 2010). This role is particularly critical in environments where firms face high uncertainty and resource constraints, as is often the case in developing economies like Nigeria and in times of economic downturn, such as the financial crises that have affected the UK.

The board's function, as articulated by the resource dependence hypothesis (Kiel & Nicholson, 2003), is to bridge the gap between the firm and its external environment. By doing so, boards can reduce uncertainties and facilitate the acquisition of essential resources. This bridging role is crucial for mitigating risks associated with financial distress and corporate failure. In the context of the study, this perspective underscores the importance of effective board governance in ensuring that firms have the necessary resources to sustain operations and navigate through challenging periods.

In summary, resource dependence theory underpins the study by highlighting how the board's ability to secure critical resources and manage external dependencies can significantly influence a firm's likelihood of survival. This theoretical lens emphasizes that effective governance structures are essential for firms to access the resources necessary for their survival and success, thus reducing the likelihood of corporate failure.

3. Methodology

The study will employ an ex post facto analysis design to explore the influence of corporate governance on corporate failure in listed manufacturing companies in Nigeria and the U.K. It will utilize a sample of 15 listed manufacturing firms from each country, drawn from the Nigeria Exchange Group and the London Stock Exchange. Data will be collected from 2010 to 2020, focusing on companies with publicly accessible externally audited financial statements. The dependent variable, corporate failure, will be measured using the Altman Z score, a widely accepted indicator in the literature (Younas et al., 2021; Atosh, 2016; Muqaddas et al., 2018). This approach ensures consistency with existing research and allows for meaningful comparisons across studies. In the study, logistic regression was used as the data analysis process. The justification for the choice of logistic binary regression is due to the nature of the study. The dependent variable in this case which is financial distress likelihood and is a dichotomous variable that assumes a value of “1” if Z > 2.67 which implies a safe zone and hence no low likelihood of financial distress and 0 if otherwise based on the Altman Z score. This approach is consistent with the practice in several studies (Adams & Ferreira, 2007; Muqaddas et al. 2018; Younas, et al 2021)

The models are presented below;

P_{jt} (CFL= Altman Z-score) = 1/ (1+ e^{-z}) -- (i)

= 1/{1+exp [Corporate Governance]} ------------------------------------ (11)

Decomposing corporate governance into its indicators, the model is expressed below;

P_{jt} (CFL= Altman Z-score) = 1/{1+exp [$-\beta_0 + \beta_1 BDS + \beta_2 BDIND + \beta_3 BDG + \mu_{it}$]} -(iii)

Where BDS= Board size, BDIND= Board independence and BDG= Board gender diversity

μ = residual

Table 1. Variable Measurement

Variable	Definition	Measurement	Source
CFL	Corporate failure likelihood	**Altman Z-score** The Z-score is computed using the equation below; Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5 -----(1) where: Z = Overall index, X1 = Working Capital / Total Assets. X2 = Retained Earnings / Total Assets. X3 = Earnings before Interest and Tax / Total Assets. X4 = Market Value of Equity / Book Value of Total Liabilities. X5 = Sales/ Total Assets. The interpretation of the Z-score provided below: Z > 2.67 "safe" zone 1.81 < Z < 2.67 "grey" zone Z < 1.81 "distress" zone	Altman (1968).
BDS	Board size	Measured as the total number of individuals on the board	Carter, et al (2003)
BDIND	Board independence	The ratio of non-executive directors on the board.	Agrawal and Chadha, (2017).
BGD	Board gender diversity	The female to male ratio on the board	Amah, Michael and John (2016).

Source: Researchers Compilation (2023)

4. RESULTS

Table 4.1: Descriptive Statistics for Nigeria

	Z-score	BDS	BGD	BDIND
Low Failure Risk Category				
Mean	5.2672	8.663	11.84	64.614
Max	17.239	15	50.00	90.00
Min	2.7026	4	0	0
Std. Dev	7.3023	2.3795	11.62272	15.91147
Kurtosis	118.15	0.2996	0.703199	-0.96477
Skewness	10.322	3.2465	2.845058	4.763124
Moderate Corporate Failure Risk Category				
Mean	2.2895	8.105	15.704	62.979
Max	2.8243	11.000	33.33	90.00
Min	1.8384	4.000	0.000	0.000
Std. Dev	0.3266	1.791	11.781	20.633
Kurtosis	-1.3225	2.887	5.6552	1.522
Skewness	0.2107	-0.220	-1.507	-0.211
High corporate failure Risk category				
Mean	1.5292	8.230	6.1752	66.146
Max	1.7953	15.000	22.22	90.000
Min	1.0718	6.000	0.000	42.857
Std. Dev	0.2489	2.5217	8.7842	14.7548
Kurtosis	2.0976	4.9644	2.2545	2.0559
Skewness	-0.6651	1.4821	0.9029	0.1706

Source: Researchers Compilation (2023)

The descriptive statistics for Nigeria for the study's independent variables are shown in Table 4.1. The mean Z-score is 5.267, with a maximum of 17.24, a minimum of 2.70, and a standard deviation of 7.30. Board size (BDS) has a mean of 9, ranging from 4 to 15, with a standard deviation of 2.37. Board independence (BDIND) averages 65%, indicating that 65% of board members are non-executive directors, with a range from 0% to 90% and a standard deviation of 15.91. The mean For BGD stood at 11.84 indicating that on the average 11.84% of board members are females with a maximum and minimum of 50% and 0% respectively.

For firms in the moderate corporate failure risk category, the mean Z-score is 2.3, with a range from 1.83 to 2.83 and a standard deviation of 0.32. BDS averages 8, BDIND averages 62.98%, and BGD stands at 15.7%. In the high corporate failure risk category, the mean Z-score is 1.53, ranging from 1.07 to 1.795 with a standard deviation of 0.24. BDS averages 8, BDIND averages 66%, and BGD stands at 6.18%.

Table 4.2: Descriptive Statistics for UK firms

	ZSCOR	BDSIZE	BDG	BDIND
Low Failure Risk Category				
Mean	3.5221	3.9000	0.2682	0.0273
Maximum	6.1779	11.00	0.6667	0.2727
Minimum	2.74591	2.000	0.00	0.00
Std. Dev.	0.78763	2.5110	0.272	0.0839
Skewness	1.94715	2.34635	0.4353	2.6667
Kurtosis	7.45109	7.14601	1.6975	8.1111
Moderate Corporate Failure Risk Category				
Mean	2.08746	7.9412	0.181517	0.12824
Maximum	2.3728	11	0.4	0.545455
Minimum	1.876	2	0	0
Std. Dev.	0.15133	3.4364	0.156356	0.18597
Skewness	0.13186	-0.625	0.16787	1.054419
Kurtosis	1.83594	1.8327	1.472675	2.612302
High corporate failure risk category				
Mean	0.90193	7.025	0.1714	0.1437
Maximum	1.83473	14	0.3636	0.6667
Minimum	-0.2527	2	0	0
Std. Dev.	0.64804	3.5118	0.1273	0.2052
Skewness	-0.2372	-0.2585	0.07572	1.4054
Kurtosis	1.70669	1.7295	1.7139	3.8471

Source: Researchers Compilation (2023)

Table 4.2 provides descriptive statistics for the UK sample. For the low failure risk category, the mean Z-score is 3.522, with a standard deviation of 0.788. BDS has a mean of approximately 4, with a standard deviation of 2.511. BDIND averages around 2.73%, with a standard deviation of 0.08%, while BGD averages 26.82%. In the moderate failure category, the mean Z-score is 2.09, with a standard deviation of 0.151. BDS averages approximately 8, BDIND around 18.15%, and BGD 12.82%. In the high failure category, the mean Z-score is 0.902, with a standard deviation of 0.64. BDS averages about 7, BDIND around 14.37%, and BGD 17.14%. The statistics provide insight into the distribution and variability of key variables across different failure risk categories.

Table 4.2: Correlation Results (Nigeria)

	ZSCORE	BDS	BDIND	BGD
Low corporate Failure Risk region				
Z-score	1.			
BDS	0.1046	1		
(Prob)	0.5096			
BDIND	-0.3097	-0.085	1	
(Prob)	0.0459	0.5915		
BGD	-0.0353	0.0824	0.0934	1
(prob)	0.8244	0.6038	0.5562	
Moderate corporate failure Risk region				
Z-score	1			
BDS	-0.2700	1.		
(Prob)	0.2635			
BDIND	-0.333	-0.1544	1	
(Prob)	0.1633	0.5277		
BGD	0.4147	-0.3117	-0.3202	1
(prob)	0.0774	0.1939	0.1813	
High corporate Failure region				
Z-score	1			
BDS	0.049	1		
(Prob)	0.872			
BDIND	0.212	0.279	1	
(Prob)	0.485	0.3567		
BGD	-0.089	0.524	0.281	1
(prob)	0.7716	0.066	0.352	

Source: Researchers Compilation (2023).

Table 4.2 shows the correlation statistics for the variables and as observed the BDS has a positive correlation with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.5096) but in the moderate failure risk category, the correlation is negative (r=-0.270, p=0.2635) and then positive in the high corporate failure risk category (r=0.049, p=0.872). BDIND has a positive correlation with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.5096) but in the moderate failure risk category, the correlation is negative (r=-0.270, p=0.2635) and then positive in the high corporate failure risk category (r=0.049, p=0.872). BGD has a positive correlation with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.5096) but in the moderate failure risk category, the correlation is negative (r=-0.270, p=0.2635) and then positive in the high corporate failure risk category (r=0.049, p=0.872).

Table 4.3.: Corporate Governance and Corporate Failure (UK) Correlation Statistics

Probability	**ALTMAN**	**BDS**	**BGD**	**BDIND**
Z-score	1			
BDS	0.095	1		
(Prob)	(0.689)			
BDIND	0.167	0.3520	1	
(Prob)	(0.4810)	0.1279		
BGD	0.2403	0.9669	0.4048	1
(prob)	(0.308)	0.0000	0.0766	
Moderate region				
Z-score	1			
BDS	-0.613*	1		
(Prob)	(0.009)			
BDIND	-0.4015	0.8619	1	
(Prob)	(0.110)	0.0000		
BGD	-0.565*	0.309	-0.1150	1
(prob)	(0.018)	0.2275	0.6603	
Failure Region				
Z-score	1			
BDS	0.586*	1		
(Prob)	(0.000)			
BDIND	0.3707*	0.758	1	
(Prob)	(0.0185)	0.0000		
BGD	0.4208*	0.448	0.4169	1
(prob)	(0.0069)	0.0037	0.007	

Table 4.3 shows the correlation statistics for the variables and as observed the BDS has a positive correlation (r=0.0951) with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.6898) but in the moderate failure risk category, the correlation is negative (r=-0.613, p=0.008) and significant at 5% and then positive in the high corporate failure risk category (r=0.049, p=0.000) maintaining statistical significance at 5%. BDIND has a positive correlation (r=0.1672) with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.1672) but in the moderate failure risk category, the correlation is negative (r=-0.4015, p=0.1101) and then positive in the high

corporate failure risk category (r=0.3707, p=0.018) and significant at 5%. BGD has a positive correlation with Altman Zscore at low corporate failure risk category though not significant at 5% (p=0.3076) but in the moderate failure risk category, the correlation is negative, stronger and significant (r=-0.565, p=0.0182) and then positive ad significant in the high corporate failure risk category (r=0.4208, p=0.0069).

Table 4.4: Corporate governance and corporate failure Likelihood Binary Regression Result (Nigeria)

Variable	Nigerian Sample estimation			
	Binary Logit	Binary Logit Odd ratio	Binary Logit	Binary Logit odd ratios
C	-1.3481 (1.6995) {0.428}	0.2597 (0.4414) {0.428}	-67.0778* (26.4623) {0.011}	7.39e-30* (1.95e-28) {0.011}
BDS	0.1799 (0.1340) {0.179}	1.1971 (0.1604) {0.179}	7.6577* (2.9682) {0.010}	2116.796* (6283.1) {0.010}
BDIND	0.0132 (0.0168) {0.433}	1.0133 (0.0171) {0.433}	0.8936* (0.3583) {0.013}	2.4441* (0.8757) {0.013}
BGD	0.0583 (0.0352) {0.097}	1.0600** (0.0373) {0.097}	7.8046* (2.8105) {0.005}	2451.9* (6891.2) {0.005}
BDS*BGD			-0.83134* (0.3022) {0.006}	0.4355* (0.1316) {0.006}
BDS*BDIND			-0.09838* (0.039) {0.012}	0.90637* (0.0345) {0.007}
BDS*BDIND*BGD			0.0109* (0.0041) {0.008}	1.0109* (0.0041) {0.008}
Log Likelihood	-31.524		-21.079	
LR chi2(3)	6.12		27.01	
Prob> chi2	0.1059		0.000	
Pseudo R^2	0.088		0.3905	
Count R^2	0.827		0.907	
BIC	80.319		76.699	
AIC	71.049		58.159	
AUC	0.71		0.87	

.Source: Researchers compilation (2023) * indicates significant @5%

Table 4.4 presents regression estimations examining corporate governance's impact on corporate failure likelihood among selected Nigerian manufacturing firms. Utilizing the widely recognized Altman Z-score, the study retains the original Altman (1968) model, chosen for its relevance to manufacturing. Firms are classified into high, moderate, and low corporate failure risk categories based on their Z-scores. Binary regression is employed, with low-risk firms assigned a value of 1 and moderate/high-risk firms assigned 0, aligning with logistic regression's applicability to binary dependent variables. Lee and Yeh (2004) underscore the significance of such dichotomous variables, even for well-performing organizations susceptible to financial difficulty under compromised corporate governance. The baseline logistic estimation reveals an odds ratio (OR) of 1.197 for Board Size (BDS), suggesting increased board size raises the odds of low corporate failure risk, though not significantly at 5% (p=0.179). Similarly, the OR for Board Independence (BDIND) is 0.0132, indicating decreased odds of low corporate failure risk with greater board independence, though not significant at 5%. Despite lacking statistical significance at 5%, the OR for Board Gender Diversity (BGD) is 0.0583, implying reduced corporate failure risk with higher board gender diversity. Larcker et al. (2007) advocate for a comprehensive approach to corporate governance evaluation, while Aguilera et al. (2012) emphasize understanding governance variables' interactions. Adopting an interactive approach yields more robust results, with significant odd ratios for BDS (OR=2116.8), BDIND (OR=2.441), and BGD (OR=2451.9), all significant at 5%. The interaction model, with lower BIC and AIC values and higher AUC, outperforms the non-interaction model across diagnostics, affirming its suitability for interpreting the research findings.

Table 4.5: Corporate governance and corporate failure Likelihood Binary Regression Result (UK)

Variable	UK sample estimation			
	Binary Logit	Binary Logit Odd ratio	Binary Logit	Binary Logit odd ratios
C	.90872 (0.5353) {0.065}	2.6836 (1.4366) {0.065}	1.5778 (0.8144) {0.053}	4.8444 (3.9453) {0.053}
BDS	-0.2223 (0.1184) {0.060}	0.8006 (0.0948) {0.060}	-0.4291 (0.1895) {0.024}	0.6511* (0.1233) {0.024}
BDIND	-0.1768 (0.1896) {0.351}	0.8379 (0.1588) {0.351}	-2.4932 (0.1895) {0.431}	0.0826 (0.2619) {0.431}
BGD	0.3464 (0.2825) {0.220}	1.4140 (0.3995) {0.220}	0.1979 (0.7070) {0.780}	1.2188 (0.8617) {0.780}

BDS*BGD			0.0763 (0.0860) {0.375}	1.0793 (0.0928) {0.375}
BDS*BDIND			0.5275 (0.3819) {0.167}	1.6947 (0.6473) {0.167}
BGD*BDIND			-0.8360 (2.1419) {0.696}	0.4334 (0.9284) {0.696}
BDS*BDIND* BGD			-0.0637 (0.2187) {0.771}	0.9383** (0.2052) {0.053}
Log Likelihood	-47.170		-42.310	
LR chi2(5)	9.30		19.018	
Prob> chi2	0.0256		0.008	
Pseudo R^2	0.0897		0.184	
Count R^2	0.549		0.627	
AIC	102.3		100.62	
AUC	0.692		0.771	

Source: Researchers compilation (2023) * indicates significant @5% ** significant at 10%

The binary regression result for the UK is presented in table 4.5 and again both the single and interaction governance estimations are presented. Given the superiority of interaction models based again on the AIC of the models, it forms the basis for the result discussion. As observed, the Pseudo R^2 stood at 18.4% while the count R^2 stood at 62.7% and it measures how well the model predicts the correct value of the dependent variable, using known values. Both are higher than those of the single variable models at 8.9% and 54.9% respectively. The odd ratio for BDS (OR=0.6511) indicates that increase in board size will reduce the the odds of low corporate failure risk and also significant at 5% (p=0.024). This implies that increase in the board size can significantly increase the chances of a firm going into corporate failure and distress. The odd ratios for BDIND (OR=0.0826) is less than 1 which indicates just like in the case of board size that an increase in board independence will reduce the odds of low corporate failure risk though the variable is not significant at 5% (p=0.431). The odd ratios for BGD (OR=1.2188) indicates that an increase in board gender diversity will increase the odds of low corporate failure risk though not significant at 5% (p=0.780). For the UK estimations, it is observed that aside from BDS all other corporate governance mechanism seem to have a weak effect on the likelihood of corporate failure.

4.1. Discussion of Results

From the binary results in Table 4.4, the Nigerian sample estimation indicates that the odds ratio for Board Size (BDS) is 2116.8, showing that an increase in board size significantly reduces the likelihood of corporate failure, significant at 5% (p=0.010). Conversely, for the UK sample, the odds ratio for BDS is 0.6511, suggesting that an increase in board size increases the likelihood of corporate failure, also significant at 5% (p=0.024). These findings reveal divergent effects of BDS on corporate failure likelihood between Nigerian and UK sampled firms. However, the hypothesis of a significant association between board size and corporate failure likelihood in Nigerian and UK sampled manufacturing firms cannot be rejected.

The literature on board size's impact on corporate failure remains uncertain, with mixed findings. Adams and Ferreira (2007) found a positive association between larger board sizes and increased financial distress risk. Similarly, Muqaddas et al. (2018) demonstrated that each additional board member raised the likelihood of financial distress. Ayoola and Obokoh (2018) supported these findings, showing financially distressed firms tend to have larger boards. In contrast, Darrat et al. (2016) discovered a negative link between board size and corporate failure, echoed by Manzaneque et al. (2015), albeit using different distress measures. Nevertheless, Appiah (2014) also found support for larger boards mitigating financial distress.

From the binary results in Table 4.4, the Nigerian sample estimation shows that the odds ratio for Board Independence (BDIND) is 2.441, indicating that an increase in board independence significantly reduces the likelihood of corporate failure, significant at 5% (p=0.013). Conversely, for the UK sample, the odds ratio for BDIND is 0.0826, suggesting that an increase in board independence weakens the likelihood of corporate failure, although not significant at 5% (p=0.431). These findings reveal differences in the effect of BDIND on corporate failure likelihood between Nigerian and UK sampled firms. However, the hypothesis of a significant association between board independence and corporate failure likelihood holds for the Nigerian sample.

The empirical data regarding board independence presents a nuanced picture, with studies showcasing conflicting findings. Positive associations between board independence and reduced corporate failure risk are observed in studies by Chang (2009), Hanani and Dharmastuti (2015), and Younas et al. (2021). Conversely, studies like Fich & Slezak (2008), Muqaddas et al. (2018), Manzaneque et al. (2015), and Atosh (2016) suggest a negative relationship. Additionally, in Table 4.4, the Nigerian sample shows that increasing board gender diversity (BGD) significantly reduces the likelihood of corporate failure, with an odds ratio of 2451.9, significant at 5% (p=0.005). Conversely, for the UK sample, the odds ratio for BGD is 1.2188, indicating a weaker effect on corporate failure likelihood, albeit not significant at 5% (p=0.780). Overall, these results highlight disparities in the impact of BGD on corporate failure likelihood between Nigerian and UK firms, underscoring its significance for Nigerian firms. However, the hypothesis of a significant association between board gender diversity and corporate failure likelihood holds for the Nigerian sample.

Overall, the lack of significance of firm-level governance variables concerning corporate failure likelihood in the UK may stem from the efficiency of the market for corporate control. Weir, Laing, and

McKnight (2012), analyzing UK listed firms, suggest that this market functions effectively, potentially replacing other governance systems. The Economist (2014) notes that the market for corporate control creates a management accountability vacuum, suggesting that board-level oversight and shareholder activism could address this. Our findings question the efficacy of imposing internal governance procedures on UK businesses, given the success of the market for corporate control in reducing agency costs.

5. Conclusion and Recommendation

The study's findings reveal contrasting effects of board size and independence on corporate failure likelihood between Nigeria and the UK. In Nigeria, increasing board size and independence significantly reduces the odds of corporate failure, whereas in the UK, larger boards reduce failure risk, but increased independence doesn't significantly affect it. However, both countries show that board gender diversity (BGD) can lower corporate failure risk, with a stronger effect observed in Nigeria.

Recommendations for the UK include enhancing the active monitoring role of independent board members and increasing their number. Additionally, sustaining and bolstering gender diversity practices is advised. Conversely, Nigeria could benefit from strengthening its market for corporate control and shareholder activism, drawing lessons from the UK's practices. Despite apparent strength in firm-level governance in Nigeria, a weak market for corporate control suggests room for improvement and learning from the UK's approach.

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IMPACT OF CONFLICT HANDLING AND EMPLOYEE COMPETENCE ON ORGANIZATIONAL PERFORMANCE

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Abstract
This study aims to investigate the extent to which conflict handling techniques and employee competence in improving organization performance with interest in customer retention and quick service delivery. Utilizing a quantitative research methodology, data were collected through a field survey targeting 250 customers of Shoprite Store in Ilorin Kwara State. The data were analysed using the descriptive and inferential statistics with the aid of Statistical Package for Social Sciences (SPSS version 29). The findings reveal that conflict handling techniques significantly influence customer retention, explaining 77.5% of its variance, while employee competence accounts for 59.9% of the variance in service delivery speed. These results underscore the importance of both conflict resolution and employee competence in enhancing organizational performance. The study concludes that to boost customer loyalty and service efficiency, organizations must refine their conflict management strategies and invest in the continuous development of employee skills. It is also recommended that organizations integrate supportive technology and cultivate a culture that encourages ongoing improvement and effective conflict resolution. Such a holistic approach will enable organizations to leverage these factors for better overall performance.

Keywords: Competence, Conflict Handling, Customer Retention, Employee Development, Quick Service Delivery, Organizational Performance.

Introduction

In today's fiercely competitive business landscape, organizations are continually striving to enhance their organizational performance, which encompasses customer retention, operational efficiency, and overall competitiveness. Central to achieving these outcomes are the dual challenges of effective conflict handling and employee competence, both of which play a crucial role in sustaining high performance standards. While these factors significantly influence customer satisfaction and retention, their collective impact on organizational performance remains a critical area for exploration.

Conflict handling is a pivotal aspect of customer relationship management and has direct implications for organizational performance. Conflicts with customers often arise from service failures, unmet expectations, or miscommunication, and how these conflicts are managed can profoundly affect a company's performance metrics, such as customer satisfaction, loyalty, and financial outcomes. Effective conflict resolution not only addresses immediate issues but also rebuilds trust and strengthens customer relationships, ultimately contributing to organizational stability and growth. Ndubisi (2007) highlighted that organizations skilled in managing conflicts achieve better customer retention rates, a key component of organizational performance. Similarly, Rahim (2023) emphasizes the strategic importance of conflict management within relationship marketing, where resolving disputes effectively can transform customer dissatisfaction into loyalty. These findings underscore that conflict handling techniques go beyond resolving complaints—they drive customer engagement and retention, which are critical determinants of long-term performance. Without robust conflict resolution practices, organizations risk eroding customer trust, damaging their brand reputation, and experiencing declines in operational efficiency.

Employee competence is another cornerstone of organizational performance, directly influencing service quality, delivery speed, and customer satisfaction. Competent employees are better equipped to meet customer needs efficiently, reducing service bottlenecks and enhancing operational productivity. Bowen and Ford (2002) argue that the skill level of employees significantly affects service outcomes, with higher competence levels correlating with faster and more accurate service delivery. Further evidence from Homburg, Wieseke, and Bornemann (2009) shows a strong link between employee competence and service delivery speed, emphasizing the importance of continuous training and development to maintain high performance standards. For organizations, investing in employee competence is not merely a tool for improving customer satisfaction but also a strategic initiative to boost productivity, innovation, and financial performance. When employees can navigate complex service challenges effectively, they contribute directly to operational excellence—a critical driver of organizational performance.

The interaction between conflict handling and employee competence represents a multifaceted pathway to enhanced organizational performance. While employee competence ensures service efficiency, conflict handling mitigates service disruptions and preserves customer loyalty. Albrecht et al. (2015) suggest that integrating these factors is essential for achieving comprehensive performance outcomes. For example, competent employees can resolve conflicts more effectively, ensuring seamless service delivery and reducing customer churn. However, these benefits are rarely realized in isolation. The effectiveness of conflict handling and employee competence is often moderated by other organizational factors, such as technological support and organizational culture. Bitner et al. (1994) argue that while employee competence is crucial, its impact is amplified by supportive technologies and a culture that prioritizes service excellence. Consequently, organizations must adopt a holistic approach that combines skilled employees, effective conflict management strategies, and enabling resources to achieve sustained performance improvements.

Despite the acknowledged importance of conflict handling and employee competence in influencing customer satisfaction and retention, there remains a gap in understanding their collective and synergistic impact on broader organizational performance. This study addresses this gap by examining how these factors contribute to performance metrics, including operational efficiency, customer retention, and financial outcomes. By investigating this relationship, the study aims to provide actionable insights for organizations striving to enhance their competitive edge and achieve sustained high performance.

The study seeks to achieve the following objectives:

i. To assess the impact of conflict handling techniques on customer retention
ii. To evaluate the role of employee competence in conflict handling on quick service delivery

Literature Review

Concept of Conflict Handling Techniques

Conflict handling techniques significantly influence organizational outcomes, with both positive and negative impacts. Effectively managed conflicts can foster innovation, strengthen relationships, and enhance productivity; for instance, resolving team disputes collaboratively can uncover inefficiencies and improve workflows. Similarly, addressing customer complaints empathetically, as seen when an airline restored loyalty after delays with clear communication and compensation, can enhance trust and reputation. However, poor conflict management can lead to reduced morale, decreased collaboration, and reputational damage. For example, unresolved workplace disputes often drive employee turnover, while mishandling customer grievances, such as dismissing complaints, risks negative reviews and lost sales. Thus, adopting thoughtful conflict resolution strategies is critical for sustaining organizational performance and resilience. Therefore, employing appropriate conflict handling techniques is crucial for maintaining a harmonious work environment and achieving organizational objectives.

Conflict handling techniques are defined by various theoretical frameworks that offer insights into managing disputes constructively. The Thomas-Kilmann Conflict Mode Instrument (TKI) is one such framework, which categorizes conflict resolution styles into five modes: competing, collaborating, compromising, avoiding, and accommodating (Thomas & Kilmann, 1978). Each mode represents a different approach to addressing conflicts based on the degree of assertiveness and cooperativeness. For instance, the collaborating mode seeks a win-win solution by addressing the underlying needs of all parties, while the avoiding mode entails evading the conflict, often to prevent escalation.

Another influential framework is Rahim's Conflict Management Styles, which identifies five styles: integrating, obliging, dominating, avoiding, and compromising (Rahim, 2023). This model emphasizes the importance of balancing assertiveness with cooperativeness to find effective conflict resolution strategies. Integrating and obliging styles focus on cooperation and finding mutually acceptable solutions, while dominating and avoiding styles reflect varying degrees of assertiveness and non-involvement.

The impact of conflict handling techniques on organizational outcomes is well-documented in the literature. Effective conflict resolution strategies can enhance customer retention, improve team dynamics, and contribute to overall organizational success. For example, studies have shown that collaborative conflict resolution approaches, which involve open communication and joint problem-solving, can lead to higher levels of customer satisfaction and loyalty (Chumpitaz & Paparoidamis, 2020; Graca etal., 2015). By addressing conflicts constructively, organizations can foster positive relationships, build trust, and prevent the negative effects of unresolved disputes.

Best practices for conflict management include adopting a proactive approach to conflict resolution, providing training on conflict handling techniques, and creating a supportive environment that encourages open dialogue. Implementing regular conflict management training helps employees develop the skills needed to handle disputes effectively and reduce the potential for conflicts to escalate (Mwikali, 2016). Additionally, establishing clear conflict resolution processes and promoting a culture of transparency can facilitate timely and effective conflict resolution.

This paper adopts the collaborative approach from the Thomas-Kilmann Conflict Mode Instrument (TKI) due to its emphasis on achieving win-win solutions through open communication and addressing the underlying needs of all parties. This technique aligns with the study's focus on enhancing organizational outcomes, such as customer retention and team dynamics, by fostering trust and preventing disputes from escalating. Collaborative conflict resolution is particularly suitable for achieving long-term organizational success, as supported by studies like Chumpitaz and Paparoidamis (2020), which demonstrate its effectiveness in improving customer satisfaction and loyalty. Its proactive nature also aligns with best practices, such as providing training on conflict handling techniques and creating an environment of transparency and open dialogue.

Employee Competence

Employee competence is a crucial factor in achieving organizational success and maintaining a competitive edge in today's dynamic business environment. It encompasses the knowledge, skills, abilities, and behaviors that employees possess and apply in their roles to effectively perform job responsibilities and contribute to organizational goals. The concept of employee competence extends beyond basic job qualifications to include the capacity to adapt to new challenges, innovate, and drive performance improvements.

Understanding employee competence involves exploring various frameworks and models that define and measure these capabilities. One widely recognized framework is the Competency Model, which identifies the key competencies required for different roles and levels within an organization. This model emphasizes not only technical skills but also soft skills such as communication, problem-solving, and leadership abilities (Dean, 2017). Competency-based approaches help organizations align employee skills with job requirements, facilitating more effective recruitment, training, and performance management processes.

The relationship between employee competence and service delivery is a critical area of focus. Competent employees are essential for optimizing service efficiency, enhancing customer satisfaction, and achieving high performance standards. Research by Heskett et al. (1997) highlights that employees with well-developed competencies are better equipped to handle tasks efficiently, reduce service delays, and improve overall operational performance. Skilled employees can provide higher-quality service, address customer needs effectively, and contribute to a positive customer experience, ultimately impacting service delivery outcomes.

Developing employee competence is an ongoing process that involves various strategies and practices. Continuous professional development is a key aspect, encompassing training programs, workshops, and educational opportunities that help employees acquire new skills and knowledge relevant to their roles (Zepeda, 2019). Performance management systems also play a significant role in fostering competence by setting clear expectations, providing feedback, and supporting employee growth through coaching and development initiatives. These strategies ensure that employees remain up-to-date with industry standards and are capable of meeting evolving job requirements.

Organizations that invest in employee competence benefit from improved productivity, enhanced service quality, and greater innovation. Competent employees are more likely to contribute to process improvements, identify opportunities for innovation, and drive organizational success. However, it is essential for organizations to address challenges related to competence development, such as providing adequate resources for training and ensuring alignment between employee competencies and organizational goals.

Competence and Service Delivery

The relationship between employee competence and service delivery is well-established in the literature. Competent employees are crucial for delivering high-quality and efficient service. Research by Bowen and Ford (2002) emphasizes that employee competence directly affects service delivery speed and quality. Skilled employees are better equipped to handle customer inquiries, resolve issues promptly, and provide consistent service, all of which contribute to enhanced customer satisfaction. Further, a study by Homburg, Wieseke, and Bornemann (2009) found that employee competence significantly impacts service efficiency. Employees with higher levels of expertise and skills are able to perform tasks more quickly and accurately, leading to faster response times and improved service outcomes. This efficiency is crucial for maintaining a competitive edge and ensuring customer satisfaction in fast-paced service environments.

Developing employee competence is essential for sustaining high levels of performance and service delivery. Continuous Professional Development (CPD) is a key strategy for enhancing employee skills and knowledge. CPD involves ongoing training and education that helps employees stay updated with industry trends and improve their competencies over time (Eraut, 2004). This approach ensures that employees remain proficient in their roles and can adapt to changes in the business environment.

Training programs are another critical component of competence development. These programs provide employees with specific skills and knowledge needed for their roles, ranging from technical training to customer service skills (Jacobs, 2003). Effective training programs are designed to address the specific needs of employees and align with organizational goals, thereby enhancing their competence and performance.

Performance management systems also play a crucial role in developing and maintaining employee competence. These systems involve setting performance goals, providing regular feedback, and evaluating employee performance against established benchmarks (Vuong & Nguyen, 2022). By implementing performance management systems, organizations can identify competence gaps, provide targeted development opportunities, and ensure that employees continue to meet performance standards.

Customer Retention

Customer retention is a critical component of organizational performance and long-term success. It refers to the ability of a company to retain its customers over time, ensuring their continued patronage and fostering loyalty. Effective customer retention strategies not only enhance customer satisfaction but also contribute to overall business profitability and stability.

The significance of customer retention cannot be overstated. Retaining existing customers is often more cost-effective than acquiring new ones, as it involves lower marketing and operational costs (Reichheld & Sasser, 1990). Moreover, loyal customers are more likely to make repeat purchases, refer others, and contribute to positive word-of-mouth, all of which can drive revenue growth and strengthen the company's market position (Heskett et al., 1994).

To enhance customer retention, organizations employ various strategies. Loyalty programs are one of the most common methods. These programs offer rewards and incentives to customers based on their purchasing behavior, encouraging them to continue buying from the company (Kivetz & Simonson, 2003). Recent research by Malthouse et al. (2022) indicates that well-designed loyalty programs can significantly boost customer retention by providing meaningful rewards and recognizing customer loyalty.

Personalized services also play a crucial role in retaining customers. Personalization involves tailoring products, services, and communications to meet the specific needs and preferences of individual customers (Ricotta & Costabile, 2007). This approach enhances the customer experience by making interactions more relevant and engaging, thereby increasing the likelihood of repeat business. Studies by Rane etal., (2023) show that personalized service not only improves customer satisfaction but also fosters deeper emotional connections, which are essential for long-term retention.

Theoretical Review

Competency-Based Model

Another key theory is the Competency-Based Model, which emphasizes the importance of specific competencies in determining job performance and organizational success. The Competency-Based Model, as outlined by Spencer and Spencer (1993), identifies critical competencies that contribute to effective job performance, including both technical skills and behavioral attributes. This model is integral to the present study, as it provides a framework for understanding how employee competence influences service delivery. The model suggests that employees who possess the right mix of skills, knowledge, and behaviors are better equipped to perform their roles efficiently, which directly impacts service speed and quality (Spencer & Spencer, 1993). The study's finding that employee competence significantly affects service delivery is supported by this model, highlighting the need for organizations to focus on developing and leveraging the competencies of their workforce to enhance operational performance and customer satisfaction.

This theory was adopted for this study because it provides a theoretical framework to understand the relationship between employee competence and service delivery. As outlined by Spencer and Spencer (1993), this model emphasizes that the right mix of skills, knowledge, and behaviors is crucial for effective job performance. It directly supports the study's focus by explaining how employee competence influences service speed, quality, and overall organizational outcomes. The model's premise that developing workforce competencies enhances operational performance aligns with the study's findings, reinforcing the importance of investing in employee skill development to achieve superior service delivery and customer satisfaction.

Empirical Review

Kim et al. (2021) examined the relationship between employee competence and service quality in the retail sector. Their study revealed that higher levels of employee competence, including both technical skills and interpersonal abilities, directly contribute to improved service quality and operational efficiency.

Ahmed and Sinha (2020) investigated the impact of different conflict handling strategies on customer satisfaction in the service industry. Their study found that effective conflict resolution techniques, particularly those involving collaborative and problem-solving approaches, significantly enhance customer satisfaction and retention.

Carter and Green (2022) explored the combined effects of conflict management and employee competence development on organizational performance. Their study highlighted that organizations that integrate effective conflict management strategies with robust competence development programs achieve higher levels of employee engagement, customer satisfaction, and overall performance.

Nelsen (2015) investigated the relationship between relationship marketing and customer loyalty at Monash University Malaysia. The study used a quantitative research technique to collect data from 220 Malaysian bank customers. Multiple regression analysis was employed to assess the impact of four key relationship marketing components—trust, commitment, communication, and conflict resolution—on customer loyalty. The findings indicated that these variables significantly affect customer loyalty and collectively explain a substantial portion of its variation. Additionally, the study found that these components are closely interrelated.

Methodology

This study targeted a population of Shoprite customers in Ilorin, Kwara State, Nigeria, selecting a sample of 250 participants through a purposive sampling method. The inclusion criteria focused on individuals who had interacted with Shoprite's services within the past six months, ensuring relevance and recency of their experiences. This approach enhances the reliability of the sample by capturing opinions from active customers who can provide accurate insights into the service delivery and conflict handling techniques observed. The sample size of 250 is justified as it balances practicality with sufficient representation for meaningful analysis, aligning with similar studies in retail settings to ensure generalizability of findings. The choice of a survey research method was justified by its effectiveness in capturing a broad range of opinions and experiences from a large population, making it ideal for understanding customer perceptions and behaviors on a substantial scale. An online questionnaire was selected due to its efficiency and cost-effectiveness in reaching a geographically dispersed audience, allowing respondents to provide feedback conveniently and anonymously. The sample size of 250 was determined using Godden's (2007) formula, which ensures statistical validity and reliability by providing a scientifically grounded approach to determining the appropriate sample size for accurate representation and generalizability of the findings.

Data analysis was carried out using both inferential and descriptive statistics, facilitated by the Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics were used to summarize and describe the basic features of the data, providing a clear overview of the sample characteristics and survey responses. Inferential statistics were employed to draw conclusions and make predictions about the larger population based on the sample data, allowing for hypothesis testing and the assessment of relationships between variables. Utilizing SPSS version 23 ensures that the data analysis is conducted with advanced statistical tools and techniques, enhancing the precision and credibility of the results.

Data Analysis and Presentation

Table 1: Demographic Information of Respondents

	Frequency	Percentage %
Gender		
Female	127	50.8
Male	123	49.2
Total	**250**	**100**
Age Distribution		
18 – 25 years	108	43.2
26 – 30years	88	35.2
31 – 35years	54	21.6

Total	**250**	**100**
Marital Status		
Single	163	65.2
Married	87	34.8
Total	**250**	**100**
Education		
OND/NCE	53	21.2
HND/ B.Sc	173	69.2
M.Sc./ MBA	24	9.6
Total	**250**	**100**
Frequency of Patronage		
Daily	81	32.4
Weekly	134	53.6
Monthly	35	14.0
Total	**250**	**100**

Field Survey (2024)

The sample consists of 50.8% female and 49.2% male respondents, indicating a balanced representation of genders. This equilibrium suggests that the findings will reflect diverse perspectives, potentially offering a holistic view of how relationship marketing impacts organizational performance across different gender demographics. The age distribution reveals that a significant proportion of respondents are relatively young, with 43.2% between 18 and 25 years and 35.2% between 26 and 30 years. Only 21.6% are between 31 and 35 years. This youthful demographic might influence the relationship marketing strategies, as younger individuals may have different expectations and behaviors compared to older age groups. Understanding these differences can help tailor relationship marketing efforts to better suit the needs and preferences of younger consumers, potentially enhancing organizational performance.

A majority of respondents are single (65.2%), while 34.8% are married. This distribution suggests that relationship marketing strategies might need to consider the social and lifestyle differences between single and married individuals. Single respondents may have different consumer behaviors and engagement patterns, which could impact how relationship marketing initiatives are designed and executed to optimize organizational performance.

The educational background of respondents shows that a large portion (69.2%) holds an HND or B.Sc degree, while 21.2% have OND/NCE, and 9.6% have advanced degrees like M.Sc. or MBA. This distribution indicates a highly educated respondent base, which could imply a more informed and critical perspective on relationship marketing practices. The high level of education may influence expectations regarding the quality and sophistication of relationship marketing strategies, potentially affecting how organizational performance is perceived and measured.

The frequency of patronage data reveals that 53.6% of respondents engage with the organization weekly, 32.4% daily, and 14% monthly. The predominance of weekly patrons suggests a strong level of customer engagement, which is crucial for assessing the effectiveness of relationship marketing. Daily patrons are likely to be highly loyal, while monthly patrons might be less engaged.

Hypothesis Testing

H_{01} conflict handling techniques do not substantially contribute to customer retention.

Table 2: Model Summary and Anova

	B	**Std. Error**	**T**	**P-Value**
(Constant)`	26.364	2.210	11.928	.000
Conflict handling	2.022	.086	23.619	.000
Model Summary: R=.756 **R^2** =.775, **Adjusted R^2**=.600 **F**=557.880 **P**=.000				

Field Survey (2024)

The results indicate that conflict handling techniques significantly contribute to customer retention, as evidenced by a high R value of .756 and R^2 value of .775, suggesting that approximately 77.5% of the variation in customer retention is explained by conflict handling. The Adjusted R^2 of .600 further supports the model's robustness, accounting for potential overfitting. The F-statistic of 557.880 and a P-value of .000 indicate the overall model is statistically significant. The T-value of 23.619 with a P-value of .000 for the conflict handling variable confirms its substantial impact on customer retention. These findings reject the null hypothesis (H01), demonstrating that effective conflict handling is crucial for maintaining customer relationships and enhancing organizational performance. This implies that businesses should prioritize and refine their conflict resolution strategies to foster customer loyalty, thereby positively influencing their overall performance.

HO2: Competence in conflict handling does not significantly contribute to quick service delivery

Model Summary and Anova

	B	**Std. Error**	**T**	**P-Value**
(Constant)`	2.098	.181	11.594	.000
Competence	.486	.044	11.029	.000

Model Summary:	**R**=.589	$\mathbf{R^2}$ =.599, **Adjusted** $\mathbf{R^2}$=.356	**F**=121.647	**P**=.000

Field Survey (2024)

The results reveal that competence in conflict handling significantly contributes to quick service delivery, as indicated by an R value of .589 and R^2 value of .599, suggesting that 59.9% of the variance in quick service delivery can be explained by competence. The Adjusted R^2 of .356, although lower, still indicates a moderately strong relationship, with some caution advised regarding potential model fit issues. The F-statistic of 121.647 and a P-value of .000 demonstrate that the overall model is statistically significant. The T-value of 11.029 with a P-value of .000 for the competence variable confirms its significant impact on service delivery speed. These findings reject the null hypothesis, showing that competence plays a vital role in ensuring quick service delivery.

Discussion of Findings

In actualizing the first objective, the results demonstrate that conflict handling techniques play a significant role in customer retention, with the model's R^2 value of .775 indicating that these techniques account for 77.5% of the variation in customer retention. The high T-value and the statistically significant P-value reinforce the substantial impact of conflict handling on maintaining customer relationships. The null hypothesis was thus rejected, confirming that effective conflict resolution is essential for sustaining customer loyalty and enhancing organizational performance. These findings are consistent with existing research that underscores the importance of conflict handling in customer relationship management. For example, a study by Ndubisi (2007) found that proficient conflict resolution strategies significantly improve customer satisfaction and retention, highlighting the necessity of managing disputes effectively to maintain strong customer relationships. Similarly, Rahim (2011) emphasizes that conflict management is a critical component of relationship marketing, where the ability to handle, disputes can lead to long-term customer loyalty and repeat business.

In achieving the second objective, the results reveal that competence significantly contributes to quick service delivery, with an R^2 value of .599 indicating that competence explains nearly 60% of the variance in service speed. The strong T-value and statistically significant P-value confirm that competence is a key factor in achieving faster service delivery, leading to the rejection of the null hypothesis. This suggests that improving employee competence directly enhances the efficiency of service delivery, which is crucial for organizational performance. Similarly, Bowen and Ford (2002) demonstrated that competence in service employees is directly linked to faster service times and higher customer satisfaction, reinforcing the idea that skilled employees are essential for meeting customer expectations in a timely manner. In agreement with these findings, Lee, Lee, and Kang (2012) also highlighted the significance of competence in service delivery, noting that organizations with highly competent employees are better positioned to respond swiftly to customer needs, thereby enhancing service quality and speed. This study supports the notion that competence is not only about individual skills but also about how these skills are applied to streamline service processes.

Conclusions and Recommendations

The study reveals several important conclusions regarding the impact of conflict handling techniques and employee competence on organizational performance. First, it concludes that conflict handling techniques have a significant effect on customer retention. The strong R^2 value of .775 underscores the importance of effective conflict resolution in maintaining customer loyalty and enhancing overall organizational performance. This finding indicates that proficient conflict management plays a crucial role in ensuring that customers remain satisfied and committed to the organization.

Second, the study highlights that employee competence is a major determinant of quick service delivery. The R^2 value of .599 suggests that nearly 60% of the variance in the speed of service delivery can be attributed to employee competence. This indicates that having skilled and capable employees is essential for delivering services efficiently and meeting customer expectations in a timely manner.

However, while employee competence is crucial for service speed, the study acknowledges that its impact may be influenced by additional factors such as technological support and the service environment. This recognition points to the need for a comprehensive approach where competence is supported by the right tools and systems to fully optimize service delivery. Integrating competence with effective technology and a conducive service environment is necessary to maximize the benefits of skilled employees.

Finally, the study concludes that both conflict handling and employee competence are vital drivers of organizational performance. Effective conflict resolution enhances customer retention, while high employee competence contributes to faster service delivery.

Based on the study's conclusions, the following recommendations are made:

i. **Enhance Conflict Handling Strategies:** Organizations should invest in training programs that equip employees with advanced conflict resolution skills. This includes techniques for managing customer complaints, negotiating effectively, and turning potential disputes into opportunities for strengthening customer relationships.

ii. **Invest in Competence Development:** To ensure quick service delivery, organizations should prioritize continuous skill development for their employees. This includes offering specialized training in service delivery, customer interaction, and problem-solving.

iii. **Leverage Technology to Support Competence:** While competence is critical, its effectiveness can be enhanced by the right technological tools. Organizations should invest in technology that supports quick service delivery, such as customer relationship management (CRM) systems, automated service processes, and real-time communication platforms.

By implementing these recommendations, organizations can enhance their ability to retain customers and deliver services quickly and efficiently, thereby strengthening their overall performance and competitive advantage.

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EFFECT OF GENDER DIVERSITY ON ORGANIZATIONAL PERFORMANCE IN NIGERIAN BUSINESS CONTEXT: A STUDY OF SELECTED BUSINESSES IN ASABA, DELTA STATE, NIGERIA.

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Abstract
The study focuses on the effect of gender diversity on organizational performance in Nigerian business context. Cross sectional survey research method was adopted in the study. The study population is made up of 400 employees of Asaba Aluminium, Flight Aluminium and Dulux in Asaba, Delta State. A stratified sampling technique was used to select the respondents. The study revealed that gender diversity of leadership teams has a statistical significant relationship with organizational performance. The results revealed that Gender diversity affects these leadership teams' decision-making with significant relationship with organizational performance. It was observed from the study that financial outcomes have a positive influence on organizational performance. The study concludes that Gender diversity positively impacts organizational performance by fostering innovation, enhancing decision-making processes, and improving talent retention. Gender diversity often leads to a broader range of perspectives and ideas, which can drive creativity and innovation. Diverse teams are more likely to approach problems from different angles and generate novel solutions. The study recommends that establish formal policies and programs that promote gender diversity and inclusivity within the organization. This can include training, mentorship programs, and diversity recruitment strategies to attract and retain a diverse workforce

Key words: Gender, Diversity, Organizational Performance, Business Context

Introduction

The international dialogue on gender diversity as a crucial component of corporate performance has undergone a significant transformation in recent decades (Vanderbroeck & Wasserfallen, 2017). The benefits of diverse leadership teams for businesses are becoming more and more obvious. These benefits include improved decision-making, increased innovation, and improved overall performance (Sheehan & Anderson, 2015). Gender diversity has gained attention, particularly in discussions about creating inclusive and effective leadership systems (Ramarajan et al., 2012). In the special environment of Nigerian enterprises, the concept of gender diversity takes on a complex and fascinating dimension. Nigeria has unique challenges and opportunities with regard to gender diversity in its corporate environment because of its rich and diversified cultural background (Cukier et al., 2021). A complex interaction of cultural norms, historical legacies, and current socioeconomic conditions, all of which specifically create the Nigerian business environment, affects the incorporation of gender diversity into leadership posts (Innocent et al., 2013).

In light of this, a significant information vacuum emerges: little is known about the complex relationship between gender diversity in leadership teams and organizational performance in Nigerian organizations. While studies from around the globe have provided insightful information about the general relationship between diversity and organizational success (Batra, 2017). The particular complexities of this interaction within the Nigerian corporate environment still need to be fully investigated.

Theoretical Review and Literature Review

According to Bae et al. (2003), gender diversity on the board of directors is measured by the number or the percentage of females. The higher the percentage of female members on the board of directors, the greater diversity is (Dutta & Bose, 2008), which may result in more neutral decisions between males and females on the board and bring more sustainable efficiency in the long run (Gul et al.,2011; Thiruvadi & Huang, 2011)

Diversity Management Theory

The diversity management theory is attributed to several scholars and practitioners who have contributed to its development over time. However, Roosevelt Thomas (1991) is considered a foundational of diversity management theory. Companies can gain a lot by supporting diverse teams, including those distinguished by gender diversity. This notion contends that including people with various backgrounds, experiences, and viewpoints helps promote more thorough problem-solving and innovation. It is commonly believed that diverse teams are better equipped to adjust to shifting market conditions and meet the diverse needs of stakeholders and customers (Baker et al., 2021).

This theory states that gender-diverse leadership teams can give businesses a competitive advantage. These teams' ability to bring together individuals with different viewpoints and skill sets may enable them to develop creative solutions to challenging issues. Thus, the diversity management theory highlights the potential connection between gender diversity and organizational performance (Moreno-Gómez et al., 2018). All things considered, diversity management makes a substantial contribution to gender diversity by providing frameworks and tactics for fostering an environment that is inclusive and equitable. In summary, diversity management theory provides a robust framework for understanding, implementing, and sustaining gender diversity in organizations, leading to more equitable and inclusive workplaces.

Social Identity Theory

Henri Tajfel and John Turner created social identity theory in the early 1970s. The theory investigates how belonging to a social group shapes an individual's identity and sense of self, and how this shapes attitudes and behavior between groups. An additional viewpoint on how gender diversity affects organizational dynamics is provided by the Social Identity Theory. In order to comprehend human behavior, this theory emphasizes the importance of identity and group membership. Individuals identify with their gender groups in the setting of gender diversity, and this identification can have an impact on their motivation, behavior, and performance within the organization (Sheehan & Anderson, 2015).

Employees are more likely to identify favorably with their workplace when firms foster an inclusive environment where all genders are appreciated and given equal opportunity. Higher levels of involvement, dedication, and performance may result from this favorable identification. On the other hand, if gender diversity is not adequately handled, it could cause identity-based disputes and impair performance (Roodt et al., 2021).

Research in a variety of contexts and industries has shown that businesses with more gender-diverse leadership teams frequently achieve higher financial performance, better reputations, and higher levels of creativity (Schrand et al., 2018). Additionally, gender diversity is typically linked to a larger talent pool and increased talent retention, both of which contribute to the success of organizations (Obisanma et al., 2022).

The organizational culture, the industry, and the specific leadership positions held by women, among other things, can all have a different impact on how well a company does when it comes to gender diversity (Walker, 2015). Additionally, the methods through which gender diversity affects performance may be intricate and multifaceted, incorporating elements like enhanced decision-making, higher inventiveness, and improved client comprehension (Moreno-Gómez et al., 2018). Overall, social identity theory helps in understanding the dynamics of gender diversity and in developing strategies to improve gender relations and equity in various settings. Social Identity Theory sheds light on the psychological mechanisms behind gender dynamics in the workplace, providing insights into biases, group behaviors, and strategies to foster inclusivity. Its application in diversity management helps organizations address systemic inequalities and build more equitable, high-performing teams.

Gender Diversity and Decision-Making

The make-up of leadership teams within businesses has a significant impact on how decisions are made. These teams' gender diversity brings forth special dynamics that can greatly affect the effectiveness and results of decision-making (Witra et al., 2021).

Teams with a mix of genders frequently demonstrate cognitive advantages that can result in more reliable decision-making. This is because people with different gender origins bring a wide variety of viewpoints, problem-solving techniques, and cognitive styles to the table (Fernando et al., 2020). The range of perspectives and experiences that can be taken into account when making decisions is widened by gender diversity. This broader viewpoint can result in a more thorough study of the problems and a more impartial assessment of potential solutions (Lu et al., 2021). Teams with a variety of individuals tend to promote creativity by pushing participants to think "beyond the box." The presence of people with different thought processes and approaches to tackling problems might result in creative and unusual solutions (Nielsen et al., 2017). Teams made up of different genders may be more successful at addressing problems due to the range of techniques they use. Different cognitive philosophies can result in a more thorough analysis of problems, decreasing the chance of missing important facts (Chiem et al., 2022). However, organizational performance cannot be successfully attained if the organization does not recruit the right human resource to carry out organizational objectives (Ndudi, Ogundare, Olayemi, & Adugbo, 2024). The cognitive advantage of gender diversity significantly enhances decision-making by bringing diverse perspectives, promoting creativity, and enabling balanced and informed decisions. Organizations that prioritize gender diversity not only foster inclusivity but also gain a competitive edge by leveraging these cognitive benefits.

Challenges in Gender-Diverse Decision-Making

For sound decision-making, effective communication is crucial, and gender-diverse teams may experience communication difficulties. Disparities in language use, assertiveness, and communication styles might result in misunderstandings or misinterpretations (Pauliene et al., 2019).

Conflicts amongst diverse teams could result from opposing beliefs or principles. Unresolved disagreements can obstruct decision-making procedures and undermine team cohesion, therefore managing them constructively is essential (Lee et al., 2017). Within diverse teams, unconscious biases and gender stereotypes can influence decision-making. These biases could cause some team members to be ignored or marginalized, which would lower the effectiveness of all decisions (Molina et al., 2019). People used to more homogeneous environments could be resistant to the introduction of gender diversity in leadership teams. This resistance could appear as a reluctance to adopt novel concepts or methods, which could prevent creativity (Ebekozien, 2021).

It is crucial to remember that the benefits and difficulties of gender diversity in decision-making are not antagonistic. Effective team dynamics and leadership can maximize the advantages of diversity while minimizing its drawbacks. Fostering open communication, conducting diversity training, and developing an inclusive team culture that recognizes and benefits from each team member's distinct perspective are all examples of strategies for dealing with problems (Santos et al., 2022).

Nearly half of women in a company face gender discrimination, according to Ogundare, Ughovero and Bereprebofa, (2023), who also assert that this is the main cause of their inability to advance in their jobs. Anthony as cited in Ogundare, Ughovero and Bereprebofa, (2023) discusses the challenges faced by male employees in the workplace, providing an alternative viewpoint on gender discrimination in the workplace. After reviewing the literature on male employee experiences, Anthony concludes that most management programs fail to consider the many ways that men learn. Male staff members additionally mention that they are expected to help with any heavy lifting and load transportation.

Gender Diversity in Nigerian Businesses

Understanding the gender diversity landscape in Nigerian enterprises is necessary to contextualize the larger significance of this research. It is essential to present quantitative data in order to obtain understanding of the gender distribution in leadership positions across different industries in Nigeria. This information clarifies the current state of gender diversity and provides a framework for estimating the proportion of women who hold positions of power. Depending on the numerous economic sectors in Nigeria, including banking, healthcare, technology, manufacturing, and more, the study will divide the data into groups (Ayadi et al., 2015). We can find inequalities and trends by looking at the gender distribution within each industry. Additionally, the statistics will make a distinction between different levels of leadership, including executive, managerial, and board positions. This difference is essential since gender representation at different levels can vary greatly. Data can be broken down to analyze whether gender diversity in leadership roles varies in urban versus rural settings or between states in Nigeria in order to capture regional differences (Glass, 2018).

Understanding the intricate relationships between cultural, societal, and legal factors that impact the representation of women in leadership positions is necessary. The varied cultural terrain of Nigeria influences how people view gender roles and expectations. Some cultures may be more conventional and conservative than others, which may have an impact on how easily women can advance to leadership positions. It's imperative to comprehend these standards in order to develop effective diversity strategies (Alordiah et al., 2022). Like many other societies, Nigerian culture could have preconceived beliefs about how men and women should behave at work. These societal norms may have an impact on women's career aspirations and possibilities, particularly in leadership roles. This covers any laws or other programs that promote gender diversity in the workplace, as well as how well these policies are put into practice (Adejugbe, 2018). It would be wise to investigate initiatives like mentoring, diversity training, and support groups for women in leadership positions (Ortmeyer et al., 2021).

Financial Outcomes and Gender Diversity

An important consideration when evaluating the impact of gender diversity in leadership teams is a company's financial performance. An important financial metric called return on equity (ROE) compares a company's profitability to the equity held by its shareholders. It illustrates how a business makes profitable use of the equity held by its owners. Gender diversity in leadership teams may have an effect on this metric by changing corporate governance, risk management, and strategic decision-making—all of which can affect profitability (Timothy, 2022). A company's capacity to produce profits from all of its assets is evaluated using return on assets (ROA). By affecting operational effectiveness, asset allocation, and overall resource management, gender diversity may have an effect on ROA. Diverse teams could offer various viewpoints on how to maximize asset use (Udoayang et al., 2020).

A company's stock performance is a crucial sign of both its financial health and investor confidence. Stock performance can be impacted by a number of variables, including improved corporate reputation, investor perception of ethical governance, and the possibility that gender-diverse leadership will promote innovation and growth (Loukil et al., 2019). Job turnover, or the rate at which workers leave an organization to be replaced by new hires, is a significant worry for businesses. High turnover rates can have a negative impact on training and recruitment costs as well as the productivity of the remaining staff (Ejimofor & Ogundare, 2023). Understanding the elements that affect job turnover rates is crucial to developing strategies to lower turnover and improve organizational performance.

Diverse perspectives, experiences, and backgrounds can be brought together to foster innovation in gender-diverse leadership teams. Diverse teams are more likely to solve complex problems in novel ways, which can lead to the development of revolutionary products or services. In turn, innovation can increase profitability and spur revenue growth (Jones, 2020). The ability of a corporation to comprehend and react to the various clients wants and market dynamics can be improved by gender diversity. Organizations may be better able to modify their plans as a result of diverse teams' increased sensitivity to new trends and shifting client preferences (Hsu et al., 2019). The retention of top talent may be favourably impacted by gender diversity in leadership teams. Organizations that are inclusive and diverse frequently recruit top talent better and retain workers at a higher rate. Increased operational stability and cost savings might result from decreased turnover (Aibieyi et al., 2014). Companies with a diverse leadership team often enjoy a better reputation with stakeholders, including customers, investors, and the general public. A corporation can avoid legal troubles and financial failures with effective risk management, which helps it to maintain its financial success (Lu et al., 2021). Comprehending these plausible mechanisms is imperative for assessing the potential impact of gender diversity in leadership teams on financial outcomes. There is a strong relationship between gender diversity and financial success, which must be understood. Many factors, such as market dynamics, corporate culture, and the specific leadership roles held by women, can have an impact on this relationship (Wu et al., 2021).

Methodology

Research Design

For this study, a cross-sectional quantitative technique was adopted as the research strategy. It is appropriate for examining how gender diversity in leadership teams affects organizational performance measures, the calibre of decisions made, and the financial results in Nigerian organizations.

Data Collection

1. Sample Selection

The stratified random sampling technique was employed to select the sample, and a comprehensive list of Nigerian businesses located in Asaba, Delta State, including Asaba Aluminium, Flight Aluminium, and Dulux, was utilized.

2. Data Sources

For the purpose of gathering data for this study, questionnaires were used. However, it is important to stress that one of the most important aspects of any business research is data collection. This is because doing so requires the use of the proper research instrument and the collection of the necessary data.

Variables and Measurements

1. Independent Variable

The independent variable in this study is the diversity of genders in leadership teams. Gender diversity was defined by looking at these teams' male to female ratio. It was calculated as the percentage of female members on each leadership team, providing a measure of gender diversity for each company.

2. Dependent Variables

Decision-Making Quality: The effectiveness of decisions were evaluated using a number of factors, such as reaching consensus, sharing information, and coming up with original solutions to problems.

Data Analysis

During the data analysis phase, several statistical techniques were applied in order to look into relationships and measure the effect of gender diversity on financial outcomes and decision-making.

1. **Descriptive Statistics:** The data on gender diversity, selection criteria, and financial performance indicators were compiled and displayed. An overview of the significant variables is provided by these statistics.
2. **Correlation Analysis**: The appropriate Pearson or Spearman correlation tests were used to conduct a correlation analysis in order to look at relationships between variables. Any statistically significant connections between the gender diversity of the leadership team, leadership choices, and financial results can be identified with the use of this analysis.
3. **Regression Analysis**: Multiple regression models were used to measure the effect of gender diversity on organizational performance in Nigerian Business context. This study sheds light on the precise relationship between gender diversity and organizational performance metrics.

By employing quantitative methods and robust statistical analysis, this study seeks to provide evidence-based insights that contribute to the body of knowledge and guide useful solutions for promoting gender diversity and improving organizational performance in the Nigerian context.

Findings and Discussion

The study population is made up of 400 employees of Asaba Aluminium, Flight Aluminium and Dulux in Asaba, Delta State. From the population, a workable sample of 400 was derived using the Taro Yamani's formula; as given:

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

$$n = \frac{400}{1+400(0.05)^2}$$

$$n = 200$$

The sample size of 200 employees' members was derived using Taro Yamani formula. Out of the two hundred (200) sets of questionnaires administered to the staff of Asaba Aluminium, Flight Aluminium and Dulux in Asaba, Delta State, one hundred & sixty seven

(167) were returned, seventeen (17) were wrongly filled and were rejected, while one hundred & fifty (150) were usable.

Table 4.1: Summary of Descriptive Statistics for all Variables

Descriptive Statistics					
	N	**Min**	**Max**	**Mean**	**Std. Deviation**
leadership teams	150	1.0	5.0	4.8612	1.10214
decision-making leaders	150	1.0	5.0	3.6342	1.36034
financial success	150	1.0	5.0	2.4757	1.63062
organizational performance	150	1.0	5.0	3.9589	1.25451
Valid N (listwise)	150				

Source: **SPSS Output, 2024**

Table 4.2 Correlation matrix studied variable

		leadership teams	**decision-making leaders**	**financial success**	**organizational performance**
leadership teams	Pearson correlation	1			
	Sig.(2-ailed)				
	No.				
		150			
decision-making leaders	Pearson correlation	.180**	1		
	Sig.(2-ailed)				
	No.	.008			
		150	150		
financial success	Pearson correlation	.495**	.532**	1	
	Sig.(2-ailed)				
	No	.000	.000		
		150	150	150	
organizational performance	Pearson correlation	.326**	.167*	.428**	1
	Sig.(2-ailed)				
	No	.000	.000	.000	
		150	150	150	150

**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is Significant at the 0.05 level (2-tailed)

Positive correlation coefficients of the indicators that look at the variables influencing organizational performance are shown in Table 4.2 above. The results showed a positive correlation (r=.180**, 0.01) between leadership teams and organizational performance.

The second variable, decision-making leaders, showed a positive correlation with both financial success (r=.532**, 0.01) and organizational performance (r=.495**, 0.01).

Financial success, the third variable, had positive correlations with decision-making leaders (r=.167*, 0.01), organizational performance (r=.326**, 0.01), and financial success (r=.428**, 0.01).

Table 4.3: Multiple Regression Analysis of Coefficients [a]

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	Std. Error	Beta		
1	(Constant)	.769	.178		2.147	.000
	leadership teams	.862	.065	.776	10.652	.000
	decision-making leaders	.701	.051	.781	11.254	.001
	financial success	.753	.060	.847	10.282	.004
a. Dependent Variable: organizational performance						

Source: SPSS Output (2024)

The B-values of influence gender diversity are; leadership teams (β= .776, p<.001), decision-making leaders (β= .781, p<.001), and financial success (β= .847, p<001) had exhibited positive effects on organizational performance.

The p-value calculated of leadership teams (.000<0.05), decision-making leaders (.001<0.05 and financial success (.004<0.05) had predicted organizational performance with a statistically significant at 0.05.

Table 4.4: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822[a]	.676	.643	.32547

a. Predictors: (Constant), leadership teams, decision-making leaders, financial success

Source: **SPSS Output, 2024**

According to the above summary, there is a strong correlation (R of 0.822) between the dependent variable (organizational performance) and the predictors (leadership teams, decision-making leaders, and financial success). The Adjusted R-squared value of 0.643 merely shows that the model has a strong predictive potential as approximately 64% of the changes in organizational performance can be predicted by the selected variables. The R-squared value of 0.676 indicates that the predictor variables account for approximately 68% of the variations in the predicted variable.

Table 4.5: ANOVA [a]

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.177	3	4.624	39.357	.000[b]
	Residual	8.936	146	.051		
	Total	24.113	149			

a. Dependent Variable: 'organizational performance'

b. Predictors: (Constant), 'leadership teams, decision-making leaders, financial success'

Source: **SPSS Output, 2024**

The statistical significance of this regression model is indicated by a significant value of 0.000<0.001 in Table 4.5. This finding suggests that the regression model makes a significant prediction about the independent variable. The ANOVA Table's F-ratio evaluated whether the regression model as a whole fits the data well. The Table demonstrated that the dependent variable (organizational performance) is significantly predicted by the independent variables (financial success, leadership teams, and decision-making leaders). The regression model is suitable for the data because $F(3, 146) = 39.357$, $p<.005$.

4.4 Hypotheses Testing

Hypothesis HO1: There is no significant effect of gender diversity in leadership teams on organizational performance.

The degree to which leadership teams improve organizational performance was displayed in the coefficient Table 4.3. In light of the Beta value (β=.776, p<.000). Regression analysis for leadership teams and organizational performance on test of hypothesis one, Table 4.3, showed that the probability of making a type one error (.05) is greater than the exact level of significance calculated (.000). Consequently, the alternative hypothesis—which holds that gender diversity in leadership teams has a major impact on organizational performance—is hereby again rejected in favor of the null hypothesis.

Hypothesis HO2: Gender diversity decision-making in leadership teams has no significant effect on organizational performance.

The degree to which decision-making leaders have a positive impact on organizational performance was displayed in the coefficient Table 4.3. Considering the Beta value of β =.781, p <.000. According to Table 4.3's regression analysis for the test of hypothesis two, decision-making leaders and organizational performance, the exact level of significance calculated (.001) is less than the likelihood of making a type one error (.05). As a result, the alternative hypothesis is accepted and the null hypothesis is rejected, suggesting that gender diversity decision-making in leadership teams significantly affects organizational performance.

Hypothesis HO3: Financial outcome in gender diversity has no significant effect on organizational performance.

The degree to which financial success outcomes have a positive impact on organizational performance was demonstrated by the coefficient Table 4.3. Considering the Beta value of β =.847, p <.000. According to Table 4.3's regression analysis for the test of hypothesis three, financial success and organizational performance, the exact level of significance calculated (.004) is less than the likelihood of making a type one error (.05). As can be seen in Table 4.3 above, the critical level of significance that was calculated is less than the p-value of 0.05 (5%) or (.004 < 0.05). Furthermore, the null hypothesis—which holds that financial success influences organizational performance—is refuted.

4.5 DISCUSSION OF RESULTS

According to research, in the Nigerian business environment, gender diversity can improve organizational performance. While examining the impact of gender diversity on organizational performance in Nigeria, keep the following points in mind:

From the results of frequency analysis in Table 4.2, indicated that majority of the respondents overwhelmingly responded positively to the various statements in relationship to gender diversity of leadership teams and organizational performance. It was reported that gender diversity of leadership teams has the positive effect on organizational performance (ß = .776, P<.01). In furtherance, the test of hypothesis indicated in Table 4.3 reveals that gender diversity of leadership teams has a significant relationship with organizational performance (.000<.05). This is agreement to Ndudi, Ogundare, Olayemi, and Adugbo, (2024) that teams made up of different genders may be more successful at addressing problems due to the range of techniques they use. Different cognitive philosophies can result in a more thorough analysis of problems, decreasing the chance of missing important facts (Chiem et al., 2022). However, organizational performance cannot be successfully attained if the organization does not recruit the right human resource to carry out organizational objectives. Gender diverse teams can solve problems more creatively and innovatively because they bring a range of viewpoints, experiences, and ideas to the table. This may lead to the development of fresh goods, services, and business plans that offer the company a market advantage.

From the results of frequency analysis in Table 4.2, indicated that majority of the respondents overwhelmingly responded positively to the various statements in relationship to gender diversity decision-makers and organizational performance. Furthermore, it was reported that gender diversity decision-makers has positive effect on organizational performance (ß = .781, P<0.01). The test of hypothesis indicated in Table 4.3 reveals that there is a significant relationship between gender diversity decision-makers and organizational performance (.001<0.05). This is agreement with Ogundare, Ughovero and Bereprebofa, (2023) that nearly half of women in a company face gender discrimination, who also asserts that this is the main cause of their inability to advance in their jobs. Anthony as cited in Ogundare, Ughovero and Bereprebofa, (2023) discusses the challenges faced by male employees in the workplace, providing an alternative viewpoint on gender discrimination in the workplace. Teams with a diversity of genders typically consider a greater range of perspectives and factors when making decisions, resulting in more well-rounded, balanced decisions. Better results and fewer risks for the company may result from this.

From the results of frequency analysis in Table 4.2, indicated that majority of the respondents overwhelmingly responded positively to the various statements in relationship to gender diversity financial outcomes and organizational performance. Furthermore, it was reported that gender diversity financial outcomes has positive effect on organizational performance (ß = .847, P<0.01). The test of hypothesis indicated in Table 4.3 reveals that there is a significant relationship between gender diversity financial outcomes and organizational performance (.004<0.05). This is agreement with Loukil et al., (2019), several factors, such as enhanced corporate reputation, investor impression of ethical governance, and the potential for gender-diverse leadership to spur innovation and growth, can all have an impact on stock performance. Job turnover, or the rate at which workers leave an organization to be replaced by new hires, is a significant worry for businesses. High turnover rates can have a negative impact on training and recruitment costs as well as the productivity of the remaining employees (Ejimofor & Ogundare, 2023). Prioritizing gender diversity helps organizations draw and keep top talent because it fosters a diverse and inclusive work environment where employees feel appreciated, respected, and supported. Higher employee satisfaction levels and decreased turnover rates may result from this.

CONCLUSION

1. Gender diversity of leadership teams had a statistical significant relationship with organizational performance, Gender diversity positively impacts organizational performance by fostering innovation, enhancing decision-making processes, and improving talent retention. A wider range of viewpoints and ideas are frequently the result of gender diversity, and this can foster creativity and innovation. Diverse teams are more likely to come up with original solutions and approach issues from various perspectives.
2. Gender diversity affects these leadership teams' decision-making had a statistical significant relationship with organizational performance. Diverse teams tend to make more well-rounded decisions by incorporating various viewpoints and reducing groupthink. Better problem-solving and wiser decision-making may result from this. Gender diverse teams in Nigeria tend to have an advantage over others because they bring a range of perspectives and experiences to the table that result in innovative and practical solutions.
3. Organizational performance is positively impacted by financial outcomes. Businesses with a higher percentage of female executives typically have better financial results.. Companies known for their commitment to gender diversity often enjoy a stronger reputation and brand image. This can attract top

talent, improve relationships with stakeholders, and enhance overall organizational performance.

RECOMMENDATION

1. Create official programs and policies that support gender inclusivity and diversity within the company. To draw and keep a diverse workforce, this can involve diversity recruitment tactics, mentorship programs, and training.
2. To establish an atmosphere at work where people of all genders are valued and respected for their distinct perspectives and contributions. Encourage team members to collaborate, be open with each other, and show respect for one another.
3. Guarantee that every employee, regardless of gender, has access to opportunities for career advancement. To promote gender equality in the workplace, establish open and transparent procedures for skill development, leadership positions, and promotions.
4. To monitor the organization's progress in advancing gender diversity and inclusion, set up key performance indicators (KPIs). Make informed decisions for improvement by routinely assessing and evaluating the effect of diversity initiatives on organizational performance.

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IMPACT OF ENTREPRENEURSHIP ON UNEMPLOYMENT REDUCTION IN NIGERIA

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ABSTRACT
This study addresses the pressing issue of unemployment in Nigeria, focusing on the impact of entrepreneurship in alleviating this economic challenge. It analysed the role of entrepreneurship, particularly within Small and Medium Enterprises (SMEs), in reducing unemployment. The research employs annual time series data from 1991 to 2021 and the Auto Regressive Distributed Lag (ARDL) method. Findings reveal a significance relationship between entrepreneurship and unemployment. Specifically, SMEs while being significant contributors to economic activities, exhibit a significant impact on the reduction of unemployment. Additionally, government expenditure on education and health emerged as crucial factors in decreasing the unemployment rate in Nigeria. In conclusion, the study underscores the complex dynamics involved in the relationship between entrepreneurship and unemployment in Nigeria. SMEs contributed substantially to reducing unemployment, as well as the positive influence of government expenditure on education and health in Nigeria. The study recommends for a comprehensive approach to entrepreneurship development, emphasising the need for targeted policies that enhances job creation potential of SMEs. Furthermore, the study suggested increase focus on government investment on education and health sectors for fostering sustainable reductions in unemployment rates. These insights will contribute to informed policies formulation on economic growth to address unemployment in Nigeria.

Keywords: Entrepreneurship, Unemployment, Government Expenditure, Education, Health.

1. Introduction

Nigeria had a thriving entrepreneurial culture at the pre-colonial era, and unemployment was a rare phenomenon (Nkechi & Eneojo, 2014). However, like other developing countries, after gaining the independence, Nigeria faced a range of challenges including poverty, unemployment, conflicts etc. These issues resulted to significant threats to the well-being and livelihoods of individuals in the country. In response, there was an increasing recognition of the importance of training and educating the masses to effectively contribute to societal development. It was believed that people would be better prepared to tackle issues such as unemployment, poverty, conflicts etc if properly educated. Thus, education became a key factor in Nigeria's development efforts (Ikon & Chika, 2018). However, the nature of education was mostly preparing graduates to take up jobs as workers rather than employers of labour. This resulted to tremendous unemployment and a modern-day mania for readymade jobs.

However, entrepreneurship is expected to contribute to reducing unemployment by creating new job opportunities through the establishment and growth of businesses. Start-ups businesses are often cited as significant contributors to employment, as they tend to be labour-intensive. Entrepreneurship can also lead to skill development, innovation, and economic diversification, which can indirectly impact employment, rates (O'Leary, 2022). The current study is predicated on the idea that entrepreneurship should be promoted in order to maintain a low-unemployment economy. More so, Nigeria is blessed with several commerce and investment possibilities including science, technology, academia, commerce, and entertainment (O'Leary, 2022). Notwithstanding the reality that entrepreneurship has been identified as the foundation for job creation and technological innovation. There is persistent high rate of unemployment in Nigeria (Nigeria Bureau of Statistics, 2022).

Despite efforts by successive governments to address the issue of unemployment, the problem persists. The associated problems have hindered the country's ability to create a strong economic environment. Coincidentally, Nigeria has one of the highest unemployment rates globally (Nigeria Bureau of Statistics, 2022). The motivation behind this study stems from the critical need to address the pervasive issue of unemployment, which poses significant challenges to economic growth and social well-being. The current study will investigate the questions:

(i) Does existence of SMEs impact on the reduction of unemployment in Nigeria?
(ii) Is there any impact of education expenditure on the reduction of unemployment in Nigeria?
(iii) Does health expenditure impact on the reduction of unemployment in Nigeria?

2. Literature Review

This section of study presents the concept of entrepreneurship, theoretical framework and empirically reviewed relevant literatures. Thus, entrepreneurship is conceived as an individual's or group's aptitude and attitude towards initiatives with the potential for success or failure (Nkechi & Eneojo, 2014). It is a dynamic process of vision change and creation of limitless opportunities. On the other hand, the unemployment refers to the state where individuals who are actively seeking employment but are unable to find suitable jobs.

Theoretically, entrepreneurial ecosystem framework provides a comprehensive understanding of the various factors and dynamics that contributed to the creation and growth of entrepreneurial activities within an economy (Uwe, et al, 2020). Such as the interplay between different stakeholders, institutions, and resources that shape the entrepreneurial environment. Entrepreneurship acts as a catalyst for job creation and economic development (Sahil, 2024). It suggests a supportive ecosystem that encourages entrepreneurship that can lead to the generation of new ventures, which in turn, create employment opportunities (Uwe, et al, 2020). Several elements within the entrepreneurial ecosystem can influence employment generation: Access to capital, entrepreneurial culture and mind-set, supportive institutions, regulatory environment.

Empirically, the causal link between entrepreneurship and unemployment has been explored. For example, Ogunjimi (2021) assessed the importance of SMEs in addressing unemployment. Findings revealed that employment provided by SMEs have beneficial effect on unemployment. Peter and Oghuvwu (2020) investigated the significance of SMEs on job creation and socioeconomic development in the Niger Delta region. Findings showed that creation of SMEs would create jobs and contribute to socioeconomic development. Similarly, Terwase, (2018) conducted a primary study on entrepreneurship education and unemployment reduction. It reported that entrepreneurship education had significantly contributed to unemployment reduction. However, study data was limited to Vandeikya Local Government Area of Benue State. Sunday and Miriam (2015) assessed the capacity of entrepreneurship in Nigeria to generate employment and sustainable development using secondary data from 1980 to 2013. The Johansen co-integration test revealed that employment and average capacity utilisations were statistically significant, indicating that entrepreneurship may offer employment and capacity utilisation for long-term growth.

Likewise outside countries, Meyer and Meyer (2020) investigated the connection between entrepreneurship, job opportunities, and domestic capital investment in five European nations employing data from 2001 to 2019. A fully modified Ordinary Least Square (OLS) was used to assess both short and long-run connection between variables. Findings revealed a long-run link among the variables. New and existing businesses were discovered to be significant predictors of employment and domestic investment. Also, Asad et al. (2014) investigated the necessity for lowering unemployment in Pakistan through entrepreneurship. The regression results of explanatory variables explain 91% of the variation in entrepreneurship development. It has been discovered that the unemployment rate was inversely related to entrepreneurial development. Thus, high unemployment was linked to a lack of entrepreneurial development in Pakistan's economy.

However, some gaps in literature were identified. While some of the studies were foreign, those that were conducted in Nigeria used variables different from the ones in this study. Similarly, most of the studies were limited in scope. For instance, Tarwase, (2018) used data from Vandeikya Local Government Area only. The current study focused on Nigeria as a whole.

3. Methodology

The current study addresses the pressing issue of unemployment in Nigeria. It focused on the impact of entrepreneurship in alleviating economic challenge. The study analysed the role of entrepreneurship, particularly within Small and Medium Enterprises (SMEs), in reducing unemployment. The entrepreneurship was proxy through the number of SMEs, government spending on education and health. Government spending on human capital development is necessary for nurturing entrepreneurship (Umar et al, 2020). This study employs annual time series data from 1991 to 2021. The data were generated from Statistical Bulletin of Central Bank of Nigeria (CBN, 2022) and the World Development Indicators (World Bank, 2023). The study employed Augmented Dickey Fuller (ADF) and Philips-Perron (PP) unit root tests to examine stationarity and integrated order of the variables. Autoregressive Distributed Lag (ARDL) was used to investigate for the existence of co-integration relationship among the variables, and ARDL-ECM approach was used to estimate the coefficients of both the short-run and long-run relationship.

4. Data Analysis

Descriptive Statistics

Table 4.1: Results of Descriptive Statistics

Variables/Stat.	LNUNEM	LNSMES	LNGEXE	LNGEXH	LNGDP	LNPOP	LNGFCF
Mean	1.408	18.406	4.307	3.610	7.581	3.970	3.236
Median	1.360	12.877	4.779	4.131	7.608	3.969	3.264
Maximum	1.792	72.836	6.472	6.048	7.893	3.984	3.880
Minimum	1.308	5.388	-1.233	-1.896	7.265	3.955	2.651
Std. Dev.	0.131	16.517	1.892	2.081	0.237	0.008	0.401
Skewness	1.903	2.128	-1.103	-0.863	-0.115	-0.013	-0.080
Kurtosis	5.487	6.423	3.838	2.928	1.351	2.018	1.667
Jarque-Bera	26.694	38.530	7.193	3.857	3.579	1.246	2.328
Probability	0.000	0.000	0.027	0.145	0.167	0.536	0.312
Observations	31	31	31	31	31	31	31

The descriptive statistics in Table 4.1 showed that the unemployment rate (UNEM) exhibits an average value (mean) of 1.408. The distribution of UNEM was positively skewed (1.903), while the kurtosis value of 5.487 indicated a relatively peaked shape compared to a normal distribution.

The number of Small and Medium Enterprises (SMEs) exhibits an average value of 18.406, and positively skewed (2.128), indicating a longer right tail in the distribution. The kurtosis value of 6.423 indicated a relatively peaked shape compared to a normal distribution. In the case of government expenditure on education (GEXE), its mean value was average (4.307), and the distribution was positively skewed, with a skewness value of -1.103, indicating a longer right tail. However, the kurtosis value of 3.838 suggests that the distribution is less peaked compared to a normal distribution. Similarly, government expenditure on health (GEXH) had a mean value of 3.610. The distribution of was also skewed (-0.863), indicating a longer right tail. The kurtosis value of 2.928 further suggested that the distribution was less peaked compared to a normal distribution. The Gross Domestic Product (GDP) mean value was 7.581, nearly symmetric around the mean, with a skewness value of -0.115. Furthermore, the kurtosis value of 1.351 suggests a distribution that was less peaked compared to a normal distribution. Yet, the population size of the labour force as a percentage of the total population mean value was 3.970, also, nearly symmetric around the mean, as indicated by the skewness value of -0.013. While the kurtosis value of 2.018 suggested a distribution that was less peaked compared to a normal distribution. Lastly, for the variable GFCF, with a mean value of 3.236% of GDP, reflecting the average value for this specific variable. The distribution of GFCF is positively skewed, as evident from the skewness value of -0.080, indicating a longer right tail. Furthermore, the kurtosis value of 1.667 suggests a distribution that is less peaked compared to a normal distribution.

Correlation Matrix

The results of correlation matrix are presented in table 4.2. The correlation coefficient was -0.646, and the associated p-value was 0.002. This negative correlation suggests that as the number of small and medium enterprises increases, the natural logarithm of unemployment tends to decrease. The relationship is moderately strong, and the p-value indicates statistical significance.

For government expenditure on education: The correlation coefficient was -0.406, and the associated p-value was 0.024. This negative correlation implies that higher government expenditure on education was associated with lower levels of unemployment. Although the correlation is moderate, the p-value suggests statistical significance.

In the case of government expenditure on health: The correlation coefficient was -0.417, and the associated p-value was 0.020. Similarly, higher spending on health is negatively correlated with unemployment. The correlation was moderate, and the p-value indicates statistical significance.

Table 4.2: Results of Correlation Matrix

Variables	LNUNEM	LNSMES	LNGEXE	LNGEXH	LNGDP	LNPOP	LNGFCF
LNUNEM	1.000						
LNSMES	-0.646	1.000					
	(0.002)						
LNGEXE	-0.406	0.563	1.000				
	(0.024)	(0.001)					
LNGEXH	-0.417	0.563	0.992	1.000			
	(0.020)	(0.001)	(0.000)				
LNGDP	-0.398	0.451	0.815	0.856	1.000		
	(0.027)	(0.011)	(0.000)	(0.000)			
LNPOP	0.363	0.267	0.283	0.236	-0.207	1.000	
	(0.045)	(0.147)	(0.123)	(0.201)	(0.265)		
LNGFCF	-0.027	0.478	0.792	0.813	0.875	0.236	1.000
	(0.006)	(0.007)	(0.000)	(0.000)	(0.000)	(0.201)	

Note: Prob. Values in parenthesis ( )

In GDP (Economic Growth): The correlation coefficient was -0.398, and the associated p-value was 0.027. This negative correlation suggests that higher economic growth is associated with lower levels of unemployment. lnPOP (Population): The correlation coefficient was 0.363, and the associated p-value is 0.045. This positive correlation indicates that higher population is associated with higher levels of unemployment. That is, both correlations were moderate, and the p-values suggested statistical significance. lnGFCF (Gross Fixed Capital Formation): The correlation coefficient was -0.027, and the associated p-value was 0.006. This weak negative correlation suggests a slight tendency for higher gross fixed capital formation to be associated with lower unemployment. The p-value indicates statistical significance.

Results of Unit Root Tests

Table 4.3 presents the results of the Augmented Dickey-Fuller (ADF) and Philips-Perron (PP) unit root tests. The ADF results indicate that the variables: UNEM, lnGDP, and lnGFCF possess unit roots at their levels. Similarly, the PP unit root tests demonstrate that all variables have unit roots at their levels. Consequently, the null hypothesis was not rejected, indicating that the variables are non-stationary at levels. However, both the ADF and PP tests demonstrate that the unit root disappears after taking the first difference, rendering the variables stationary. This suggests that they are integrated of order one, denoted as I(1). On the other hand, the ADF test indicated that the variables lnGEXE, lnGEXH, and lnPOP do not have unit roots at their levels. Therefore, the null hypothesis can be rejected, implying that these variables are stationary at levels or integrated of order zero, denoted as I(0).

Table 4.3: ADF and PP Unit Root Test Results

	Level				Remark
	ADF		PP		
Variables	t-Statistic	Prob.	t-Statistic	Prob.	
lnUNEM	1.031	0.999	1.031	0.999	
lnSMEs	-4.217	0.328	-2.567	0.243	
lnGEXE	-3.355	0.077	-3.147	0.114	I(0)
lnGEXH	-3.247	0.095	-3.034	0.140	I(0)
lnGDP	-0.756	0.817	-0.643	0.846	
INFL	-2.524	0.315	-2.792	0.211	
lnPOP	-3.931	0.025	-1.802	0.679	I(0)
lnGFCF	1.335	1.000	1.491	1.000	
First difference					Remark
lnUNEM	-4.511	0.006	-4.562	0.006	I(1)
lnSMEs	-6.731	0.003	-3.456	0.000	I(1)
lnGEXE	-11.260	0.000	-10.554	0.000	I(1)
lnGEXE	-12.746	0.000	-16.057	0.000	I(1)
lnGDP	-2.701	0.086	-2.680	0.089	I(1)
INFL	-5.363	0.001	-7.941	0.000	(1)
lnPOP	-3.252	0.028	-1.635	0.095	(1)
lnGFCF	-4.122	0.015	-4.182	0.013	I(1)

Note: both intercept and trend were used for the estimations. Akaike Information Criterion (AIC) was employed to select optimum lag length in the ADF test.

Results of ARDL Long-Run and Bounds Test

Having confirmed mixed order stationarity of the variables, ARDL approach for co-integration test was conducted to determine existence of long-run relationship among the variables.

Table 4.4: ARDL Bound Test for Cointegration Results

F- Statistics	K	Significance	Lower(bound)	Upper(bound)
		10%	2.12	3.23
6.490692***	6	5%	2.45	3.61
		1%	3.15	4.43

The decision rules states; if computed F-statistic is greater than the upper bound [I(1)], it implies rejection of the null hypothesis of no co-integration among the variables and conclude that there is co-integration (long-run) relationship among the variables. But, if the computed F-statistic is less than the lower bound [I (0)], the null hypothesis of no co-integration among the variables cannot be rejected. However, the bounds test result indicated that the computed F-statistic was greater than the upper bound at 1% significance level. Thus, there is a co-integration or long run relationship among the variables in the model. Hence, though the short-run relationship among the variables was distorted, the long-run equilibrium was attained.

Results of ARDL Long-run and Short-run Parameters Estimate

This section discussed the results of estimations of long-run and short-run parameters using ARDL model to address the objectives of the study.

Table 4.5: Results of Long and Short run Estimated Coefficients

Panel A: Long-run Coefficients - Dependent variable is LNUNEM				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
LNSMES	-0.727485	0.256350	-2.837861	0.0125
LNGEXE	-0.066359	0.033708	-1.968648	0.0678
LNGEXH	-0.052801	0.024796	-2.129408	0.0502
LNGDP	-1.165667	0.561517	-2.075925	0.0555
LNPOP	24.61954	11.16594	2.204878	0.0435
LNGFCF	0.052902	0.128023	0.413219	0.6853
Panel B: Short-run Coefficients - Dependent variable is Δ UNEM				
C	-38.60815	4.843983	-7.970332	0.0000
D(LNUNEM(-1))	-0.727485	0.159901	-4.549598	0.0004
D(LNGEXE)	-0.066359	0.012960	-5.120266	0.0001
D(LNGEXH)	-0.032990	0.012082	-2.730564	0.0155
D(LNGDP)	-0.256550	0.137764	-1.862238	0.0823
D(LNPOP)	26.72035	4.543096	5.881529	0.0000
D(LNGFCF)	-0.060058	0.034791	-1.726264	0.1048
ECT_{t-1}	-0.368388	0.046190	-7.975511	0.0000
R-squared	0.850536			
F-statistic	17.07175			0.000
Durbin-Watson stat	2.086957			

Note: Akaike Information Criterion (AIC) was used to select optimum lags of (2, 0, 1, 1, 1, 1, 1).
Source: Author's computation (2023)

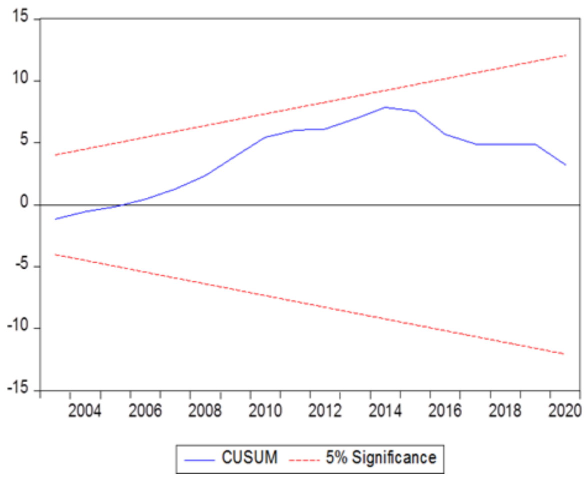
In the long-run analysis (i.e. panel A), the impact of SMEs, government education expenditure (LNGEXE) and government health expenditure (LNGEXH) on unemployment rate were examined. For LNSME coefficient (-0.727485) with a p-value (0.0125), indicated that SMEs had a long-run impact on unemployment rate at 5% significance level. The negative coefficient (-0.727485) for LNSMEs suggests that an increase in the number of SMEs by 1% will lead to a decrease in the long-run unemployment rate by 0.73%. For LNGEXE, the coefficient was -0.066359 with a p-value (0.0678) indicating its impact on the long-run unemployment rate at 10% significance level. The negative coefficient (-0.066359) suggested that an increase in government education expenditure by 1% will lead to a decrease in the long-run unemployment rate by 0.07%. For LNGEXH, the coefficient was -0.052801 with a p-value of 0.0502. This indicates that it has impacted on the long-run unemployment rate at 10% significance level. The negative coefficient (-0.052801) suggested that an increase in government health expenditure by 1% may potentially lead to a decrease in the long-run unemployment rate by 0.05%. Similarly, the coefficient for LNGDP was -1.165667 with a p-value of 0.0555. This suggests that LNGDP had a long-run impact on unemployment rate at a 10% significance level. The negative coefficient (-1.165667) implies that a 1% increase in GDP may lead to a decrease in the long-run unemployment rate by 1.17%. The coefficient for LNPOP was 24.61954 with a p-value of 0.0435. This indicates that it has an impact on the long-run unemployment rate at a 5% significance level. The positive coefficient (24.61954) suggests that a 1% increase in population may lead to an increase in the long-run unemployment rate by 24.61%. Furthermore, the coefficient for LNGFCF was -0.060058 with a p-value of 0.6853. The probability value suggests that the coefficient is not statistically significant at the conventional levels of significance. Therefore, there is limited evidence to suggest that LNGFCF has a significant impact on the long-run unemployment rate.

In panel B, which focuses on the short-run coefficients, we can interpret the results using a similar pattern as in the long-run analysis. The coefficient for D(LNSMES) was -0.727485 with a p-value of 0.0004. This suggested that there was some evidence to indicate that changes in SMEs had impacted on the short-run unemployment rate at a 1% significance level. The negative coefficient (-0.727485) implies that an increase in the number of SMEs by 1% may lead to a decrease in the short-run unemployment rate by 0.73%. For D(LNGEXE) the coefficient for is -0.066359 with a p-value of 0.0001. This suggested that there was some evidence to indicate that changes in government education expenditure (D(LNGEXE)) had impacted on the short-run unemployment rate at a 1% significance level. The negative coefficient (-0.066359) implies that an increase in government education expenditure by 1% may lead to a decrease in the short-run unemployment rate by 0.071%. Similarly, the coefficient for D(LNGEXH) is -0.032990 with a probability value of 0. .0155. This indicated that there was an evidence to suggest that changes in government health expenditure (D(LNGEXH)) had a significant impact on the short-run unemployment rate. The p-value suggested that the coefficient was statistically significant at conventional levels. The coefficient for D(LNPOP) was 26.72035 with a p-value of 0.0000. This indicated that there was strong evidence to suggest that changes in GDP (D(LNPOP)) had a significant impact on the short-run unemployment rate at a 1% significance level. The positive coefficient (26.72035) suggests that an increase in population by 1% may lead to a decrease in the short-run unemployment rate by 26.72%. The coefficient for D(LNGFCF) was 0.032 with a p-value of 0.1048. This indicated that there was limited evidence to suggest that changes in government fixed capital formation (D(LNGFCF)) had significant impact on the short-run unemployment rate. The p-value suggested that the coefficient was not statistically significant at conventional levels.

The error correction term (ECT_{t-1})' coefficient was significant at 1% and negative. This matches our assumption. The study showed 36.83% of deviations from equilibrium to be repaired within one year. Together, the independent variables in the models properly explain the changes in unemployment in Nigeria. This was suggested by the high R-square (0.850536). It means that explanatory factors in the model explain 85.05% of the fluctuations in unemployment from 1991 to 2020.

Results of Diagnostic Tests

The outcomes of diagnostic tests suggested that model for ARDL satisfies all. Hence, computed relationship was free from serial correlation, normalcy and heteroscedasticity issues. Furthermore, there was no missing variable biasness.



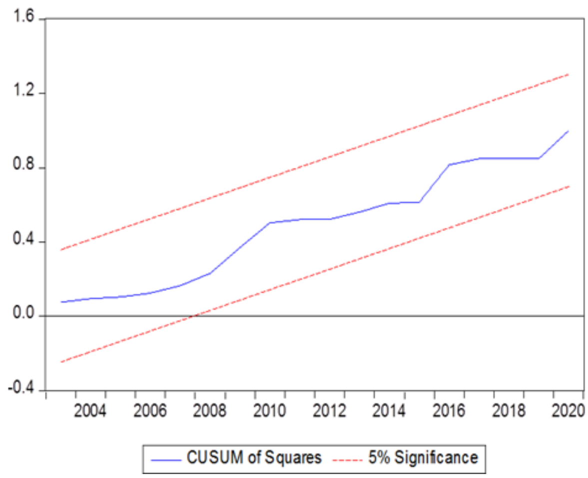


Figure 4.1: CUSUM and CUSUMSQ

Table 4.6: Result of Diagnostic Tests

Test Statistics	F-Statistic [prob.]
Normality: Jarque-Bera	0.5299 [0.7673]
Serial Correlation: Breusch-Godfrey LM Test; F (2,13)	0.495 [0.2148]
Heteroskedasticity Test; F (14, 15)	0.3876 [0.3382]
Functional Form: Ramsey Reset; F (1, 19)	2.9667 [0.1043]

Results of Model Stability Tests

The CUSUM) and (CUSUMQ) tests were applied to assess the stability of the estimated parameters. The plots were both within the bounds (see Figure 4.1) indicating that the model is long-term stable.

Test of Hypotheses

In this study, the validity of long-accepted idea (theory) of the influence of entrepreneurship on unemployment was tested using the number of SMEs, government expenditure on education and health as proxies. We found that the hypotheses were valid in Nigeria. Thus, there was evidence to reject the null hypotheses of the study. The ARDL estimation technique was employed to explore the connectivity between, the independent variables and the dependent variable. The outcome revealed that the number of SMEs, health expenditure and education expenditure had significant impact on unemployment in Nigeria. Therefore, the null hypotheses were rejected.

5) Conclusion

This study examined the relationship between entrepreneurship and unemployment rates. The long-run and short-run significance of government expenditure for both education and health on unemployment rates was established. This suggests that investing in education and health sectors can effectively reduce unemployment over the long term and in the immediate future. The study highlights the importance of government spending on these sectors as a means to foster economic development and create employment opportunities. It underscores the need for policymakers to prioritise investments in these areas to address the issue of unemployment. However, future research should explore additional factors and that may contribute to better understanding of entrepreneurship-unemployment nexus.

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SURVIVING THE STORM: SMES FINANCIAL PERFORMANCE, COVID-19, AND THE ROLE OF OWNER-RELATED FINANCING IN NIGERIA

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ABSTRACT
The objective of the study is to determine the influence of owner-related financing as a bootstrapping strategy on SMEs' financial performance during the COVID-19 pandemic. In achieving the said objective, primary data was employed using a structured questionnaire on four Likert's rating scales, distributed to 362 respondents from the registered SMEs in the study area. The study used multiple regression analysis to test the study hypotheses, and the findings of the study indicated that Personal Savings, loans from Friends and Relatives, and Donations and Contributions are positively significant factors that influence SMEs' performance during the COVID-19 pandemic. The study also indicated that Owner Personal Credit, Employing Self, and relatives do not influence SMEs' performance. The study recommends that SMEs should use Personal Saving, loans from friends, and Donation and Contributions as bootstrapping techniques to enhance their financial performance.

Keywords: Personal Savings, Donations and contributions, loan from friends

1.1 Introduction

Small and medium-scale enterprises (SMEs) like other sectors of the global economy suffered a horrific business misfortune in the last quarter of 2019 to the third quarter of 2020. Studies across the globe argue that the strategies used (WHO, 2020) to contain the spread of the COVID-19 pandemic are the causative agents that send SMEs into precarious economic conditions (Abdulrahaman, 2022). However, before the pandemic, IMF (2020) reported that SMEs represent 90 percent of global businesses, provide more than 50 percent of global employment, and contribute 40 percent of national incomes in emerging economies. With the measures employed to limit the spread of Coronavirus such as restriction of movement, self-distancing, and closure of factories and working environments the result according to Susanty, et al, (2022) indicated that the global economy suffered a drop in GDP, production, employment, and revenues from the business within the period of a pandemic.

The negative consequence of Covid 19 pandemic according to some studies (Susanty, et al., 2022; Abdulrahaman, 2023a) manifested in every segment of the global economy including transportation, communication, insurance, banking, and manufacturing as well as business operations in small and large enterprises. Based on this Abdulrahaman, (2024) opines that SMEs are more vulnerable to succumb when compared to other economic sectors during the pandemic.

To survive under the tumultuous pandemic conditions, SMEs around the globe devise various strategies using bootstrapping finances to augment their cash flows and preserve the liquidity that they suffered during the pandemic (Abdulrahaman, 2024). Bootstrapping financing according to Abdulrahaman (2023b), and Mabonga (2020) is a technique taken by business entities to source funding internally without resorting to external financing methods. These techniques include; Owner financing, minimizing accounting receivables, and delaying payment to suppliers to mention but just a few as opined by Muo, et al., (2020).

Owner financing is widely used by SMEs at different stages of economic conditions, and this could be associated with its simplicity, timely, and cost-free in providing funds as reported by many empirical studies (Mabonga, 2020; Ubiomah, 2017). Despite the role played by owner financing in influencing SMEs' performance, a plethora of studies neglected to investigate the influence of owner financing on SMEs' performance during the period of Covid 19 pandemic in Nigeria. Therefore, the current study intends to investigate the influence of owner-related financing on SMEs' financial performance during the COVID-19 pandemic.

2.0 Literature Review and Hypothesis Development

2.1 SMEs Financial Performance

Small and Medium Scale Enterprises here referred to as SMEs have no distinctive acceptable unique definition (Anoke, et al., 2022). However, in the Nigeria context, the Small and Medium Enterprise Development Agency of Nigeria (NBS/SMEDAN, 2017); and Anoke, et al., (2022) defined Small and Medium Enterprises (SMEs) as entities with an asset base of not more than N500 million and not less than N300 million excluding land and buildings with employees, not more than 300 and turnover not less than N100 million per annum. Despite the limitations of SMEs, researchers (Abdulrahaman, 2022) believe that it plays a crucial role in economic development specifically its contribution to Gross Domestic Product (GDP).

SMEs' performance is defined as the thriving ways that management manages the firm resources to provide value to its stakeholders (Abdulrahaman 2022). Similarly, Zeidy (2020); and Abdulrahaman (2023b) argue that SMEs drive growth, create employment, and provide goods and services. Financial performance refers to how well a firm maximizes shareholders wealth and this could be measured using Gross Profit Margin, Net profit Margin, Net Interest Margin, Return on Equity, and Return on Assets (Muo et al., 2020; Nurudden, 2022; Yusuf et al., 2020). Despite there are different measures, however, owing to the lack of keeping proper business records by SMEs the study used gross sales, gross profit margin, and net profit margin to measure the financial performance of SMEs in the study area during the period of Covid 19 pandemic.

2.2 Owner-Related Financing

Abdulrahaman (2023b) defines owner-related financing as direct and indirect ways of raising funds for the business from the part of the owner/manager, friends, and relatives, especially for start-up businesses or businesses that cannot secure external credit.

Abdulrahaman, (2023); Owusu, et al., (2021), and Mabonga (2020) opine that owner-financing methods include; Personal savings, loans from friends and relatives, donations and contributions from philanthropies and well-wishers, owner personal credit, and employing spouses, daughters, and sons.

2.2.1 Personal Savings and SMEs' Financial Performance

Savings are that portion of income that was not spent on expenditure at the moment and set aside for precautionary purposes (Sawsdpeera & Pandey, 2012). Abdulrahaman (2024) looks at personal savings as the way that individual rather than business entities set aside excess income over their expenditures for attending plans. It is a well-known source of funding among SME owners, using compulsory contribution (*ADASHI Scheme*) or voluntary saving (*ASUSU scheme*) that could be used in the future period. Abdulrahaman, (2023b) argues that the strategy is widely used for personal growth and business funding, and this is supported by Mabonga, (2020) that owner financing through personal savings positively influences SMEs’ sustainability.
Similarly, Owusu et al., (2021) in their study using structural equation modeling found that personal savings have a positive impact on financial resources-building efforts among the sample SMEs in Ghana. Similarly, Ubiomah (2017) found that personal savings though positive but not a significant factor in influencing SME performance in Delta State, Nigeria. Based on the above empirical findings the study postulated the following preposition.

Ha1: Personal saving influences SMEs' financial performance during the COVID-19 pandemic in Nigeria

2.2.2 Loan from Friends and Relatives and SMEs Financial Performance

A credit loan according to Abdulrahaman (2022) is a contractual agreement between the debtor and the creditor, where the creditor agrees to provide funds to his clients for a defined period under specific conditions. Similarly, an informal loan such as that from friends and relatives, local money lenders, and other non-formal lending institutions as opined by Nguyen and Canh (2021) is that which does not satisfy the bureaucratic requirements of institutional loans, and the amount is small, unsecured with short time maturity. However, personal credit as argued by Lake (2023) is the amount of money that an individual borrows personally from formal or informal sources to meet his personal or business needs. In this regard, a lot of empirical studies were conducted to examine the influence of loan/credit on SMEs' performance.

For instance, Nguyen and Canh (2021) asserted that owners of SMEs find it difficult to provide funds for their businesses at initial take up from banks necessitating SMEs to look for credit from friends and relatives. However, some studies (Owusu, 2021; Akande, et al., 2022) argue that personal relations, ethnicity, and religious attachment play a positive role in providing such funds to SMEs with non-significant negative results in some areas.

Furthermore, Owusu et al., (2021) found that loans from friends and relatives were a positive and significant factor in influencing financial resource-building efforts among the sampled SMEs in the study area. In addition, Akande, et al., (2022), using regression results found that Loans from friends and relatives are statistically positive and significant to SMEs' performance. However, Ubiomah (2017) found that loans from friends and relatives are not a significant factor that can influence SME performance in Delta State. Based on the above empirical findings the study postulated the following preposition

Ha2: Loans from Friends and Relatives positively influence SMEs' financial performance during the COVID-19 pandemic in Nigeria

2.2.3 Donation / Contribution and SMEs' Financial Performance

Donations and contributions provide alternative funding to SMEs (Akande et al., 2022) and are considered the easiest way of informal funding available to entrepreneurs (Ubiomah, 2017). In this regard, Olaiya (2024) highlighted an instance where a sum of $ 220 million was raised to boost SMEs with a substantial part of the funds going to women entrepreneurs. Despite donations and contributions form part of informal sources that are considered to be risk-free, Ubiomah (2017) in his study argued that contributions from friends and relatives do not influence SME performance. Based on the above empirical findings the study postulated the following preposition

Ha3: Donations and Contributions positively influence SMEs' financial performance during the COVID-19 pandemic

2.2.4 Owner Personal Credit and SMEs Financial Performance

Owner personal loan according to Abdulrahaman (2022) is a credit loan purposely meant for bank customers' personal uses. However, these loans used to be diverted from personal to business uses especially among SME owners especially where corporate credit is not easy to access. Empirical results from previous studies indicated the influence of credit loans on SME performance. For instance, Ifeakachukwu and Olasunkami (2013) from their study findings found that bank loans to SMEs had an insignificant impact on manufacturing output. Furthermore, Ibrahim and Ndid (2020) from their finding of the study indicated that bank lending positively influences SME growth.

Similarly, Abdulrahaman (2022) in his study found that Short Term Loan, Medium Term Loan, and Long Term Loan were significant factors that influence SME’s financial performance. Likewise, Adeyemo and Olateju (2022) reported a positive relationship between credit loans and SME growth. Based on the above empirical findings the study postulated the following preposition

Ha4: Owner Personal Credit influences SMEs' Financial performance during the COVID-19 pandemic

2.2.5 Employing Self, and Relatives and SMEs Financial Performance

To reduce the cost of operation SME owners employ (temporarily) their relatives on reasonable wage payment and, at the same time provide the business with tax relief on total taxable income. The method is a cost-saving that can ensure liquidity through all economic conditions (Cruz, et al., 2012). It is a common practice among SME owners to employ and appoint their sons, daughters, and spouses to a strategic position irrespective of the demand for the seat. The reason, however, behind temporary or relative employment is the family business empire as noted by Ongera and Juma (2015).

Similarly, Cruz, et al., (2012) examine whether Family Employment Enhances MSMEs' Performance in the Dominican Republic. Using Descriptive and Bivariate Correlation the study result indicated that employing family members increases sales but decreases profitability. Using the above empirical findings the study hypothesized the following statement.

Ha5: Employing self, and Relatives positively influence SMEs' Financial performance during the COVID-19 pandemic

2.3 Theoretical Framework

The underpinning theory of this study is the Pecking Order Theory developed by Myers and Maljuf (1984). The theory postulates that managers/owners have the liberty to decide and choose from alternative sources relevant to the hierarchy use of internal financing at their disposal (Abdulrahaman, 2021). The theory is relevant to SMEs' sustainability and performance (Aabi, 2014) in providing sources other than financial institutions at no cost. The theory postulates the relevance of prioritizing internal sources of funding available to SMEs that could meet their demand most especially in distressed economies. It should be noted that owner-related financing provides different sources that can be prioritized depending on the situation and personal conviction of the owners. The theory plays a pivotal role during the pandemic in paving the way for SMEs to address the shortfall of cash flow during the economic downturn.

3.0 Methodology

3.1 Design

The study design is descriptive, (looking for the causal relationship between Owner Related Financing and SME performance) using empirical evidence

3.2 Population, Samples, and Sample Design

The population of the study includes all the registered 2441 Small and Medium Enterprises (SMEs) in Kano State according to the National Bureau of Statistics (NBS, 2017). Using the Slovenes' formula calculator the study selected 362 respondents as the sample size with an acceptable margin of 0.05. Similarly, the study used a simple random probability sampling technique to give each unit an equal chance of representation from the population this is in line with the study conducted by Abdulrahaman (2022).

3.3 Research Instrument

Structured questionnaires are used as a research instrument using four Likert's rating scales and distributed to the owners/managers of SMEs as the study respondents. The responses from the survey were used to validate the research hypotheses.

3.4 Measurement of the Study Variables

To measure Owner related financing as the independent variable, the study employs personal savings, loans from friends, donations, and contributions, owner-related personal credit, and employing self, and relatives with five items each using four Likert's rating scale as found in the studies conducted by Abdulrahaman (2023b); Mabonga, (2020); Abdulrahaman (2024). Similarly, the dependent variable SMEs' financial performance was measured by Gross sales; Gross profit margin, and Net Profit margin based on the studies conducted by Yusuf, et al., (2020); Nuraddeen (2022), and Abdulrahaman (2023a)

3.5 Validity and Reliability

3.5.1 Validity Test

In conducting the validity test, construct validity was used using confirmatory factor analysis, and the result of the test using the Kaiser-Meiyer-Olkin (KMO) validity test coefficient, indicated that both the independent (Owner-related financing), and the dependent variable (SMEs' Financial performance) were found to be within the accepted region with a coefficient of 0.73, and 0.70 respectively according to the classification of George and Mallery (2003).

3.5.2 Reliability Test

To measure the consistency of the study's instrument a reliability test was conducted using Cronbach's Alpha. The Cronbach's Alpha for both the independent and the dependent variables were found to be good and fall within the accepted regions according to the classification of George and Mallery (2003) which, state that values within the range of 0.8 and 0.9 are acceptable according to the classification of George and Mallery (2003).

3.6 Diagnostic Test

To check if data is normally distributed, the result from the preliminary analysis indicated that the data were normally distributed with Skewness and Kurtosis having values within the acceptable region of -1 and +1, and with the value of Skewness falling between -.901 and -.516 the distribution is symmetrical as argued by Singh (2021). Similarly, the normal distribution as depicted in Figure 1 indicated that the data is normally distributed.

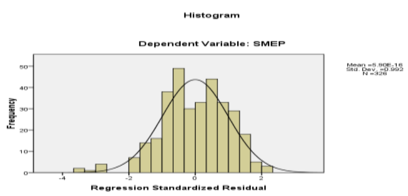

Figure 1

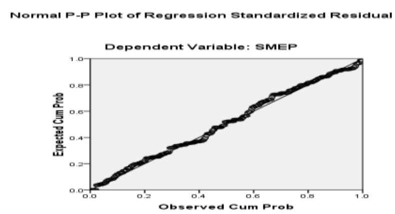

Figure 2

3.7 Statistical Model

To achieve the study objective, and test the study's hypothesis the study employs the following statistical model to establish the causal relationship between the dependent (SMEs' Financial performance) and independent variables (Owner-related financing). The model is formulated in the form of a multiple linear regression equation as given below.

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X3 + \beta_4 X_4 + \beta_5 X_5 + \acute{\varepsilon}$$

Where;

β	=	*the slope of the regression line*		
X1	=	*PS*	=	*Personal Saving*
X2	=	*LF*	=	*Loan from Friends*
X3	=	*DC*	=	*Donations AND Contributions*
X4	=	*ORC*	=	*Owner-Related Personal Credit*
X5	=	*ESDS*	=	*Employing Spouse, Daughters and Sons*
$\acute{\varepsilon}$	=	*Error term*		
Y	=	*SMEs' Performance*		

4.0 Data Presentation, Analysis, and Results

4.1 Questionnaire Response Rate

Table 4.1 provides the questionnaire response rate, which determines the adequacy to which the study has sufficient data to make an inference conclusion.

Table 4.1 Response Rate

Response	Frequency	Percentage
Responded	350	96.5
Not Responded	12	3.5
Total	**362**	**100**

Source: Field Survey, 2023

From the 362 questionnaires distributed to the respondents, 96.5% returned their questionnaire well-filled, and only 12 respondents (3.5%) respondents did not return their questionnaire at all. Mugenda and Mugenda (1999) opine that a response rate of 96.5% is considered excellent for providing representation for analysis and reporting.

4.2 Descriptive Statistics of the Study Variables

Using SPSS (21) software the descriptive statistics of the study variables as depicted in Using descriptive statistics (mean and standard deviation) Table 4.3 indicate how the study respondents understand the concepts used in the research instrument. The mean average ranges from the highest 4.0552 (OPC) to a minimum of 3.8037 (ESDC) with the highest standard deviation of 1.0890 (ESDC) and a minimum of .88920 (DC) showing the variability of the data as it moves closer to the mean going by the classification of Field (2015).

Similarly, Table 4.2 also indicated the normality distribution of the study instrument, using Skewness and Kurtosis all the values are within the acceptable region of -1 and +1, and with the value of Skewness falling between -.901 and -.516 the distribution is symmetrical as argued by Singh (2021).

TABLE 4.2 Descriptive Statistics of the Study Variables

	PS	LF	DC	OPC	ESDC	SMEP
Mean	3.9816	3.8190	4.0092	4.0552	3.8037	3.8742
Std Dev	.89767	.90524	.88920	.92654	.1.0890	.94437
Skewness	-.613	-.586	-.626	-1.044	-.883	-.761
Kurtosis	-.196	.009	-.210	.843	.143	.075
Minimum	1.000	1.000	1.000	1.000	1.000	1.000
Maximum	5.000	5.000	5.000	5.000	5.000	5.000

Source: SPSS Output 2023

4.2 Respondents Profiles

The respondents' profiles indicated that the majority of the respondents are male (320, 91.4%) and married (250, 71.4 %). Similarly, the majority of the respondents have business experience between 11 and 15 years (51.4%). Concerning the educational level of the respondents, 120 (34.3%) constituting the majority have a secondary certificate with very few attending postgraduate courses (5.7%). Furthermore, the majority of the respondents have a capital base between 50 million and 100 million (140, 61%), while only 7 percent have a capital of N 151 million and above as a capital base. Similarly, on the total number of workforce, those that employed between 40 – 59 constitute the majority with 51.4%. The descriptive statistics further indicated that the majority of the respondents (200: 55%) are in the production business, with 15% in merchandising.

4.4 Correlation Analysis

To look at the association between the variables of the study using the Pearson Correlation Coefficient, Table 4.3 shows a positive correlation between SMEP and Personal Saving (PS) with a coefficient of .492. Similarly, the relationship between Loan from Friends (LF) and Personal Savings (PS) (.401); Donation and Contribution (DC) and Personal Saving (PS) (.490), Owner Personal Credit (OPC) and Donation and Contribution (DC) (.645). Similarly, SME financial performance (SMEFP) has positively correlated relationships with Personal savings, Loan from friends, Donations and contributions, Owner personal credit, and Employing self, daughters, and sons with coefficients of .451, .326, .492, .412, and .293 respectively. It should be noted that these coefficients indicated the absence of multicollinearity since there was no indication of high correlations as suggested by Field (2015).

Table 4.3 Pearson Linear Correlation

	SMEFP	PS	LF	DC	OPC	ESDC
SMEFP	1					
PS	.451**	1				
LF	.326	.401	1			
DC	.492	.490	.273	1		
OPC	.412	.519	.309	.645	1	
ESDS	.293	.402	.235	.412	.432*	1

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*
Source: SPSS Output, 2023

4.4 Regression Analysis

To test the research model if it fits the study results from Table 4. The **T stat.** (3.256) and **Sig.** (0.001) indicated the model is good enough to measure the influence of owner financing on SME performance. Looking at the summary of the statistics the **r value** of .565 showed a simple relationship between the dependent and independent variables. The **r^2** (.319) measured the proportion which, which the dependent variable (SME financial performance) was captured and explained by the independent variable. The coefficient of **r^2** indicated that 31.9% of SMEs' financial performance was captured and explained by owner financing methods, and 58.1 % were not captured by the independent variable. Similarly, the adjusted R^2 **value** .309 indicated the predictive power that 31.9% of the dependent variable can be predicted if the additional variable is introduced. Similarly, to check if multicollinearity and linearity problems exist the study used Tolerance and Variance Inflator Factors, and all the values are within the accepted region as indicated in Table 4.4, going by the suggestion of Field (2015).

Table: 4.4 Regression Table

	Unstandardized Coefficients		Standardized Coefficients				
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
Constant	.844	.259		3.256	.0.001		
PS	.218	.062	.207	3.524	.000	.616	1.624
LF	.142	.053	.136	2.673	.008	.822	1.216
DC	.328	.067	.309	4.918	.000	.538	1.857
OPC	.052	.056	.051	.789	.431	.509	1.963
ESDC	.025	.046	.028	.534	. 594	.752	1.330

Model	**1**
R	**.565[a]**
R^2	**.319**
Adj R^2	**.309**
Std. Error of the Estimate	**.785**
R^2 Change	**.319**
F Change	**30.021**
df1	**5**
df2	**320**
Sig. F Change	**0.000**

a. Predictors (Constant) PS, LF, DC, OPC, ESDC
b. Dependent Variable: SMEP
SMEs Performance = $.844 + .218X_1 + .142X_2 + .328X_3 + .052X_4 + .025X_5 + {}^{\wedge}\varepsilon$

Source: SPSS Output 2023

4.4 Test of Hypotheses

In achieving the study objective, five hypotheses were formulated, and using multiple regression analysis the result of the findings as depicted in Table 4.4 were analyzed and discussed.

Hypothesis One

Ha1: Personal saving positively influences SMEs' financial performance during the COVID-19 pandemic

In testing **Ha1**, results from Table 4.4 **(β = .218, Sig. = 0.000, and α = 0.05)** indicated that personal savings positively and significantly influenced SMEs' performance during the Covid-19 pandemic. Looking at α = 0.05, which is statistically greater than Sig. = 0.000 at 95% confidence level. The study therefore supported the **Ha1**, that personal saving positively and significantly influences SMEs performance in the study area. The study result concurred with the earlier study finding (Mabonga, 2020), which found that owner financing through personal savings positively influences SMEs' sustainability in the study area. Similarly, Owusu et al., (2021) found that personal savings have a positive impact on financial resources-building efforts among the sample SMEs in Ghana. However, Ubiomah (2017) argues that personal savings though positive but not a significant factor in influencing SME performance in Delta State, Nigeria.

Hypothèses Two

Ha2: Loans from Friends and Relatives positively influence SMEs' performance during the COVID-19 pandemic

To test **Ha2** results from Table 4.4 **(β = .142, Sig. = 0.008, and α = 0.05)** indicated that loans from friends and relatives are positively and statistically significant factors that influenced SMEs' performance during the Covid-19 pandemic. The beta value indicated that a 1 unit increase in loans from friends and relatives will lead to an increase of 14.2% in SMEs' financial performance. This finding supported the earlier study result conducted by Owusu et al (2021), and Akande, et al., (2022) that loans from friends and relatives have a positive impact on SME performance.

Hypothesis Three

Ha3: Donations and Contributions positively influence SMEs' performance during the COVID-19 pandemic

In testing hypothesis three, results from Table 4.4 indicated that **(β = .328, Sig. = 0.000, and α = 0.05)** donations and contributions positively and significantly influence SMEs performance the alpha value **(α = 0.05)** is statistically greater than sig. Value **(0.000).** With this result, the study supported **Ha3** that donations and contributions significantly influence SMEs' performance during the COVID-19 pandemic. This result is supported by the recent donation of N200 million to boost SME performance in Africa with a substantial part of the fund going to women entrepreneurs (Olaiya, 2017). However, the finding of the study does not concur with what Obiomah (2019) found in his study arguing that donations and contributions do not influence SMEs' performance.

Hypothesis Four

Ha4: Owner Personal Credit positively influences SMEs performance during the Covid-19 Pandemic

Hypothesis four states that Owner personal Credit positively influences SMEs' performance during the COVID-19 pandemic. In testing this hypothesis, the result from Table 4.4 show that **(β = .052, Sig. = 0. 431, and α = 0.05)** owner personal credit is not a significant factor that influences SMEs performance during Covid-19 pandemic among the sampled SMEs in the study area. The sig. Value **(Sig. = 0. 431)** is statistically large enough to reject the hypothesis when compared to the alpha **value (α = 0.05)** at a 95% confidence level. This result, however, does not concur with the earlier findings of the study conducted by Abdulrahaman (2023b) and Adeyemo and Olateju (2022) indicating that credit loan influences SMEs' Financial performance.

Hypothesis Five

Ha5: Employing Self, and Relatives positively influences SMEs' performance during the COVID-19 pandemic.

In testing the Ha5, Table 4.4 indicated that β = .025, Sig. = 0.594, and α = 0.05 the result from the regression table did not support **Ha5** because α = 0.05 is not statistically greater than the Sig. = 0.594, and for this reason, the hypothesis was rejected. However, the result further signifies that employing self, spouses, daughters, and sons did not positively influence SME performance during the COVID-19 pandemic in the study area. Based on the result, the study, therefore, concludes and rejects **Ha**5 that employing self, spouses, daughters, and sons does not influence SMEs' financial performance among the samples of the study. However, this result is contrary to earlier findings of Cruz et al., (2012) and Ongera and Juma (2015) arguing that employing relatives influences SMEs performance.

4.5 Discussions

The study's findings revealed that small and medium-sized enterprise (SME) owners who cultivate a culture of saving possess a competitive advantage over those who do not prioritize precautionary savings. During the pandemic, these saved funds were instrumental in enhancing cash inflows and ensuring business continuity despite the numerous challenges posed by the crisis. Conversely, SMEs that failed to engage in precautionary saving faced significant difficulties. Lacking available funds for borrowing, they experienced setbacks that hindered their operational continuity.

The COVID-19 pandemic has severely impacted the global financial system, creating significant challenges for banks and financial institutions in fulfilling their traditional roles (Abdulrahaman, 2023b). This crisis compels small and medium-sized enterprises (SMEs) to explore alternative funding sources, particularly in the informal sector. Many SMEs turn to friends and family for financial support, often receiving loans motivated by empathy, camaraderie, and a sense of community. In some cases, individuals seek these informal loans as a safer option, especially when bank branches are closed or operational difficulties arise.

Furthermore, donations and contributions are effective ways to raise significant funds without incurring costs, especially during times of tragedy. Both individuals and organizations are often willing to extend their support to address precarious situations. Small and Medium Enterprises (SMEs) that maintain strong relationships with individuals and communities, as well as those with connections to the government, experienced improved performance compared to those without such ties. During the pandemic, many SMEs faced dire circumstances, and without the influx of donations and contributions, their survival would have been at risk. A noteworthy example is the role played by international donors and the government in providing palliatives during this challenging time, which helped save numerous SMEs from collapse.

However, the irresponsible credit behavior exhibited by some loan applicants, coupled with the closure of bank branches, may explain why personal credit is not statistically significant. The fear of loan defaults, particularly during challenging economic times, leads banks to prioritize corporate loans over personal loans. Similarly, personal loans are often diverted from their original intended purposes. This shift in focus raises important questions about the accessibility of personal credit. The increasing number of bank branch closures limits individuals' access to financial services, making it more difficult for them to obtain loans. This trend disproportionately affects those who rely on in-person interactions for financial guidance and support.

During the pandemic, restrictions on movement had a detrimental impact on people's ability to run errands, particularly in the workplace. The inability of family members to leave home for work, as mandated by these orders, adversely affected the performance of small and medium-sized enterprises (SMEs).In normal circumstances, employing relatives can positively influence the financial performance of SMEs. However, the pandemic created an environment where this arrangement became challenging. The inability to rely on family members for assistance not only hindered daily operations but also strained the workforce of these businesses.

5.1 CONCLUSION

The objective of the study is to examine the influence of owner-related financing as one of the bootstrapping techniques on SMEs' financial performance during the period of the COVID-19 pandemic. Based on the results and findings of the study the following conclusions are made. Personal savings, loans from friends and relatives, donations, and contributions all influence SMEs' financial performance during the COVID–19 pandemic. However, owner's credit, and employing relatives are not significant factors that influenced SMEs' financial performance during the Covid-19 pandemic.

5.2 Recommendations

Based on the study findings the study recommends that:

1. SMEs should consider the use of personal savings, loans from friends and relatives as well as donations and contributions as strategies to boost their financial performance under distressed economic conditions.
2. SMEs should avoid using owner’s credit and employing relatives as strategies to raise funds during the economic recession.
3. SMEs should prioritize their internal sources of funding and access the one with a competitive advantage over the others.

5.3 Limitations of the Study

As a limitation, the study suggested future researchers explore how owner-related financing impacts the financial performance of small and medium-sized enterprises (SMEs) in the post-COVID-19 periods.

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DETERMINANTS OF WORK INCIVILITY ON ALIENATION SENSITIVITY IN ORGANIZATION IN SOUTH-SOUTH NIGERIA MANUFACTURING COMPANIES

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Abstract
A growing body of literature suggests that over the past decades, policies aimed at tackling work incivility on alienation sensitivity in manufacturing firms have had little effect. Moreover, researchers have shown great interest in establishing a relationship among physical intimidation, persons related incivility, work-related incivility, and alienation sensitivity in manufacturing firms, hence the purpose of this study is to examine the determinants of work incivility on Alienation Sensitivity in manufacturing firms in south-south, Nigeria. In addition, this study also examined the relationship between work-related incivility, persons-related incivility, and physical intimidation on work alienation. In total, 246 employees from various firms in south-south, Nigeria completed a quantitative survey relating to their perception of workplace-related incivility, persons-related incivility, and physical intimidation on Alienation sensitivity. Data were analyzed using a statistical software known as STATA VERSION 13.0. The result shows that work-related incivility, person-related incivility, and physical intimidation have a positive impact on work Alienation sensitivity. Recommendations are presented to human resource managers and practitioners to prevent unethical practices in organizations and encourage interaction that promotes civil behavior in the workplace. The study recommends the adoption of an inclusive policy that portrays best practices in a healthy work environment.

Keywords: Alienation, Managerial role, Persons-Related Incivility, Physical Intimidation, Turnover Intention, Workplace Incivility.

Introduction

In recent years, the issue of work incivility has gained increasing attention due to the focus on organization attaining excellence in best practices (Omofowa et al, 2021). extant studies has shown that incivility is detrimental to the survival of organizations (Odiri 2024; Arubayi, 2023; Aruoren & Ugbeghene, 2023). Moreover, the concept have been linked to several negative work outcomes since the COVID-19 pandemic (Omofowa & Omofowa 2022). The concept of workplace incivility pertains to an unpleasant behavior that is intentional in causing harm against the mutual respect norm in the workplace. Its impact on absenteeism (Porath & Pearson, 2012). sabotage (Bibi, Karim & Din, 2013, Lim, Cortina & Magley, 2008). Fatigue (Lin, et al, 2008, Welbourne, Gangadharan & Esparza, 2015), and decrease in creativity (Porath & Enez, 2009; Rahim & Cosby, 2016) have been studied.

Several studies in advanced nations have emphasized a hostile atmosphere which has caught the interest of researchers and practitioners prompting further debate (Birks et al., 2017; Loh & Loi, 2018; Warrner et al., 2016; Chen et al., 2018). Moreover, proof of these outcomes in developing nations like Nigeria shows incompatibility (e.g., Tamunomiebi & Ukwuije, 2021, Bamidele, 2010; Chinawa et al., 2020; Achara, Onyemaechi & Eberechi, 2020; Adewale 2020). Despite this research, there is much more to learn about its implications in developing nations, as studies linking the concepts are either narrow or inconsistent in findings (Odiri 2024, Magley et al, 2024).

This study aims to explore the neglected aspect of physical intimidation, person-related incivility, and work-related incivility (Irsan et al, 2020). This study advances the literature in three ways. Firstly, by leveraging the qualities of Einarsen et al. (2001), it is possible to comprehend the impact of earlier research on negative work behavior outcomes of employees within an organization. Second, thoroughly examining workplace incivility to identify its predictors against expectations (Gill & Sypher, 2009). Third, uncivil behavior has been reviewed and aligned with alienation in past studies (Igou, Bless & Schwartz, 2002). It is noteworthy that there is gap in the context of the findings on significant aspects of toxic outcomes... This paper's primary section covered the theoretical model and hypotheses, detailed the methodology, presented the data analysis and findings, and enlarged the implications both theoretically and practically. The shortcomings and the suggestions for additional research. (Anderson & Pearson 2019, Berger 2020).

Statement of Problem

A perfect system is a system made up of human interaction where incivility or uncivil behavior is never found. Although workplace incivility is generally not well understood and acknowledged as an issue that needs attention, it does exist. With workplace incivility incidents rising it has become imperative for scholars to focus on its antecedents, consequences, outcomes, and descriptors. The detrimental cost on human capital and financial resources has become a re-occurring decimal in organizational activities. Unresolved workplace activities represent the largest cost to an organization that is reducible (Arubayi 2023; Achana, Onyemaechi & Eherechi, 2020; Adewale, 2020).Workplace incivility is described as a low-intensity deviant behavior with an intent to harm an employee. It is an uncivil behavior that originated from rude and discourteous acts, bullying, ostracism, physical intimidation, and work-related and person-related acts. Empirical evidence in developing countries is relatively scanty. Moreover, management has failed in recognizing this concept and curtailing the impact on organizations. It is against this backdrop that this study is set to evaluate the determinant of workplace incivility on Alienation Sensitivity in manufacturing companies in south-south, Nigeria.

Objectives of the Study

The broad objective of this study is to examine the determinant of workplace incivility on Alienation sensitivity in manufacturing companies. The specific objectives are;

1. To investigate the effect of workplace-related incivility impact on work alienation.
2. To determine the effect of a person's related incivility on work alienation.
3. To examine the effect of physical intimidation on work alienation.

Theoretical Background: A Spiral Theory

Despite the contributions of employees to the organization, a hierarchical organizational structure can foster incivility and alienation in the workplace if standards of reciprocity are not implemented (Halbesieben & Clark, 2010; Woo & Kim, 2020, Gallus et al, 2014, Anderson & Pearson, 1999). To explain how workplace incivility behavior by individuals is undesirable, Anderson and Pearson (1999) developed the spiral theory. According to spiral theory, incivility begins when an uncivil act is perceived, and instead of intervening or reporting the issue it is left unabated to prevail due to job insecurity. Such practices lead to isolation, thereby encouraging alienation sensitivity in the workplace (Jex, Bliese, Buzzell & Primeau, 2001, Blau & Anderson, 2005). This spiral theory of incivility on workplace counterproductive behavior can be minimized by proactively addressing workplace culture and other counterproductive forms of aggression. Pearson & Parath (2005) suggest that the first step in putting an end to this spiral phenomenon is to create a corporate culture that values mutual respect and trust (Pearson & Parath, 2005). Scholars have used the spirals theory to explain such phenomena as organizational decline (Hambricks & D'Aveni, 1988; Masuch, 1985), efficacy and performance (Lindsley, Brass & Thomas, 1995), and tyrannical leadership (Ashforth, 1994). Relson (1982) found that a violent incident usually begins when someone believes that a norm has been violated. Incivility as a breach of norms for mutual respect can engender a perception of interactional injustice (Bies & Moag, 1986). Spirals in organizations are created by human actors because they lack adequateunderstanding of the situation or are unwilling or unable to alter their behavior (Masuch, 1985). In examining the escalation of incivility and alienation sensitivity into coercive action in organizations, this begins when norms concerning demeanor, unfairness, and interpersonal treatment are not adequately addressed,employees would term the potential spiral deviation amplifying: as the negative actions of one party lead to the negative action of the second party, which results in increasingly counterproductive behaviors (Masuch, 1985).

Conceptualizing Incivility

The body of research has shown that the traits of offenders—such as their higher level of power (Cortina et al., 2001), anger trait (Meier & Semmer, 2013), and their dominating or non-integrative conflict management styles (Trudel & Rein, 2011)—are positively correlated with instigated incivility. Nonetheless, workplace incivility refers to estrange intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil are characteristically ruled and discourteous display of lack of regard for others. Therefore, workplace incivility affects participation which might stifle the innovation processes (Pearson, Anderson & Wagner, 2001. According to Zauderer (2002), there is a possibility that workplace incivility results in disrespectful behavior that ultimately undermines employees' dignity and self-esteem and causes needless suffering. Academics have discussed ideas such as workplace aggression, deviance, bullying, and abusive supervision and their negative impact on work attitudes and the general well-being of employees leading to a higher turnover intention (Chiaburn & Harrison, 2008, Saka et al, 2023 Olaleye, Srivastava & Agurwal, 2020). Workplace incivility can be distinguished from other bad social behavior conceptions by its intensity, which is characterized by hostility, violence, and bullying, and to ascertain whether they are deliberate. Determining whether incivility is intentional is more challenging. This distinction is helpful mainly when compared to recipients of other bad workplace conduct, and attributes that are the target of incivility. We contend that understanding workplace incivility, its causes, antecedents, and effects is essential for management, organizations, and employees.

Conceptualizing Workplace Alienation

Alienation is the process when employees feel powerless and meaningless at work, that is their contributions are insignificant to the purpose, and objective of the organization. Work alienation entails a sense of incomprehensibility among employees and their contribution to purpose. According to Diperto and Pizam (2008), the body of research has demonstrated that interactive organizational elements are superior alienation predictors. Others have shown that the causes of job alienation are spirituality and leadership style (Ali et al., 2022; Usman and Associates, 2020). According to Nair and Vohra (2009), work alienation is a reflection of perceptions of work, self, and its incomprehensibility. Arguably, employees may have a sense of detachment from their jobs, when alienation condition is noticed (Banai et al., 2004). Work alienation, or estrangement or detachment from work, is any disengaged, negative, and even painful view in one's workplace (Nair & Vohra, 2012, Hirschfield & Field, 2000). It should come as no surprise that this state has been empirically linked to low effort (Tummers & Dendulk, 2013), poor performance (Kartal, 2018), career dissatisfaction (Chiaburu, Diaz & De Vos, 2013, p. 4), abuse (Isralowitz, Reznik & Belhassen, 2012), and intention to quit (Duplooy & Roodt, 2010). High-status employees experience work alienation because of personal traits and their work-life balance, (Omofowa & Omofowa, 2022) while other interactive organizational factors, such as continuous job rotation, serve as predictors of incivility that affect work alienation. The predictive aspect of interacting organizational structure makes this evidence powerful. We reason that a worker becomes alienated when they sense emptiness.

Work-Related Incivility and Work Alienation

Workplace incivility is a normative behavior that deviates from social standards, acting in an impolite and disrespectful manner, and showing a lack of regard for others (Cortina et al, 2001). However status and positions of an employee might predict their level of alienation at work. Consequently, status is assumed to be associated with job autonomy, personal autonomy, independence, and control as a determinant factor (Hackman & Oldham, 1976, Shantz et al, 2015). The satisfaction of an employee's basic needs boosts self-esteem in minimizing direct threats hampered by work-related incivility (Wu et al., 2014). When employees believe they have been treated unfairly in comparison to expectations, they are more likely to feel overwhelmed in social situations and find it difficult to build strong social bonds (Wang et al., 2019). Following a prolonged period of ineffective interaction, the target may lose sight of the purpose of the work. As a result, they may feel alienated (Shantz et al, 2014). Although there is conflicting empirical evidence, studies generally indicate that work-related incivility negatively affects work alienation (Chiaburn, Thundiyil, & Wang, 2014). However, Bingnan et al. (2022, p.1), Holm, Torkelson, & Blackstrom (2015), and Sliter & Boyd (2015), observed that work-related incivility positively affects work alienation. Thus, the following hypothesis is put out in light of the research evidence provided above:

Ho$_1$: Work-related incivility impacts work alienation negatively

Persons-related Incivility and Work Alienation

Workplace incivility is closely related to health issues such as depression, anxiety, insomnia, hypertension, and migraines (Nielsen & Einarsen, 2012). A significant source of stress linked to rudeness may impact workplace alienation. Subtle discrimination rationalizes such actions on justification (Ortina, 2008). Blatant discrimination involves actions such as overt contempt which is illegal in many places (Cortina et al., 2013). Thus, it is likely that incivility—encourages such moral acts that breach standards and may have unclear intentions to cause harm. Therefore, factors other than membership in the target group might be blamed for in civil actions; typically, these factors are related to gender traits. According to Cortina et al. (2013), women typically encounter incivility in the workplace and as part of minority. Behavior directed at them is an indication that they are not welcome in that setting. Different research (Liao, Joshi & Chuang, 2004, Cunningham, Miner & McDonald, 2013; Avery, Mckay & Wilson, 2008) revealed differences. Research on connected personal incivility is scarce, but empirical investigations (e.g. William & Sommers, 1997, Lim & Lee, 2011, Lim, Cortina & Magley, 2008, Sliter, Jex, Wolford & Mcinnerney, 2010) indicate a positive correlation. In light of this review, we put forth the following theory:

Ho$_2$: Persons Related Incivility Impact Work Alienation Negatively

Physical Intimidation and Workplace Alienation

Threats of bodily harm, shouting or screaming, and making fun of or disparaging a victim in front of coworkers or clients are all considered forms of physical intimidation. Putting the victim in charge of tasks outside of their area of competence. An act or pattern of behavior intended to instill fear in a particular person can also be considered intimidation. When someone is forced to do something they do not want to do, they can become intimidated. Bullying is an example of physical intimidation; according to Einarsen, Hoel, and Notelaers (2009), bullying at work is defined as extended, recurrent exposure to unfavorable and unreasonable behavior from other employees. Given that workplace bullying negatively impacts targets' productivity, career achievements, and well-being, as well as those who witness or are accused of bullying, it is a significant human resources issue. According to Kivimaki et al. (2003), victims of workplace bullying, for example, have worse mental and physical health; they also have lower job satisfaction, more career disruption, a decreased sense of job security, and a higher inclination to leave their positions (Nielsen & Einarsen, 2012). Human resource professionals face significant difficulties when it comes to managing workplace bullying, including staff turnover. These professionals must develop strategies for handling complex and challenging cases of workplace bullying. (Fox & Cowan, 2015, p.116). However, there is a dearth of research and many of the relationships are still unclear. Based on the literature reviewed above, we hypothesize that; workplace bullying is linked to absenteeism, which in turn causes positive workplace alienation (Hauge, Skogstad, & Einarsen, 2010, Kivimaki, Elovaino & Vahtera, 2000, Nielsen & Einarsen, 2012).

Ho_3: Physical intimidation impacts work alienation negatively

Methodology

The research adopts a cross-sectional survey. This enables the researcher to gather data on events occurring at a certain moment and conduct quantitative tests and hypotheses. The population of the study consists of 644 staffs of selected 24 rubber tapping companies, and firms also engaging in plastic cup production were engaged. 4 firms were taken from each of the 6 states in the south-south, of Nigeria. For easy administration, the sample size of the study was derived by using Yamani's formula (1967) for a finite population.

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

Where
n = sample size
N = total population
e = error term (5%)

$$n = \frac{644}{1+644(0.05)^2}$$

$$n = \frac{644}{1+644(0.0025)}$$

$$n = \frac{644}{1+1.61}$$

$$n = \frac{644}{2.61}$$

n = 246

For sampling techniques, a convenient sampling technique was used. What informed the choices was that the rubber factories were located in the rural area and the plastic companies were majorly in the cities. Stratified sampling was used because the population comprises different strata. The survey was done from January 2024 to March 2024. However, there are other manufacturing companies in these states but we choose the rubber and plastic industries based on their entrepreneurial development & innovation. Out of 246 questionnaire copies distributed only 230 copies were confined suitable, representing a 93% response rate. To minimize common bias, staff were asked to provide information only on the subject matter. The study ensured the respondent anonymity and discontinuation of any participant without explaining their decision to back out, besides, we minimized evaluation apprehension by assuring respondent confidentiality (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). The participants were informed that the measurement of the independent variable is not associated with the dependent variable, also participants were adults proving that they were not vulnerable and consented to participate in the survey voluntarily without any form of compulsion (Falola et al., 2020). To certify the regression model, data analysis was done using OLS regression and canonical correlation analysis. Before generalization, post-regression diagnostic tests (PRDT) were performed. STATA VERSION 13.0 software was used for the statistical analysis of the data collected.

Reliability

In addition to the Cronbach index test, a pilot test was carried out utilizing 20 copies of the questionnaires that were randomly distributed to staff members with the assistance of senior managers. According to Numaly (1978), an alpha of at least 0.61-0.71 is considered credible. Thus, the instrument's acceptable reliability is validated if the reliable item agrees with a Cronbach alpha index of greater than 0.6. After data were gathered, the outcome reliability of questionnaires was calculated using the STATA VERSION 13.0 program. Table 1 explains the rationale for the validity and reliability tests we performed on the measuring scale.

Table 1: Reliability Assessment

Item	OBS	Sign	Item-test correlation	Item-test correlation	Average Inter Item covariance	Alpha
wpin	246	+	0.7321	0.4271	.2972141	0.7038
wrin	246	+	0.7741	0.5624	.2917678	0.6318
prin	246	+	0.6835	0.4131	.3493788	0.7167
phyint	246	+	0.7425	0.4464	.3743861	0.7267
alen	246	+	0.7873	0.6296	.2849552	0.6104
Test scale					.305833	0.7262

Source: Authors Desk, 2024

Model Specification

This study adapted and modified the model specification of (Aruoren & Ugbeghene, 2023) This study modified their model to ensure that work-related incivility person's incivility and physical intimidation are captured as independent variables and work alienation as the dependent variable. The model is specified in econometric notation in equation (1).

Model Specification

WRKALT = $\alpha_1 - \beta_1 WKRINC + \beta_2 PERINC + \beta_3 PHYINT$ .... (1)

WRKALT = $\alpha o_1 - \beta_1 WKRINC + UO_1 + \beta_1 + + + \cdots \beta_1$ ... . (2)

WAKALT = $\alpha o_2 - \beta_2 PERINC + UO_2 + \beta_2 + + + \cdots \beta_2$ ... . (3)

WAKALT = $\alpha o_3 - \beta_3 PHYINT + UO_3 + \beta_3 + + + \cdots \beta_3$ ... . (4)

Where;

WRKALT = Predictors of work incivility & Alienation
WKRINC = Work-related incivility
PERINC = Persons-related incivility
PHYINT = Physical intimidation
U = error term
αo = constant
$\beta_1 - \beta_n$ = regression coefficient

Table 2: Kaisar-Mayer – Olkin Measure of Sampling Adequacy

Variable	**KMO**	**Interpretation**
wkrinc	0.8937	Marvelous
perinc	0.8841	Meritorious
phyint	0.7276	Meritorious
wrkalt	0.7235	Meritorious
Overall	**0.7822**	Meritorious

Source: Authors Desk, 2024

The Kaiser – Mayer – Olkim (K.M.O) test is a statistical measure to determine how suited data is for factor analysis. The test measures sampling adequacy for each variable in the model. A rule of thumb for interpreting the statistics KMO values between 0.5 and 1.0 indicate the sampling is adequate. According to Table (2), the sample adequacy KMO and Bartlett test results were significant (KMO; 0.7822, $p = 0.0000 < 0.05$), indicating the internal consistency and reliability of the variables.

Table 3: Bartlett's Test
Analysis of Variance

Source	**SS**	**df**	**MS**	**F**	**Prob > F**
Between groups	53.7947403	4	13.4486851	28.63	0.0000
Within groups	113.201195	241	.469714501		
Total	166.995935	245	.681616061		

Bartlett's test for equal variance: chi2(4) = 21.5599, prob>chi2 = 0.000
Source: Authors Desk, 2024

According to the results shown in Table (3), physical intimidation, person-related incivility, and work-related incivility together account for 64.56% of the variation in work alienation of manufacturing companies for variables that are not included in the analysis, explaining 35.44% of the variation in work alienation. The level of physical intimidation, people-related incivility, and work-related incivility were evaluated using the standard coefficient (BETA). Table (4) presents the regression result ($t = 2.74$, = 0.110, $p < 0.0000$) which confirms the existence and strength of the significant link between work-related and work alienation. Teamwork is supported ($t = 12.11$, □ = 0.622, $p < 0.000$) implies that H_3 is supported, confirming that physical intimidation has a significant relationship with workplace alienation. H_2 ($t = 3.89$, □ = 0.179, $p < 0.000$) suggests that person-related incivility has a significant influence on workplace alienation in terms of communication. Variable collinearity indicates how strongly a single variable is correlated with the other variables. It tests whether the correlation coefficients are all (O). The test computes the probability that the correlation matrix has a significant correlation among at least some of the variables in a dataset.

DATA ANALYSIS AND RESULTS

Descriptive Statistics

The mean findings are displayed in Table (4), and the constructs suggest that value (5) is the maximum, explaining the respondents' high agreement with all of the questions at some time. The data indicates that the respondent is unsure about their answers to all of the questions, as indicated by the min—value of (1). Furthermore, descriptive data that follows the mean authors' depiction of participant agreement on job-related incivility (3.825203), person-related incivility (3.882114), physical intimidation (3.95935), and work alienation (4.004065) further indicates the sample size of 246 respondents.

The correlation matrix in Table (5)

Table 4: Descriptive Statistics

Stats	**wkrinc**	**perinc**	**phyint**	**wrkalt**
Mean	3.825203	3.882114	3.95935	4.004065
p50	4	4	4	4
Max	5	5	5	5
Min	1	1	2	2
N	246	246	246	246

Source: Authors Desk, 2024

Table 5: Correlation Matrix

	wkrinc	**perinc**	**phyint**	**wrkalt**
wkrinc	1.0000			
perinc	0.4273	1.0000		
phyint	0.5410	0.5549	1.0000	
wrkalt	0.5337	0.5737	0.7782	1.0000

Source: Authors Desk, 2024

Methods of Data Analysis

Table 6: Multiple Regression

Source	**SS**	**DF**	**MS**		
Model	107.820465	3	35.9401551	Numbers of obs =	246
Residual	60.5981641	246	0.246334	F (3, 242) =	146.98
Total	166.995935	245	.681616061	Prob>F =	0.0000
				R-squared =	0.6456
				Adj R-squared =	0.6413
				Root MSE =	.4945

wrkalt	Coef.	Std. Err.	T	P>/t/	[95% Conf.	Interval]	Decision
wkrinc	.1104667	.0403596	2.74	0.007	.0309658	.1899676	H_0 rejected, H_1 accepted
perinc	.179364	.0461461	3.89	0.000	.0884647	.2702632	H_0 rejected, H_1 accepted
phyint	.6227463	.0514357	12.11	0.000	.5214276	.7240651	H_0 rejected, H_1 accepted
_cons	.4195255	.1785384	2.35	0.020	.067838	.7712131	H_0 rejected, H_1 accepted

Source: Authors Desk, 2024

Post Regression Test

The variance inflation factor test indicates that the mean value is 1.56<10, which means that their reference value is larger. This suggests that there is no multicollinearity and that no variable is omitted from the model. The Ramsey regression equation specification error test yielded a result of 0.0282, which indicates a probability value confirming that no variable is omitted from the model (refer to table).

Heteroskedasticity effect assessment using
Breusch-Pagan/Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: Fitted values of wrkalt
Chi2(1) = 0.00
Prob > chi2 = 0.9788
Ramsey RESET Test
Ramsey RESET test using powers of the fitted values of wrkalt
Ho: Model has no omitted variables
F (3,239) = 3.08
Prob > F = 0.0282

Table 7: VIF

Variable	VIF	1/VIF
Phyint	1.73	0.579139
Perinc	1.49	0.669247
Wkrinc	1.46	0.683960
Mean VIF	1.56	

Source: Authors Desk, 2024

Discussion

This study examines the relationship between work alienation and workplace rudeness in south-south Nigeria empirically. The outcome confirmed that workplace rudeness significantly influences all variables. Previous research found a substantial relationship between workplace incivility and work alienation (Trudel & Rein, 2011), as well as between work-related and person-related incivility (Cortina et al, 2011; Lim & Lee, 2011). Additionally, physical coercion, Hauge (2014). The findings indicated a positive correlation between job-related incivility and work alienation, supporting the hypothesis that incivility at work contributes to work alienation. This implies that absorbed alienation is the cause of incivility at work. According to earlier research (Binghan et al., 2022, Holm et al., 2015, Sliter & Boyd, 2015), this outcome is consistent. The spiral theory is supported by this outcome. There is no connection between an individual's unaccepted work alienation and their related rudeness. The results showed a positive and significant relationship, supporting the theories put forth by William & Sommers (1997), Lim & Lee (2011), Lim et al. (2008), and Sliter et al. (2010) that suggest the primary targets of work alienation are people's related rudeness, differences in beliefs, and psychological and occupational well-being outcomes. The results support the spiral theory, which states that when behavior deviates from expectations or is viewed negatively by victims, it becomes more likely that the victim will seek retribution, which is an indication of rudeness. The claim that there is no correlation between physical intimidation and work alienation was refuted; instead, it was found that there is a positive correlation between workplace alienation and physical intimidation. This implies that bullying and harassing intentions are linked to physical intimidation. This confirms the results of Kivimaki et al. (2000), Nielsen & Einarsen (2012), Hauge et al. (2010). From a practical standpoint, an important reason that employees of disrespectful treatment at work fail to fight for their rights at work is that they develop paired beliefs of being disconnected from work. This makes the role of work alienation more prominent management should strive to find meaning in their work. This could be achieved by setting up frequent formal meetings that will give employees opportunities to socialize and maintain social ties and team spirit. Similarly, frequent, clear, and transparent communication especially on organization plans and priorities, should be constantly explained to employees to alleviate fear. Inviting employees to write down how their work is beneficial to other employees is another efficient way to foster the perception of work meaningfulness.

Conclusion and Recommendation

Work alienation is the foundation for both achieving and comprehending workplace incivility. This study advances our knowledge of work alienation and workplace rudeness. We reasoned that to reduce employee turnover in Nigeria, managers needed to have a basic understanding of the norms, acts, and behaviors that constitute workplace incivility. As a result, this study suggests that management adopt an inclusive policy and educate staff about the organization's intended future course. Not to mention, categorically denouncing any disorderly conduct and putting a halt to intimidation and harassment based on gender or ethnicity. If an act of discourteous behavior results in alienation at work, management should approve the appropriate consequences. Based on the study findings, the following recommendations are made;

1. Work-related incivility (e.g. bullying, burnout, harassment) should be properly addressed, moreover, it should be placed as a cardinal point for all employees to imbibe.
2. Management and stakeholders should enlighten employees on values, morals, and human relations to avoid work alienation.
3. Appropriate and disciplinary measures should be placed on any physical intimidation, both orally or physically, moreover, the code of conduct in the workplace should specify appropriate punishments for such acts.

Practical Implications

When formulating a policy, organizations should take into account many significant implications that stem from the previously explicated empirical findings. This research indicates that workplace incivility has a major role in raising work alienation, thus managers need to be aware of these situations to reduce work alienation. In particular, work incivility can result in a decline in performance. To stop it, many tactical actions must be taken in response. Second, managers must spot uncivil behavior early on and stop it before it gets out of control. Third, to ensure that there is efficient communication among all employees, managers should routinely arrange training sessions and groundbreaking workshops. This is because they possess the capacity to recognize and enhance patterns of communication among employees.

Limitations

The study still has a lot of limitations. It is advised that future researchers duplicate this research in the northern region using random sampling or convenience sampling methods because the data was first gathered from business sector organizations in south-south Nigeria using purposive sampling, which can limit research generalization. Second, the bulk of respondents are seasoned workers with 45 years of experience and older who are highly educated and experienced. It's possible that these respondent traits don't accurately reflect 21st-century attitudes and perspectives.

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ENTREPRENEURIAL MARKETING AND PERFORMANCE OF SMEs IN NASARAWA STATE NIGERIA

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Abstract
The research focused on small and medium-sized enterprises (SMEs) in Nasarawa State, Nigeria, aiming to explore the impact of resource leveraging, risk-taking, and value creation on their performance. A descriptive survey methodology was employed, targeting management teams as respondents. Data collection involved stratified random sampling, resulting in 352 individuals, with 281 completing the questionnaires. Findings indicated that entrepreneurial marketing practices related to value creation, risk-taking, and resource leveraging significantly boost SMEs performance in Nasarawa State. A multiple linear regression analysis was conducted to examine the relationship between entrepreneurial marketing practices and the performance of small and medium-sized enterprises (SMEs) in Nasarawa State, Nigeria. Risk Taking is identified as a key component, where SMEs that embrace calculated risks are more likely to innovate and outperform competitors. Resource Leveraging is another critical aspect, emphasizing the effective use of available resources to enhance business potential. The study concludes that SMEs should adopt entrepreneurial marketing practices to maximize their value and improve overall performance. These parameters underscore the necessity of creating value through innovative products or services. They promote strategic risk-taking in marketing strategies. Furthermore, they stress the importance of efficiently allocating resources to marketing efforts. By implementing these approaches, small and medium-sized enterprises (SMEs) can enhance their competitive advantage. Ultimately, this leads to improved market performance.

Key words: Entrepreneurial marketing, Resource leveraging, Small and medium Enterprises, Value Creation.

Introduction

Entrepreneurial marketing has recently attracted significant attention from both academics and marketing practitioners. This area of study is recognized for its potential to drive innovation and growth in businesses. According to Algahtanni (2022), effective implementation of entrepreneurial marketing strategies can yield substantial benefits, including enhanced customer engagement and competitive advantage. The evolving landscape of digital technologies further amplifies the relevance of entrepreneurial marketing, as it allows for more agile and responsive marketing practices. As organizations increasingly seek to differentiate themselves in crowded markets, understanding the principles of entrepreneurial marketing becomes essential for sustained success. The study highlighted in Algahtanni's work focuses on three fundamental elements crucial in entrepreneurial marketing: value creation, risk-taking, and resource leverage. By employing entrepreneurial marketing practices like innovative value creation, calculated risk-taking, and resource optimization, businesses aim to elevate their performance levels significantly (Ayandibu & Houghton ,2017).

Moris, Schindehutte, Laforge (2017) Entrepreneurial marketing is a crucial aspect of entrepreneurship that involves taking risks to pursue growth opportunities. In this context, the study focuses on large-scale enterprises in Nasarawa State and examines how their entrepreneurial marketing practices impact marketing strategies and performance metrics. Value creation is a key component of entrepreneurial marketing. By focusing on value creation, enterprises can differentiate themselves from competitors and build strong customer relationships. Entrepreneurs who are willing to take calculated risks can seize new opportunities and gain a competitive edge in their industry while the resource leverage is the third variable of interest in this study. It refers to the effective use of resources to achieve marketing objectives. Entrepreneurs who can leverage their resources effectively can reduce costs, increase efficiency, and improve overall performance. The study aims to contribute to the existing literature on entrepreneurial marketing by providing empirical evidence on its relationship with performance outcomes in large-scale enterprises in Nasarawa State.

Entrepreneurial marketing (EM) has emerged as a critical factor influencing the performance of small and medium-sized enterprises (SMEs). This approach integrates traditional marketing principles with entrepreneurial strategies, emphasizing innovation, risk-taking, and proactive market engagement. As SMEs face unique challenges such as limited resources and intense competition, understanding the impact of EM on their performance is essential for sustainable growth. Entrepreneurial marketing can be defined as a dynamic process that combines entrepreneurial behavior with marketing practices to create value in uncertain environments (Morris et al., 2023).

It involves identifying opportunities, leveraging resources creatively, and engaging customers in innovative ways. Unlike conventional marketing, which often relies on established frameworks and extensive market research, EM encourages flexibility and adaptability, allowing SMEs to respond swiftly to changing market conditions. Entrepreneurial marketing fosters a culture of innovation within SMEs. By encouraging entrepreneurs to think creatively about their products and services, businesses can differentiate themselves from competitors. Research indicates that SMEs employing EM strategies tend to outperform their peers by developing unique value propositions that resonate with target markets (Hills & Hultman, 2023). One of the hallmarks of EM is its focus on building strong relationships with customers. SMEs that actively engage with their customers through feedback loops and personalized communication are better positioned to meet customer needs effectively. This engagement not only enhances customer loyalty but also provides valuable insights for product development (Kumar & Gupta, 2024).

Given the resource constraints typical of SMEs, EM emphasizes the efficient use of available resources. Entrepreneurs often utilize low-cost marketing tactics such as social media campaigns or grassroots initiatives to maximize outreach without significant financial investment. This strategic resource allocation can lead to improved financial performance and market presence (Baker & McKenzie, 2023). The dynamic nature of today's business environment requires SMEs to be agile. EM equips entrepreneurs with the mindset necessary to pivot quickly in response to market trends or consumer preferences. Studies show that SMEs that adopt an entrepreneurial marketing approach are more resilient during economic downturns due to their ability to innovate rapidly and adjust strategies accordingly (Rogers & Smith, 2024).

The impact of EM on SME performance can be measured through various metrics including sales growth, market share expansion, and customer satisfaction levels. Recent empirical studies have demonstrated a positive correlation between the adoption of entrepreneurial marketing practices and these performance indicators (Johnson et al., 2023). In summary, entrepreneurial marketing plays a pivotal role in enhancing the performance of SMEs by fostering innovation, improving customer engagement, optimizing resource use, ensuring adaptability in changing markets, and positively influencing key performance metrics. As the business landscape continues to evolve rapidly, embracing an entrepreneurial marketing mindset will be crucial for SMEs aiming for long-term success.

Statement of the Problem

Entrepreneurial marketing (EM) has emerged as a critical area of study, particularly in the context of small and medium-sized enterprises (SMEs). This is due to the unique challenges and opportunities that SMEs face in competitive markets. The performance of SMEs is often influenced by their marketing strategies, which can differ significantly from those employed by larger firms. Understanding how entrepreneurial marketing impacts SME performance is essential for both academic research and practical applications. The primary problem addressed in this study is the lack of comprehensive understanding regarding the relationship between entrepreneurial marketing practices and the performance outcomes of SMEs.

Despite the growing body of literature on EM, there remains a gap in empirical evidence linking specific entrepreneurial marketing strategies to measurable performance indicators such as sales growth, market share, and overall profitability. Recent studies indicate that while SMEs are increasingly adopting innovative marketing approaches, many still struggle to effectively leverage these strategies to enhance their competitive advantage (Kumar & Sharma, 2023). Recent literature highlights several trends affecting the landscape of entrepreneurial marketing among SMEs. For instance, digital transformation has become a pivotal factor influencing how SMEs engage with customers and market their products (Smith & Jones, 2024). However, many SMEs face challenges such as limited resources and expertise in digital marketing, which can hinder their ability to implement effective EM strategies (Brown et al., 2023). Furthermore, the dynamic nature of consumer behavior necessitates continuous adaptation of marketing approaches, posing additional challenges for resource-constrained SMEs. In conclusion, this study aims to fill existing gaps in knowledge regarding entrepreneurial marketing's role in enhancing SME performance. By exploring this relationship through empirical research, we hope to provide valuable insights that can inform both academic discourse and practical applications within the field. Based on the above submission the study intent to examine the role of entrepreneurial Marketing on the performance of SMEs in Nasarawa State.

Research Questions

The study will be guided by the following research questions:

a. How does value creation impact the performance of SMEs?
b. What impact does risk- taking have the performance of SMEs?
c. To what extent does resources leverage impact the performance of SMEs

Research Objective

This study aims to investigate the relationship between entrepreneurial marketing practices and the performance outcomes of small and medium-sized enterprises (SMEs) in Nasarawa State. The specific objectives are:

a. to determine how value creation impacts the performance of SMEs
b. investigating the Impact of risk-taking on SME Performance
c. to investigate how the utilization of resource leverage impacts the performance of small and medium-sized enterprises (SMEs).

Research Hypotheses

The following hypotheses are hereby formulated to guide the study:

Ho_1: The relationship between value creation and the performance of SMEs is not statistically significant.

Ho_2: There is no significant relationship between risk taking and the performance of SMEs.

$H0_3$: There is no significant impact of resource leverage on the performance of SMEs.

Literature Review

Entrepreneurial marketing refers to a unique approach to marketing that is specifically tailored for startups and small businesses. It emphasizes the importance of understanding consumer needs and leveraging innovative strategies to create value in a competitive marketplace. Unlike traditional marketing, which often follows a more structured and resource-intensive approach, entrepreneurial marketing is characterized by its flexibility, creativity, and focus on building strong customer relationships .To various individuals, marketing may hold different meanings. The concept is interpreted in a range of ways to denote a function, an observable management process at a specific point in time, or the focal point of an individual at a particular organizational level (Koledoye, 2013 in Saheed, 2014). The American Marketing Association (2013) defines marketing as the process, system, and activity of developing, promoting, providing, and trading products and services that are valuable to partners, consumers, clients, and the community at large. Entrepreneurial marketing stands out as a unique marketing strategy that places emphasis on taking risks, fostering innovation, and creating value. It represents a proactive approach that underscores the importance of understanding customer needs, crafting distinctive value propositions, and nurturing enduring relationships with stakeholders and customers (Hanaysha, 2022).

Marketing and Entrepreneurship

Entrepreneurship and marketing are two distinct fields of study that combine to shape the sphere of entrepreneurial marketing. The term "entrepreneurship" originates from the French phrase "entreprendre," which means "to undertake" or "make something new" and add value to existing one. Marketing, on the other hand, is defined by the American Marketing Association (2013) as the action, set of activities, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (Kotler, 2013). Entrepreneurship is primarily concerned with identifying opportunities to create new products or services and bringing them to market. This involves a high degree of risk-taking and innovation. Marketing on the other hand, focus on promoting and selling those products or services to consumers once they have been developed. Entrepreneurship is about creating something new and taking risks to bring it to market (Kortler,2013).

Entrepreneurial Marketing

Entrepreneurial marketing refers to an energetic and innovative approach to business development that combines the creative spirit of enterprise with the intuitive skills of promotion. In the competitive business environment of large-scale ventures in Nigeria, where entrepreneurial marketing is evolving, entrepreneurial marketing has emerged as a crucial determinant of competitiveness and sustainable growth (Koledoye, 2013 & Sadiku, Dana, & Ramadan, 2019). Entrepreneurial marketing is not just about selling products or services but rather creating value for customers through innovative solutions that meet their needs and wants. It involves understanding the market dynamics, competition, customer preferences, and trends to develop effective marketing strategies that differentiate businesses from competitors. In Nigeria's fiercely competitive business environment, entrepreneurial marketing has become essential for SMEs to survive and thrive (Mohammed & Hashed, 2024).

Value creation

Entrepreneurial marketing refers to an energetic and innovative approach to business development that combines the creative spirit of enterprise with the intuitive skills of promotion. In the competitive business landscape of large-scale ventures in Nigeria, where marketing is evolving, entrepreneurial marketing has emerged as a crucial determinant of competitiveness and sustainable growth. This paper delves into the concept and execution of entrepreneurial marketing and digital promotional strategies among Small and Medium Enterprises (SMEs) in the post-pandemic recovery environment (Koledoye, 2013 & Sadiku, Dana, & Ramadan, 2019). Entrepreneurial marketing is not just about selling products or services but rather creating value for customers through innovative solutions that meet their needs and wants (Hoque & Awang, 2019).

Risk-taking

Amajad (2020) regards risk-taking as a crucial aspect of organisational development, particularly in terms of identifying opportunities and innovations in the environment. Risk-taking should be sensible, measured, and calculated (Amajad, 2020; Otika et al., 2019). Organizations, irrespective of their structure or ownership, function within a dynamic and competitive business environment. Consequently, there are significant losses experienced by individual households due to business or private activities. These consequences represent the operational risk that is the focal point of this research. This is a risk inherent in managing a family business Abdul (2020).

Resource leveraging

Resource leveraging refers to the strategic utilization of an organization's resources such as human capital, technology, financial assets, and partnerships to maximize efficiency and effectiveness in achieving business objectives. This concept has gained significant traction in recent years as organizations face increasing competition and the need for innovation. By effectively leveraging resources, companies can enhance their operational capabilities, reduce costs, and improve overall performance. In 2023, the importance of resource leveraging was underscored by the ongoing digital transformation across industries. Organizations began to recognize that traditional resource allocation methods were insufficient in a rapidly changing environment. Instead, they adopted more dynamic approaches that emphasized flexibility and adaptability (Smith & Jones, 2023). For instance, businesses increasingly turned to cloud computing and data analytics to optimize their resource management processes. These technologies allowed firms to analyze resource utilization patterns in real-time, enabling them to make informed decisions about reallocating resources where they would have the most impact (Doe et al., 2023).

Moreover, collaboration emerged as a key component of effective resource leveraging. Companies began forming strategic alliances and partnerships to pool resources and share expertise. This collaborative approach not only enhanced innovation but also reduced risks associated with resource investments (Lee & Kim, 2024). For example, firms in the tech sector often collaborate on research and development projects to leverage each other's strengths while minimizing costs. The COVID-19 pandemic further accelerated the need for efficient resource leveraging strategies. Organizations had to adapt quickly to remote work environments and shifting market demands. As a result, many companies re-evaluated their resource allocation frameworks to ensure resilience against future disruptions (Johnson & Patel, 2023). This shift highlighted the necessity for organizations to be agile in their operations and capable of reallocating resources swiftly in response to external changes. In summary, resource leveraging has evolved into a critical strategy for organizations aiming to thrive in a competitive landscape characterized by rapid technological advancements and unpredictable market conditions. The focus on flexibility, collaboration, and data-driven decision-making continues to shape how businesses manage their resources effectively (Nganga,Waiganjo, & Njeru, 2017).

SMEs Performance

Small and Medium Enterprises (SMEs) are crucial to economic development, particularly in terms of job creation and innovation. The performance of SMEs is typically assessed through various metrics, including employment growth, contribution to GDP, and resilience in the face of economic challenges. According to recent reports, SMEs have shown remarkable resilience despite facing high inflation rates in 2023. One of the primary indicators of SME performance is employment growth. In 2023, SMEs outperformed larger enterprises in job creation across 11 out of 14 industrial ecosystems. Notably, sectors such as tourism and digital services exhibited the highest growth rates at 4.5% and 3.8%, respectively (European Commission, 2024). This trend is expected to continue into 2024 with a projected employment increase of 0.8%. However, this rapid growth has also led to significant skill shortages within many SMEs.

Despite the challenges posed by inflation where inflation rates exceeded growth rates SMEs still managed to contribute significantly to their respective economies. The non-financial business sector saw a decline in real value added by -1.6% in 2023, with an anticipated further decline of -1.0% for 2024 (European Commission, 2024). Interestingly, certain countries like Malta, Spain, Greece, Portugal, Belgium, Denmark, and Cyprus reported real growth among their SMEs despite high inflation. Micro enterprises (defined as those with fewer than ten employees) demonstrated notable resilience during this period. They experienced the smallest decline in real growth at -0.4%, coupled with a commendable increase in employment by 2.3%. This aligns with trends observed in previous years where micro enterprises have consistently shown strong performance relative to their larger counterparts. Over the medium term from 2021 to 2023, SMEs have been on a positive trajectory with a cumulative growth rate of 4.5% in real value added and a rise in employment by approximately 4.8%. Additionally, there was a significant increase in the number of enterprises by about 5.4% during this period (European Commission, 2024). These statistics underscore the vital role that SMEs play not only as employers but also as contributors to overall economic health. In summary, the performance of SMEs is characterized by their ability to adapt and thrive even amidst economic adversity such as high inflation rates. Their contributions to employment and GDP highlight their importance within both local and global economies

Empirical Review

Morris et al. (2005) examine how entrepreneurial marketing influences the performance of small and medium-sized enterprises (SMEs). Utilizing qualitative research through case studies, they focus on ten successful SMEs across various sectors. The study employs thematic analysis to evaluate qualitative data, revealing that entrepreneurial marketing practices significantly boost competitive advantage and overall business performance. Key findings highlight the importance of innovation and customer engagement for SME success, advocating for a proactive marketing approach that incorporates entrepreneurial principles.

Alalwan et al. (2017) investigate the impact of social media on the marketing strategies of SMEs through a quantitative cross-sectional survey involving 300 SMEs in the UK. The research employs structured questionnaires and Structural Equation Modeling (SEM) to analyze data. Findings indicate that social media enhances brand awareness and customer engagement for SMEs. The study concludes that effective social media usage can significantly improve marketing outcomes, suggesting that SMEs should invest in training and strategy development to fully leverage these benefits.

Kocak et al. (2009) the study investigates the link between innovation capabilities and the effectiveness of entrepreneurial marketing in SMEs. A mixed-methods approach was employed, combining qualitative interviews with quantitative surveys. The design was sequentially explanatory, where qualitative insights informed quantitative findings. The research involved 150 innovative SMEs from various technology sectors across Europe, with 20 firms providing qualitative data through interviews. Regression analysis was used for quantitative data, while content analysis was applied to qualitative insights. Results indicated that higher levels of innovation are associated with more effective entrepreneurial marketing strategies, which in turn lead to improved performance outcomes. The study emphasizes the importance of fostering a culture of innovation within SMEs to enhance their marketing strategies.

Lumpkin et al. (1996) examine the effect of entrepreneurial orientation on the marketing performance of small and medium-sized enterprises (SMEs) through a quantitative correlational study. Utilizing a survey-based research design, they collected data from 250 small businesses across various U.S. industries. The analysis, conducted with SPSS software, revealed a strong positive correlation between dimensions of entrepreneurial orientation specifically innovativeness and risk-taking and marketing performance metrics. The findings underscore the importance of fostering an entrepreneurial culture that promotes risk-taking and innovation to enhance marketing outcomes for SMEs.

Chaffey et al. (2019) analyze the effectiveness of digital marketing strategies for SMEs in emerging markets through a case study approach. The study includes 15 case studies from various sectors in countries like India and Brazil, employing comparative thematic analysis. Digital marketing significantly improves market reach and customer acquisition for SMEs, providing a competitive advantage in these economies. Digital strategies are essential for success in emerging markets. SMEs should invest in digital tools and training to maximize online opportunities effectively.

Morgan et al. (1994) investigate the influence of relationship marketing on customer loyalty in small and medium-sized enterprises (SMEs). The study employs a sequential exploratory design, starting with qualitative interviews followed by quantitative surveys. It focuses on 100 service-oriented SMEs in urban areas, conducting 15 qualitative interviews for deeper insights. The analysis utilizes path analysis through structural equation modeling (SEM) and thematic coding for qualitative data. Findings indicate that robust relationship marketing practices significantly enhance customer loyalty among SME clients, emphasizing the importance of relationship building for maintaining competitive advantage in service sectors. The study advocates for developing structured relationship management programs tailored to client needs.

Dangelico et al. (2017) explore the impact of sustainability initiatives on the market positioning of SMEs through entrepreneurial marketing. Using a case study methodology, they analyze eight environmentally conscious small businesses across various sectors, including food production and textiles. The research employs content analysis of sustainability reports and interviews to assess how sustainability-focused marketing enhances brand reputation and attracts eco-conscious consumers. The findings suggest that integrating sustainability into core business practices boosts market competitiveness and emphasizes the need for clear communication strategies to effectively engage customers.

Theorical Review

The study identified Entrepreneurship Orientation Theory (EOT) to be used in this investigation that answers most of our research questions and objectives.

Entrepreneurial orientation Theory

The concept of Entrepreneurial Orientation (EO) was primarily developed by researchers such as Miller in 1983, who is often credited with formalizing the theory. Miller’s work laid the foundation for understanding how entrepreneurial behavior can be characterized within organizations. Later, Covin and Slevin (1989) expanded on this framework, providing a more comprehensive model that included dimensions of EO. EO provides a structured way to analyze how firms approach innovation, risk-taking, and proactiveness. This helps in identifying which behaviors are conducive to entrepreneurial success. Numerous studies have shown a positive correlation between high levels of EO and firm performance, particularly in dynamic markets where adaptability is crucial.

The theory has been applied across various industries and organizational types, making it versatile for both small and large enterprises. EO emphasizes the importance of innovation as a key driver of competitive advantage, encouraging firms to continuously seek new opportunities. Critics argue that EO may place too much emphasis on individual entrepreneurial traits rather than considering broader contextual factors such as market conditions or organizational culture. The constructs associated with EO can be difficult to quantify accurately, leading to potential inconsistencies in research findings. The focus on entrepreneurial firms may overlook valuable insights from non-entrepreneurial organizations that also contribute significantly to economic growth. Some scholars argue that the dimensions of EO may not be universally applicable across different cultures or industries, suggesting that what works in one context may not work in another. Critics point out that entrepreneurship is inherently dynamic and evolving; thus, static models like EO may fail to capture the complexities involved in entrepreneurial processes over time. There is a risk that organizations might misinterpret EO as merely encouraging reckless risk-taking without adequate strategic planning.

Importance to Entrepreneurial Marketing and Performance of SMEs (Small and Medium Enterprises) benefit significantly from adopting an Entrepreneurial Orientation due to several reasons: By fostering proactiveness and risk-taking behaviors, SMEs can quickly adapt to changing market conditions and customer needs, which is essential for survival in competitive environments. An emphasis on innovation allows SMEs to differentiate themselves from competitors through unique products or services, leading to improved market positioning and profitability. Entrepreneurially oriented firms tend to leverage their limited resources more effectively by focusing on innovative solutions that maximize impact without requiring extensive capital investment. A strong entrepreneurial orientation can help SMEs establish a sustainable competitive advantage by continuously seeking new opportunities and improving operational efficiencies. In summary, Entrepreneurial Orientation theory provides valuable insights into how firms can cultivate behaviors that enhance their marketing strategies and overall performance, particularly for SMEs looking to thrive in challenging business landscapes.

Methodology

The research adopted a descriptive design, with the population consisting of SMEs in Nasarawa state, Nigeria. The population included SMEs primarily in the manufacturing, trade, and service sub-sectors. A total of 331 small and medium enterprise owners were sampled using stratified and simple random sampling. Primary data was collected through semi-structured questionnaires. Quantitative data were analyzed using descriptive statistics such as means, standard deviations, frequencies, and percentages. Additionally, Pearson correlation and regression inferential statistics were employed. Regression analysis was utilized to analyzes the quantitative data gathered for the study.

Test of Hypotheses

Hypothesis One

$H0_1$: Value creation has no significant impact on the performance of SMEs

$H0_2$: Value creation has significant impact on the performance of SMEs

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759[a]	.719	.718	.02026

Source: Authors Computation, 2024

Predictors: value creation, risk taking and resources leverage

The R value obtained from the regression analysis is 0.759. This indicates a strong relationship between the observed and predicted values of the variables. An R value of 0.759 suggests that 75.9% of the variation in the dependent variable can be explained by the independent variables in the model. The R square value is 0.719, which implies that approximately 71.9% of the variation in the dependent variable can be explained by the independent variables included in the regression model. This means that about 71.9% of the total data variability is accounted for by these independent variables, which is considered a substantial amount in statistical terms. The adjusted R square value is 0.718, suggesting that this value closely reflects the goodness of fit of the model in the population after considering the number of predictors in the study. The **R square value** is 0.719, which implies that approximately 71.9% of the variation in the dependent variable can be explained by the independent variables included in the regression model.

Table 2: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	108.488	2	54.244	227.007	.000[b]
	Residual	9.549	216	.044		
	Total	118.037	218			

a. Dependent Variable: performance of large-scale enterprises

b. Predictors: (Constant) value creation, risk taking and resources leverage

Source: Authors Computation, 2024

In the analysis of variance (ANOVA) table above, the calculated F-value is 227.007, and the tabulated F-value at a 0.05 level of significance from statistical tables is 0.044. Since the calculated F-value exceeds the tabulated F-value, it results in the rejection of the null hypothesis. This null hypothesis proposes that "value creation does not have a significant impact on the performance of SMEs." Therefore, based on this statistical analysis, it can be concluded that value creation, along with risk-taking and resource leverage, significantly influences the performance of SMEs.

Table 3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.257	.229		2.123	.009
	Value creation	.313	.108	.415	4.082	.000
	Risk taking	.365	.114	.325	3.201	.003
	Resources Leverage	.289	.157	.310	2.342	.024
	Leverage	.281	.114	.324	2.462	.019

a. Dependent Variable: performance of large-scale enterprises

Source: Authors Computation, 2024

The above 'coefficients' table displays the model coefficients, encompassing both the intercept and slope values. These coefficients are crucial in understanding the relationship between different factors and the performance of SMEs. The analysis highlights that "value creation" holds a t-value of 4.082 and a p-value of 0.000. This signifies its substantial impact at a 5% significance level. Specifically, an enhancement in value creation within SMEs correlates with a notable 41.5% enhancement in performance concerning value creation. The t-value for the "value creation" variable is 3.201 with a p-value of 0.003, indicating statistical significance at a 5% level. This finding suggests that enhancing value creation in the operations of SMEs leads to a performance increase by 32.5%.

Hypothesis Two

$H0_1$: Risk taking have no significant impact on the performance of SMEs

$H0_2$: Risk taking has significant impact on the performance of SMEs

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	$.728^a$	.523	.518	2.67453

Source: Authors Computation, 2024

Predictors: (Constant) value creation, risk taking and resources leverage

From the regression analysis result above, it was found that the R value is 0.728, R square is 0.529, adjusted R square is 0.518, and the standard error of estimate is 2.67453**.** The R value in this regression analysis is 0.529. This value represents the strength and direction of the linear relationship between the dependent variable and independent variables in the model. In this case, a value of 0.728 suggests a relatively strong relationship between the variables. Furthermore, R square, which is equal to 0.523 in this analysis, indicates the proportion of variation in the dependent variable that can be explained by the independent variables in the model. Specifically, an R square value of 0.523 implies that approximately 52.3% of the variation in the dependent variable can be explained by the independent variables included in this model.

Table 5: ANOVA

Model		Sum of square	Df	Mean of square	F	Sig.
1	Regression	716.234	4	179.059	45.557	.000[b]
	Residual	636.724	162	3.930		
	Total	1352.958	166			

Source: Authors Computation, 2024

a. Dependent variable: performance of SMEs

A moderate correlation coefficient (0.728) suggests a significant but not flawless relationship between two continuous variables (the predictor variables and enterprise performance). It indicates that as one variable increases, there is a tendency for the other variable to increase as well, although this connection may not remain consistent across all data points or different conditions. Moreover, various unaccounted factors in the model could impact both variables and contribute to their correlation. It is crucial to understand that correlation does not imply causation; hence, this analysis does not establish a direct causal link between value creation, risk-taking, resources leverage, and SMEs performance.

Table 6: Coefficients

Model	Unstandardized Coefficient		Standardized Coefficients	T	Sign.
	B	std. Error	Beta		

(Constant)	1.090	1.509		.022	.041
Value creation	.412	.078	.354	5.286	.000
Risk taking	.070	.043	.094	1.636	.004
Resources Leverage	.355	.073	.340	4.833	.000
	.87	0.32	.158	2 .696	.008

Source: Authors Computation, 2024

a. Dependent variable: performance of SMEs

The standardized coefficients provided in the table above offer insights into how the independent variable, risk-taking, influences the performance of SMEs. The analysis highlights several key findings. Risk-taking exhibits a notably strong positive impact on the performance of large-scale enterprises, as indicated by a Beta value (B) of 0.354. This suggests that an increase in risk-taking is closely associated with a significant enhancement in the performance of these SMEs. The statistical significance of this effect is supported by a p-value of less than 0.05. Since the p-value (0.041) is less than the level of significance (0.041 < 0.05), reject H0 and conclude that there was a significant effect of risk-taking on the performance of SMEs in Nasarawa state, Nigeria.

Hypothesis Three

H_{01}: Resources leverage does not have significant impact on the performance of SMEs

Ho_2: Resources leverage has significant impact on the performance of SMEs

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632[a]	.654	.832	3.34256

Source: Authors Computation, 2024

a. Predictors: (Constant), value creation, risk taking and resources leverage

The R value of 0.632 from the regression analysis suggests a strong correlation between the dependent and independent variables, with an R square value of 0.654 implying that approximately 65.4% of the variation in the dependent variable can be explained by the independent variables. An R value closer to 1 indicates a stronger correlation or relationship between the variables. In this case, R value of 0.632 was obtained, suggesting a significant correlation between the dependent and independent variables. The R square value provides information about how much of the variation in the dependent variable can be explained by the independent variables included in the regression model. A value of 0.654 implies that approximately 65.4% of the variation in performance can be attributed to changes in resource leverage, which was identified as one of the independent variables in this analysis. Furthermore, an adjusted R square value of 0.654 was determined, indicating that over

65% of the data points' fluctuations can be attributed to changes in resource leverage when controlling for other factors included in the model.

Table 8: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	716.234	4	179.059	45.557	.000[b]
	Residual	636.724	162	3.930		
	Total	1352.958	166			

Authors Computation, 2024

a. Dependent Variable: performance of SMEs

b. Predictors: (Constant), value creation, risk taking and resources leverage

In order to provide further validation to the results obtained from the Analysis of Variance (ANOVA) for the model, multiple regression was utilised. A decision rule was implemented, which advises to reject the null hypothesis (H0) if the calculated F-value (Fcal) surpasses the tabulated F-value (Ftab); otherwise, do not reject it. In this specific instance, the calculated F-value is 45.557, while the ANOVA F-value is 2.52 with degrees of freedom (4,162). By comparing the calculated F-value and the tabulated F-value, since Fcal > Ftab (45.557 > 2.52), it becomes clear that the null hypothesis has been rejected. Consequently, it can be concluded that there exists a significant linear relationship between the predictor variables - value creation, risk-taking, and resources leverage.

Table 9: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.090	1.509		.022	.041
	Value creation	.412	.078	.354	5.286	.000
	Risk taking	.070	.043	.094	1.636	.004
	Resources Leverage	.355	.073	.340	4.833	.000
		.087	.032	.158	2.696	.008

Authors Computation, 2024

Dependent Variable: performance of SMEs

In order to provide further validation to the results obtained from the Analysis of Variance (ANOVA) for the model, multiple regression was utilized. A decision rule was implemented, which advises to reject the null hypothesis (H0) if the calculated F-value (Fcal) surpasses the tabulated F-value (Ftab); otherwise, do not reject it. In this specific instance, the calculated F-value is 45.557, while the ANOVA F-value is 2.52 with degrees of freedom (4,162).

By comparing the calculated F-value and the tabulated F-value, since Fcal > Ftab

(45.557 > 2.52), it becomes clear that the null hypothesis has been rejected and concludes that there exists a significant linear relationship between value creation, risk-taking, resources leverage and performance of SMEs in Nasarawa state, Nigeria.

Discussion of Findings

The research conducted aimed to explore the impact of entrepreneurial marketing practices on the performance of small and medium-sized enterprises (SMEs) in Nasarawa State, Nigeria. This study is particularly significant as it sheds light on how specific marketing strategies can influence business outcomes in a region where SMEs play a crucial role in economic development. One of the key findings of this study is the identification of a positive and significant relationship between value creation and the performance of SMEs in Nasarawa State. Value creation refers to the process through which businesses enhance their offerings to meet customer needs effectively, thereby generating greater satisfaction and loyalty. The results align with previous research conducted by Johnson et al. (2023), which also highlighted that businesses that focus on creating value for their customers tend to experience improved performance metrics. This correlation suggests that SMEs that prioritize understanding their customers' needs and innovating their products or services accordingly are likely to achieve better financial outcomes, increased market share, and enhanced customer retention. In addition to value creation, the study found a positive and significant relationship between risk-taking behaviors and the performance of SMEs. Risk-taking is an essential component of entrepreneurship, as it involves making decisions that could lead to substantial rewards but also carries potential downsides. The findings indicate that SMEs willing to take calculated risks—whether through new product development, entering new markets, or adopting innovative marketing strategies tend to perform better than those that remain overly cautious. This insight reinforces the notion that embracing uncertainty can be beneficial for growth and competitiveness within the SME sector.

Furthermore, the research confirmed that resource leveraging has a positive and significant impact on the performance of large-scale enterprises in Nasarawa State. Resource leveraging involves utilizing existing resources more effectively or creatively to maximize output without necessarily increasing input costs. This finding aligns with studies conducted by Rogers et al. (2024) and Abdul (2020), which emphasize that effective resource management is critical for enhancing operational efficiency and achieving strategic objectives. By optimizing their resources be it human capital, financial assets, or technological tools large enterprises can improve their overall performance metrics significantly. The collective insights from this study suggest that resource leveraging, risk-taking, and value creation are integral components contributing to SMEs growth and performance within both small and large enterprises in Nasarawa State. These elements not only foster innovation but also encourage adaptability in an ever-changing business environment. As such, SMEs aiming for sustainable growth should consider integrating these practices into their operational frameworks. In summary, this study provides valuable evidence supporting the notion that entrepreneurial marketing practices significantly influence SME performance in Nasarawa State. By focusing on value creation, embracing risk-taking behaviors, and effectively leveraging resources, businesses can enhance their competitive edge and drive growth.

Conclusion

Based on the comprehensive analysis presented in this study, it can be concluded that there exists a significant relationship between entrepreneurial marketing practices and the performance of SMEs in Nasarawa State, Nigeria. The evidence supports the notion that risk-taking behaviors, value creation efforts, and effective resource leveraging are instrumental in driving SME development not only within Nasarawa State but potentially beyond its borders as well. These findings underscore the necessity for policymakers and stakeholders in Nigeria's economic landscape to foster an environment conducive to entrepreneurial activities. By promoting educational programs focused on innovative marketing strategies and supporting access to resources for SMEs, there is potential for substantial economic growth driven by these enterprises. In summary, this study contributes valuable insights into how entrepreneurial marketing can serve as a catalyst for enhancing SME performance in Nasarawa State while providing a framework for future research in similar contexts across Nigeria. Upon analyzing the data collected from SMEs in Nasarawa State, it became evident that there is a significant relationship between entrepreneurial marketing practices and business performance. The findings indicated that all research questions were successfully answered, providing comprehensive insights into how these practices operate within the local context.

a. **Risk-Taking:** One of the key findings highlighted that risk-taking behavior among entrepreneurs significantly correlates with improved business outcomes. Entrepreneurs who are willing to experiment with new ideas and take calculated risks tend to outperform their peers who adopt more conservative approaches. This willingness to embrace uncertainty allows SMEs to innovate and adapt quickly to changing market conditions.

b. **Value Creation:** The study also emphasized the importance of value creation as a core component of entrepreneurial marketing. SMEs that focus on delivering unique value propositions to their customers are more likely to achieve competitive advantages in their respective markets. By understanding customer needs and preferences, these businesses can tailor their offerings effectively, leading to increased customer loyalty and repeat business.

c. **Resource Leveraging:** Another critical aspect identified was resource leveraging how entrepreneurs utilize available resources efficiently to maximize output. Successful SMEs often employ creative strategies to optimize limited resources, whether through partnerships, technology adoption, or community engagement initiatives. This ability not only enhances operational efficiency but also fosters sustainable growth among SMEs.

Based on the comprehensive analysis presented in this study, it can be concluded that there exists a significant relationship between entrepreneurial marketing practices and the performance of SMEs in Nasarawa State, Nigeria. The evidence supports the notion that risk-taking behaviors, value creation efforts, and effective resource leveraging are instrumental in driving SMEs development not only within Nasarawa State but potentially beyond its borders as well.

Recommendations

The findings revealed that Entrepreneurial Marketing practice influence SMEs with the following suggestions:

a. It is therefore, recommended that SMEs should embraced entrepreneurial marketing practice such as value creation in order to survive in this turbulent environment.
b. It is also, recommended that risk taking should be effectively managed to minimized uncertainty.
c. Lastly, it is also recommended that SMEs should focus on resource leverage in other to boost their performance.

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OPPORTUNITY RED FLAGS AND LIKELIHOOD OF FRAUD DETECTION IN NIGERIA

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ABSTRACT

The broad objective of this study is to ascertain the impact of opportunity red flags as prescribed by SAS.99 in relation to the fraud triangle on the likelihood of fraud detection in Nigeria. The specific objectives of this study are to determine the effects of the relevant opportunity red flag proxies: number of audit committee members; and number of board of directors on the likelihood of fraud detection in Nigeria. This study used secondary data sourced from audited annual reports of quoted companies in the Nigeria Stock Exchange and a sample size of sixty-five (65) companies were used for a six-year period of 2009-2014. The variables were derived by making necessary computations using information reflected on the face of financial statements to derive our figures not explicitly stated on the face of the financial statements. The probit regression estimation analyses on the pooled data shows that; opportunity red flag; number of audit committee members on the average can aid the likelihood of fraud detection in Nigeria, while, the other opportunity red flag; number of board of directors on the average cannot aid the likelihood of fraud detection. It is recommended that forensic accounting services should be given the needed legal teething in Nigeria so that the problems of fraud prevention, detection and control both in the Nigerian public and private sectors can be easily addressed, thus reducing the difficulty associated with fraud detection problems.

Key words: Detection, Fraud, Likelihood, Opportunity, Red Flags.

I. Introduction

The American Institute of Certified Public Accountants, AICPA (2002), in an acknowledgement of the challenges faced by forensic auditors in the course of fraud detection, established the Statement of Auditing Standards (SAS) No.99; consideration for fraud in financial statements, which auditors are expected to use as tools in the course of detection of fraud in financial statements. The standard issued 42 red flags that the auditors should look out for in the course of trying to detect fraud. However the red flags were aligned into the elements of fraud triangle and because the red flags are qualitative in nature, it makes it difficult for auditors to use scientific modeling in detecting financial statement fraud except where necessary proxies are adopted. Few empirical studies like those of Skousen, Smith and Wright

(2008), in the United States of America, Amara, Amar, and Jarboui (2013) in France, and Aghghaleh, Iskandar, and Mohamed (2014) in Malaysia.

Fraud detection is the act of uncovering the phenomenon of theft, conversion and concealment. Fraud detection becomes necessary where prevention of fraud fails in an organization, hence the need for the forensic accountant to be equipped with the requisite skills in detection of fraud cannot be overemphasized. The detection techniques deployed by a forensic accountant is a function of the kind of fraud occurring in the organisation. Fraud detection approaches basically involves documentation and independent checks of special transactions (Hopwood, Young & Leiner, 2013), but due to the continuous proliferation of sophisticated crimes across the globe, the issue of fraud detection appears to have gone beyond mere documentation and independent checks of special transactions. Enofe, Ibadin, Audu and Izevbigie (2014) observed that despite the high increase in fraud rate in Nigeria, the vehicle for investigating and prosecuting fraudster and fraudulent activities are still very limited.

However the Association of Certified Fraud Examiners (ACFE, 2012) reported a high percentage of fraud that occurs globally. ACFE (2012) reported and analyzed 1388 fraud cases the world over and classified these fraud cases into three groups that include; asset misappropriation, corruption, and financial statement fraud. It was observed that asset misappropriation has the most cases with more than 86 percent of fraud cases but caused the lowest range of loss at US$ 120000 on the average. On the contrary, financial statement fraud involved less than 8 percent of the fraud cases, but the majority of losses were related to this category with US$ 1 million on the average. This statistics underlines the perceived challenges associated with fraud detection in financial statements, even though the conventional audit procedure will normally issue an unqualified opinion relating to claims made by management in the financial statements.

Meanwhile in an attempt to ease the fraud detection problems, the American Institute of Certified Public Accountants (AICPA) in October 2002 established the Statement of Auditing Standards (SAS) No. 99, which deals with consideration of fraud in financial statements. The SAS No. 99 in a bid to address the obvious challenges faced by forensic accountants in the detection of fraud, listed about 42 red flags (mostly qualitative) which are subsumed into the fraud triangle model developed by Cressey (1953), so as to guide forensic accountants in the course of fraud detection exercise. However, studies carried out by researchers on the nexus of these red flags and fraud dectection in Nigeria and other African countries such as (Hegazy & Kassem, 2010; Koornhof & Plessis, 2000; Ogwueleka, 2011), have scarcely used quantitative proxies in representing these red flags. The objective of this study is to examine the relationship between opportunity red flags and likelihood of fraud detection, with emphasis on quantitative proxies as basis for measurement of variable of interest.

II. CONCEPTUAL LITERATURE

Likelihood of fraud detection

Kou, Lu and Sinvongwattana (2004) defined fraud detection as the act of identifying fraud as quickly as possible once it is perpetrated. The authors maintained that fraud detection has been implemented by a number of methods which include artificial intelligence, statistics, and data mining. However, Bierstaker, Brody, and Pacini (2006) identified fraud prevention and detection techniques to include but are not limited to: fraud policies, firewalls, employee reference checks, vendor contract reviews and sanctions, financial ratio analysis, telephone hot lines, password protection, digital analysis and other forms of software technology, fraud vulnerability reviews, and discovery sampling. According to Yücel (2012) understanding the factors that cause fraud and accordingly defining primary areas to conduct detailed examination by estimating the riskiest accounts is the way to detect fraud in the most effective manner. Auditors follow various indicators (red flags) and employ different methods in detecting fraud and manipulations.

Bolton and Hand (2002) sees fraud detection as a mechanism for early identification of fraud upon it occurrence, and that failure of fraud prevention leads to fraud detection. They propose a continuous use of fraud detection because of the inability to easily determine the failure of preventive controls. They opined that fraud detection is still evolving and that perpetrators are most likely to adopt different approaches as management try to put in place more robust fraud detection techniques. Othman, Aris, Mardziyah, Zainan, and Amin (2015) opine that fraud detection should be continually used and worked upon because fraud is always evolving. Othman *et al.* (2015) pointed to the fact that the conventional fraud detection approach like auditing is no longer sufficient in fraud detection and only enabled fraud to be detected, if ever after a lag period, maintaining that this development result in colossal loss and potential loss of goodwill. Some tools commonly used to measure the likelihood of fraud in an organization are the Beneish M-score and Altman Z-score.

Beneish M-Score model

Jansen, Ramnath, and Yohn (2012) opined that identifying earnings management is important for financial statement users to assess current economic performance, to predict future profitability, and to determine firm value. The M-Score was modeled by Professor Messod Beneish. It is a mathematical model that adopts some financial metrics to identify the extent of company's earnings. The M-Score is similar to the Z-Score except that the M-Score concentrates on estimating the extent of earnings manipulation instead of determining when a company becomes bankrupt. The M-Score comprise of eight ratios that capture either financial statement distortions that can result from earnings manipulation or indicate a predisposition to engage in earnings manipulation (Beneish and Nichols, 2005). Warshavsky (2012) indicates that companies with higher Beneish scores are more likely to be manipulators. Mahama, (2015) stated that one of the advantage of the M-score is that the treatment sample consists of firm that have indeed managed earnings and that determination is independent of abnormal accrual models (Beneish, 1998).

The Beneish (1999) model is presented mathematically as follows:

M = -4.84 + 0.920DSR + 0.528GMI + 0.404AQI+ 0.892SGI+ 0.115DEPI - 0.172SGAI + 4.679ACCRUALS - 0.327LEVI

Where,

DSRI = (Receivables$_t$/Sales$_t$)/ (Receivables$_{t-1}$/Sales$_{t-1}$)

GMI= ((Sales$_{t-1}$ - Sold Goods of Costs $_{t-1}$)/ Sales $_{t-1}$)/ ((Sales$_t$- Sold Goods of Costs $_t$)/ Sales $_t$)

AQI = (1-((Current Assets$_t$ + PPE$_t$)/ Total Assets$_t$))/ (1-((Current Assets$_{t-1}$ + PPE$_{t-1}$)/ Total Assets$_{t-1}$))

SGI =Sales$_t$/Sales$_{t-1}$

DEPI = (Depreciation $_{t-1}$ / Depreciation $_{t-1+}$ PPE$_{t-1}$) / (Depreciation $_t$ / Depreciation $_{t+}$ PPE$_t$)

SGAI = (SGA Expenses$_t$/Sales$_t$)/ (SGA Expenses$_{t-1}$/Sales$_{t-1}$)

TAT = (Change in Working Capital$_t$ - Change in Cash – Change in Income Tax Payable$_t$ – Depreciation & Amortisation$_t$)/ Total Assets$_t$

LEVI = ((LTD$_t$ + Current Liabilities$_t$)/ Total Assets$_t$) / ((LTD$_{t-1}$ + Current Liabilities$_{t-1}$)/ Total Assets$_{t-1}$)

Red flags

The American Institute of Certified Public Accountants, AICPA (2002) submitted in its Statement of Auditing Standard, SAS No. 99, that auditors are expected to use 42 red flags in financial statement audits to detect fraudulent financial reporting. The list of 42 red flags found in SAS No. 99 is categorized under pressure, opportunity and rationalization. Abdullahi and Mansor (2015) defined red flags as a systematic way of detecting the symptoms or any signs of fraudulent activities within the organizational settings, they opined that the red flags found in SAS No. 99 is arranged based on the fundamental concept of fraud triangle, which encompasses: pressure, opportunity, and rationalization.

Abdullahi and Mansor (2015) extended the red flags beyond the 42 prescribed by SAS No.99 by identifying some red flags under the fourth element of fraud diamond theory as follows: Pressure red flags includes excessive personal debt; Material lifestyle with lower earning; Excessive gambling; Undue family, organization, and or community prospects; Alcohol or drugs addiction among the employees; Perceived differential and inequality treatment; Antipathy of superiors, intimidation and frustration with job; Pressures from the employee’s peer group and clique; Greediness of the employee; and Social, working and other environmental distresses.

According to Abdullahi and Mansor (2015), opportunity red flags include close relationship between suppliers and other key people within and outside the organization; Organizational failure to orienting employees on the measures uses to eradicate fraudulent act; Frequent and excessive replacement of key employees due to retrenchment, firing and retiring; Lack of job rotation, regular vacation or transfer of key employees within the organization; Inadequate personnel-screening policies when employing a new employee for the replacement; Lack of general and precise personnel policy; Improper record of commendation on personnel dishonest act and other disciplinary actions; Lack of executive disclosures and examinations; A dishonest or overlapping of duty by the dominant management; frequent operation in an unfavorable climate; Lack of supervision and attention paid to details of the job; Inadequate compensation scheme;

Others opportunity red flags include inadequate training programs; Related party transactions; A complex organizational structure; Lack of effective internal auditing staff; use of several auditing firms or changes auditors frequently; providing irrelevant data to the auditors and lack of required information; Use of various legal firms or changes legal counsels repeatedly; An organization that uses large number of different bank accounts; Continuous problems with various regulatory agencies; Large year-end and unusual transactions or unbalanced transactions; An inadequate internal control system or no enforcement of the existing internal controls; Lack of proper accounting records and inadequate accounting personnel; An organization that inadequately disclosed questionable or unusual accounting practices; and Too much familiarity with operations. Rationalization red flags includes an employee's inconsistent behaviour; Lack of personal ethics and morality; A wheeler-dealer personality; A strong desire to beat the system; Employee's criminal or questionable historical background; and a poorly recommended employee with poor financial status. Capacity red flags include having exercising an excessive power; Job or work overlapping; Too much power to coerce other employees; Ability to pursued others; Too much resistance to stresses; Ability to convincingly deceive and tell lies; Too much egoism and over confidence; Specialization in one function for a long duration; and Confidence of risk bearing

Koornhof and Plessis (2000) mainatianed that red flags are seen as those events, conditions, situations, pressures, opportunities, threats or personal characteristics that may increase the risk of management fraud, suggesting that the access that auditors have to the organization books allow them to use a broad spectrum of red flag indicators.

Review of empirical literature

Opportunity red flags and fraud detection

Skousen and Wright (2008) submitted that opportunity red flags represented by relevant proxies in their study were found to have significant impact on financial statement fraud, hence enabling detection of fraud. Skousen and Wright (2008) position is consistent with the findings of Aghghaleh, Iskandar, and Mohamed (2014), who found out that firms' opportunity red flags such as more audit committee and board members experience low level of financial statement fraud.

Yücel (2012) examined the level of effectiveness of the 42 red flags as prescribed by SAS No.99 in detecting financial statement fraud in Turkey from the perspective of auditors. He designed questionnaire and were sent to auditing firms involved in independent auditing activities of capital markets board of Turkey. Using the statistical package for social science, SPSS 17 to analyze their responses, the results of the study shows that the level of fraud-detecting effectiveness of these red flags determined as somewhat effective by external auditors. He found out that the red flags related to opportunities are the most effective category of red flags based on the responds, maintaining that according to the responds of the auditors, it can be said that the opportunities are more dangerous for the companies in Turkey, and that both companies and auditors should be careful about the indicators related to opportunities for preventing fraud and manipulations.

Othman, Aris, Mardziyah, Zainan, and Amin (2015) investigated the perceptions of internal auditors and accountants on fraud detection and prevention methods in the Malaysian public sector. The study adopted the use of carefully structured questionnaire on a population sample covering accountants and compliance auditors from the Malaysian public sector. Findings from the study suggest that improved internal controls, implementation of fraud reporting policy, operational audits, well-structured audit committees, compulsory staff rotation, fraud hotlines and forensic accountants can promote proactive fraud detection and prevention mechanisms employed in the public sector.

Amaechi and Nnanyereugo (2013) investigated the application of computed financial ratios in fraud detection modeling using existing Financial Ratio Models in an attempt to ascertain it effectiveness in the detection of fraud in the Nigerian banking sector. Secondary data generated from published financial statements of about twenty (20) banks for the five year period 2004 -2008, which included preceding year and the fraud year. Using Logistic Regression for purpose of data analyses, the result of their study shows that 16 significant ratios out of 29 financial ratios used in their study as being capable of aiding detection of fraud in the financial statements of banks.

Kourilova and Plevkova (2013) put forward the DMFCA (Detection Model Material Flow Cost Accounting) Model as a possible way to detect creative accounting and accounting fraud in an enterprise, the model is based on environmental accounting and MFCA (Material Flow Cost Accounting) with material, financial and legislative as it balanced areas. The model used analysis of strength and weaknesses, while an assessment of it possible use within production and Business Company in terms of detection of some creative accounting were done.

Aghghaleh, Iskandar, and Mohamed (2014) carried out a study in Malaysia on the usefulness of elements of fraud triangle adopted from SAS No. 99 to prevent fraud from occurring. Cressey's theory opines that pressure, opportunity and rationalization are preconditions for fraud to occur, hence can also be used as a trace for detection of fraud. The study used the binary logistic model and necessary proxies as a measure of pressure and opportunity, by examining a sample of fraud firms and no-fraud firms; two pressure proxies and two opportunity proxies were found to be significantly related to financial statement fraud. The study found out that leverage and sale to account receivable are positively related to the likelihood of fraud which can aid fraud detection. Audit committee size and board of directors' size were also linked to decrease the level of financial statement fraud.

Gbegi and Adebisi (2015) carried out a study to analyze the incidence of fraud in the Nigeria public sector and the means of achieving a successful management of such fraud, using thirty (30) ministries in Nigeria public sector as research population from which sample size of twenty eight (28) ministries were drawn with the aid of the Yaro Yamane's formula. The researchers administered three hundred and ninety two (392) copies of the questionnaire and SPSS17.0 was used to analysed the responds of a total of three hundred and fifty (350) copies of questionnaire retrieved. Their study found out that, there is positive and significant relationship between management policies and Nigeria public sector fraud, fraud prevention and detection methods have influence on Nigeria public sector fraud, there is no strong internal control system in the Nigeria public sector and management integrity has influence on fraud prevention in the Nigeria public sector.

Theoretical framework

Fraud Triangle Theory (Donald Cressey, 1950)

Donald Cressey in 1950 developed the fraud triangle theory as a way of investigating the root causes of fraud and published the fraud triangle theory for the first time in 1953 in his journal title other people's money (Abdullahi & Mansor, 2015). Cressy in 1950, attempted to provide answers on why people commit financial crimes by examining 250 criminals in a period of 5 months and concluded that: trust violators, having a financial problem that is non-shareable and having knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust, gave birth to the theory of fraud triangle which comprises of elements such as pressure, opportunity and rationalization.

Ruankaew (2013) argued that before an employee makes sub-optimal/fraudulent decisions, the tripod elements of fraud triangle which includes pressure, opportunity, and rationalization are preconditions which must be satisfied. He noted that pressure relates to the triggering factor that leads to unethical behaviors, maintaining that those who perpetrate fraud are usually under pressure arising from various circumstances, which in most cases will involve financial stress. Similarly, Ruankaew submitted that perpetrator believes that opportunity exist irrespective of the reality of such opportunity, citing that fraudulent actions is a function of low level of risk. On the other hand, rationalization is a calculated attempt by perpetrator to justify his/her action before the eventual execution of the fraudulent actions. Hopwood, Young and Leiner (2013) defines fraud triangle as a means of assessing the risk that a particular individual may commit fraud. They opine that the triangle consist of three elements which includes pressure/motive, opportunity and rationalization. This means that in the use of use of model for fraud detection, an understanding of the workability of the theory of fraud triangle is very important.

According to Kassem and Higson (2012), the question of why people commit fraud was first examined by Donald Cressey, a criminologist, in 1950. He pointed out that his research was about what drives people to violate trust. He interviewed 250 criminals over a period of 5 months whose behaviour met two criteria: (1) the person must have accepted a position of trust in good faith, and (2) he must have violated the trust. He found that three factors must be present for a person to violate trust and was able to conclude that: "Trust violators when they conceive of themselves as having a financial problem which is non-shareable, have knowledge or awareness that this problem can be secretly resolved by violation of the position of financial trust, and are able to apply to their own conduct in that situation verbalisations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property". The three factors were non-shareable financial problem; which is the pressure, opportunity to commit the trust violation, and rationalisation by the trust violator. When it comes to non-shareable financial problem, Cressey stated "Persons become trust violators when they conceive of themselves as having incurred financial obligations which are considered as non-socially sanctionable and which, consequently, must be satisfied by a private or secret means". The theoretical framework upon which this work is anchored on is the theory of fraud triangle.

III. METHODOLOGY

The secondary source of data collection was used. This was achieved from the annual reports of the respective companies and the Nigeria Stock Exchange Fact Books for a six (6) year period from 2009-2014, thus making it a panel data collection of sixty-five (65) companies. The study used probit regression as it expects a functional relationship between the pressure red flag and the likelihood fraud detection. The model adapted from the work of Aghghaleh, Iskandar and Mohamed (2014) is stated and operationalized as follows:

Fraud= β0+ β1 SALAR + β2 LEV + β3 AUDCSIZE + β4 BRDSIZE+ ε ……….Eqn. 3.1

The model is adapted in this study as follows:

$DLFD_{it}$ =F **(**pressure (SALAR, LEV), opportunity (AUCSIZE, BRDSIZE), rationalization**)**

Grove and Cook (2004) put forward two additional quantitative red flags not yet considered in fraud detection models which were incorporated into this model and classed under rationalization. The additional quantitative red flags are: Quality of earnings and the effective cash tax rate, which they denoted as follows:

Quality of earnings (QOE) = (Operating cashflows/Net income); with a red flag benchmark of <2

Effective cash tax rate (ECR) = GAAP: Accrual basis: (Total income tax expense/Net income before taxes) or

Cash basis: (Total income tax paid/Net income before taxes)

With a red flag benchmark of >2

Thus the fraud detection model adapted from Aghghaleh, Iskandar and Mohamed, (2014) for this study is:

$DLFD_{it}$ =F (pressure (SALAR, LEV), opportunity (AUCSIZE, BRDSIZE), rationalization (QOE, ECR)),

However, because our dependent variable; likelihood of fraud detection (**$Dlfd_{it}$)** is measured using dummy variables on the Beneish M-score metrics, we used probit regression model for our estimate as follows:

$DLFD_{it} = \beta_0 + \beta_1\, SALAR_{it} + \beta_2\, LEV_{it} + \beta_3\, AUDCSIZE_{it} + \beta_4\, BRDSIZE_{it} + \beta_5\, QOE_{it} + \beta_6\, ECR_{it} + \varepsilon_i$……………………………………………………………………………..Eqn. 3.2

Where:

$DLFD_{it}$ = Likelihood of fraud detection of company i in year t.
$SALAR_{it}$ = Sales to Accounts receivables of company i in year t.
LEV_{it} = Total debt to Total assets of company i in year t.
$AUDCSIZE_{it}$ = Number of audit committee members of company i in year t.
$BRDSIZE_{it}$ = Number of board of directors members of company i in year t.
QOE_{it} = Quality of earnings of company i in year t.
ECR_{it} =Effective cash tax rate of company i in year t.

ε_{it}= stochastic error term
$\beta1$ - $\beta6$= Regression coefficients

Data Analyses and interpretation

The result of the descriptive statistics in Table 1 the appendices shows the statistics of three hundred and ninety (390) recorded observations from annual reports of sixty-five (65) companies listed on the Nigeria stock exchange for a period of six years (2009-2014). It shows that the Likelihood of Fraud Detection (LFD), which is the main variable of interest as it is the dependent variable has a mean value of 0.400000, while it standard deviation is 0.490527, it has a Jarque-Bera value of 65.45139. Sales to Accounts receivables (SALAR) has the highest mean value of 19.20881 and a standard deviation of 107.0200. Total debt to Total assets (LEV) has a mean value of 0.078203 and standard deviation value of 0.123877, Number of audit committee members (AUCSIZE) has a mean value of 5.123077 and standard deviation of 1.658578, while Number of board of directors' members (BRDSIZE) has a mean value of 9.107692 and standard deviation of 3.942217. Quality of earnings (QOE) and Effective cash tax rate (ECR) have mean values and standard deviation values of 0.700000, 0.112821 and 0.458846, 0.316780 respectively. Sales to Accounts receivables (SALAR) has the highest Jarque-Bera value of 281810.6. All other variables but Number of audit committee members (AUCSIZE), Number of board of directors' members (BRDSIZE) and Quality of earnings (QOE) exhibited positive skewness.

Table 2 in the appendices shows the association among the variables employed in our study. It shows that the Likelihood of Fraud Detection (LFD) has a low positive relationship with Sales to Accounts receivables (SALAR), Total debt to Total assets (LEV), Number of audit committee members (AUCSIZE), and Number of board of directors' members (BRDSIZE) with correlation coefficient values of 0.081614, 0.094254, 0.207911 and 0.146497 respectively, and a negative relationship with Quality of earnings (QOE) and Effective cash tax rate (ECR) with a correlation coefficient values of -0.059391 and -0.009926 respectively. Sales to Accounts receivables (SALAR) has low positive and negative relationship with Total debt to Total assets (LEV), Number of audit committee members (AUCSIZE), Number of board of directors' members (BRDSIZE), and Quality of earnings (QOE), Effective cash tax rate (ECR) with a correlation coefficient values of 0.063967, 0.047406, 0.015589 and -0.001598, -0.036860 respectively.

Total debt to Total assets (LEV) has low positive and negative relationship with Number of audit committee members (AUCSIZE), Number of board of directors' members (BRDSIZE), Effective cash tax rate (ECR) and Quality of earnings (QOE) with correlation coefficient values of 0.135642, 0.041877, 0.093380 and -0.063596 respectively.

Number of audit committee members (AUCSIZE) has low positive and negative relationship with Number of board of directors' members (BRDSIZE), Effective cash tax rate (ECR) and Quality of earnings (QOE) with correlation coefficient values of 0.716672, 0.046896 and -0.208079 respectively. While Number of board of directors' members (BRDSIZE) has negative and low positive relationship with Quality of earnings (QOE) and Effective cash tax rate (ECR) with a correlation coefficient values of -0.138421 and 0.010831 respectively.

Table 3 in the appendices shows the result of probit regression estimate. It has a McFadden R-squared value of 0.045772, an indication that about 4% of the likelihood of fraud detection on the average, is jointly explained by Sales to Accounts receivables (SALAR), Total debt to Total assets (LEV), Number of audit committee members (AUCSIZE), Number of board of directors' members (BRDSIZE), Quality of earnings (QOE) and Effective cash tax rate (ECR) while the balancing 96% is captured in the stochastic error term (ε_{it}). This means that the model has a low predictive power. However, with an LR statistic value of 24.02800 and Prob (LR statistic) value of 0.000516, the model model on the average can be said to be statistically significant at 95% confidence interval. This means that there exists a significant relationship between likelihood of fraud detection and all explanatory variables which includes Sales to Accounts receivables (SALAR), Total debt to Total assets (LEV), Number of audit committee members (AUCSIZE), Number of board of directors' members (BRDSIZE), Quality of earnings (QOE) and Effective cash tax rate (ECR).

The results of our estimate show that total debt to total assets have a probability value of 0.0033, hence highly significant at 95% confidence interval. This means on the average, that the number of audit committee members can aid the likelihood of fraud detection in Nigeria. This finding corroborates the findings of Skousen and Wright (2008), in the U.S.A, Yücel (2012) in Turkey and that of Aghghaleh, Iskandar, and Mohamed (2014) in Malaysia.

The results of our estimate show that number of board of directors have a probability value of 0.9083, hence not significant at 95% confidence interval. This means on the average, that the number of board of directors cannot aid the likelihood of fraud detection in Nigeria. This finding is inconsistent with those of Skousen and Wright (2008), in the U.S.A, Yücel (2012) in Turkey and Aghghaleh, Iskandar, and Mohamed (2014) in Malaysia.

IV. CONCLUSION

The objective of this study is to ascertain the impact of opportunity red flags as prescribed by SAS.99 in relation to the fraud triangle on the likelihood of fraud detection in Nigeria. Detection of fraud involves the use of different mechanisms such as fraud models and other methodology. Based on our empirical analyses, finding shows that red flags can aid the likelihood of fraud detection in Nigeria. However, the nature of red flag model to be employed in fraud detection process may vary from industry to industry based on the varying degree of significance of the different red flags in the different corporate industries in Nigeria. From our empirical validation, our conclusion is that the importance of opportunity red flags in fraud detection cannot be overemphasized, particularly as it relates to fraud detection modeling in Nigeria and detection of fraud. Red flags are also important based on the fact that the conventional auditing approach may not be able expose all fraudulent practices in both corporate and public sector. It is recommended forensic accounting services should be given the needed legal teething in Nigeria so that the problems of fraud prevention, detection and control both in the Nigerian public and private sectors can be easily addressed, thus reducing the difficulty associated with fraud detection problems.

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APPENCDICE

Table 1 Descriptive statistics

	LFD	SALAR	LEV	AUCSIZE	BRDSIZE	QOE	ECR
Mean	0.400000	19.20881	0.078203	5.123077	9.107692	0.700000	0.112821
Median	0.000000	4.309185	0.020363	6.000000	9.000000	1.000000	0.000000
Maximum	1.000000	1494.708	0.960651	7.000000	21.00000	1.000000	1.000000
Minimum	0.000000	0.000000	-0.462440	0.000000	0.000000	0.000000	0.000000
Std. Dev.	0.490527	107.0200	0.123877	1.658578	3.942217	0.458846	0.316780
Skewness	0.408248	10.97473	2.114106	-2.091805	-0.093675	-0.872872	2.447612
Kurtosis	1.166667	132.8476	12.19973	6.709489	3.959115	1.761905	6.990804
Jarque-Bera	65.45139	281810.6	1665.834	508.0222	15.51878	74.43311	648.2082
Probability	0.000000	0.000000	0.000000	0.000000	0.000427	0.000000	0.000000
Sum	156.0000	7491.437	30.49898	1998.000	3552.000	273.0000	44.00000
Sum Sq. Dev.	93.60000	4455326.	5.969429	1070.092	6045.477	81.90000	39.03590
Observations	390	390	390	390	390	390	390

Source: Researchers computation (2016) using Eviews 8.0

Table 2 Correlation matrix

Covariance Analysis: Ordinary
Date: 04/22/16 Time: 10:51
Sample: 1 390
Included observations: 390

Covariance Correlation	LFD	SALAR	LEV	AUCSIZE	BRDSIZE
LFD	0.240000				
	1.000000				
SALAR	4.273422	11423.91			
	0.081614	1.000000			
LEV	0.005713	0.845862	0.015306		
	0.094254	0.063967	1.000000		
AUCSIZE	0.168718	8.393005	0.027798	2.743826	
	0.207911	0.047406	0.135642	1.000000	
BRDSIZE	0.282564	6.560196	0.020398	4.673925	15.50122
	0.146497	0.015589	0.041877	0.716672	1.000000
QOE	-0.013333	-0.078287	-0.003606	-0.157949	-0.249744
	-0.059391	-0.001598	-0.063596	-0.208079	-0.138421

ECR	-0.001538	-1.246413	0.003655	0.024576	0.013491
	-0.009926	-0.036860	0.093380	0.046896	0.010831

Source: Researchers computation (2016) using Eviews 8.0

Table 3 Regression result output

Dependent Variable: LFD
Method: ML - Binary Probit (Quadratic hill climbing)
Date: 04/22/16 Time: 10:48
Sample: 1 390
Included observations: 390
Convergence achieved after 4 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-1.314037	0.314753	-4.174817	0.0000
SALAR	0.001016	0.000835	1.216795	0.2237
LEV	0.694675	0.522524	1.329462	0.1837
AUCSIZE	0.189917	0.064713	2.934776	0.0033
BRDSIZE	0.002699	0.023438	0.115148	0.9083
QOE	-0.039670	0.143777	-0.275911	0.7826
ECR	-0.074133	0.207040	-0.358063	0.7203

McFadden R-squared	0.045772	Mean dependent var	0.400000
S.D. dependent var	0.490527	S.E. of regression	0.482595
Akaike info criterion	1.320311	Sum squared resid	89.19994
Schwarz criterion	1.391498	Log likelihood	-250.4605
Hannan-Quinn criter.	1.348530	Deviance	500.9211
Restr. deviance	524.9491	Restr. log likelihood	-262.4746
LR statistic	24.02800	Avg. log likelihood	-0.642207
Prob(LR statistic)	0.000516		
Obs with Dep=0	234	Total obs	390
Obs with Dep=1	156		

Source: Researchers computation (2016) using Eviews 8.0

MANAGEMENT OF HUMAN RESOURCES IN THE COVID-19 PANDEMIC ERA. A STUDY OF SMALL-SCALE ENTERPRISES IN LAGOS STATE.

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ABSTRACT
Despite the significant contributions of small-scale enterprises to the Nigerian economy, challenges still persist that hinder the growth and development of the sector, and coronavirus pandemic reversed some of the gains achieved. It is obvious that corona virus pandemic has seriously disrupted the world economy and continuing to ravage the existence of businesses especially the small businesses even in the post-COVID-19 era. This study is aimed at examining the management of human resources by the small business owners during the Convid – 19 pandemic. The population for the study was 1200 registered SMEs in Isolo local government development area in Lagos State. Taro Yamane statistical formula (1969) was adopted to arrive at a sample size of 300 respondents. The analysis of the quantitative data was done using chi-square and, shows significant effect of Covid-19 pandemic on the management of human resources by Small – Scale Enterprises in Lagos State. The findings imply that COVID-19 pandemic posed a great challenge in the management of human resources by small – scale business owners. In view of the findings, the researcher recommended that small scale enterprises should constantly provide hygienic training sessions for employees and investment in technologies to ensure that staff are acquainted with the telework tools for effective communication.

Keywords: COVID-19, Human resources, Management, Pandemic, Small-Scale Enterprises

1.1 Introduction

Development of small and medium scale enterprises (SMEs) has been a focal point of the various governments of the world, because SMEs have flexible configurations and immensely contributed to nation building respectively (Aderemi, Tolulope, Adedayo, & Arinola, 2019). Price Water (2020), posited that SMEs sector is the backbone of major developed and developing economies, as well as important contributors to employment, economic and export growth. According to Rahid (2022), small and medium-sized enterprises (SMEs) are acting as engines of economic development in both developed and developing countries. In South Africa, SMEs account for 91% of businesses, 60% of employment and contribute 52% of total GDP. According to Chowdhury, Azam, and Islam, (2013) as cited in Rahid (2022), “SMEs contribute 50% of Bangladesh’s industrial GDP and employ 82% of the total industrial sector employment". In Nigeria, SMEs contribute 48% of national GDP, account for 96% of businesses and 84% of employment (NBS, 2017). According to the Nigeria Bureau of Statistics (2017), micro, small and medium scale enterprises (MSMEs) in Nigeria have contributed about 48% of the national GDP in the last five years. They make up about 90% of the manufacturing sector's businesses and roughly 50% of all industrial jobs. To Hussaini, Auwal, and Damina, (2021), SMEs subsector makes up about 97% of businesses in Nigeria and provide on average, 10% of Nigeria's employment, and industrial output. Due to their ability to increase productivity, create jobs, and enhance the welfare of the populace, SMEs in Nigeria have been named as the country's economic drivers (Abosede & Onakoya (2013) cited in Aderemi, *et al. 2020*). Aderemi et al. (2020) summarized that, the SMEs in Nigeria play pivotal role in the economic development resulting from their capacity to stimulate welfare of the people, reduction of unemployment and productivity. This is one of the reasons why studies about impact of COVID-19 on SMEs in Nigerian cannot be ignored.

Despite the significant contributions of SMEs to the Nigerian economy, challenges still persist that hinder the growth and development of the sector, and perhaps, such challenges were amplified during the COVID-19 pandemic. A global COVID-19 virus has gripped nearly all facets of the world's economic endeavors, posing a threat to human and material resources. At this period, while a few sectors (such as the telecommunications industry, IT service providers, social support services, banking, and healthcare) appear to have benefited in some respects from COVID-19; a vast majority of sectors and industries have been engulfed with widespread challenges exceeding their elastic limits and perhaps, currently on 'life support'. Micro and small businesses experienced a larger decline in business activity compared to large firms (Lakuma et al., 2020).

According to Yeboah-Assiamah, (2020), one factor that appears constant, is the impact of the pandemic on ''people or workforce'' within the organisations. During Covid – 19 pandemic, some people were advised to leave the organization, others were advised to take a temporary leave of absence, still, others have had changes made to their salary and compensation to their disfavour. Additionally, the great majority of the "surviving" workers work from "one corner" of their houses while feeling socially excluded (in obedience to social distance). Many of the people who have survived these austerity measures could develop some psychological difficulties (Yeboah-Assiamah, 2020). The human relations and the ''informal organisation'' which had held organisational members together has to be artificially suspended, and in some cases regarded as distasteful because of the need to stick to COVID-19 protocols of physical and social distancing. According to Carnevale and Hatak, (2020), the COVID-19 pandemic has created a particularly challenging environment for Human Resource Management (HRM) – with managers having to quickly venture into the virtual world for meetings and other social interactions. For example, employees who formerly spent all or most of their time working inside their organisation's physical boundaries now have to quickly adjust to remote work environments. In Nigeria, the drastic shift in work culture on how to keep workers engaged has constituted a challenged to HRM practice due to inadequate policies and resources for remote work environment, employee competences in recruitment and selection, employee compensation and benefits scheme. Though the wellbeing of workers has become a major concern to HRM, transition to alternative methods of performing tasks has not been well developed.

Human resources are one of the most precious resources an organization can have in the highly competitive business world of today. The human resource within the organisation is like a catalyst and, puts other organisational resources (such land, capital) to productive use, to achieve the goals for which it was established. In the current global work environment, the cost of hiring, maintaining and retaining the human resources within an organisation is so huge that losing them to disease is a massive strain on the organization's financial resources. It could difficult to estimate how much an ill or injured employee could cost the company. The disease may make the organisation's human resources disabled, unable to perform their jobs, and possibly even cause death, forcing the organisation to shop for replacements. The lockdown occasioned by the covid-19 pandemic prevented the human resources from discharging their duties to the organisation. Lockdown partial or total hindered productivity, and seemingly, forced a good number of organisations to reduce costs through salary cuts, insufficient human resource planning, and ultimately layoffs.

Gap filling

The COVID-19 stimulated research in a variety of sectors, including the medical, pharmaceutical, economic, political, and social arenas, in order to conceptualize potential multiplier effects of COVID-19 on the global economy. Research on small-scale enterprises in this era of Covid -19 is not an exception; the devastating effects of COVID-19 pandemic on both human and material resources in early 2020 was impactful. In spite of these, there are many researches ongoing that are yet to unravel or explore the empirical performance and management of human resources by small scale enterprises during Covid-19 pandemic. It is on this premise that the author decided to examine effects of management of human resources on the small enterprises' owners during the COVID-19 pandemic in Nigeria with specific emphasis on small scale enterprises operating in Isolo LCDA in Lagos State.

Managing human resources in small scale businesses could be more critical (Sulaiman, Ahmed & Shabbir, 2020). Perhaps, with the outbreak of the pandemic, handling workforce issues which were already a challenge for human resource managers became more complicated. The injection of some technological, institutional, and human resource reforms could help to operate effectively within this new normal of human resource management. The task of human resource manager has become more than ever crucial in taking up the strategic role of leading the organisation and its workforce to navigate and to adjust appropriately in this new HRM era. The crux of this study is to examine how small –scale enterprises managed their human resources in the era of covid- 19 pandemic in Lagos state.

The significance of this study cannot be overemphasized; the prevalence of COVID-19 has instigated various researches in economics, health, environment, manufacturing, agriculture and many more. It is expected that this research work will postulate possible coping strategies or mechanisms and guidelines that will mitigate against future effect of pandemic on small – scale enterprises and world economy. The study will be of great significance to both policy makers and human resource managers of SSEs. To the policy makers, it would provide the basis for effective policies for the sector's survival of the post-Covid-19 challenges. To the SSEs owners and operators, it would provide an opportunity for diversification, business opportunities and coping strategies that could build SSEs resilience against major economic uncertainties.

Review of related Literatures

Conceptual Review: Meaning and Origin of Virus and Covid -19 Pandemic

Viruses of note that have significantly affected the human race according to Harding (2020) include the Marburg virus of 1967; the Spanish flu of 1918 that claimed the lives of over 50 million people; Dengue virus of 1950 which started in the Philippines and Thailand; Smallpox of 1980 virus which claimed the lives of over 300 million people; HIV of 1980 that claimed the lives of 32 million people and Hantavirus of 1993. At the turn of the century, other viruses of significant effect include; SARs-CoV of 2002 which was first noticed in China that killed 770 people within two years; Rotavirus of 2008 that claimed the lives of 453,000 children; the 2009 swine flu pandemic that killed 203,000 people worldwide; the 2012 and 2015 discoveries of MERS-CoV in Saudi Arabia and South Korea; and the SARS-CoV-2 also known as Coronavirus.

Previous viral outbreaks that are similar to coronavirus include the severe acute respiratory syndrome (SARS)-CoV and the Middle East Respiratory Syndrome (MERS)-CoV (Hussin & Siddappa, 2020). The Coronavirus or COVID-19 which started in late 2019 in Wuhan City in China, manifested majorly as a respiratory tract infection, impacting more on the elderly and, people with underlying medical conditions (Mayoclinic, 2020). The World Health Organization (WHO) declared Coronavirus a pandemic on March 11, 2020, closed to a decade after declaring H1N1 influenza a pandemic in 2009 (David, 2020). The mode of transmission is through droplet infections, which necessitated the enforcement of COVID-19 protocols of social distance, use of face masks, and respiratory etiquette of sneezing or coughing into a flexed elbow.

In Nigeria, the first case was confirmed in Lagos on the 27th of February 2020, since then the spread of covid-19 is on the increase, as at 30th November, 2021, total confirmed cases recorded in the country was 214,113; 207,292 cases have been discharged and 2,976 deaths have been recorded in 35 states including the Federal Capital Territory (NCDC, 2021). In an attempt to flatten the curve of outbreak levels, many nations around the globe have implemented sweeping prohibitions (e.g., quarantines, lockdowns and closing of physical shops and businesses) as part of safety concerns (Michie, 2020). The lockdown created travel limits and social barriers which impacted negatively on the customers services and service suppliers (Giritli Nygren & Olofsson 2020). The lockdown forced some businesses to either shut down or reduce their production capacity and this seemingly increased unemployment and underemployment (Bofinger et al., 2020). A sustained lockout further raises the possibility of a significant rise in corporate and government debt that might extend the stabilization process from the COVID-19 crisis (Donthu & Gustafsson, 2020).

The incubation period of the virus is 14 days, therefore, upon exposure, individuals are isolated for 14 days to see whether they could develop symptoms of the virus which include; loss of smell, coughing, difficulty breathing, fever, sore throat, and muscle discomfort (NCDC, 2020). Complications of the disease could mimic symptoms of pneumonia with shortness of breath and fever, among others (Mayoclinic, 2020).

SME Sectors Greatly Affected By COVID-19 Pandemic

Some of the micro, small and medium enterprise sectors greatly affected by Coronavirus include: manufacturing, wholesale and retail trade; repairs of motor vehicles and motorcycles. the sectors also include accommodation and food service activities, mining and quarrying, construction, water supply; sewerage, waste management and remediation, agriculture, forestry, fishing and hunting. Others are: transport and storage, administrative and support services activities, education, entertainment, recreation, among others (Smedan.gov.ng, 2021).

COVID-19 and Small-Scale Enterprises: An Empirical Study

According to Adenomon et al. (2020), who studied the effects of the COVID-19 outbreak on the Nigerian Stock Exchange's performance using Evidence from GARCH Models covering the period of 2nd January 2020 to 16th April 2020, the results revealed that profits nosedived during the COVID-19 period under study in Nigeria as against the normal pre-COVID-19 results. The work of Chukwuka and Ekeruche (2020) on the impact of the COVID-19 outbreak on the Nigerian economy, shows that Nigeria economy that was projected to experience 2.5% Gross Domestic Product (GDP) growth, has been truncated by the pandemic leading to a higher increase of the nation's debt servicing to revenue ratio at 60% amid the falling prices of oil.

In the same vein, FATE Foundation and BudgIT (2020) studied the impact of COVID-19 on 1,943 Micro, Small, and Medium Enterprises (MSMEs) across the 36 states in Nigeria including the FCT. The result revealed that 94.3% of the businesses recorded negative results during the pandemic principally in the areas of Cashflow, Sales, and Revenue. AfDB's

African Economic Outlook (2020) report revealed that, real GDP in Africa will contract by 1.7 percent in 2020, plummeting by 5.6 percentage points from January 2020 pre-COVID–19 projection, if the virus has a significant impact but lasts for a brief period. If the spread of the virus continues till after the second quarter of 2020, a deeper GDP contraction of 3.4 percent is projected, down by 7.3 percentage points from the growth projected before the outbreak of COVID–19. In Abayomi et al. (2021) in a survey reported that many micro enterprises in the thirty-six states of the country were negatively impacted on by the Coronavirus pandemic, mostly in the area of cashflow, revenue and sales. In another study by Tekola and Gidey (2019), weak human resources development schemes, dependency on government are the factors that influence the outcome of Ethiopian micro and small enterprises.

A study by Babatunde, Fayigbe and Ayo-Ogunlusi in Ekiti state, South West Nigeria, that involved 120 purposively selected respondents of governmental and non-governmental agencies showed that COVID-19 pandemic impacted on human resources managers. Also, managers utilized virtual office and online marketing to minimize the negative effects of organization performance (Babatunde, Fayigbe & Ayo-Ogunlusi, 2022).

Theoretical Foundation

Human Capital Theory

The study was guided by the Human Capital Theory by Gary Becker in the 1960s, which emphasized the importance of investing in learning skills and education to achieve enhanced productivity. This education and skills make people to be more informed and enhance the individual's rationality (Becker, 1993). Education tends to respond to varying demands of labour market and helps individuals to upscale during economic crisis such as during COVID -19 (OECD, 2022).

This theory is relevant to the study because during COVID-19 lockdown, small scale business operators were left to how well informed they were and their level of innovativeness to succeed. Hence, a lot of them through their education and skills in computer services leveraged on online platforms to make their break through. Even in the post COVID-19 era, some of the small-scale businesses still retain both physical and online platforms.

Methodology

Research Design

A descriptive survey was employed. One thousand two hundred (1200) known business owners in Isolo Local Government Development area (LCDA) constituted the population. The proportionate sampling technique was used for the study. A sample of one hundred (300) respondents who are business owners formed the sample which is 25% of the population. Data was collected with the aid of a questionnaire which had item statements measuring the various constructs identified in the research questions. According to available record at the Isolo LCDA secretariat, the total registered small scale enterprises in Isolo LCDA in the field of manufacturing, foods services, wholesale / retail sales sector is 1200, the breakdown is shown in the table 1.

S/N	Small Scale Enterprises in Isolo LCDA	Owners (Population)
1	Manufacturing	347
2	Food service	462
3	Wholesale / retail trade	391
Total		1200

Source: Chamber of Commerce, Isolo LCDA

The study employed Yard's formula to determine the sample size. This formula is concerned with applying a normal approximation with a confidence level of 95% and a limit of tolerance level (error level) of 5%.

Sample size is determined by

$$n = \frac{N}{1 + Ne^2}$$

Where: n = the sample size

N = population

e = the limit of tolerance

$$n = \frac{1200}{1 + 1200(0.05^2)}$$

$$n = 300$$

The sample size is 300 which imply that 300 copies of questionnaire is administered to the respondents who are the owners of small businesses in Isolo LCDA.

Table 2**. Proportionate sampling of types of small-scale businesses in Isolo**

Small Scale Enterprises in Isolo LCDA	**Population**	**Proportion**	**Sample size**
Manufacturing	347	347x300 /1200	87
Food services	462	462x300 /1200	115
Wholesale/ retail trade	391	391x300 /1200	98
Total	1200		300

Analysis and Presentation of Data

Table 3. Frequency distribution of the socio-demographic characteristics of small-scale enterprises

Variable	Frequency	Percentage
Employment size		
(Employees)		
1 to 10	108	36.0
11 to 20	122	40.6
21-40	30	10.0
41 and above	40	13.4
Total	300	100.
Challenges		
Restrictions on labour mobility	80	26.6
Disruptions in logistics	55	18.3
Presenteeism	45	15.1
High rate of absenteeism	60	20.0
Changes in work arrangement	60	20.0
Total	300	100
Coping strategies		
Flexible work arrangements	65	21.6
Remote functioning	48	16.2
Adhere to covid protocols	55	18.3
Temporary Furlough	40	13.3
Pay cut	37	12.3
Work redesigning	55	18.3
Total	300	100

Source: Field Work (2022)

Table 3 above shows employment capacity of the surveyed SSEs. 36% of the enterprises has between 1 and 10 employees, 40.6% has between 11 and 20 employees, 10% has between 21 and 40 employees, and 13.4% has 41 workers and above. This implies that the majority of the enterprises have a number of workforces between 11 and 20 people.

The challenges faced by the operators of small-scale enterprises during COVID-19 include: flexible work arrangement (labour mobility, 55 (18.3%), disruptions in the logistics, 45 (15.1%), presenteeism challenges, 60 (20%), and absenteeism 60 (20%). This shows small scale enterprises faced a lot of challenges in managing their human resources during the covid -19 pandemic era. Some of the coping strategies adopted by SSEs during COVID-19 include (table 3): Flexible work arrangement (21.6%), pay cut (12.3%), among others.

Hypothesis Testing.

H_{O}: There is no significant effect of Covid-19 pandemic on the management of human resources of Small – Scale Enterprises in Lagos State.

Table 4 Chi-Square Analysis

Responses	Observed Frequency	Expected Frequency	O – E	$(O - E)^2$	$\frac{(O-E)^2}{E}$
Strongly agree	115	60	55	3025	50.41
Agree	85	60	25	625	10.41
Undecided	50	60	10	100	1.67
Disagree	22	60	38	1444	24.06
Strongly disagree	28	60	32	1024	17.06
Total	300				103.61

$$\chi^2_{tab} = 9.49$$

$$\chi^2_{Cal} = 103.61$$

Decision Rule: At 5%, when the calculated value is greater than the table value (χ^2), we reject the Null Hypothesis. In this case, the calculated value (103.61) is greater than the table value (9.49), we therefore reject the null hypothesis which implies that there is significant effect of COVID-19 pandemic on the management of human resources of small – scale enterprises in Lagos State.

Discussion of findings

The objective of this study was to examine how small – scale enterprises manage their human resources during COVID-19 era with the specific objectives of finding out the challenges posed by covid-19 pandemic in the managing human resources and the coping strategies adopted by the owners and human resource managers of SSEs during COVID-19 pandemic in Lagos state. To achieve these objectives, structured questionnaire was distributed to various respondents within the selected SSEs in Lagos State. Findings from review of literature show that small scale enterprises in Nigeria prior to the COVID-19 era faced challenge of infrastructural deficit, poor financial support and harsh business environment, top levels of unskilled workforce and low investment opportunities (Oyelaran-Oyeyinka, 2020). In the COVID-19 era, perhaps, small scale enterprises could be the most vulnerable sector in the Nigerian economy with little or no help from the Federal government. COVID-19 seemingly, impacted negatively on small scale enterprises more than ever before (Oyelaran-Oyeyinka, 2020).

The study shows that there is significant effect of COVID-19 pandemic on the management of human resources of small – scale enterprises in Lagos State. This corroborated the study by Babatunde, Fayigbe and Ayo-Ogunlusi (2022) in Ekiti state, South West Nigeria which stated that COVID-19 pandemic impacted on human resources managers, however, innovative thinking of virtual office helped to reduce negative impacts on some businesses.

Conclusion

Coronavirus has impacted negatively on small – scale enterprises, globally. The prevalence of Covid-19 pandemic will definitely change the dynamics of doing business worldwide. While the prospects for many small-scale enterprises may look discouraging and morale damaging in this period, the world economy could eventually rebound with successive businesses springing up. It is advisable now for small scale enterprises to assess the damages their companies may face and strategically address protection measures that will assist in mitigating the impact of the pandemic while maximizing the opportunities that will most certainly present themselves once the pandemic is contained. COVID-19 has significant impact on workplace and the uncertainty emanating has imposed unfavourable environment for HRM practice which requires radical adjustment to ensure that workforce is managed based on safety measures in line with COVID-19 guidelines. In Nigeria, the pandemic has created attention on how HRM need to adopt changes on how work should be done, the type of work, and how to organise and managed work. Approaches for enhancing socioeconomic sustainability of organisation involve remote work environment which requires limiting human contact in workplace. HRM now apprehends unprecedented changes arising from COVID-19 which influences employees' performance through formulation of policies and procedures to enhance organisational performance.

Recommendations

In view of the above, the researcher makes the following recommendations for the policy makers and all stakeholders in small scale enterprises sector in Nigeria that:

1. Human resource management can overcome the challenges by providing hygienic training sessions to front-line employees, initiating incentive plans at all levels to motivate employees, directing all staff of their organisations to adhere to the health guidelines, assisting employees in overcoming their uncertainty, invest in technologies to ensure that staff are acquainted with the telework tools for effective communication.
2. The influence of COVID-19 should motivates small scale enterprises owners and human resource managers to rethink their core competencies, seek new opportunities of managing their human resources and redefine sustainable business models in a more intense and timely manner.
3. It is also recommended that strengthening partnership with stakeholders and excising best leadership practices are essential to

ensure good management of human resources by small enterprises.

4. Finally, human resource managers of small-scale enterprises need to pay attention to the morale, remote work atmosphere, and job satisfaction variables to sustain optimal employee efficiency, especially by online working during the COVID-19 pandemic

Contribution of this Research to Knowledge

The study has empirically established that COVID-19, though may have its negative impact on businesses, but may not be able to shut down business completely if adequate steps are taken to salvage the situation through proper, effective and efficient management of human resources.

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EXPLORING THE NEXUS OF ENTREPRENEURSHIP EDUCATION ON STUDENTS' ENTREPRENEURIAL INTENTION: A CONCEPTUAL STUDY

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Abstract

The major challenge that many developing countries such as Nigeria is confronted with today is that of unemployment faced by many graduates. It is in an attempt to proffer remedies to the issues of unemployment that entrepreneurship education was introduced into the Nigerian educational institutions curriculum in order to foster entrepreneurial skills among students, reduce the level of unemployment and serve as a tool for stimulating economic growth. The major objective of this paper is to evaluate the connection between entrepreneurship education and entrepreneurial intention with major reference to Nigerian students in tertiary institutions. The study adopted a qualitative research method by using online journals, textbooks, and articles that are relevant to the field. This paper builds on the theory of planned behavior and the entrepreneurial event model in assessing the connection of entrepreneurial education on the entrepreneurial intention of Nigerian students. The study revealed that the major problem facing Nigerian graduates are that of unemployment and inadequate skills required to set up businesses. It was identified that the introduction of entrepreneurship education into the school curriculum is helpful as it has helped students in identifying new entrepreneurial opportunities and converting them into marketable products or services. It also showed that entrepreneurial intentions are a strong determinant of entrepreneurial behavior towards business setup. Therefore, the introduction of entrepreneurship education on institutional curriculum is very much acceptable as it will be helpful in training and motivating students toward entrepreneurial behavior.

KEYWORDS: entrepreneurship education, entrepreneurial intentions, students, Nigeria

Introduction

Entrepreneurs, as economic agents, have an important influence in the revival of an economy by promoting economic, technological, social and organizational development (Baporikar, 2021). They act as key drivers for economic development through the wide range of economic and social benefits they provide in terms of job creation, the transfer of technology from lab to market, increasing competitiveness and innovation and promoting social empowerment (Avelino et al, 2022)

Entrepreneurship education is a possible way to foster the previous factors driving entrepreneurial intentions and strengthen entrepreneurial skills (Do Nguyen et al, 2023). In Nigeria, the pressing challenges of youth unemployment and underemployment have prompted educational reforms aimed at fostering entrepreneurial skills among students. As part of these reforms, many institutions are increasingly incorporating entrepreneurship into their curricula. Effectively, the implementation started in the 2007/2008 academic session. In pursuance of the full implementation of entrepreneurship education, most of Tertiary Institutions established a Coordinating Centre for entrepreneurship education to support students' training. The Nigeria University Commission (NUC) was given presidential directives by the Ministry of Education to supervise and coordinate the programme of introducing entrepreneurship education into Nigerian institutions of higher learning (Ogunode et al, 2024).The introduction would be a road map for graduate self-employment, self-reliance and poverty reduction(Edikpa et al, 2021).

Entrepreneurship education has emerged as a vital component in shaping the skills and competencies of students in Nigeria. With the country's high unemployment rates and a growing youth population, incorporating entrepreneurial training into the curriculum is seen as a solution to enhance employability and economic independence (Adeleye et al, 2020).

Although, virtually all the courses offered by Nigerian university students have potential for self-employment due to the introduction of entrepreneurship education. This affords students offering these courses, double opportunities for self-employment and white collar jobs. Unfortunately, a larger percentage of graduates fail to make use of entrepreneurial aspect of their training but are left in the world of work either searching for employment or being underemployed despite their exposure to entrepreneurial education. In the light of this, an investigation into factors which influence such students' entrepreneurial intention is needed.

This paper seeks to contribute toward addressing this gap in knowledge by theoretically adopting a model that draws on the theory of planned behavior (TPB) to examine the antecedents of entrepreneurial intentions among Nigerian university students. In doing so, it enhances understanding of whether and if so, how education can affect students' attitudes toward entrepreneurship and their entrepreneurial self-efficacy.

Objective

The main objective of this study is aimed at examining the connection between entrepreneurial education and entrepreneurial intentions of Nigerian students, this paper assumes that there is a significant relationship between entrepreneurship education and entrepreneurial intention among university students; this is because entrepreneurship still remains a key ingredient for successful economic growth in developing countries because of its importance on job creation and opportunity identification.

2. Conceptual/Theoretical Framework And Literature Review

Historically, the impact of entrepreneurship occasioned the attention of various scholars and led to the emergence of the concept of entrepreneurship education. The concept of entrepreneurship came into existence through the works of French economist Richard Cantillon, who was the first to introduce the concept "entrepreneur" in his work in 1725. He opined that an entrepreneur is a risk-taker (UDUKEKE et al).

However, some scholars like Jean-Baptise Say who examined the concept in an advanced way in his work in 1821 argued that an entrepreneur is an economist, and he identified entrepreneurship as a new economic phenomenon (Hopkins, 2021). With the above submissions, we can conclude that the concept "entrepreneur" is as old as the discipline of economics itself. Entrepreneurship is the driving element that coordinates all other factors of production to create goods and services.

From the global perspective, the effect of entrepreneurship has been felt in various economies and has impacted positively both to developing and developed countries of the world such as countries in Africa and Europe respectively(Agu et al, 2021).

Students at tertiary institutions may have different attitudes largely as a result of other exogenous factors such as entrepreneurial education, entrepreneurial experience, present of role model, demographics etc. Although attitudes changes with time, it can provide the basic explanation or predictions of future action of individuals (Verplanken et al, 2022).

Both Ajzens intention- centered theory of planned behavior and Shaperos model of entrepreneurial event provides a well-grounded explanation and predictions of variety of planned behavior.

2.1 Theoretical Framework: Theory of planned behavior (TPB).

The theory of planned behavior (Ajzen, 1991) has predominantly been used as a reliable theoretical framework to examine student's entrepreneurial intentions. Research has shown the explanatory power of the theory to determine the factors that influence student's decision to become entrepreneurs and individuals actual involvement in entrepreneurship (Maheshwar *et al*., 2023). According to Ajzen (1991), The Theory of Planned Behavior (TPB), is driven by three factors: Attitudes (the individual's evaluation of entrepreneurship), Subjective Norms (social pressure to engage in entrepreneurship) and Perceived Behavioral Control (the perceived ease or difficulty of becoming an entrepreneur). In the context of entrepreneurship education, TPB suggests that education can influence students' attitudes, norms, and perceived control over entrepreneurial behaviors, thereby shaping their entrepreneurial intentions (Kobylińska, 2022). For example, entrepreneurship education can enhance students' self-efficacy and belief in their ability to start a business, which in turn influences their entrepreneurial intentions.

The entrepreneurial event model

The concept of entrepreneurship education on entrepreneurial intention was further backed by the Entrepreneurial Event Model (EEM), proposed by Shapero and Sokol (1982). He explained that entrepreneurial intentions are influenced by life events or personal triggers that prompt individuals to consider entrepreneurship. This model suggests that the decision to become an entrepreneur is shaped by three factors: Perceived Desirability (personal attitude toward entrepreneurship), Perceived Feasibility (belief in one's capability to start and manage a business) and Propensity to Act (the individual's inclination to act on the opportunity).Entrepreneurship education influences these factors by enhancing students' perceptions of both the desirability and feasibility of entrepreneurship. Through exposure to entrepreneurship concepts and experiences, education helps increase students' belief that entrepreneurship is a viable career choice (Osorio et al, 2022).

In both models, intention is considered as antecedent for entrepreneurial behavior. Thus, the two models are regarded as intentionality based models. In Ajzens model, it is clear that intention is a precondition for target entrepreneurial behavior (new business initiation), While Shaperos model requires that individual perceived entrepreneurship as being credible career option (Joensuu-Salo et al, 2022). Believing entrepreneurship as a career option is dependent on how an individual see it (i.e. whether feasible and desirable or not). If the students feel venture creation is something desirable and feasible, they may likely have intention for entrepreneurial behavior

2.2 Entrepreneurship Education

The term entrepreneurship education is used interchangeably with entrepreneurship training and skill acquisition. Conceptually, entrepreneurship education refers to a specialized knowledge that inculcates in learners the traits of risk-taking, innovation, arbitrage and coordination of factors of production for the purpose of creating new products or services for new and existing users within human communities (Ajose, 2021).

In the words of Audu,2022 the thrust of entrepreneurship training entails identifying "the sources of opportunities, the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate and exploit them. It encompasses a wide range of activities, including teaching the fundamentals of business, innovation, leadership, risk management, and the entrepreneurial mindset. The goal is to foster the abilities needed for identifying opportunities, taking calculated risks, and effectively managing new businesses or projects. It is on the above submissions, that education plays a vital role in teaching and developing entrepreneurial skills.

Education at all levels have articulated the national implementation strategy packages as part of long term programmes to address gross unemployment and under employment, especially at Post-graduation level. This programme at maturity is expected to improve Nigeria economic growth through the development of academic excellence. Entrepreneurship studies is particularly relevant as most business, attempt to reconcile the implementation aspects with profitability. This nexus is important and of great interest for the academia, scientific community and even policy makers.

According to Onwo et al (2021), job creation through orientation, skill development, career development, and opportunities would greatly contribute to addressing joblessness in the country. Nigeria's economy would experience more growth when entrepreneurship development has reached an appreciable level. These can be done when all the stakeholders (researchers, academia, and policymakers) give their very best in promoting entrepreneurship and its development in the country through entrepreneurship education. EE provides a wide ground for new inexperienced adventurists in every economy to enhance standard of living of people in a country. It is the field where a person can start his or her idea of venture creation, which may end up in a giant enterprise. Entrepreneurship provides enormous kinds of products which increases the income of youths who are employed in the entrepreneurial enterprises (Morris et al, 2020).

The importance of entrepreneurial curriculum at this stage is vital in order to eradicate idleness and occupy the youths with hands on task skills and activities. Findings by Ogwu, (2023), revealed that entrepreneurship education is a viable medium of steering the wheels of economic development for secondary school graduates in Nigeria. The researcher also found that financial management skill, risk taking skill, communication skill, and human relations skill among others are entrepreneurial skills required for economic development and empowering of youths.

2.3 Entrepreneurial Intention

Entrepreneurship development cannot be successful without the major factors for its formation and growth which is the entrepreneurial intention (EI). Entrepreneurship intention encourages self-reliance and brings critical thinking which would give birth to innovations. For more than half a century, various findings of entrepreneurship have been done.

According to Leonelli et al (2022), attention has been on the result of the psychic traits of entrepreneurs on their entrepreneurial behavior. Some schools of thought argued that individual ambition of entrepreneurship was more fruitful and had muscular ability in the projection of their entrepreneurial behavior (Beuving, 2023). Scholars have discussed the determinants of individual EI while estimating their entrepreneurial intention. They suggested many analyzing models, which include; the entrepreneurial event model, by Shapero & Sokol (1982), and the theory of planned behavior by Ajzeen (1991) are the representative ones. There are also other new entrepreneurial intentions models proposed by other scholars. These models can be categorized into three namely; individual or psychological factors, family background factors, and social and environmental factors (Maheshwari et al, 2023). Some people are born-entrepreneurs such that from the early stage of their lives such people's entrepreneurial intentions are influenced by psychological factors. Meanwhile, other people are influenced by the fact that their parents are renowned entrepreneurs. The factors that influence their entrepreneurial intentions are family background factors (Dragin et al., 2022). The third category consists of people who their entrepreneurial intentions are influenced by environmental factors. These are people that decided to become entrepreneurs due to the environment they found themselves.

According to Van et al., (2021), the recent EI model was often straightforward and fixed, they however proposed a contextual model of entrepreneurial intentions to keep away from shortcomings or limitations. There are problems encountered at the course of analyzing the researches of an individual's entrepreneurial intention which includes influential factors. This is as a result of non-comprehensiveness and systemic analysis. Some of the other problems experienced are statistical course of action such as psychology analysis, variance review, and circumstantial statistics among others.

2.4 Entrepreneurship Education and Entrepreneurial Intention of students (nexus)

Jena (2020), defined Entrepreneurial intention as a mental orientation such as desire, wish, and hope to influence their choice of entrepreneurship. There has been an increase of interest on the topic of entrepreneurship in Nigeria in recent times. This could be a result of the notion that entrepreneurship has the capacity in reducing unemployment, under-development, poverty, and also the belief that it could contribute to economic growth and development (Enaifoghe et al, 2022).These have led researchers and academics from different fields of endeavors and policymakers to pay more attention to comprehend the driving forces behind entrepreneurship. The progress made so far in entrepreneurship education needs to strengthen and more current entrepreneurship education programs need to be added so that the impact of entrepreneurial intention would be more pronounced among Nigeria students.

Exposure to entrepreneurship education has been linked to increased entrepreneurial intention and a higher likelihood of starting a business (Sun et al, 2023).Research indicates that entrepreneurship education significantly influences students' entrepreneurial intentions. A study by Satriadi et al. (2022) found that exposure to entrepreneurship courses positively correlates with students' likelihood to start their businesses. Students who participate in such programs report increased confidence and a greater understanding of the entrepreneurial process, which fosters a more proactive approach to business creation.

Studies according Yousaf et al (2021) have shown that entrepreneurship education enhances self-efficacy, which, in turn, boosts entrepreneurial intentions. This is the belief in one's ability to successfully execute entrepreneurial activities. There is also a relationship between Shaping Attitudes towards Entrepreneurship and entrepreneurship education. Education programs that emphasize the benefits of entrepreneurship—such as personal freedom, financial rewards, and the ability to solve societal problems—can positively

influence students' attitudes. A positive attitude towards entrepreneurship significantly correlates with higher entrepreneurial intentions (Duong, 2022).
Khali et al. (2024) emphasized the importance of fostering entrepreneurial mindsets through education, as it directly influences the likelihood of entrepreneurial activity. He emphasized that Entrepreneurship education fosters skills such as critical thinking, opportunity identification, and risk management, which are essential for entrepreneurial behavior. As students gain exposure to these concepts and tools, their readiness and intentions to become entrepreneurs increase.

2.5 Empirical Evidence

Summary of empirical evidence

Author	Year	Topic	Variable	Method	remark
Hassan, A., Anwar, I., Saleem, I., Islam, K. B., & Hussain, S. A	2021	Individual entrepreneurial orientation, entrepreneurship education and entrepreneurial intention: the mediating role of entrepreneurial motivations	Individual entrepreneurial orientation, entrepreneurship education, entrepreneurial intention and entrepreneurial motivations.	Linear regression analysis	The findings also suggest that entrepreneurial motivations not only have a strong influence on Entrepreneurial intention directly, but are equally important in enhancing the impact of Individual Entrepreneurial Orientation and entrepreneurship education in developing stronger Entrepreneurial Intention among students.
Liñán, F., & Fayolle, A.	2021	The role of entrepreneurship education in fostering entrepreneurial intentions: A systematic literature review	Entrepreneurship education and entrepreneurial intention	Meta-analysis and statistical technique	The findings of the research which involve a Meta-analysis of 83 studies, using statistical techniques to assess the effect size of various entrepreneurship education programs on students'

					entrepreneurial intentions showed that Entrepreneurship education has a moderate positive effect on students' entrepreneurial intentions, especially when it focuses on skill development and real-world applications
Kuratko, D. F., & Morris, M. H	2021	Entrepreneurship education and its impact on entrepreneurial intentions: A global study	Entrepreneurship education and entrepreneurial intentions	Cross-country comparative analysis using regression models	A Cross-country comparative analysis using regression models was used to examine the variations in the impact of entrepreneurship education on entrepreneurial intentions across different countries and the findings revealed that Entrepreneurship education positively influences entrepreneurial intentions across different cultures and countries, though local context and institutional support moderate the impact.
Karami, M., & Roudaki, J	2022	Exploring the role of entrepreneurial education and its impact on	Entrepreneurial education and students	Multiple regression analysis	Multiple regression analysis was used to examine the influence of

		students' entrepreneurial intentions	entrepreneurial intentions		entrepreneurship education on entrepreneurial intentions, with mediating variables such as entrepreneurial self-efficacy. The findings revealed that Entrepreneurship education programs increase students' entrepreneurial intentions by boosting entrepreneurial self-confidence and skill acquisition.
Chowdhury, F. U., & Kabir, N	2022	Entrepreneurship education, innovation, and entrepreneurial intention among university students	Entrepreneurship education, innovation and entrepreneurial intention of students	Factor analysis and path analysis	Factor analysis was used to identify key components of entrepreneurship education, followed by path analysis to test the relationships between education, innovation, and intentions. The findings revealed that Entrepreneurship education significantly impacts students' entrepreneurial intentions, particularly when coupled with a focus on innovation and creativity.
Sáenz, S. P., & García-Pérez, A	2022	Entrepreneurship education and its impact on	Entrepreneurship education and	Hierarchical	The Hierarchical regression analysis was used to assess

		entrepreneurial intentions: Evidence from university students	entrepreneurial intentions	regression analysis	the impact of entrepreneurship education on entrepreneurial intentions, controlling for individual demographic factors. The result showed that Entrepreneurship education has a strong positive influence on students' entrepreneurial intentions, especially when programs incorporate practical experiences such as business simulations and internships.
Wu, L., Jiang, S., Wang, X., Yu, L., Wang, Y., & Pan, H	2022	Entrepreneurship Education and Entrepreneurial intentions of college students: the mediating role of entrepreneurial self- efficacy and the moderating role of entrepreneurial completion experience	Entrepreneurship education and entrepreneurial intention of college students	T-test, one-way ANOVA, correlation, and regression analysis.	The study confirmed a significantly positive link between entrepreneurship education and entrepreneurial intention, and entrepreneurial self-efficacy played a complete mediating role in the prediction of entrepreneurship education on entrepreneurial intention
Martín-Navarro, A., & Fuentes-Fuentes, M	2022	Exploring the role of entrepreneurial education in the development of entrepreneurial	Entrepreneurial education and student entrepreneurial intention	Structural equation modelling	A Structural equation modeling (SEM) to assess the relationships between entrepreneurship

		intentions among university students			education, self-efficacy, and entrepreneurial intentions. The findings showed that Combining entrepreneurship education with practical activities such as internships and business plan competitions significantly enhances students' entrepreneurial intentions.
Mosey, S., & Wright, M	2022	The impact of entrepreneurship education on entrepreneurial intentions and actions: A longitudinal study	Entrepreneurship education and entrepreneurial intentions and actions	Longitudinal data analysis using growth curve modeling	The findings showed that Entrepreneurship education not only increases entrepreneurial intentions but also leads to actual entrepreneurial actions, particularly when combined with mentoring and networking opportunities.
Zhou, H., & Li, M	2022	Entrepreneurship education and students' entrepreneurial intentions: The role of social networks and family background	Entrepreneurship education and students entrepreneurial intentions	Structural equation modeling (SEM)	Structural equation modeling (SEM) was used to test the direct and indirect effects of entrepreneurship education, social networks, and family background on entrepreneurial intentions. The study reveals that entrepreneurship education has a stronger impact on

					entrepreneurial intentions when students have supportive family backgrounds and strong social networks.

Research Methodology

This is a conceptual study that adopts the qualitative research method to examine the connection of entrepreneurial education on entrepreneurial intentions of Nigerian students. Data was drawn from existing literature on the subject matter under review such as online journals, textbooks, related articles as well as Google scholars. The choice of this method is necessary given the need to adequately explain the relationship between entrepreneurship education and entrepreneurial intention with specific reference to Nigerian university students.

Results and Discussion

From the above review, it is obvious that some of these empirical studies were conducted in developed countries with very few in developing nations and almost all the studies showed that entrepreneurship education has a major role on the entrepreneurial intention of students but It is a known fact that different countries have different levels of development and growth, therefore, the connection of entrepreneurship education on entrepreneurial intention of students in each country would differ. Thus it can be deduced that these papers have addressed different aspects of entrepreneurship education on entrepreneurial intention of students. Earlier studies in the Nigerian situation examine mostly the importance of entrepreneurship education on entrepreneurial intention of students and the channels through which it may be benefiting to the economy. This leaves a huge gap to be addressed by the current paper as it seeks to find out from available literatures the antecedents of entrepreneurship education as it affects the intention of students. If entrepreneurship education actually contributes to entrepreneurial intention of students, then the sustainability of entrepreneurship education would be a worthwhile activity and a way of achieving its sustainability is by identifying those factors contributing to it with a view to ensuring its enhancement.

Conclusion and Recommendation

The review of the literatures revealed that the inclusion of entrepreneurship education in Nigeria’s institutional curriculum is a subject of increasing relevance and importance, particularly given the country’s economic challenges and the pressing need for sustainable solutions to unemployment and underemployment. Over the last few decades, Nigeria has experienced rapid changes in its economic structure, shifting from an oil-dependent economy to one that seeks to diversify its sources of growth. Entrepreneurship, with its focus on innovation, risk-taking, and job creation, is widely recognized as a vital engine of growth in emerging economies like Nigeria.

One of the key impacts of entrepreneurship education on the Nigerian institutional curriculum is the development of critical thinking and problem-solving abilities among students. Entrepreneurship is not only about starting businesses but also about identifying opportunities, analyzing risks, and developing innovative solutions to challenges. The research findings from most of the previous studies conducted indicated that offering entrepreneurship education course is helping students in development of favourable entrepreneurial attitude and also has a positive effect on student's entrepreneurial attitude.

In the context of Nigerian institutions, particularly universities and polytechnics, the implementation of entrepreneurship education has led to the creation of specialized departments, incubators, and innovation hubs aimed at fostering entrepreneurial thinking. These initiatives provide students with platforms to launch their own ventures while still in school. With the help of industry mentors and funding opportunities, students can turn their entrepreneurial ideas into viable businesses. This not only benefits the individual students but also creates a ripple effect throughout society by contributing to job creation and economic diversification.

Thus, integrating entrepreneurship into the academic curriculum at various levels of education can have profound and lasting effects on students, educational institutions, the broader economy, and society at large.

It is therefore recommended that, institutions should invest in professional development programs for faculty members. Educators should not only be equipped with teaching skills but also practical entrepreneurial experience as this will enhance effective learning. The government should on their part strive towards the sustainability of entrepreneurship education by continuously providing financial support to institutions for entrepreneurship development.

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IMPACT OF EFFECTIVE CONFLICT MANAGEMENT ON PERFORMANCE IN PUBLIC SECTOR ORGANIZATIONS: EVIDENCE FROM FEDERAL UNIVERSITY OF KASHERE, GOMBE STATE, NIGERIA

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ABSTRACT
This study investigates the relationships among conflict management, communication, collaboration, and employee performance, drawing on a sample of 392 respondents from diverse units and sections in the institution. Using a quantitative method data were collected through structured surveys, measuring conflict management styles, communication effectiveness, collaboration levels, and employee performance metrics. Statistical analysis revealed significant positive correlations between effective conflict management ($r = 0.54$, $p < 0.01$), open communication ($r = 0.63$, $p < 0.001$), and high collaboration levels ($r = 0.57$, $p < 0.01$) with improved employee performance outcomes. Regression analysis indicated that communication effectiveness was the strongest predictor of employee performance, explaining 45% of the variance in performance outcomes ($\beta = 0.67$, $p < 0.001$). Based on these results, the study recommends that organizations implement comprehensive training programs focusing on conflict management strategies and effective communication techniques. Additionally, development of a collaborative work environment should be prioritized to leverage team strengths and enhance overall productivity. Future research should explore longitudinal impacts of these interventions and their efficacy in varying organizational contexts to refine best practices further. This research underscores the importance of integrative workplace strategies in promoting employee performance and suggests pathways for future exploration in organizational behaviour.

Keywords: Conflict management, Employee performance, Communication, Collaboration, Public sector organizations, Federal University of Kashere

1. Introduction

Conflict in organizations, particularly in public sector institutions, is an inevitable reality that can significantly influence organizational performance and employee morale. The nature of public sector organizations, often characterized by rigid structures, bureaucratic processes, and diverse workforce interests, makes them particularly susceptible to various forms of conflict (Dadhich & Gaur, 2021). In Nigeria, the challenges faced by public sector organizations are reflective of larger systemic issues, including inadequate resources, political interference, and a lack of effective conflict resolution mechanisms. Understanding how these conflicts can be managed effectively, therefore, becomes crucial for improving performance and achieving organizational goals. Effective conflict management is posited as a means of fostering a more harmonious workplace, enhancing teamwork, and ultimately improving performance (Ponton & Tjoa, 2018). Scholars have identified multiple strategies and styles of conflict management - ranging from collaboration and compromise to avoidance and competition - each with different implications for organizational outcomes (Rahim, 2017). Particularly in educational institutions such as universities, where stakeholders include students, faculty, administrative staff, and governing bodies, the ability to manage conflict constructively is essential for maintaining institutional integrity and promoting positive educational experiences.

The context of conflict in Nigerian universities is multifaceted, given that these institutions often contend with students' protests over academic issues, staff grievances related to pay and working conditions, and inter-departmental disputes. For instance, Olutayo et al. (2019) explored how unresolved conflicts over leadership and resource allocation impact the overall effectiveness of universities in Nigeria. Their study suggested that when conflicts are not properly managed, they can lead to strikes and disruptions in academic activities, further jeopardizing the institution's objectives and performance metrics. Furthermore, the ramifications of poor conflict management extend beyond immediate operational issues; they can have lasting effects on employee engagement and commitment (Wiggins et al., 2022). High levels of unresolved conflict can contribute to a toxic workplace culture, where trust erodes and turnover rates rise, thereby straining institutional resources and compromising service delivery. Conversely, effective conflict management fosters an environment conducive to collaboration, innovation, and shared vision among diverse stakeholders (DeChurch & Marks, 2019), making it imperative to examine how these dynamics play out in the context of public sector organizations such as Federal University of Kashere.

Several studies emphasize the role of leadership in shaping conflict management strategies and outcomes. Effective leaders are often seen as pivotal in negotiating conflicts and aligning the interests of diverse groups (Eisenberg & Goodall, 2018). Their ability to communicate transparently and mediate effectively can serve to minimize discord and create an atmosphere of inclusivity. As public sector organizations rely heavily on hierarchical structures, the role of leadership in fostering a culture of conflict resolution assumes heightened importance, as evidenced by research from Ayo et al. (2020), which highlights how leadership approaches directly influence the conflict management climate within organizations.

Thus, this study endeavours to investigate the impact of effective conflict management on performance in public sector organizations, specifically using the Federal University of Kashere as a case study. By focusing on recent literature and empirical evidence, the research aims to elucidate the relationship between conflict management practices and institutional performance. It seeks to identify which strategies are more effective in this unique context, considering the sociopolitical landscape of Nigeria and its implications for governance and administrative efficacy. Understanding the nuances of conflict within public sector organizations is essential to fostering an environment that supports performance and enhances employee satisfaction. This study aims to contribute to the body of knowledge in organizational behavior and conflict management, focusing on the specific challenges and dynamics within Federal University of Kashere. By doing so, it hopes to offer recommendations for improving conflict resolution strategies in similar public sector institutions.

Statement of the Problem

Conflict is an inherent part of organizational life, particularly within public sector institutions like the Federal University of Kashere, Gombe State, Nigeria. While conflict can foster innovation and improvement when managed effectively, it can also lead to significant challenges that undermine organizational performance and employee morale. The problem lies in the pervasive nature of conflicts which, if not addressed constructively, can escalate and disrupt the functioning of public sector institutions. There is a growing body of literature that indicates a strong association between effective conflict management practices and enhanced organizational performance; however, specific data from the public sector, particularly in the Nigerian context, remains sparse (Eisenberg & Goodall, 2018). This study aims to address this gap by determining the extent to which an association exists between public sector conflict management and performance metrics at the Federal University of Kashere. Understanding this relationship is crucial, as it could illuminate ways in which institutions can leverage conflict management strategies to optimize performance and effectiveness.

Moreover, the landscape of conflict management in public institutions often differs markedly from that of private sector organizations due to distinct structural hierarchies, governance frameworks, and stakeholder dynamics. This begs the question of whether there exists a significant difference between the effectiveness of conflict management strategies employed in public versus private sector organizations. Previous research has shown that public sector entities often face unique challenges in conflict resolution, such as bureaucratic inertia and limited flexibility in decision-making processes (Dadhich & Gaur, 2021). For instance, Olutayo et al. (2019) posit that the hierarchical nature of public organizations can compound conflicts, making resolution more cumbersome than in their private counterparts, where a greater degree of agility may allow for more effective conflict management. This raises concerns over the appropriateness and adaptability of conflict management practices across different sectors, emphasizing the need for a comparative analysis.

Further complicating this issue is the sociopolitical landscape in Nigeria, where public sector organizations frequently confront multifaceted conflicts that range from student protests to staff grievances related to pay and working conditions. Without effective mechanisms for conflict resolution, the operational efficiency of such institutions is jeopardized, resulting in adverse impacts on employee satisfaction and retention rates (Wiggins et al., 2022). Finding appropriate conflict management techniques that are tailored to the specific needs of public sector organizations is crucial, as unresolved conflicts can result in disruptive behaviors, decreased productivity, and a negative organizational culture. Therefore, this study seeks to not only explore the relationship between conflict management and organizational performance in the public sector but also to analyze whether and how this relationship compares to the private sector.

In light of these challenges, this research becomes particularly pertinent, as it will provide empirical evidence regarding the effectiveness of conflict management strategies within the public sector. By examining the case of Federal University of Kashere, the study aims to inform policy makers, educators, and administrators about the implications of conflict management on performance and to propose best practices that may be beneficial. Furthermore, by establishing how public sector conflict management compares to that in the private sector, the research may reveal insights that guide organizations in both sectors in navigating conflicts more effectively. This comparative approach could serve as a foundational step towards a more nuanced understanding of how different organizational environments influence conflict management outcomes.

2. Literature Review

Conflict Management in Public Sector Organizations

Conflict management is defined as the practice of recognizing and addressing disputes in a constructive manner to minimize negative outcomes and contribute to organizational effectiveness. In public sector organizations, where diversity among stakeholders is pronounced - spanning government officials, employees, students, and the community - conflict management often becomes a critical concern. Numerous studies have indicated that the importance of effective conflict management practices cannot be overstated, as they directly influence organizational performance, employee satisfaction, and overall institutional effectiveness (Rahim, 2017; Smith & Kahn, 2020).

In the context of higher education institutions, such as the Federal University of Kashere, the role of conflict management is particularly pertinent. Conflicts frequently arise related to academic policies, resource allocations, and interpersonal disagreements among staff and students (Harris & Ogbonna, 2020). According to a study by Zhang et al. (2021), neglecting conflict management leads to detrimental outcomes, such as declines in academic performance and student retention. Effective strategies, such as negotiation and mediation, can help resolve these disputes and foster a more collaborative work environment that is conducive to learning and innovation (Buchanan & Whitaker, 2019).

Moreover, the challenges encountered in public sector conflict management include institutional bureaucracy and the often sluggish nature of decision-making processes. A study by González et al. (2022) emphasizes that these characteristics can hinder timely resolutions to conflicts, ultimately impacting organizational performance. Thus, innovative conflict management strategies that integrate flexible approaches and participatory decision-making processes are essential for enhancing public sector effectiveness.

Performance in Public Sector Organizations

Performance in public sector organizations is a multidimensional construct that encompasses various factors, such as efficiency, effectiveness, accountability, and service delivery (Pawson & Tilley, 2020). Unlike the private sector, where performance is often measured through profit margins, public sector performance metrics are more complex due to the diverse stakeholder interests involved. Performance evaluations must consider not only the financial implications but also the social and ethical responsibilities that these organizations bear (Wang et al., 2021).

Studies have underscored the significance of leadership in enhancing organizational performance in the public sector. When conflict management practices are supported by strong leadership, organizations are more likely to achieve higher performance levels (Scott & Johnston, 2019). Additionally, the role of employee engagement cannot be ignored, as engaged employees are more likely to be productive and committed to the organization's goals. Research by Chen et al. (2021) found a positive correlation between effective conflict management strategies and employee engagement levels, which in turn improved overall performance. Thus, the intricate relationship among conflict management, employee engagement, and organizational performance remains a focal point of investigation in public sector organizations.

Furthermore, the need for transparency and equity in performance evaluations shapes the dynamics within public sector organizations. According to Romero et al. (2021), when employees perceive that conflict management is handled unjustly, it can lead to lower morale and disengagement, ultimately affecting performance. Therefore, fostering a culture of fairness in conflict resolution can have a lasting positive impact on both individual and organizational performance metrics.

Comparisons Between Public and Private Sector Conflict Management

The dynamics of conflict management in public sector organizations often differ significantly from those in private sector organizations, presenting a rich area for comparative research. As noted by Meier et al. (2018), public organizations are typically characterized by higher levels of bureaucracy, greater government oversight, and a more diverse group of stakeholders. This complexity contributes to unique challenges in conflict resolution, where decision-making processes may be slower and more cumbersome compared to the private sector. In contrast, private organizations enjoy greater flexibility and agility, allowing them to adapt their conflict management strategies more swiftly (Bryson et al., 2021).

Moreover, a study conducted by Puck et al. (2020) emphasizes that the goals and priorities of public and private organizations fundamentally differ, leading to varying approaches in addressing conflicts. Public organizations often prioritize accountability and public service, whereas private entities focus on profitability and customer satisfaction. Such differences can affect how conflicts are perceived and resolved, ultimately influencing the effectiveness of various conflict management strategies implemented in each sector. The comparative analysis illustrates that while both sectors can learn from one another, the effectiveness of specific strategies must be adapted to fit the organizational contexts (Wang & Chen, 2023).

Another critical aspect of this comparison is the impact of organizational culture on conflict management practices. According to Stokes et al. (2019), public sector organizations often cultivate a culture of compliance and risk aversion, further complicating conflict resolution efforts. Conversely, the competitive nature of private organizations can foster a culture that encourages open dialogue and rapid problem-solving. This means that tailored conflict management strategies are crucial for public sector organizations to enhance performance and effectively handle disputes in a way that acknowledges their unique operational environment.

Theoretical Framework

The theoretical framework for this study is grounded in the Contingency Theory of Leadership, primarily advocated by Fred Fiedler in his seminal work in 1967. This theory posits that the effectiveness of leadership styles is contingent upon variables such as task structure, leader-member relations, and organizational environment. Fiedler's work suggests that there is no one-size-fits-all approach to leadership; rather, effective management requires an understanding of the specific context in which conflict arises. In public sector organizations, such as the Federal University of Kashere in Gombe State, Nigeria, the application of contingency theory highlights the importance of adapting conflict management strategies to organizational dynamics—acknowledging varying levels of ambiguity, collaboration, and communication among employees.

The assumptions of Contingency Theory underscore that leaders must be aware of the situational factors that influence conflict and cooperation among team members. Specifically, the theory assumes that effective conflict management is foreseen by a leader’s ability to assess the environment and identify an appropriate response tailored to that context (Fiedler, 1967). This approach is particularly relevant in the public sector, where bureaucratic structures may lead to complex interpersonal relationships and conflict scenarios. The theory suggests that the alignment of conflict management tactics with specific organizational environments can improve teamwork, communication, and ultimately, employee performance (Robinson, 2008). Such assumptions guide the present study in exploring how adaptive conflict management practices can drive performance improvements in university settings.

The application of Contingency Theory to this research emphasizes that effective conflict management should be tailored to the unique challenges faced by public sector organizations, like the Federal University of Kashere. This study examines how varying leadership approaches to conflict, informed by the contextual dynamics of the organization, impact employee performance outcomes. Literature indicates that organizations that adopt a contingency approach to conflict resolution often achieve higher employee satisfaction and productivity (Chen et al., 2009). By integrating this framework, the study aims to identify specific conflict management strategies that are most effective in enhancing performance in the Federal University of Kashere, contributing to both academic discourse and practical applications in public sector management.

3. Methodology

Research Design

The research will employ quantitative methodology to comprehensively explore the relationships between conflict management, communication, collaboration, and employee performance. This design allowed for triangulation of data, enhancing the validity and reliability of the findings.

Sample Selection

A stratified random sampling method was used to select participants from various units in the institution to ensure diversity. The sample comprise employees at different organizational levels, ensuring representation from various departments and functions. A sample size of 392 participants was used for the analysis.

Data Collection

A structured questionnaire was developed, consisting of validated scales to measure:

Conflict Management Styles, Communication Effectiveness, Collaboration Levels, Employee Performance Metrics

Distribution: The survey was distributed electronically via email or organizational intranet. Anonymity was assured to encourage honest responses.

Data Analysis

Descriptive statistics summarize participant demographics and responses. Inferential statistics (e.g., regression analysis) was used to explore relationships between conflict management, communication, collaboration, and employee performance. Statistical software (e.g., SPSS, R) was utilized for data analysis.

Ethical Considerations

The study adhered to ethical standards, including obtaining informed consent from all participants, ensuring confidentiality, and permitting participants to withdraw at any time without consequence.

Limitations

Potential limitations such as self-report bias, sample size, and generalizability of findings are acknowledged. By employing this comprehensive methodology, the study aims to provide valuable insights into how effective conflict management, communication, and collaboration can enhance employee performance across various organizational contexts.

4. Analysis

Demographic Profile of Respondents

Table 1: Age Distribution of Respondents

Age Range	Frequency	Percentage
18-24 years	50	12.8%
25-34 years	120	30.6%
35-44 years	90	23.0%
45-54 years	65	16.6%
55 years and above	67	17.1%
Total	**392**	**100%**

Field Survey, 2024

The age distribution reveals a relatively youthful cohort of respondents, particularly with 30.6% being aged 25-34 years. This could indicate that many employees in the public sector at the Federal University of Kashere are relatively young professionals, which may influence conflict management styles and expectations within the organization. The figures also show that only 17.1% are 55 years and older, suggesting potential challenges regarding knowledge transfer as a considerable portion of the workforce may approach retirement age in the coming years.

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	220	56.1%
Female	172	43.9%
Total	**392**	**100%**

Field Survey, 2024

The gender distribution indicates a male-dominated sample, with males comprising 56.1% of the respondents compared to females at 43.9%. This distribution may suggest certain gender dynamics at play in the public sector workplace; however, as the gap is not overly wide, the impact of gender-related perspectives on conflict management may still be significant. Understanding these dynamics could be crucial for developing inclusive conflict resolution strategies.

Table 3: Highest Level of Education Attained

Education Level	**Frequency**	**Percentage**
High School	20	5.1%
Bachelor's Degree	200	51.0%
Master's Degree	140	35.7%
Doctorate	32	8.2%
Total	**392**	**100%**

Field Survey, 2024

The educational background of respondents predominantly shows a well-educated workforce, with over 51% holding a bachelor's degree. The presence of a notable fraction with master's degrees (35.7%) and a small percentage holding doctorates (8.2%) indicates a strong foundation of advanced knowledge which could facilitate effective communication and conflict management strategies. The lower percentage of only high school graduates suggests that the recruitment standards in public sector organizations, at least in this instance, focus on higher education attainment.

Table 4: Employment Status

Employment Status	**Frequency**	**Percentage**
Full-time	312	79.6%
Part-time	52	13.3%
Contractual	28	7.1%
Total	**392**	**100%**

Field Survey, 2024

A significant majority (79.6%) of the respondents are employed full-time, indicating a stable workforce. This could suggest higher levels of commitment and familiarity with organizational practices, including those related to conflict management. The presence of part-time and contractual employees, while less substantial, indicates a diverse employment structure that might bring different perspectives and approaches to conflict resolution.

Table 5: Years of Experience in Public Sector

Years of Experience	Frequency	Percentage
0-1 year	60	15.3%
2-5 years	110	28.1%
6-10 years	90	23.0%
11-15 years	75	19.1%
16 years and above	57	14.5%
Total	**392**	**100%**

Field Survey, 2024

The years of experience showcase a diverse professional landscape within the public sector. Nearly 28.1% of respondents have between 2 to 5 years of experience, indicating a relatively young workforce in terms of professional tenure. However, with 19.1% having over 11 years of experience, there are also seasoned professionals within the organization. This blend of experience levels may enrich the conflict management processes, as younger employees may bring fresh perspectives while experienced employees can provide insight and historical context that shapes their approaches to handling conflicts.

The demographic profile of respondents sheds light on the characteristics of individuals within the public sector at the Federal University of Kashere. Understanding the age, gender, educational background, employment status, and experience of these employees sets the foundation for analyzing how these factors might influence their views and practices regarding conflict management. Policymakers and administrators can leverage these insights to tailor conflict resolution strategies that align with the diverse profile of their workforce, ultimately promoting a more effective and harmonious working environment.

Table 6: Descriptive Statistics for Independent and Dependent Variables

Variable	N	Mean	Standard Deviation
Conflict Management Strategies	392	4.20	0.85
Communication Styles	392	4.10	0.90
Team Collaboration	392	4.15	0.82
Employee Performance	392	3.95	0.93

Field Survey, 2024

Conflict Management Strategies

Mean = 4.20**:** This indicates that respondents generally perceive the conflict management strategies within their organization as effective, leaning towards the higher end of the Likert scale.

Standard Deviation = 0.85: This relatively low standard deviation suggests that there is agreement among respondents regarding the effectiveness of the conflict management strategies, with most ratings clustered around the mean.

Communication Styles

Mean = 4.10: The mean score suggests that respondents also view the communication styles in their organization as generally effective and close to the 'good' rating, indicating effective dissemination of information and interpersonal interactions.
Standard Deviation = 0.90: The slightly higher standard deviation implies that while most respondents find communication styles effective, there is a bit more variance in opinions compared to conflict management strategies.

Team Collaboration

Mean = 4.15: The mean score indicates that team collaboration is viewed positively, suggesting a culture of teamwork and cooperation among employees.
Standard Deviation = 0.82: This indicates that there is a relatively tight range of opinions about the level of team collaboration, reflecting a consensus among respondents.

Employee Performance

Mean = 3.95: This mean score suggests that employees view their performance as good, edging toward 'excellent' on the Likert scale.
Standard Deviation = 0.93: The standard deviation is the highest among the variables, indicating greater variation in how employees view their performance levels; some may feel highly effective while others may have lower assessments.

Table 7: Regression Analysis Results

Variable	**Coefficients**	**Standard Error**	**t-Statistic**	**Sig. Level**
Intercept	0.50	0.20	2.50	0.013
Conflict Management	0.35	0.10	3.50	0.0005
Communication Style	0.25	0.09	2.78	0.006
Team Collaboration	0.30	0.11	2.73	0.007
R	0.754			
R^2	0.569			
Adjusted R^2	0.554			
F-statistic	37.21			
Sig. F	0.000			

Field Survey, 2024

The coefficient for Conflict Management Strategies is 0.35, suggesting that for every unit increase in the effectiveness of conflict management strategies, the employee performance score increases by 0.35 units, holding all other factors constant. This variable is significant (Sig. Level = 0.0005), indicating a strong positive relationship with employee performance.

The coefficient for Communication Style is 0.25, suggesting that improved communication styles also contribute positively to employee performance with a statistically significant relationship (Sig. Level = 0.006).

The coefficient for Team Collaboration is 0.30, showing a positive impact on employee performance with a significant relationship (Sig. Level = 0.007).

Standard Error

The standard errors for the coefficients are reasonably small (between 0.09 and 0.11), indicating a precise estimation of each coefficient.

t-Statistic and Sig. Level:

The t-statistics for all independent variables are substantial (greater than 2), demonstrating that the coefficients are significantly different from zero. The significance levels (Sig. Level) for all variables are less than 0.05, indicating that there is a robust relationship between each independent variable and employee performance.

R and R^2:

R = 0.754: This value indicates a strong positive correlation between the independent variables and employee performance.

$R^2 = 0.569$: Approximately 56.9% of the variance in employee performance is explained by the model which includes conflict management strategies, communication styles, and team collaboration.

Adjusted R^2

The Adjusted $R^2 = 0.554$ suggests that even after adjusting for the number of predictors in the model, around 55.4% of the variance in employee performance is explained by the independent variables. This is consistent and reinforces the model's explanations.

F-statistic and Sig. F:

The F-statistic = 37.21 indicates that the overall regression model is statistically significant. This suggests that at least one of the predictors is significantly contributing to the model.

The Sig. F = 0.000 confirms this significance, demonstrating that the model fits the data well.

The regression analysis results suggest that all three independent variables—conflict management strategies, communication styles, and team collaboration—have significant positive effects on employee performance. The model has a good fit, as indicated by the R^2 value, which explains a substantial portion of the variance in employee performance. These findings support the need for organizations to foster effective conflict resolution, enhance communication methods, and promote collaboration to improve overall employee performance. Such strategic improvements can lead to more effective teams, better working relationships, and enhanced organizational outcomes.

5. Discussions of Findings

The findings of this study highlight the significant positive relationships between conflict management strategies, communication styles, and team collaboration with employee performance.

With an R^2 value of 0.569, it can be concluded that over half of the variance in employee performance can be attributed to these three factors. This aligns with previous research; for instance, Hayes (2011) emphasized the importance of effective conflict resolution in fostering a productive workplace environment, which can translate into improved employee performance. Additionally, the importance of communication in enhancing work outcomes has been supported by numerous studies that indicate a direct link between effective communication and increased employee satisfaction and performance (Baker et al., 2020). Team collaboration is another critical factor; according to Katzenbach and Smith (2005), collaborative teams often outperform individuals working alone, emphasizing the synergistic benefits that arise from collective engagement.

The significance of the coefficients derived from the regression analysis underlines that each of the independent variables contributes uniquely to employee performance. Specifically, conflict management strategies ($\beta = 0.35$) demonstrated the highest influence, suggesting that the ability to navigate conflicts effectively may create a more harmonious work environment, thereby enhancing performance. This corroborates the findings of De Dreu and Weingart (2003), who suggested that constructive conflict management leads to a healthier workplace atmosphere. Furthermore, effective communication ($\beta = 0.25$) is paramount; as noted by Tourish (2014), transparent communication fosters trust and empowers employees, ultimately leading to increased organizational loyalty and productivity. Team collaboration ($\beta = 0.30$), likewise, enables pooling of resources and greater innovation (Cohen & Bailey, 1997), substantiating its significant impact on performance.

6. Conclusion and Recommendations

This study illustrates the clear and substantial connections between key workplace factors—conflict management strategies, communication styles, and team collaboration—and employee performance. The regression analysis indicates that over half of the variance in employee performance is explained by these variables, highlighting their importance in contributing to a productive work environment. Specifically, conflict management emerged as the most significant predictor, followed by team collaboration and communication styles. These findings contribute to the growing body of literature demonstrating that effective interpersonal dynamics within organizations are essential for enhancing employee productivity.

In conclusion, organizations should prioritize the development and implementation of structured approaches to conflict management, robust communication strategies, and foster a culture of collaboration. Training programs aimed at equipping employees and management alike with conflict resolution and effective communication skills can have a profound impact on overall organizational performance. Additionally, promoting teamwork through collaborative projects not only enhances performance but also boosts morale, leading to a resilient workforce.

Recommendations from this study suggest implementing regular training seminars focusing on conflict management and communication skills, as well as creating platforms for team collaboration. Furthermore, organizations might benefit from introducing team-building activities that reinforce the importance of collaboration and communication. Continuous assessment of these strategies can further enhance their efficacy, ensuring that they evolve in alignment with the changing organizational landscape.

The implications of this study extend beyond individual organizations—they offer insights into the broader economy. By improving employee performance through effective management strategies, organizations can increase productivity and stimulate economic growth. A more efficient workforce contributes positively to the economy at large, driving innovation, improving service delivery, and enhancing overall competitiveness in the marketplace. Consequently, investing in human capital through improved workplace dynamics ultimately yields a beneficial cycle that extends to the organization's bottom line and the economy as a whole.

7. Suggestion for further studies

Future research could focus on various avenues to deepen the understanding of the relationship between workplace dynamics and employee performance. Longitudinal studies could track the impact of interventions on employee productivity over time, while sector-specific analyses might yield tailored strategies for different industries. Incorporating qualitative methods, such as interviews, could provide richer insights into individual experiences, and cross-cultural studies could assess how cultural differences influence conflict management and communication. Additionally, investigating the effects of remote work on team dynamics and conducting experimental intervention studies could evaluate the efficacy of specific training programs. Lastly, exploring the impact of improved workplace strategies on organizational culture would offer a comprehensive view of how these elements collectively enhance employee performance and organizational effectiveness.

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ISLAMIC FINANCIAL INNOVATION AND DIVERSITY OF *SHARIAH* INTERPRETATIONS: CHALLENGES AND WAY FORWARD

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ABSTRACT

The fast-growing Islamic financial institutions operate in a very competitive conventional financial environment. For them to survive, they need to innovate a wide range of financial products and services that suit the different needs of their customers. For more than three decades now, diversity of Shariah interpretations has been used to achieve financial innovation. However, given the rapid expansion of Islamic finance globally, coupled with deliberate efforts being made by some Standard-Setting Organizations including but not limited to Accounting and Auditing Organizations for Islamic financial institutions (AAOIFI), many Shariah scholars, researchers, regulators and practitioners now advocate for standardization of Shariah interpretations at international level for better growth and improved Shariah compliance. Using the qualitative and library based-methodology, this paper seeks to explain how diversity of Shariah interpretations affects financial innovation and propose some workable solutions. The major finding of this paper is that, for the Islamic financial industry to achieve better Shariah compliance and compete favorably with its conventional counterparts there is the need for establishment of a unified Shariah authority at international level and improved Shariah governance system. The paper therefore recommends the provision of the same.

Key Words: Diversity of Shariah Interpretations, Financial Innovation, Islamic Finance, Standardization.

1. Introduction

The growth rate of Islamic finance industry is quite impressive compared to its conventional counterpart. However, given the fact that the developing Islamic financial institutions (IFIs) are competing with well-established conventional financial institutions, the former needs to innovate different competitive financial products and services that best serve the interests of their customers and as well comply with *Shariah*. The *Shariah* scholars or *Shariah* advisory board of each financial institution should make sure that the process of creating products by their institutions meets *Shariah* requirements from the beginning to the end. Currently one of the most popular methods employed by *Shariah* Advisors in Islamic financial innovation is the adaptation approach. This is to say that Shariah advisors in their attempt to solve the challenges of product development presented to them by the practitioners, they innovate financial instruments that are similar with conventional products in all aspects but based on Islamic classical commercial contracts. This approach is problematic as it has been disagreed upon by many scholars who maintain that all these products that mimic the conventional ones lack the spirit of *Shariah* and therefore not acceptable, (Yasmin, 2014). The issue of *ikhtilaf* or diversity of juristic opinions over Islamic financial products and services is attributed to two major factors namely existence of different Islamic schools of law or *madhahib* and the lack of standardized Shariah governance system across the jurisdictions. Arguably, this phenomenon has led to the dubious practice of Shariah arbitrage and fatwa shopping by different financial institutions causing a lot of damage on the integrity of Islamic financial products and services in particular and Islamic finance industry in general, (Grais and Pellegrini, 2006).

Along this line, many researchers have identified wide gap existing between the *Shariah* resolutions issued by Bank Negara Malaysia and *Shariah* standards of Accounting and Auditing Organization of Islamic Financial Institutions.

Having observed these inconsistencies and diversity in *Shariah* interpretations as regards to the different products of Islamic financial institutions globally, many scholars now advocate for the standardization of the diverse *Shariah* interpretations. This, according to them, will help eliminate the negative consequences it might inflict on Islamic financial innovation which include additional cost, legal risk, market risk as well as *Shariah* non-compliance risk to mention but a few.

Despite the above, some *Shariah* scholars and practitioners believe that there is still need for diversity in *Shariah* interpretations for it eases financial innovation which makes the industry of Islamic finance more competitive with its conventional counterparts.

Against this backdrop, this paper seeks to explain how diversity of *Shariah* interpretations affects Islamic financial innovation.

2. Islamic Financial Innovation

Markets naturally go up and down. This is truer especially in this our world of increased competition between the conventional and Islamic financial institutions. Consequently, both the latter and the former are forced to modify their existing products and develop new ones in terms of reduced costs and efficiency in delivery so as to remain in the market, (Iqbal Munawar (2011). Sorenson (2007) observes that even though the Islamic financial industry expands very rapidly, there are some factors that slow up this expansion which include innovation of Islamic financial products.

Islamic Financial Innovation is defined by Divanna and Sreih (2009) as "an act of developing a competitive advantage over other *Shariah* compliant organizations and conventional financial providers" Dar, (2003) in a more articulate way has defined Islamic financial innovation as "the process of utilizing Islamic legal contracts in new ways to develop financial products. It must comply with Shariah and have the ability to replicate the economic effects of the conventional financial products."

This is to say that for an effective Islamic financial innovation to take place there is the need for IFIs to come up with new ideas, a superior design, as well as effective delivery of products and services to meet the increasingly varying demands of their customers. However, Islamic financial innovation unlike the conventional, it has dual objective of achieving economic effects, such as profit and company reputation as well as satisfying the requirements of Shariah. This is the reason why all the products designed by the management of a given Islamic financial institution (IFI) must be tabled before its Shariah board for *Shariah* assessment and approval, (Yasmin, 2014).

It is pertinent to note here that an increasing level of market liberalization is always needed for innovation to blossom. A typical example of such liberalization is found in Malaysia where different financial products are created comprising unit trust, equities, structured products, derivatives, *sukuk* and others, (Divanna &Sreih, 2009). An IFI can achieve products innovation through applying specialized skills, assets and capabilities in a way that provides solutions to the problems at hand in order to get competitive advantage over and above other Islamic or conventional financial institution. However, factors such as politics, economics, regulations, taxes, environments, ethics, time to market, internal capabilities of the institution, as well as cultural variations within Islamic societies reshape the process of innovation across an entire industry. This last factor is mirrored by the lack of standardization in *Shariah* interpretations by the local *Shariah* advisors which render some Islamic financial products controversial.

Currently two approaches are followed by the Islamic financial Institutions in products innovation as identified by Sorenson (2007). In the first mechanism, the *Shariah* scholars of these institutions directly apply *Shariah* principles to create new financial products while in the second, they replicate and modify some aspects or structure of an existing conventional product to achieve same objective while adhering to *Shariah* principles, (Yasmin, 2014). This last approach is popularly known as *"Shariah* arbitrage" and is arguably resorted to by the so called “lenient *Shariah* advisors” who in many cases prioritize format of the product over its substance, (Grais and Pellegrini, 2006). Sometimes, these institutions even make use of creative arbitrage strategies that are regarded as tricks or *hiyal* to circumvent interest. This indeed has been frowned upon by conservative Shariah scholars and efforts are being made to jettison it as righty captured by Ahmed Moola, head of Islamic banking at ABSA South Africa:

> “The necessity to replicate the economic equivalents of conventional banking products in Islamic finance will soon be outlived. In order for Islamic banking to become more competitive, certain hurdles will have to be overcome and certain barriers crossed with regard to the suite of products offered. Banks are currently using principles of *Shariah* as basis to develop products, while conforming to conventional regulations and legislation. The end product would be expected to have more of the characteristics usually associated with equity rather than debt. Most of such products would generally exist in the areas of investment banking and the top end of the net worth market. The

> barometer of the migration towards this next generation will soon be determined by the extent of the product or products' broad acceptance, that is Muslim and non-Muslim alike" (Divanna and Sreih, 2009).

A clear example of such financial engineering is that a leveraged buyout based on huge amounts of debt, was innovated to comply with *Shariah* principles through a unique sale-lease back structure involving two tranches of financing. Researchers such as Nidal (2009) observes that the independence of some Shariah Boards members in products' Shariah assessment is in many cases influenced. This is due to the fact that they adopt a less restrictive but more permissive attitude towards financial products innovation in order to maintain their membership with the institutions they serve.

This has indeed brought about the questionable practice *of tasawwuq al-fatwa or fatwa* shopping where the minority Shariah views are preferred in order to push through the contemplated transactional structure, (Singh, 2018). This challenge is necessitated by the competition within the financial institutions coupled with lack of standardization of the divergent Shariah opinions causing a lot of serious damages on products innovation in Islamic finance. This is especially true where you find some products are rendered unacceptable as a result of different juristic schools of Islamic law and resultant distinctions of *Shariah* interpretation on Islamic financial products and services, especially between Asian and Gulf cooperation council (GCC) *Shariah* advisors. Worthy of mentioning here is the case of *Bay' bi-thaman ajil* or *BBA(*deferred payment*), bay' al-inah* (sell and buy back) where Malaysia and Brunei Darussalam had used them to innovate a number of financial instruments such as credit cards which were vehemently criticized and rejected by *Shariah* scholars of Bahrain and other GCC countries, (Shaharuddin, 2012 & Al-khamees, n,d.). Nonetheless, scholars believe that differences in Shariah interpretations have its pros and cons on financial innovation as rightly elaborated by Rosli (2013):

> "…differences in (Shariah) interpretations have the potential to spur innovation, which lead to better productivity, performance and higher quality products, which would improve the industry. Nevertheless, if interpretations are too dissimilar from each other, negative effects could ensure. For example, huge dissimilarities in Shariah interpretations would cause a greater dependency on attorneys in cross-border transactions."

This signifies that current state of differences in Shariah interpretations if not properly taken care of, they would end up stagnating the ongoing rapid development of the industry by innovating controversial and non-*Shariah* compliant products.

3. Diversity of Shariah Interpretations in Islamic Finance

Diversity or differences of opinions among the Muslim jurists popularly known as *Ikhtilaf*, is not a new phenomenon. It has been there since the first generation of Muslims. It is also permitted in Islam as long as it is motivated by the pursuit of knowledge and truth and observed in total conformity with the standard norm of ethics and proper behavior, (Yasmin, 2014). Due to its importance, *ikhtilaf* is one of the subjects frequently discussed in Islamic Jurisprudence, (Masud, n.d.). Muslim jurists have considered six major factors responsible for differences in juristic opinions as follows: i) distinctive interpretations of the meaning and intent of some words and verses of the Qur'an; ii) distinctive interpretations of the meanings of *hadith* (prophetic tradition), differences in the number of *hadith* memorized by various *fuqaha* (jurists), and differing criteria for accepting *hadith;* iii) disagreement on the legal status of the opinions of the *sahabah (prophet* companions); iv) inconsistencies in understanding the wisdom (*hikmah*) behind laws, their *ilal* (effective causes) and the *maqasid* (objectives) of the Shariah; v) environmental and customary differences ; vi) different approaches to harmonize apparently contradictory Shariah texts or give preference (*Tarjih*) to one text over another. Other factors contributing are differing views regarding the validity of some of the secondary sources of the Shariah such as *Qiyas* (Anology) *Istihsan (*juristic preference), *Istislah* (consideration of public interest), *Istishab* (presumption of continuity) and regarding certain legal maxims employed to arrive at rulings. These factors have contributed to the long formation of different schools of Islamic law (*madhhabs*) (Yasmin, 2014. & Al-a Alwani, 2017).

Even though, some scholars considered *ikhtilaf* to be inevitable, others believed that there had been dire need for uniformity. For instance, during the reign of the Abbasid Caliph Mansur (re. 754–775), due to the lack of harmonization of judicial practice, judges were issuing divergent and conflicting judgments which caused a lot of legal chaos. Consequently, his secretary Ibn Muqaffa'(d. 759) advised him to address the issue. When it came to the notice of the caliph that Imam Malik had compiled *al-Muwatta*,(A collection of prophetic *Hadiths*) he pleaded with him that *al-Muwatta* be adopted as the law of the caliphate to avoid the negative effects of divergent judgment issued by the judges but Imam Malik disagreed, (Masud, n.d). Some Classical examples relating the apparently divergent Shariah interpretations include the differences of opinion on the issue of *iddah* (waiting period for widow or divorced wives) and over the necessity of reciting *basmalah* in prayer.

Coming down to the context of modern Islamic financial industry, although diversity in Shariah interpretation is acceptable from the *Fiqh* (Islamic Jurisprudence) view point, practitioners believe that it brings more harms than benefits on Islamic finance products and services particularly in international trade. This is true when we consider the confusion, uncertainty and unease that it creates among the public, scholars, investors, as well as practitioners of Islamic finance concerning controversy over the validity and acceptability of certain financial products, (Yasmin, 2014). The Shariah advisory boards' *fatwas* are in many cases observed to be controversial particularly when it involves products offered by different countries or regions. For example, the case of *Bay' bi-thaman ajil* or *BBA (*deferred payment*) and bay' al-inah* (sell and buy back) where Malaysia and Brunei Darussalam had used them to innovate a number of financial instruments such as credit cards which were vehemently criticized and rejected by *Shariah* scholars of Bahrain and other GCC countries, (Shaharuddin, 2012). As mentioned earlier on, among the factors contributing to diversity in *fiqh* opinions in our modern is the lack of uniformity in Shariah governance models. Currently different countries adopt various Shariah governance models which include conventional model, decentralized as well as centralized model, (Hakim, n.d.). This practice really exacerbates the issue of diversity in *fiqh* opinions, damages the credibility of the Islamic finance industry, weakens the trust and confidence of its stakeholders and of course allows the dangerous practice of *fatwa* shopping, (Shanmugam and Zahari, 2009). Singh (2018) reports that Dr Mohammad Kabir Hassan when discussing Shariah innovation at the first World Islamic Economics and Finance Conference (WIEFC) in Lahore, Pakistan, has made an indication to this fact as he states:

> "The differences in religious decisions lead to uncertainty, confusion, and unease among scholars and investors. This situation restricts the industry from reaching its potential because a number of inefficiencies arise from the lack of standardization. For example, different interpretations of Shariah mean that one Islamic bank may not be able to accept or use as a model another Islamic bank's products, which can stifle the integration of Islamic finance at both the national and international levels"

In view of the above, it is argued that consensus in Shariah rulings will trigger expansion of the industry as it becomes easier to innovate and promote Islamic financial products across jurisdictions if there are no disputes about their legality. Consequently, the issue of standardization of the conflicting *fatwa* in Islamic finance is seen as a matter of urgency by many scholars, practitioners and regulators as well, (Shaharuddin, 2012).

4.0 Standardization of Shariah Opinions

Standardization in the context of this write-up signifies establishing *Shariah* standards for universal adoption which would eliminate the need for individual decisions by *Shariah* scholars, and therefore tackling the divergence of *Shariah* interpretations and reducing the problems of the shortage of *Shariah* scholars, (Ghoul, n.d). Investopedia (2010) defines standardization as "a framework of agreements to which all relevant parties in an industry or organization must adhere to ensure that all processes associated with the creation of a good or performance of a service are performed within set guidelines. This is done to ensure the end product has consistent quality". Standardization is achievable perhaps via a flexible codification of the *Shariah* principles and precepts, (McMillen, 2010). This signifies that a universally recognized Islamic manuscript or standards should be issued to harmonize differences in *fiqh* opinions concerning Islamic finance in order to further enhance product development and reduce the *Shariah* noncompliance risk, (Oakley, 2010). Adoption of Standards either local or international is not mandatory in nature. It is agreed that while adherence to standards is left at the discretion of a given jurisdiction, standardizations are by nature mandatory due to their incorporation in the domestic regulations, (Swann, 2010) and they carry many implications when it comes to cross border transactions, (Yaacob, Muhammad and Smolo, 2011 & Yaacob and Abdullah, 2012).

The need to standardize diverse and divergent *Shariah* rulings on at least basic products of Islamic finance to accelerate growth of Islamic financial institutions has since been acknowledged by many stakeholders of Islamic finance. This due to the fact that its absence has necessitated Islamic financial institutions having dissimilar *Shariah* governance models by which they set, measure, and monitor their compliance with *Shariah* principles, (KPMG 2006). The statement made by Fura, 2018 supports this argument as follows:

> "Even though there has been progress, agencies have in fact predicated a loss in momentum for 2018. Some have argued that this has been attributed in part to the fragmented state of the industry due to an absence of uniform regulations and inconsistent implementation of standards as well as a lack of standardized legal documentation".

This lack of standardized *Shariah* interpretations on Islamic financial products across countries always poses challenges and creates obstacles particularly when it comes to transactions at international level. With standardization, it is argued that confusion and costs would be reduced, efficiency, consistency and transparency would be improved and more time for innovation would be provided.

Consequently, there have been serious efforts geared towards unifying Islamic financial products through issuance of *Shariah* standards and resolutions by some international standards-setting organizations such as Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI), Islamic Financial Services Board (IFSB) and International Islamic financial market (IIFM). Others include resolutions issued by Organization of Islamic Conference popularly known as OIC *Fiqh* Academy as well as fiqh academies of different jurisdictions. However, the main challenge that generally affects these standards lies in the fact that their adoption is voluntary by the different jurisdictions globally. They are only mandatory if incorporated in domestic laws. The following is the brief about the current efforts on standardizations:

4.1 The Role of AAOIFI in Standardization

AAOIF established in 1991 and based in Bahrain is considered to be the leading international autonomous non-profit corporate body with the primary mandate of developing and issuing standards relating to accounting, auditing, ethics and governance as well as *Shariah* for adoption by the global Islamic financial industry. AAOIFI gets supports from its members comprising of central banks, regulatory bodies, Islamic financial institutions, and other participants from more than 45 countries worldwide. So far, it has developed and issued more than100 standards on different areas including *Shariah*, accounting and auditing, (Yaacob, Muhammad and Smolo, 2011).

These standards have been widely adopted in Islamic finance industry. They have been made mandatory for Islamic finance industry of Bahrain, Jordan, Lebanon, Qatar, Sudan and Syria as well as Dubai International Financial Centre. Australia, Indonesia, Malaysia, Pakistan, the Kingdom of Saudi Arabia, South Africa and some others have recognized them for reference in their national guidelines, (AAOIFI Official Website, 2017).

4.2 The Role of IFSB in Standardization

IFSB based in Kuala Lumpur was established on the 3rd of November but started operations on the 10th of March, 2003. It is also recognized as an international standard-setting body of regulatory and supervisory agencies with the main aim of issuing prudential global standards and guiding principles to ensure the stability and soundness of the Islamic finance industry. Also, part of its mandate is organizing seminars, conferences, roundtables as well as conducting research on issues related to the industry, (Yaacob, Muhammad and Smolo, 2011)

IFSB is supported by 195 members including regulatory and supervisory authorities, international inter-governmental organizations, market players, professional firms and industry associations operating in 40 jurisdictions. It has issued 12 Standards, Guiding Principles and Technical Notes for the industry covering different areas such as Risk Management, Capital Adequacy, Corporate Governance, Transparency and Market Discipline, Supervisory Review Process, Guiding Principles on Governance for Islamic Insurance (Takaful) Operations and Guiding Principles on the *Shariah* Governance System, (Yaacob, Muhammad and Smolo, 2011).

4.3 The Role of IIFM in Standardization

IIFM is yet another notable not-for-profit standard-setting organization for Islamic finance industry. Like AAOIFI and IFSB, IIFM was also established by the key players of the industry which comprise of Central Bank of Bahrain, Bank Indonesia, Central Bank of Sudan, Labuan Financial Services Authority, Brunei Ministry of Finance and Islamic Development Bank. In addition, it also gets supports from various apex banks, government agencies as well as some prominent financial institutions.

The establishment of this body is aimed at harmonizing the Islamic capital and money market sectors. It also standardizes products, documentation, and related processes. IIFM has issued some standards which comprise of Master Agreement for Treasury Placement (MATP) and the ISDA/IIFM *Tahawwut* Master Agreement (TMA).

It is glaring from the above that, there have been many efforts deliberately put in place to help standardize the contradictory *fatwas* and inconsistent products and services of the modern Islamic financial industry in order to achieve accelerated growth. However, these standards, *fatwas* and resolutions developed by the aforementioned global standard-setters on Islamic financial matters, are made mandatory for compliance by only few jurisdictions globally. This has certainly caused divergence of *Fiqh* opinions among *Shariah* supervisors of Islamic finance especially between Malaysia and GCC countries. Consequently, Islamic financial products innovation is exposed to inconsistencies, legal and regulatory risk as well as *Shariah* non-compliance risk, (Yaacob, Muhammad and Smolo, 2011). Therefore, it is believed that standardization can bring greater transparency and consistency, enhance confidence of all stakeholders and as well save time and cost, (Yaacob, Muhammad and Smolo, 2011).

5. Research Methodology

The research methodology adopted by this write-up is qualitative and library based in nature, where it reviews and analyses the various relevant literature and secondary data to identify and explain some of the effects of diversity of *Shariah* interpretations on Islamic financial innovation.

6.0 Findings & Discussions

Under this section, the author presents some of the examples of such effects that diversity of *fiqh* opinions has on Islamic finance in general and Islamic financial innovation in particular. They are as follows:

6.1 Disagreement over Bay *al-inah* Based Products and Services

The *Shariah* advisory council of Bank Negara Malaysia (SAC) in its 8th meeting held on 12th December, 1998 has considered the application of *Bay al-inah* in the interbank money market tractions permissible. Based on this resolution Malaysia used *bay al-inah* to innovate a number of financial products and services such Islamic credit card. The Shariah scholars of GCC countries who are considered to be more conservative compared to Malaysian scholars deemed this contract impermissible arguing that it involves *hilah* to circumvent *riba* (interest). However, the *Shariah* advisory council of Malaysia has recently followed the suite of their Middle East colleagues in prohibiting it. These inconsistencies are certainly capable of causing market risk, *Shariah* non-compliance risk and as well integrity damage to Islamic finance products and services innovation, (Lahsasna, 201; Yaacob, Muhammad & Smolo, 2011).

6.2 Controversy over *Shariah* Compliance of *Sukuk*

Arabian business reports that Sheikh Muhammad Taqi Usmani has declared 85% of gulf *sukuk* as non-Shariah compliant in 2007. He argued those *sukuk* were sold based on repurchase undertaking. This to say the investors are assured to get back their invested capital at face value at the maturity or in the event of default. This indeed violates the profit and loss sharing philosophy, (Hakim, n.d). It is indeed needless to say that this has caused chaos in the industry and as well market and *Shariah* non-compliance risks to both issuers and subscribers of the *sukuk.* (Alkhamees, n.d.)

6.3 Disagreement on *Sukuk* issuance by Japan Bank for International Cooperation (JBIC)

This bank in its efforts to issue its first *Sukuk* in May, 2008 selected Citibank of Dubai and CIMB Malaysia to arrange the deal but their *Shariah* advisory boards disagreed on the *Shariah* compliance of the *sukuk* structures based on *Murabaha*. As a result, this deal was delayed and the structure modified from the original

Murabaha to *Musharakah*. This lack of uniformity of *Shariah* interpretations as we can see has caused some negative effects on Islamic financial innovation reflected in time waste, additional cost and frustration for the issuer, (Kamal, 2008).

6.4 Controversy over *Wa'd* Based Total Return Swaps (TRS)

Islamic Total Return Swaps (I-TRS) is one of the *Shariah* compliant structured products which combine the features of a fixed income instrument with the characteristics of a derivative transaction, (Securities commission Malaysia, 2009). I-TRS have been developed with main objective of providing more *Shariah* compliant investment choices for investors. However, their conformity to *Shariah* tenets has been questioned. I-TRS is a replicate of conventional TRS that involves "puts" and "calls" option contracts which are mere promises. It is not allowed because it comprises of sale of promise *(wa'd)* which is considered to be impermissible by the *Shariah* experts, (Ghoul 2008). *Wa'd* is being used to design an 'Islamic' TRS, which consists of two unilateral promises.

Dr Hussein Hassan who happened to be the Director of Islamic Finance Structuring at Deutsche Bank, UAE, argued that Islamic total return swaps products are *Shariah* compliant, (Stanton 2007). He explained that Islamic investors' assets at Deutsche Bank are separated from impermissible assets through conducting regular *Shariah* audits on the bank operations. However, many researches including, Dolerenzo, (2007), Osama (2008) New horizon (2011) disagreed with Dr Hussain Hassan and maintained that the *wa'd* based total return swap is not compliant with *Shariah* arguing that it lacks linkage to real economy, increases risk and the intention behind it is circumvention of interest.

From the above we understand that Shariah scholars do have conflicting views over some Islamic financial products which definitely render them controversial. Such lack of legal certainty throws a lot of challenges to the Islamic financial products innovation as explained in this article.

7.0 Conclusion and Future Recommendations

This paper underscores the imperative need of more Islamic financial products innovation. It identifies some of the negative effects and difficulties that Islamic financial products innovation encounters as a result of the divergent *Shariah* interpretations among *Shariah* scholars/Advisors of Islamic financial institutions, especially when it comes to cross border financial transactions. This leads to discussion on the need to standardize the apparently conflicting *fatwas* and on the ongoing efforts geared towards achieving that, especially by Accounting and Auditing Organization of Islamic Financial Institutions, Islamic Financial Services Board and International Islamic financial market. However, it has been established that the standards, resolutions and guidelines so far developed and issued by these bodies suffer from the lack of mandatory compliance by respective Islamic financial institutions internationally. This is due to the fact that many jurisdictions are yet to incorporate them in their domestic laws. As a result, there have been series of calls from many scholars, practitioners and regulators to establish an international *Shariah* advisory body made up of representatives from all countries and from various schools of Islamic law. It is hoped that this would be achievable especially if the member countries through their financial regulators could make compliance with these standards mandatory. In view of the above, the author offers the following recommendations:

(i) To establish a unified international *Shariah* advisory body made up of representatives from all countries and from various schools of Islamic law;

(ii) To achieve the first recommendation, the author highly recommends for more researches to evaluate the opinions of the key Islamic finance market players on the possibility of establishing this international Shariah authority.

(iii) In view of the various *Shariah* governance models (eg. Conventional, centralized and decentralized) adopted by different countries, it is recommended all jurisdictions that operate other models of Shariah governance should change to centralized model, so that *Shariah* governance system could be standardized internationally.

(iv) In the meantime, the author recommends that all AAOIFI member countries should as matter of significance gradually opt for centralized model of Shariah governance and mandatory compliance with its standards.

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MODERATING ROLE OF AUDIT QUALITY ON THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FIRM PERFORMANCE: A CONCEPTUAL FRAMEWORK

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Abstract
The research on firm performance is gaining much attention from academics and politics when it is associated with country's policies regarding corporate governance problems. Unfortunately, the comprehensive studies to observe this case become rare, therefore this study is aimed to propose a conceptual framework on the moderating effect of audit quality on the relationship between corporate governance and firm performance. Literature review shows that there is inconsistency in the findings on the relationship between corporate governance and firm performance. Audit quality has a strong significant effect on organizational performance and can moderate the relationship between corporate governance and firm performance. The conclusion reached is that the way an organisation manages, and sustains its corporate governance and audit quality has a remarkable relationship with its performance and achievements. It is suggested that future studies to apply the proposed conceptual framework so as to find an empirical evidences.

Keywords: performance; corporate governance; audit quality

1.1 Introduction

The performance of an organization's finances is extremely important. It significantly influences the growth of the company and the value it provides to its shareholders (Oshim & Igwe, 2024). Management's effectiveness and efficiency can be seen in an organization's financial performance (Atugeba & Acquah-Sam, 2024). Therefore, the Company and Allied Matters Act (CAMA, 2004) mandates the preparation of essential financial statements to assist users in making informed decisions. The concepts of corporate governance and company performance continue to attract significant interest because corporate scandals still occur, undermining the trustworthiness of many investors and consequently affecting the country's economy (Bako, 2024; Al-ahdal & Hashim, 2022). During major corporate scandals, such as Enron and WorldCom, it was widely believed that weak corporate governance systems were the primary cause, and there was a need for substantial improvements to regain investor confidence (Bako, 2024). The significant reform in corporate governance was the strengthening of audit committee's characteristics, board characteristics and ownership characteristics, which acted as a protective barrier against managerial misconduct by the board of directors and shareholders (Atugeba & Acquah-Sam, 2024; Han et al., 2024; Khan, 2023; Al-ahdal & Hashim, 2022).

Moreover, empirical evidence of the impact of corporate governance on company performance has produced inconsistent results (Bako, 2024; Javeed et al. 2021). For instance, Islam et al., (2024); Bui and Krajcsak, (2024); Ermalina et al., (2023); Ibrahim et al., (2023); Sarwar et al., (2022); Huynh et al., (2023) etc. show that there is positive significant relationship between corporate governance on company performance. While, Fortyfour et al., (2024); Ibrahim et al., (2024); Bako (2024); Adamu et al., (2023); Mansour et al., (2022); Adegboye et al. (2019); Singh and Tabassum, (2018); Padachi et al. (2017) etc. indicate that there is negative significant relationship between corporate governance on company performance, while, Al-ahdal and Hashim (2022); Qeshta et al. (2021) reported insignificant relationship between corporate governance on company performance. Moreover, Hyarat et al., (2023); Puni and Anlesiny (2020) and Mubeen and Hussain (2020) conclude that the relationship between several corporate governance mechanisms and firm performance could not necessarily be direct, which indirectly influences it. Consequently, there may be moderating variable in their relationship, which future studies should aim to ascertain.

Likewise, Bako (2024); Bhatia and Gulati (2021) recommended extending the moderator analysis to investigate the relationship between corporate governance and financial performance. In other words, it assumes that there is a third variable (moderator variable) that may influence such relationships. As such, many previous literatures tried to moderate the relationship i.e. Atugeba and Acquah-Sam, (2024); Agara and Stainbank (2023); Ebimobowei (2023); Mansour et al., (2022); Eldaia et al., (2022); Saleh et al., (2021); Mardan et al., (2021); Al-Hamadsheh et al., (2020); Al-Matari and Mgammal (2019), but to best of the researcher knowledge none of these studies used audit quality as the moderating variable despite its fiduciary role of significantly contributing to both financial reporting and financial performance as it stands to lower the risk of severe misleading statements by guaranteeing that financial statements are prepared in accordance with established norms, regulations and standards. Therefore, this study introduces audit quality as moderating variable hoping to strengthen the influence of corporate governance on company performance as higher audit fees may indicate a higher-quality audit, as more resources and expertise are often required to conduct a thorough examination of a company's financial statements (Bako, 2024; Santosa et al., 2021). A high-quality audit can provide greater assurance to investors and stakeholders regarding the accuracy and reliability of financial information, thus positively impacting a company's reputation and potentially attracting more investors (Masmoudi, 2021). This has been overlooked in previous studies. Thus, this study proposed a conceptual framework on the moderating effect of audit quality on the relationship between corporate governance and firm performance.

1.3 Objectives of the study

The objectives of this research paper are as follows:

i. To examine the relationship between corporate governance and firm performance.
ii. To examine the relationship between audit quality and firm performance.
iii. To examine the moderating role of audit quality on the relationship between corporate governance and firm performance.

2.0 Literature Review

This section reviewed the concept of firm performance, corporate governance, audit quality and relationship between them. The empirical studies that were reviewed are from 2021-2024. The section also reviewed the theoretical framework.

2.1 Concept of Performance

Performance is defined as the ability of an organization to achieve set goals to maintain profit, gain competitive advantage, increase market share, and sustain long-term survival, which depends on the use of appropriate organizational strategies and operational plans (Oyemomi et al., 2019; Soto-Acosta et al., 2016; Vatamanescu et al., 2022). It can be generally said that performance is the achievement that companies can attain in a given period. Return on assets (ROA) is a better measure of a company's ability to generate returns on its portfolio of assets. ROA gives an idea of how efficiently management is using its assets to generate profits. Other company performance measures include Return on Equity/Investment (ROE) as net income per naira of equity, Net Interest Margin (NIM) which is the difference between interest income and interest expense as a percentage of total of assets and others. In this study, financial performance is the efficiency with which a company achieves profit using available assets. The study also chose return on equity because the purpose of the study is to measure the company's performance in terms of shareholder returns, and return on equity measures the return on shareholders' investment by comparing the company's net income to the value of shareholders' equity. It measures a company's ability to generate profits from the money invested by shareholders. Therefore, the study will consider this measure of the dependent variable as the most suitable for analysis that remains adaptable.

2.2 Concept of Corporate Governance

Corporate governance refers to a set of mechanisms and tools that allow better control while reducing sources of conflict within the company. However, better governance largely depends on a qualified board of directors (Tyrowicz et al., 2020), etc. In fact, the role of the board of directors is to reduce agency costs, monitoring and controlling managers to ensure that their decisions converge with the company's goal of creating value and increasing its social legitimacy (Ouni et al., 2022). Many previous studies have examined the quality and effectiveness of the board of directors by examining its characteristics such as independence, size, number of meetings, communication, experience, etc. (Ibrahim et al., 2024).

2.3 Concept of Audit Quality

Audit quality refers to an auditor’s ability to assess financial statements to disclose mistakes (Bako, 2024). It is crucial to make every activity of audit quality beneficial for upgrading personal abilities in making the statement of accounting information and eliminating untrusted information (DeAngelo, 1981; Mgbame et al., 2012). The audit provides credibility to the financial reporting process by engaging in assurance activities to determine whether the financial statements are fairly presented in accordance with the applicable financial framework (Bako, 2024). Audit quality is the ability of an auditor to commit to his/her responsibility to perform a qualified audit (Herdiansyah & Kuntadi, 2022). In this case, audit quality improves the auditor's performance in the independence of financial statements through the discovery, reporting, and opinion of deviations found in clients' accounting systems. If accounting information is of low quality, it triggers serious economic problems and leads to high levels of future management fraud (Herdiansyah & Kuntadi, 2022).

Soyemi et al., (2020), define audit quality as the dual possibilities of auditors detecting material misstatements during the audit engagement and reporting them through an audit report. The former refers to auditors' competence, whereas the latter pertains to auditor independence. Given the unobservable nature of audit quality, researchers often face challenges in measuring audit quality directly and instead rely on proxies such as the presence of Big4 audit firms (Ezejiofor & Erhirhie, 2018; Soyemi et al., 2020), auditor independence (Phan et al., 2020), audit fees (Bako, 2024; Enekwe et al., 2020; Soyemi, 2014), auditor specialization (Soyemi et al., 2021), and audit committee attributes (Ogbodo & Akabuogu, 2018), among others. However, this study seeks to proxy audit quality with auditor independence as used by Adeniyi and Mieseigha (2013) and Phan et al., (2020).

2.4 Relationship between Research Variables

The section discusses the relationship between the different proxies of independent variable (i.e. corporate governance) and dependent variable (i.e. firm performance).

2.4.1 Corporate Governance and Firm Performance

Ayeni-Agbaje et al., (2024) empirical investigations found that board size had a positive significant effect on return on performance, while the number of non-executive directors had a negative significant effect. Nguyen and Nguyen, (2024) confirm that board size has a negative impact on the financial performance of the business, in contrast, the participation of women on the board and the selection of men as CEO have a positive effect on corporate profits. Oshim and Igwe, (2024) showed that, board size, board independence and board meetings does not have a strong relationship with financial performance. Ebimobowei, (2023) revealed that board size, board diligence and board independence have a positive and insignificant relationship with the return on equity of listed consumer goods manufacturing firms in Nigeria; while, board compensation has a negative and significant relationship with return on equity of listed consumer goods manufacturing firms in Nigeria. Adewumi, (2024) revealed that board size and CEO Duality have a significance negative impact on financial performance. Agara and Stainbank, (2023) revealed that CEO non-duality, female board membership, gender diversity and frequency of board meetings indicated a significant but negative relationship with performance. Oriakpono and Musiliu (2023) revealed that the size of the board was found to relate insignificantly negatively with bank performance. Ogunmakin, et al., (2020) reported insignificant positive effects of CEO duality and gender diversity on performance. These indicate that the results from previous studies indicated an inconsistency, therefore, Nguyen (2021) introduced a religious dimension to the role of the corporate governance in the financial performance of firms.

2.5 Moderating Role of Audit Quality

This study explored the moderating effect of audit quality on the relationship between corporate governance and financial performance. External auditors are recognized as the primary entities responsible for overseeing financial reporting and ensuring accurate firm performance (Al-ahdal & Hashim, 2022). However, existing evidence on the impact of corporate governance yields mixed results and suggests that corporate governance may not always protect shareholders' interests or improve firm value (Bako, 2024). Conversely, limited research on the influence of audit quality on firm performance suggests a positive association (i.e. Nguyen & Nguyen, 2024; Hyarat et al., 2023; Al-ahdal & Hashim, 2022; Al-Mamun et al., 2014; Rahman & Ali, 2006). Consequently, Al-ahdal and Hashim (2022) proposed that external auditors who perform their duties professionally and appropriately have the potential to enhance firm performance. Moreover, Bako (2024); Al-Ansi, (2022); Masmoudi, (2021); Santosa et al., (2021) used audit quality as the moderating variable and concluded that it would be a good moderating variable on the relationship between different independent variables and firms' performance.

2.6 Research Gap

Prior research has found mixed evidence or inconsistency regarding the relationships between corporate governance and firm performance. Moreover, there is a lack of evidence on the moderating variable that can weaker or strength the relationship; hence, this study tackles this issue. The study aims to propose a conceptual framework on the moderating role of audit quality on the relationship between corporate governance and firm performance.

2.7 Theoretical Review

The agency theory will be used to underpin this study.

2.7.1 Agency Theory

This theory was initially proposed by Alchian and Demsetz (1972) and subsequently expanded by Jensen and Meckling (1976). Agency theory is centered on the relationship between principals (owners) and agents (managers) within an organization, examining how conflicts of interest may arise between these two parties and how tools like contracts, incentives, and monitoring can be utilized to align their interests. In the context of corporate governance, agency theory provides insights into the difficulties associated with delegating decision-making authority and how to address potential agency problems.

Secondly, no doubt, the agency theory is underlying auditor engagement by firms. The shareholders, as resource owners, are principals whose interests need to be protected by directors, who are agents responsible for the day-to-day management of the firm. The shareholders then engage auditors to lend credibility to the stewardship report prepared by the agents (directors). Consequently, the auditor is expected to apply due diligence and skill in discharging his/her duties by examining financial statements prepared by management and giving an opinion as to whether in all material respect, such report is free from material misstatements. By so doing, quality audit engagements must reduce information asymmetry and gives credibility to financial information.

2.8 Propose Conceptual Framework

The conceptual framework of this study shows diagrammatically how audit quality moderate the relationship between corporate governance and firm performance.

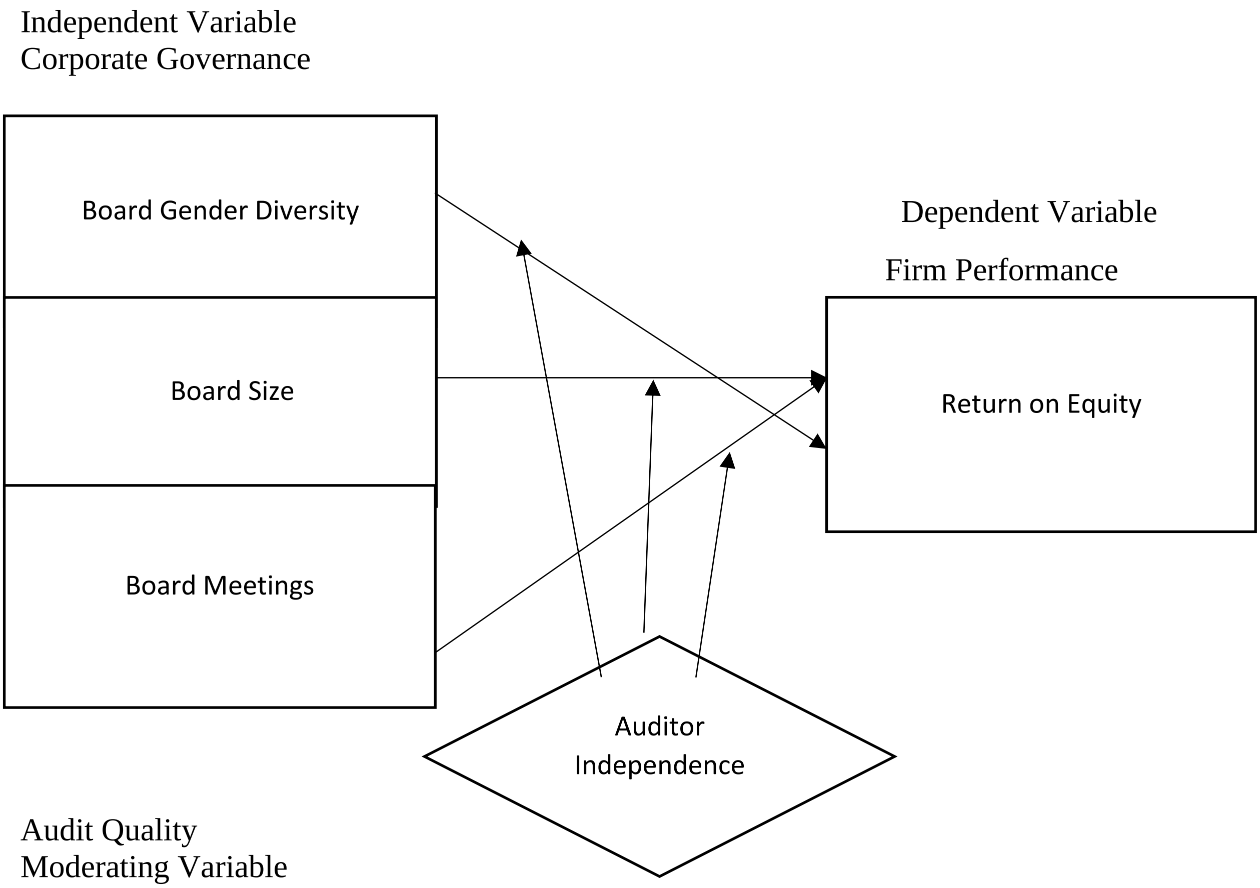

Figure 1: Propose Conceptual Framework of the Study

2.9 Model Specification

$$ROE_{it} = \beta_{0it} + \beta_1 BS_{it} + \beta_2 BGD_{it} + \beta_3 BM_{it} + e_{it}$$

$$ROE_{it} = \beta_{0it} + \beta_1\ AI*BS_{it} + \beta_2\ AI*BGD_{it} + \beta_3\ AI*BM_{it} + e_{it}$$

Where:
ROE_{it} = Return on Equity
BGD_{it} = Board Gender Diversity
BS_{it} = Board Size
BM_{it} = Board Meetings
AI_{it} = Auditor Independence
β_0 = Constant (i.e., the intercept)
$\beta_1 - \beta_8$ = Coefficient of the explanatory variables (i.e., the slope)
e = Error term
i = Individual firm
t = Time period (i.e., year)

3.0 Conclusion and Suggestion for Future Studies

Conclusively, previous studies have found mixed evidence or inconsistency regarding the relationships between corporate governance and firm performance. Moreover, there is a lack of evidence on the moderating variable that can weaken or strengthen the relationship, even though some studies have attempted to moderate the relationship but none of those studies used audit quality to moderate the relationship despite it significant role or influence on firm performance and been used by many studies as moderating variable between different independent variables and firm performance; hence, this study tackles this issue. The conclusion reached is that the way an organisation manages, and sustains its corporate governance and audit quality has a remarkable relationship with its performance and achievements. It is suggested that future studies to apply the proposed conceptual framework so as to find an empirical evidences.

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BUSINESS PROCESS REENGINEERING AND ORGANIZATIONAL SUSTAINABILITY IN SELECTED DEPOSIT MONEY BANKS IN ABEOKUTA METROPOLIS, OGUN STATE, NIGERIA

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Abstract
This study investigates the relationship between business process reengineering and organizational sustainability in selected deposit money banks in Abeokuta metropolis. The conceptualize business process reengineering as organization restructuring, technological innovation, strategy modification and job redesign. The study employs a survey research design which measures two variables, independent variable and dependent variable. The sample size of 171 respondents was selected through Taro Yamane's formula from the population of 300 who are worker workers (top, middle and low level of management) spread across seven (7) selected banks in Abeokuta metropolis using stratified random sampling method. A well-structured, validated and reliable questionnaire serves as the primary research instrument in this study, which was used to collects data from primary sources. Data collected from 150 respondents was analyzed using both descriptive statistics and inferential statistics. Result of the findings indicate a significant positive correlation between organization restructuring and organizational sustainability ($r = 0.253^{**}$, $N= 150$, $P < .01$); a significant positive correlation between technological innovation and organizational sustainability ($r = 0.375^{**}$, $N= 150$, $P < .01$); a significant positive correlation between Strategy modification and organizational sustainability ($r = 0.399^{**}$, $N= 150$, $P < .01$); significant positive correlation between job redesign and organizational sustainability ($r = 0.303^{**}$, $N= 150$, $P < .01$). Furthermore, the linear combination of organization restructuring, technological innovation, strategy modification and job redesign on organizational sustainability {($F = 21.937$; $R = .474$, $R^2 = .225$, Adj. $R^2 = .216$; $P <. 01$)}. The study concludes that business process reengineering dimensions (organization restructuring, technological innovation, strategy modification and job redesign) have a significant relationship with organizational sustainability in selected bank in Abeokuta metropolis. It was recommended that organizations in the banking sector should involves the partial or full replacement of an existing technology by a newer system aimed at improving productivity, standard, quality and competitiveness of products and services.

Keywords: Job redesigns, Organization restructuring, Technological innovation,

1] Introduction

Managers are desirably giving up obsolete modes of operation and leveraging upon change to make their organizations competitive and operate successfully in a complex, continually changing environment (Edema, Mathew & Uwah, 2019). In a competitive business environment where change is at high velocity, allowing for a fast adjustment in business process is a key requirement for rejuvenating modern enterprises. The increasing flexibility of business environment and the dwindling process validation have saddled managers with the responsibility of setting a new page for the organization. The organization sustainability in contemporary business environment requires more than an incremental management or a mere modification of the operational process. Organizations must involve all their units in the change process (Bako & Banmeke, 2019). Hence, business process reengineering is a prerequisite and an indispensable tool of organizational sustainability.

Business process reengineering (BPR) is an effective tool for changing the entire operating system of an organization. Business process reengineering (BPR) is a managerial approach that focuses on doing things in a standard way clearer to enhance innovation and exploitation of opportunities (Bako & Banmeke, 2019). It is a management idea that aims to pinpoint operational processes that don't benefit customers and replace them with a strategy that would significantly boost organizational performance. Additionally, it enables businesses to make wiser decisions through improved data dissemination, enabling them to enhance their operational efficiency, decrease waste, and provide better customer service (Bell, Bryman & Harley, 2022).

Business process reengineering is a process that redesigns jobs in organizations to improve resource utilization and efficiency. It involves introducing change, including changes in management style, and focusing on the organization's sustainability (Bell, Bryman & Harley, 2022). This involves reorganizing work, managing team members, and achieving shared goals. It involves analyzing a company's sustainability in relation to set goals, innovation, customer satisfaction, and efficiency, ensuring the continuity of operations and generating profits for owners and society (Kelechi, Uzoma, & Ndubueze, 2023). Based on the forgoing, this study is set to investigate the relationship business process reengineering and organizational sustainability selected bank in Abeokuta metropolis.

1.2] Statement of the Problem

Organizations are faced with changing business environment due to economic changes, competition, technology innovation, and consumer preferences (Nsien et al, 2023). To compete, firms must restructure their operational procedures and understand diverse modes of operation, management styles, beliefs, and cultural practices. However, some businesses fail to re-design employment that respects cultural backgrounds, resulting in lower organizational productivity (Edema et al, 2019). Despite positive changes, some deposit money banks struggle to abandon old-style operating, highlighting the importance of creativity and rapid technological advancement in today's dynamic business climate.

Recent researches (Bako & Banmeke, 2019; Kelechi et al., 2023; Orugbu et al., 2015) discovered a correlation between business process reengineering and organizational performance, however the results were varied. Sahul-Hameed, Salamzadeh, and Abdul-Rahim (2019) established a positive association between business process reengineering and organizational performance when researching the Malaysian manufacturing industry. According to the report, senior management commitment, organizational readiness for change, information technology competence, and people management all help organizations perform better.

Chunmei and Zhang (2018) discovered that effective strategy modification influences the quality of service in health-care companies. The majority of these research focus on determining the relationship between business process reengineering and organizational performance on the one hand, and personnel performance on the other. This gave rise to a gap this present study seeks to fill as well as highlight challenges associated with redesigning process in the quest to achieving streamlined workflows in order to reduced times and better use of resources by examining the effect of business process reengineering (proxied by organization restructuring, technological innovation, strategy modification and job redesign) and organizational sustainability of selected bank in Abeokuta metropolis.

1.3] Objectives of the Study

i) Examine the relationship between organization restructuring and organizational sustainability of selected bank in Abeokuta metropolis
ii) Assess the relationship between technological innovation and organizational sustainability of selected bank in Abeokuta metropolis
iii) Investigate the relationship between strategy modification and organizational sustainability of selected bank in Abeokuta metropolis
iv) Examine the relationship between job redesign and organizational sustainability in selected bank of Abeokuta metropolis
v) Determine the combined effect of organization restructuring, technological innovation, strategy modification and job redesign on organizational sustainability of selected bank in Abeokuta metropolis

1.4] Research Hypotheses

The hypotheses that will be tested in the study are stated in the null form below;

H_{01}: There is no significant relationship between organization restructuring and organizational sustainability of selected bank in Abeokuta metropolis

H_{02}: There is no significant relationship between technological innovation and organizational sustainability of selected bank in Abeokuta metropolis

H_{03}: Strategy modification has no significant relationship with organizational sustainability of selected bank in Abeokuta metropolis.

H_{04}: Job redesign has no significant relationship with technological innovation on organizational sustainability of selected bank in Abeokuta metropolis.

H_{05}: Organization restructuring, technological innovation, strategy modification and job redesign have no significant combined effect on organizational sustainability of selected bank in Abeokuta metropolis

2] Literature Review

2.1] Concept of Business Process Re-engineering

Business Process Re-engineering (BPR) is a performance improvement technique used by organizations to redesign work methods to support the delivery of organizational missions at reduced cost (Nsien, Nkutt, Umoh, 2023). BPR aims to create and deliver value to clients by rethinking, restructuring, and streamlining structures, processes, and methods of working. It has gained interest from both industry and academia due to its potential to improve management practice and organizational working processes. However, BPR is both important and troublesome, with debates surrounding terminologies, changes involved, and the role of information technology in BPR (Kelechi, Uzoma & Ndubueze, 2023). Key aspects of BPR include business process renovation, automation, and networking. BPR is particularly beneficial for service companies like couriers, as it enhances customer satisfaction, service quality, cycle time, cost, competitive advantage, and delivery speed (Garcia-Garcia, Coulthard, Jagtap, Afy-Shararah, Patsavellas & Salonitis, 2021).

2.2] Dimensions of Business Process Reengineering

BPR, which pose various challenges, such as resistance to change, lack of stakeholders engagement, data management issue and lack of technical expertise, derives its existence from different disciplines, and four major areas can be identified as being subjected to change in BPR – organization, technology, strategy, and people – where a process view is used as common framework for considering these dimensions (Garcia-Garcia, Coulthard, Jagtap et.al, 2021).

2.2.1] Organization Restructuring

Restructuring is a significant organizational change that involves reducing management levels, acquiring components, and shrinking the workforce (Ihunwo, & Poi, 2022; Kurgat, 2016). It involves realigning culture, vision, values, strategy, structure, management systems, styles, technologies, and staff skills. Modern managers use restructuring strategies to address operational and financial issues, improve service delivery, and decision-making processes (Boje & Whetten, 2019). Organizations can reorganize for various reasons, such as enhancing profitability, productivity, competitiveness, and strategic direction. Responsible restructuring may not necessarily involve employee retrenchment (Ihunwo, & Poi, 2022).

2.2.2] Technological Innovation

Technological innovation is the use of new information technology to improve productivity, quality, and competitiveness of products and services (Zhang, et.al, 2019). Small firms with ICT capabilities can improve market intelligence practices by acquiring customer segment information. Technological entrepreneurship is crucial for job creation, economic and social development, and growth. Independent entrepreneurs create new firms to exploit technological discoveries, contribute to community well-being, and generate wealth. However, there is limited research on technological innovation in Nigeria, with few technological entrepreneurs (Okonkwo et.al, 2023; García-Fernandez et.al 2022).

2.2.3] Strategy Modification

Strategy Modification or Strategy Innovation is crucial for organizational environment and competitiveness. It can be radically or incrementally influenced, with radical innovation involving significant changes in processes, products, or services (Tidd & Bessant, 2020). Types of innovation include process innovation, which involves moving out of an existing supply function to lower variable costs, and product innovation, which involves creating a new production function to differentiate an existing product (Lopes, Gomes, Oliveira & Oliveira, 2022; Tidd & Bessant, 2020).

2.2.4] Job Redesign

Job design is a crucial tool that improves worker performance, meets their needs, and benefits the organization. It includes job responsibilities, content, and experience necessary for performing the job. Job design outlines everyday tasks, activities, relationships, and responsibilities, as well as qualifications (Onwuchekwa et.al 2020). It is the study, creation, and modification of the composition, content, structure, and environment within which jobs and roles are enacted (Kurgat, 2016; Lopes er.al, 2022). Job designs specify the work techniques of individual staff members and can be distinguished by employee participation in day-to-day work behavior (Onwuchekwa et.al 2020).

2.3] Organizational Sustainability

Organizational sustainability comprises the capacity and strategy that enhance competitiveness. According to Mahmoud and Mollaei (2014) organizational sustainability is the capacity companies have for leveraging their economic, social and environment capital for contributing towards sustainable development within their political domain. Luciano, Barbara and Rafael (2006) depict that organizational sustainability is an attempt to find equilibrium between what is desirable economically viable and ecologically sustainable. An organization’s sustainability could be viewed in terms of its ability to generate profits for owners, gain competitive advantage and add value to the people with whom it employs as well as the society. It is certain that the environment in which organizations exist changes.

Trends such as globalization, demographic change, climate change and social inequality have been considered significant to the existence of businesses Opiyo and Isaac (2014) see organizational sustainability as achieving success today without compromising the needs of the future. To Orugbu, Onyeizugbe and Onuzulike (2019) organizational sustainability is keeping business going. According to the chartered institute of personnel and development (2012), the essence of sustainability in an organizational setting is the principle of improving the societal, environmental and economic systems within which the organization operates. Thus, organizational sustainability can be viewed as a company's strength to survive the challenges of rapidly changing environment of business.

Conceptual Model
Business Process Reengineering

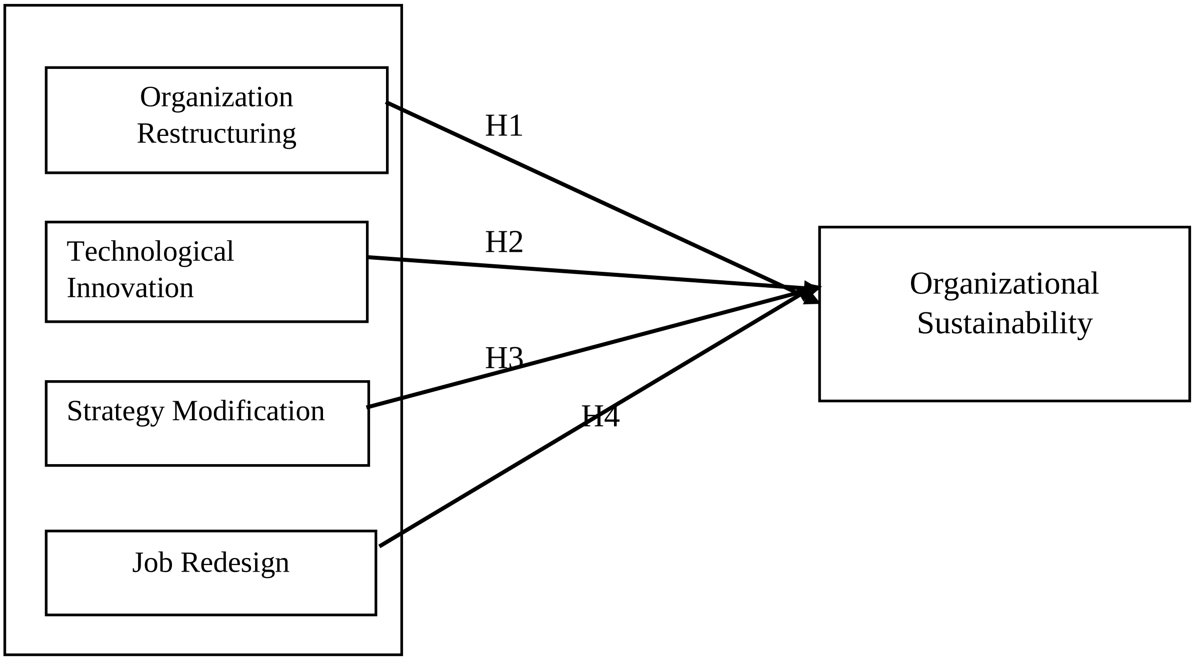

Figure 1: Business Process Reengineering and Organizational Sustainability
Source: Authors Conceptualization, 2024

2.4] Theoretical Framework

This work hinged on systems theory, proposed by Von Beratalanffy (1972), emphasizes the interconnectedness of an organization's components to achieve common goals. It emphasizes the importance of understanding and addressing the relationships between these components to enhance sustainability and competitive advantage. The theory encourages managers to focus on all aspects of the organization, recognizing that changes in one part affect others. This approach encourages the reengineering of operational processes for sustainability. This is the basis for selecting the variables (organization restructuring, technological innovation, strategy modification) for the study. Furthermore, this study anchored on job characteristics theory, developed by Hackman and Oldham (1976). It suggests that well-designed jobs can increase employee satisfaction, motivation, and productivity. It consists of core job dimensions, critical psychological states, and work outcomes. This justifies inclusion of job redesign which aims to increase motivation and productivity, as it helps manufacturing companies understand job features like skills required tasks identification, meaningfulness, and responsibility.

2.5] Empirical Review

Allui and Rawshdeh (2024) investigate the effect of strategic innovation practices and organizational sustainability on the framework of fundamental changes in government development plans or economic diversity. Findings of this study indicate that strategic innovation is impressively being practiced in the Kingdom of Saudi Arabia during the 2030 vision. The results also ascertained that strategic innovation practices tested in this study are found to be positively related to organizational sustainability during this phase.

Santos and Berssaneti (2024) assesse the Impacts of Technological Innovation on Product and Service Quality and Sustainable Financial, Environmental and Social Results in the Aeronautics Sector. The results obtained were utilized to validate and corroborate the research. After conducting the survey, it can be seen that innovation can help in adaptation, meeting the new demands and opportunities of the market, while impacting aspects of quality: conformity to the requirements of the market where the company operates; product, service and/or process performance; customer satisfaction and loyalty

Kelechi, Uzoma and Ndubueze (2023) examine the relationship between business process reengineering and organizational performance of Nigerian banks. Findings revealed that leadership change and adoption of information technology showed insignificant relationship with organizational responsiveness. Findings also showed that top management commitment showed significant relationship with organizational responsiveness.

Nsien, Nkutt and Umoh (2023) examine the influence of business process re-engineering (BPR) on Courier firms' delivery speed in South East Zone of Nigeria. Findings of this study showed that business process re-engineering had a significant positive influence on courier firms 'delivery speed in the South East Zone of Nigeria.

Okonkwo et.al (2023) investigated technological innovation and performance of technology-based companies in South-West, Nigeria. The findings revealed that E-learning platforms positively affected customer satisfaction and there was significant positive relationship between online shopping applications and the market share of technology-based companies in South-West, Nigeria.

Echiejile (2020) conducted a study to examine the impact of information technology on organizational success in an emerging economy, evidence of Nigerian banking industry. Findings revealed that IT factors (internet applications, technological devices and special industry software) had a significant positive influence on organizational success in the Nigerian banking industry. Kabiru (2020) determined the relationship between information technology capability and organizational performance in Nigerian Banks. The findings showed that IT capability had significantly relationship with organization performance of banks.

Siddiqui, Hummayun and Mubeen (2022) examine the job design literature through the lens of sustainability for its evolution as decent work or sustainable job with human, ecological and societal compatibility for its pertinent effects benefitting all stakeholders involved in the business. The literature review highlights gaps in literature for theoretical integration of sustainability into contemporary job design models and offers guidelines for ideological transformation through policy interventions at organizational and national levels.

Edema, Mathew, and Uwah, (2019 examined the relationship between business reengineering and sustainability of manufacturing companies in Cross River State. The major finding revealed a significant positive relationship between job redesign and opportunity exploitation. Also, there was positive moderating effect of technology on manufacturing firms in Cross River State.

Orogbu, Onyeizugbe and Onuzulike (2015) conducted a study on the business process reengineering and organizational performance using employees of selected automobile companies in south east of Nigeria. The study showed that process innovation influences employee retention and this enhances organizational success.

3] Methodology

3.1] Research Design

The design for this study was survey research design which measures two variables, independent variable and dependent variable. The independent variable is business process reengineering while the dependent variable is organizational sustainability. The business process reengineering was measured by four sub variables (namely; organization restructuring, technological innovation, strategy modification and job redesign).

3.2] Population for the Study

The target population from which sample was drawn for the study consists of all categories of worker (top, middle and low level of management) spread across seven (7) selected deposit money banks (namely Access Bank Plc, First Bank Nigeria Holdings Plc., First City Monument Bank Group Plc., Fidelity Bank Plc., Guaranty Trust Holding Company Plc., Zenith Bank Plc and Eco Bank Plc) all in Abeokuta.

Table 1: Population Distribution

Banks	**Top Level Management**	**Middle Level Management**	**Low Level Management**	**Total**
First bank Plc	5	33	16	**54**
Polaris Bank Plc	3	20	11	**34**
Eco Bank Plc	4	15	13	**32**
Zenith bank Plc	3	26	13	**42**
Fidelity Bank Plc	3	20	9	**32**
Guaranty Trust Bank Plc	4	35	18	**57**
Access bank Plc	4	30	15	**49**
Total	**26**	**179**	**95**	**300**

Source: Researcher's Compilation, 2024

3.3] Sample Size and Sampling Procedure

Stratified random sampling method was used, after application of the Yamane formula to select one hundred and seventy-one (171) respondents from the population of (300) who are staff of selected seven (7) deposit money banks. Below table shows the sample size distribution

Table 2: Sample size Distribution

Department	Proportion of population	Sample size
First bank Plc	54/300 x 171	31
Polaris Bank Plc	34/300 x 171	20
Eco Bank Plc	32/300 x 171	18
Zenith bank Plc	42/300 x 171	24
Fidelity Bank Plc	32/300 x 171	18
Guaranty Trust Bank Plc	57/300 x 171	32
Access bank Plc	49/300 x 171	28
Total		**171**

Source: Researcher's Compilation, 2024

3.4] Source of and Research Instrument

This study relies mainly on primary source of data collection that was sources using a well-structured questionnaire. The questionnaire was self-administered on the sample. The questionnaire divided into three parts. Part A measured the demographic information, Part B measured business process reengineering which has four variables namely organization restructuring, technological innovation, strategy modification and job redesign while Part C of the research instrument measures organizational sustainability. All items are close ended questions coded in five (5) point likert scale. The research instrument was subjected to validity and reliability test before being administered on the respondents

3.6] Reliability of Instrument

A pilot study of test-pre-test was conducted with 5 staffs of Sterling bank plc Abeokuta, Ogun State, to confirm that the question substance, wordings, sequence, and scale range are correct. The pre-test research instrument was used to improve the questionnaire before it is used for data collecting for the first time. Cronbach's alpha value of reliability was used to assess construct reliability. Table 3 below shows the Cronbach's alpha value of reliability for each variable.

Table 3: Cronbach's alpha value of reliability

Variables	Acronyms	No of Items	Cronbach's alpha
Independent Variables			
Organization restructuring	OR	4	0.699
Technological innovation	TI	4	0.701
Strategy modification	SM	4	0.710
Job redesign	JD	4	0.697
Dependent Variables			
Organizational Sustainability	ORS	4	0.712

Source: Researcher's Computation (2024)

3.7] Method of Data Analyses

The data was analyzed using statistical package for social sciences (SPSS) version 25. The demographic data as well as the responses from the thematic issues was analyzed and presented with frequency counts and simple percentages. Other tools for analysis include Pearson's product moment correlation coefficient (PPMCC), simple linear regression and multiple regression analysis, analysis of variance (ANOVA). All analyses were done using 5% level of significance.

4] Results and Discussion

This section deals with the presentation, analysis and interpretation of data collected for the study. From 171 copies of the questionnaires distributed to participants, 150 copies were successfully collected accounting for 87.72% response rate. The data presentation includes tables showing personal characteristics of respondents and the distribution of responses to thematic questions, on relationship between business process reengineering and organizational sustainability in selected bank in Abeokuta metropolis, as gathered from all categories of respondents from the sample of the study population. The returned questionnaires were analyzed as follows.

4.1] Demographic Characteristics

Table 2: The Demographic Characteristics of the Respondents

Characteristics	Frequency	Percentage (%)
Sex		
Female	77	51.3
Male	73	48.7
Total	**150**	**100.0**
AGE		
20-29	69	46.0
30-39	54	36.0
40-49	17	11.3
50 and Above	10	6.7
Total	**150**	**100.0**

Marital status		
Divorced	18	12.0
Married	61	40.7
Separated	14	9.3
Single	57	38.0
Total	**150**	**100.0**
Education		
BSC/HND	81	54.0
OND/NCE	14	9.3
Post Graduate	44	29.3
Primary School Certificate	6	4.0
SSCE	5	3.3
Total	**150**	**100.0**
Department		
Treasury	15	10.0
Credit & Risk Mgmt	31	20.7
Forex	13	8.7
Customer Care	3	2.0
Operations	56	37.3
Marketing	32	21.3
Total	**150**	**100.0**

Source: Author's Computation, (2024)

From table 2 above, it is shown that, 77(51.3%) of the respondents are female while 73(48.7%) are male. As regards age, 69(46.0%) respondents are between ages 20 and 29 years, 54(36.0%) of them are between ages 30-39 years, 17(11.3%) are between 40 - 49 years of age, 10(6.7%) are 50 years and above. On marital status, the table shows that there are 57(38.0%) singles among the respondents, 61(40.7%) are married, 18(12.0%) are divorced. On qualifications, the table shows that 81(54.0%) have B.Sc./HND, 44(29.3%) have post graduate degree, 14(9.3%) possessed ND/NCE

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4.2] Test of Research Hypotheses

Hypothesis One

There is no significant relationship between organization restructuring and organizational sustainability in selected bank in Abeokuta metropolis

Table 3: Relationship between organization restructuring and organizational sustainability

Variable	Mean	Std. Dev.	N	R	P	Remark
Organization restructuring Organizational sustainability	4.360000 4.79833	.3674285 .848012	150	.253**	.001	Sig.

Source: Author's Computation, (2024)

It is shown in the above table 3 that there is a significant relationship between organization restructuring and organizational sustainability in selected bank in Abeokuta metropolis (r = .253**, N= 150, P < .01). Hence, it could be deduced that organization restructuring influence organizational sustainability in selected bank in Abeokuta metropolis.

Hypothesis Two

There is no significant relationship between technological innovation and organizational sustainability in selected bank in Abeokuta metropolis

Table 4: Relationship between technological innovation and organizational sustainability

Variable	Mean	Std. Dev.	N	R	P	Remark
Technological innovation Organizational sustainability	4.1633 4.79833	.48896 .848012	150	.375**	.000	Sig.

Source: Author's Computation, (2024)

It is shown in the above table 4 that there is a significant relationship between technological innovation and organizational sustainability in selected bank in Abeokuta metropolis (r = .375**, N= 150, P < .01). The implication of this is that a 1% change in technological innovation will result in a 37.5% change in organizational sustainability. Hence, it could be deduced that technological innovation influences organizational sustainability in selected bank in Abeokuta metropolis.

Hypothesis Three

Strategy modification has no significant relationship with organizational sustainability in selected bank in Abeokuta metropolis.

Table 5: Relationship between strategy modification and organizational sustainability

Variable	Mean	Std. Dev.	N	R	P	Remark
Strategy modification Organizational sustainability	4.1750 4.79833	.53388 .848012	150	.399**	.007	Sig.

Source: Author's Computation, (2024)

It is shown in the above table 5 that there is a significant relationship between Strategy modification and organizational sustainability in selected deposit money banks in Abeokuta metropolis (r = .399**, N= 150, P < .01). The implication of this is that a 1% change in Strategy modification will result in a 39.9% change in organizational sustainability. Hence, it could be deduced that Strategy modification influences organizational sustainability in selected bank in Abeokuta metropolis.

Hypothesis Four

Job redesign has no significant relationship with organizational sustainability in selected bank in Abeokuta metropolis.

Table 5: Relationship between job redesign and organizational sustainability

Variable	Mean	Std. Dev.	N	R	P	Remark
Job redesign Organizational sustainability	4.2483 4.79833	.42912 .848012	150	.303*	.013	Sig.

Source: Author's Computation, (2024)

It is shown in the above table 5 that there is a significant relationship between job redesign and organizational sustainability in selected deposit money banks in Abeokuta metropolis (r = .303**, N= 150, P < .01). The implication of this is that a 1% change in job redesign will result in a 39.9% change in organizational sustainability. Hence, it could be deduced that job redesign influences organizational sustainability in selected bank in Abeokuta metropolis.

Hypothesis Five

There is no significant combined effect organization restructuring, technological innovation, strategy modification and job redesign on organizational sustainability in selected bank in Abeokuta metropolis.

Table 6: Regression analysis of BPR variables and organizational sustainability

Variables	F- Ratio	Sig of P	R	R^2	Adj R^2	B	t	P
Organization restructuring	21.937	.009	.474	225	216	.376	-2.771	.042
Technological innovation						.300	2.005	.019
Strategy modification						-.262	-1.583	.011
Job redesign						-.316	-2.084	.033

Source: Author's Computation, (2024)

The table 6 above showed that the linear combination of organization restructuring, technological innovation, strategy modification and job redesign on organizational sustainability in selected deposit money banks in Abeokuta metropolis was significant. F = 21.937; R = .474, R^2 = .225, Adj. R^2 = .216; P <. 01). The independent/predictor variables jointly accounted for a variation of about 22.5% in employee's performance. The following shows the various relative contributions and levels of significance of the independent variables: organization restructuring (β = .376, P <.05), technological innovation (β = .300, P <.05), strategy modification (β = -.262, P <.05) and job redesign (β = -.316, P <.05), respectively. It can be concluded that all independent variables, (organization restructuring, technological innovation, strategy modification and job redesign) will jointly and independently predict organizational sustainability in selected deposit money banks in Abeokuta metropolis.

4.3] Discussion of Findings

This study investigates the relationship between business process reengineering and organizational sustainability in selected bank in Abeokuta metropolis. The first hypothesis was to determine whether there exists any significant relationship between organization restructuring and organizational sustainability in selected bank in Abeokuta metropolis and the result shows that there exists a significant relationship between organization restructuring and organizational sustainability. The findings are in line with the study by Nsien, Nkutt and Umoh (2023); Kelechi, Uzoma and Ndubueze (2023).

The second hypothesis was to determine whether there exists any relationship between technological innovation and organizational sustainability in selected bank in Abeokuta metropolis and the result shows that there exists a significant relationship technological innovation and organizational sustainability. The findings are in line with the study by Echiejile (2020) and Okonkwo et al., (2023).

The third hypothesis was to determine whether there exists any relationship between strategy modification and organizational sustainability in selected bank in Abeokuta metropolis and the result shows that there exists a significant relationship strategy modification and organizational sustainability. The findings are in line with the study by Kabiru (2020).

The fourth hypothesis was to determine whether there exists any relationship between job redesign and organizational sustainability in selected bank in Abeokuta metropolis and the result shows that there exists a significant relationship job redesign and organizational sustainability. The findings are in line with the study by Siddiqui, Hummayun and Mubeen (2022).

The fifth hypothesis was to determine combined effect organization restructuring, technological innovation, strategy modification and job redesign on organizational sustainability in selected bank in Abeokuta metropolis and the result shows that BPR measures predict organizational sustainability. This is in line with Edema, Mathew, and Uwah, (2019); Santos and Berssaneti (2024); Allui and Rawshdeh (2024).

5.1] Conclusion and Recommendations

This study explores the relationship between business process reengineering and organizational sustainability in selected bank in Abeokuta metropolis. The results of the regression analysis show that organization restructuring, technological innovation have positive impact on organizational sustainability while strategy modification and job redesign have a negative effect on strategy modification and job redesign. It is clear from the vast number of factors identified, reported and through the literature review, that the goal of this study was achieved. The results from the study shows that business process reengineering dimensions (organization restructuring, technological innovation, strategy modification and job redesign) have a significant relationship with organizational sustainability in selected bank in Abeokuta metropolis. Based on the outcome of the findings, the following recommendations are suggested

i. Considering the steam which banking are gaining within the business environment, it is recommended that management need to embark on organization restructuring from time to time.
ii. Organizations in the banking sector should involves the partial or full replacement of an existing technology by a newer system aimed at improving productivity, standard, quality and competitiveness of products and services.
iii. Management should ensure radical innovation and incremental innovation as it predicts a high change in processes, products, or services.
iv. Management should embark of a well-defined job design as it is the prerequisite required to do the work, how the job is to be carried out and the responsibilities and duties.

5.2] Contributions to Knowledge

The study contributes to knowledge in the following areas: first, the study was carried out in Abeokuta metropolis where only few studies in the literature focused on. Secondly, the study adds to existing literature in the area of business process reengineering components (organization restructuring, technological innovation, strategy modification and job redesign) and organizational sustainability and on the basis concluded that business process reengineering increases organizational sustainability.

5.3] Suggestions for Further Research

Despite the contribution of the study to knowledge, there are still some areas that are suggested for future research. First, this study only deals with only commercial bank. Further studies may concentrate on more than one other financial institution so as to bring about comparison. The study only limited its findings to 150 participants. This may not be a real generalization of findings. Therefore, future research should make use of more participants. The study only focused in Abeokuta metropolis, further research should look at areas like Lagos, Abuja and Kano that are big cities.

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GENDER DIVERSITY AND INTELLECTUAL CAPITAL EFFICIENCY OF LISTED CONSUMER GOODS FIRMS IN NIGERIAN: MODERATED BY EXECUTIVE COMPENSATION

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Abstract
This paper investigates the moderating role of executive compensation on the effect of board gender diversity on intellectual capital efficiency in Nigeria-listed consumer goods firms. The population of this study comprises 21 consumer goods firms listed in the Nigeria Exchange as of 31st December 2021. This study used purposive sampling techniques to select a sample size of twelve (12). The data for this study were collected from sampled firms' annual reports. Intellectual capital efficiency is proxy by Value-added Intellectual Coefficient. This study employs multiple regression techniques, and the panel data was analyzed through STATA 13 software. The results found that the interaction between board gender diversity and executive compensation reveals a significant negative moderating effect, suggesting that higher executive compensation levels diminish the positive effect of gender diversity on intellectual capital efficiency. This study recommends that firms should carefully assess their executive compensation structures to ensure they do not counteract the benefits of board gender diversity. Balancing fair executive compensation with the need to maintain a diverse and effective board is crucial for maximizing intellectual capital efficiency and overall firm performance.

Keywords: Executive Compensation, Gender Diversity, Intellectual Capital Efficiency, Purposive Sampling Techniques

1. Introduction

The consumer goods sector (CGFs), which is marked by intense competition and changing market dynamics, is one of the sectors that boosts Nigeria's economic activities (Mishra & Swain, 2018). This study revolves around the underrepresentation of gender diversity in leadership roles within Nigerian listed consumer goods firms and its potential effect on intellectual capital efficiency. While gender diversity has been associated with enhanced decision-making and innovative capabilities, many firms in Nigeria still lack significant female representation in executive positions. This situation may hinder the firm's ability to leverage diverse perspectives for improved performance and innovation (Kang et al., 2022; Oduol, 2021). Some listed consumer goods firms in Nigeria, such as Champion Breweries, Honeywell Nigeria, Guinness Nigeria, and Nascon Nigeria, have historically faced challenges related to gender diversity in their executive ranks. These companies often have a male-dominated leadership structure, which can stifle diverse viewpoints and limit the effectiveness of intellectual capital utilization (Olarewaju & Msomi, 2021; Okeke et al., 2022).

Several studies have investigated the impact of gender diversity on intellectual capital efficiency. However, there needs of more literature regarding the moderating role of executive compensation in this relationship, particularly in the context of Nigeria's CGFs. This study aims to fill this gap by providing new insights into how executive pay structures influence the effectiveness of gender-diverse boards in enhancing ICE.

This study investigates the moderating role of executive compensation on the effect of gender diversity and intellectual capital efficiency of listed consumer goods firms in Nigerian. The specific objectives are to:

i. examine the effect of gender diversity on the intellectual capital efficiency of listed consumer goods firms in Nigeria.

ii. investigate the influence of executive compensation on listed consumer goods firms in Nigeria's intellectual capital efficiency.

iii. examine the moderating effect of executive compensation on the effect of gender diversity on the intellectual capital efficiency of listed consumer goods firms in Nigeria.

This study hypothesized that:

$H0_1$: Gender Diversity has no significant effect on intellectual capital efficiency of listed consumer goods firms in Nigeria.

$H0_2$: Executive compensation has no significant effect on intellectual capital efficiency of listed consumer goods firms in Nigeria.

$H0_3$: Executive compensation has no significant moderating role on the effect of gender diversity on intellectual capital efficiency of listed consumer goods firms in Nigeria.

This research sheds light on the moderating role of executive compensation on the effect of gender diversity on ICE, which can aid in the design of more effective governance strategies tailored to the unique needs and characteristics of CGFs. The findings of this study can be further validated by other researchers. The practical problems caused by board gender diversity and executive compensation show how important effective governance practices are. This study broadens the existing knowledge and provide practitioners, academics, and decision-makers with useful information to enhance gender diversity in Nigeria business environment.

This study specifically focusses on moderating role of executive compensation on the effect of gender diversity on ICE of listed consumer good firms in Nigeria from 2011 – 2022. This study is group into five parts that include introduction, literature review, methodology, result and discussions, conclusion and recommendations.

2. Conceptual/Theoretical Framework and Literature Review

Intellectual capital efficiency is defined by Idris (2020) as the ability of firms to efficiently utilize their intangible assets, including knowledge, innovation, and human capital, to create competitive advantage and long-term value. According to Baba and Abdulmanaf, (2017), this idea highlights how crucial it is to maximize the use and management of intellectual resources (human capital, structural capital, capital employed and relational capital) within firms to boost output, creativity, and general performance. Firms may be able to increase their intellectual capital efficiency and, in turn, promote long-term sustainability and profitability in Nigeria's dynamic business environment. This study refers to Intellectual capital efficiency as the effectiveness of a firm's intellectual resources in generating value.

The representation of men and women in different roles and at different levels within an organization is referred to as gender diversity (Lee & Girma, 2021). It includes making sure people of different genders receive equal opportunity, treatment, and representation. This helps to create an inclusive workplace that values and makes use of a range of viewpoints, experiences, and skills (Gupta, 2020). By building an inclusive culture, stimulating creativity and innovation, sharpening decision-making skills, drawing in diverse talent, and better catering to the needs and preferences of various consumer segments, gender diversity in consumer goods companies can boost intellectual capital efficiency (Lee & Girma, 2021). Promoting leadership and participation from men and women in all organizational positions and hierarchical levels is known as gender diversity. The ultimate goal of establishing a fair and balanced workforce composition is addressed by this study, which tackles gender disparities in hiring, promoting, retaining, and decision-making processes. This study refers to gender diversity as the representation of different genders on a company's board.

The term "executive compensation" describes the monetary and non-monetary benefits given to senior managers and executives of a company (Wang et al., 2020). It consists of base pay, incentives, stock options, benefits, and perquisites that are intended to draw in, inspire, and keep top personnel while lining their interests up with the company's performance targets and strategic objectives (Mishra & Swain, 2018). Through its impact on organizational values, culture, diversity and inclusion procedures, executive compensation can attenuate the relationship between gender diversity and intellectual capital efficiency. According to Wang et al. (2020), companies can utilize remuneration structures as a means of demonstrating the value of gender diversity, fostering inclusive leadership practices, and supporting projects that leverage the advantages of diverse teams to improve intellectual capital efficiency. Executive compensation is a significant factor in determining the priorities, decision-making processes, and leadership behaviour of listed CGFs in Nigeria. According to Aguilera et al. (2019), it functions as a means of providing executives with incentives and rewards for accomplishing specific goals, such as financial success, innovation, talent management, and corporate governance. This study refers to executive compensation as the emolument given to top executives.

The tenet of stewardship theory, which was developed by James D. Thompson in 1967 and later improved upon by academics such as James L. Bowlin, asserts that directors manage a company's assets with the best interests of shareholders in mind. This theory emphasizes how crucial directors' attributes, trust, and teamwork are to promoting value creation and long-term sustainability (Bowlin, 2008). Because they are viewed as stewards, directors' stewardship orientation affects how well they manage and improve the company's ICE. This theory considers the stewardship role of directors in optimizing ICE for long-term value creation. The stewardship theory is used to anchor this study by offering a framework to comprehend how gender diversity affect ICE of listed consumer goods firms in Nigeria.

The study by Nadeem et al. (2019) examined the empirical relationship between female representation on corporate boards and intellectual capital efficiency. Utilizing data from the top 500 UK-listed firms from 2007 to 2016, the authors employ an adjusted-value-added intellectual coefficient as a proxy of intellectual capital efficiency. They apply the two-step system-generalized method of moments to address endogeneity issues. The results show a strong positive correlation between the efficiency of intellectual capital and the number of women on boards. The study supports legislation to increase female representation on corporate boards. However, the research predominantly focuses on developed markets, and without considering the moderating effect of executive compensation, this poses a gap when considering emerging economies like Nigeria. This study addresses this gap by investigating the moderating role of executive compensation on the effect of gender diversity on intellectual capital efficiency.

The study by Ali and Oudat (2021) investigated the empirical relationship between board characteristics and intellectual capital performance (ICP) in Bahrain's commercial banks. Using panel data and multiple regression analysis over five years (2015-2019) for seven banks, the study found that gender diversity has a marginal relationship with ICP. However, this research is limited to the period covered, with no consideration of the moderator, and to a specific sector in Bahrain. Its findings may not be generalizable to other contexts. This study fills this gap by investigating the moderating effect of executive compensation on the relationship between gender diversity and the intellectual capital efficiency of listed consumer goods firms in Nigeria from 2011 to 2022, to provide new insight.

Accordingly, gender diversity and ICE were found to positively significant in the study of Yahaya and Apochi (2022) on Nigerian companies. The role of the board of directors in enabling the operation of ICE was ascertained by the research using data collected over ten years from 112 listed companies. The study added valuable insight but not specifically on consumer goods firms and did not consider the moderating role of executive compensation. This study fills this gap by providing new insight on how executive compensation moderate the relationship between gender diversity and ICE from 2011 - 2022.

Conversely, Soriya and Kumar (2022) investigated the relationship between the ICE and the corporate governance features of the top 116 companies from 2012 and 2018. The ICE and corporate governance structure were compared using panel data regression analysis. The findings indicated a negative relationship between intellectual capital performance and gender diversity. The study provides valuable insight, but the period covered is short, not current and the study did not consider executive compensation as the moderator. This study fills this gap by investigating the moderating role of executive compensation on the effect of gender diversity on ICE from 2011 - 2022.

However, Attarita et al. (2017) investigated the qualities of the board of directors and the ICE in Thai companies listed on the SET. The study analyzed data from 403 Thai companies using structural equation modeling (SEM). The findings showed that there was no discernible relationship between the proportion of women on the board and the ICE. The study provides valuable insight but fails to consider the moderating role of executive compensation in this relationship. This study fills this gap by providing new insight into how executive pay structures influence the effectiveness of gender-diverse boards in enhancing ICE.

However, Sanyaolu et al. (2022) investigated how gender diversity on the board affected the intellectual capital efficiency in Nigerian deposit money banks. The study discovered that board gender diversity has no significant effect on ICE, both with and without the moderating influence of international authorization, using a panel data set of 11 banks from 2011 to 2020.

The study's findings may lack generalization to sectors as it focused on deposit money banks with international authorization moderating variables. The study equally has a limitation period covering 2011 – 2020. This study fills this gap by providing new insight into how executive compensation influences the effectiveness of gender-diverse boards in enhancing ICE.

The impact of board gender diversity on executive compensation in Nigerian non-financial firms was investigated by Adegbite et al. (2012). Gender-diverse boards may bring different perspectives and priorities to executive compensation discussions, potentially influencing decision-making processes. Empirical findings suggest that gender-diverse boards are more likely to advocate for equitable and performance-based executive compensation schemes, which could positively impact intellectual capital efficiency by fostering a fair and meritocratic organizational culture. The study provides valuable insight but not specifically in the context of consumer goods firms, and the year of the study has been a long time. This study fills this gap by conducting a similar study in the context of consumer goods firms from 2011 - 2022

3. Methodology

This study employed an ex-post facto research design to assess the moderating effect of explanatory variables on explained variable in listed CGFs in Nigeria. The choice of 12 firms from a population of 21 consumer firms listed in Nigeria were selected based on the criteria that involved financial and sustainability reporting data availability and variability during the study period, continuous listing on the Nigerian Exchange Group over the study period, and the relationship of firms to the study variables. It was also decided to use purposive sampling to concentrate on such firms because this approach guarantees that only such firms, that have the most appropriate characteristics, such as reasonably developed reporting standards, are included. It also helps to enhance the stability of the results obtained under the conditions of incompleteness and the stochastic nature of some of the data. Hence, the study selects 12 firms, which is somewhat reasonable, allowing the study to cover the objectives of the study exhaustively. The 12 sample firms are shown in table 1 below.

Table 1 : *Population Sampling of the Study*

S/N	Population	Sample
1.	Bua Foods Plc	
2.	Cadbury Nigeria Plc.	√
3.	Champion Brew. Plc.	√
4.	Dangote Sugar Refinery Plc	√
5.	DN Tyre & Rubber Plc	
6.	Flour Mills Nig. Plc.	√
7.	Golden Guinea Brew. Plc.	
8.	Guinness Nig Plc	√
9.	Honeywell Flour Mill Plc	√
10.	International Breweries Plc.	
11.	Mcnichols Plc	
12.	Multi-Trex Integrated Foods Plc	
13.	N Nig. Flour Mills Plc.	
14.	Nascon Allied Industries plc	√
15.	Nestle Nigeria Plc.	√
16.	Nigerian Brew. Plc.	√
17.	Nigerian Enamelware Plc.	
18.	P Z Cussons Nigeria Plc.	√
19.	Unilever Nigeria plc.	√
20.	Union Dicon salt Plc.	
21.	Vitafoam Nig Plc.	√

Source: Nigeria Exchange, 2024

This method was employed because it ensures that firms with complete and relevant data were included in the sample. This study used panel data that cover a period of 12 years from 2011 – 2022 and multiple regression technique is used to analyze the panel data via STATA 13. This study adapts the model of Sanyaolu, et al. (2022). This model is stated below:

$$VAIC_{it} = \beta_0 + \beta_1 GD + \beta_2 IN_{it} + \beta_3 (GD*IN)_{it} + \beta_4 ROA_{it} + \beta_5 AGE_{it} + e_{it}$$

And modified as:

$$vaic_{it} = \beta 0_{it} + \beta_1 bgd_{it} + \beta_2 ecl_{it} + \beta_3 (bgd*ecl)_{it} + \varepsilon_{it}$$

where: vaic = Value-added intellectual coefficient; bgd = board gender diversity; exl = executive compensation; β_1-β_3 = Coefficients of determination; β_o= Intercept of the regression line; it = firm i time t; εi= Residual or error term.

Table 2

Variable Definition and Measurement

Variable	Abbreviation	Definitions	Measurement of Variable	Author(s)
Value-added	VA	This study sees value-added as the increase in the value of goods or services as a result of a particular process or activity.	Operating Profit + Staff Cost + Depreciation + amortization	Duho et al (2018); Lawal et al (2022)
Dependent variable:				
Value-added intellectual coefficient	VAIC	This study refers to VAIC as the effectiveness of a firms' intellectual resources in generating value	HCE + SCE + CEE	Baba & AbdulManaf, (2017)
Where				
Human capital efficiency	HCE	This study sees human capital efficiency as how well a firm uses its human capital.	VA/HC	Buallay and Hamdan (2018)
Structural capital efficiency	SCE	This study sees structural capital efficiency as how well a firm uses its structural capital.	SC/VA	Buallay and Hamdan (2019)
Capital employed efficiency	CEE	This study sees capital employed efficiency as how well a firm uses its capital employed.	VA/CE	Buallay and Hamdan (2019)
Independent Variables				
Gender diversity	BGD	This study refers as representation of different gender on the firms' board.	Female directors on the board/ total board size	Nadeem et al. (2019)
Moderating Variable				
Executive compensation	ECL	This study refers to executive compensation as the emolument given to top executive.	Natural log of executive compensation	Hussain et al. (2020)

Source: Author Compilation, 2024

4. Results and Discussion

This section presents the result of data analysis and the discussions as it relates to descriptive statistics, Correlation Matrix, Robustness Tests, Regression results, and test of hypothesis.

Table 3: *Descriptive Statistics*

Variable	Obs	Mean	Std. Dev.	Min	Max
Vaic	144	3.254	2.568	-6.37	9.87
Bgd	144	.194	.115	0	.50
Ecl	144	17.042	2.519	7.99	20.49

Source: STATA Output, 2024

Value-added intellectual coefficient (VAIC), board gender diversity (BGD), and executive compensation (ECL) are the three variables that are presented in this descriptive statistics Table 3. These metrics provide insight into the implications of these variables for the topic of "Gender Diversity and Intellectual Capital Efficiency of Listed Consumer Goods Firms in Nigeria: Moderated by Executive Compensation." Firstly, the mean VAIC of 3.254 indicates that, on average, the intellectual capital efficiency among listed consumer goods firms in Nigeria is moderate, with significant variability indicated by the standard deviation of 2.568. This implies that while some firms effectively leverage their intellectual assets to create value, others may struggle to do so, possibly because of knowledge management inefficiencies or underutilization. Furthermore, the range of VAIC scores from -6.37 to 9.87 indicates that there are both positive and negative effects on value creation, highlighting the necessity of more research into the variables affecting the intellectual capital efficiency in these firms.

Secondly, the standard deviation of .115 suggests some variation from the mean BGD score of .194%, which shows a rather low level of gender diversity on the boards of listed CGFs in Nigeria. This emphasizes how crucial it is to encourage more gender diversity on corporate boards since it has been linked to better decision-making, creativity, and the general performance of the firm. The fact that BGD scores range from 0% to 5% highlights the necessity of taking steps to increase the presence of women on boards to promote a more effective and inclusive governance structure.

Finally, the sampled firms' average ECL score of 17.042 indicates moderate levels of executive compensation, with some variability shown by the standard deviation of 2.519. Comprehending the levels of executive compensation is essential, as it signifies the firm's dedication to retaining talent, fostering effective leadership, and matching incentives with business performance. The disparities in compensation policies between firms, as evidenced by the range of ECL ratings from 7.99 to 20.49, may have an impact on attracting and retaining top talent and ultimately influencing intellectual capital efficiency.

Table 4: *Correlation Matrix*

Variables	(1)	(2)	(3)
Vaic	1.000		
bgd	-0.264*	1.000	
	(0.001)		
ecl	-0.601*	0.216*	1.000
	(0.000)	(0.009)	

**** p<0.01, ** p<0.05, * p<0.1*

Source: STATA Output, 2024

The Table 4 presents the correlation coefficients between "vaic (intellectual capital efficiency)," "bgd (board diversity)," and "ecl (executive compensation)." The low correlations found between "vaic" and "bgd", and "vaic" and "ecl," imply a weak linear relationship between these variables.

Table 5: *Model Robustness Tests*

	VIF	1/VIF
bgd	1.049	.953
ecl	1.049	.953
Mean VIF	1.049	.
Hettest	0.7386	
Hausman Test	0.2816	
Xttest0	0.0000	

Source: STATA Output, 2024

The regression model one's stability and dependability are evaluated by the robustness tests shown in Table 5. With bgd, and ecl having values less than benchmark of 1, indicating no multicollinearity, VIF values below less than benchmark of 10. Therefore, multicollinearity has no significant impact on the regression model. In addition, Hettest's p-value of 0.7386 is greater than benchmark of 0.05 indicates that the model does not contain any evidence of heteroscedasticity.

The null hypothesis, which claims that the coefficients of the fixed and random effect models do not differ significantly, was successfully rejected, according to Table 5. This makes sense because the prob Chi2 of 0.2816 is greater than the benchmark of 0.05. Taking this into consideration, the test concludes that although the fixed effect model is not the most appropriate model to employ in this study, it also does not suggest that the random effect model is a better fit. The appropriateness of the random effect model is ascertained by comparing it with the pooled OLS regression model through the application of the Breusch-Pagan Lagrange Multiplier (LM) test. The random effect model is the better model to use with the panel data, according to the results of the LM test. This is because the variance among the selected companies varies significantly, as indicated by the prob<chi2 0.0000 not exceeding the benchmark of 0.05. As such,

the null hypothesis, according to which there is no variation among the selected companies, is disproved. We conclude, therefore, that the random effect model is the best fit for this study.

Table 6: Regression results

vaic	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
bgd	19.385	9.74	1.99	.047	.295	38.475	**
ecl	-.207	.17	-1.22	.223	-.54	.126	
bgd_ecl	-1.257	.574	-2.19	.029	-2.381	-.132	**
Constant	7.254	2.829	2.56	.01	1.71	12.798	**
Overall r-squared	0.401		Number of obs		144		
Chi-square	13.147		Prob > chi2		0.004		

*** p<.01, ** p<.05, * p<.1

Source: STATA Output, 2024

The regression results are shown in Table 6 with an overall R-squared of 0.401, implies that the independent variables in the model account for roughly 40.1% of the variance in ICE. This suggests that within listed consumer goods firms in Nigeria, gender diversity on the board, executive compensation, and their interactions are significant determinants of intellectual capital efficiency. The model is statistically significant, according to the Chi-square value of 13.147 with a probability less than 0.05. The correlations between the independent and dependent variables are not the result of chance, as the statistically significant Chi-square value supports the model's validity. This validates the robustness of the results and lends credence to the interpretation of the regression coefficients.

The hypotheses as stated earlier are hereby introduced as:

$H0_1$: Gender Diversity has no significant effect on intellectual capital efficiency of listed consumer goods firms in Nigeria.

$H0_2$: Executive compensation has no significant effect on intellectual capital efficiency of listed consumer goods firms in Nigeria.

$H0_3$: Executive compensation has no significant moderating role on the effect of gender diversity on intellectual capital efficiency of listed consumer goods firms in Nigeria.

BGD and VAIC have a positive and statistically significant at the 0.05 level (p = 0.047), with a standard error of 9.74 and a coefficient of 19.385. The coefficient indicates that firms with more gender diversity on their boards typically have greater levels of intellectual capital efficiency. This study, therefore, rejects the first hypothesis that there is no significant effect of gender diversity on the intellectual capital efficiency of listed consumer goods firms in Nigeria. This finding is consistent with other research showing that having diverse perspectives and experiences on corporate boards can improve decision-making, spur innovation, and ultimately increase intellectual capital efficiency.

The ECL coefficient has a standard error of 0.17 and a coefficient of -0.207. Based on standard thresholds, its t-value of -1.22 and p-value of 0.223 suggest that it is not statistically significant.

This implies that there isn't any solid proof of a link between executive compensation and intellectual capital efficiency. This study, therefore, does not reject hypothesis two that the intellectual capital efficiency of listed consumer goods firms in Nigeria is not significantly affected by the executive compensation.

The coefficient for the interaction term BGD_ECL is -1.257 with a standard error of 0.574. At the 0.05 level of significance, its t-value of -2.19 and p-value of 0.029 shows negative and statistically significant. This suggests that executive levels have a moderating effect on the connection between board gender diversity and intellectual capital efficiency. In particular, the negative coefficient indicates that greater executive salary levels attenuate the beneficial effect of gender diversity on intellectual capital efficiency. This study, therefore, rejects the third hypothesis that the effect of gender diversity on the intellectual capital efficiency of listed consumer goods firms in Nigeria is not moderated by executive compensation.

5. Conclusion and Recommendations

The study concludes that gender diversity on corporate boards (BGD) positively and significantly affects the intellectual capital efficiency (VAIC) of listed consumer goods firms in Nigeria. This finding aligns with previous research indicating that diverse perspectives on boards enhance decision-making, spur innovation, and ultimately increase intellectual capital efficiency. However, executive compensation (ECL) shows an insignificant direct effect on intellectual capital efficiency. Interestingly, the interaction between board gender diversity and executive compensation (BGD_ECL) reveals a significant negative moderating effect, suggesting that higher executive compensation levels diminish the positive effect of gender diversity on intellectual capital efficiency.

Recommendations include

i Encouraging greater gender diversity on corporate boards to enhance intellectual capital efficiency.

ii Additionally, firms should carefully assess their executive compensation structures to ensure they do not counteract the benefits of board gender diversity.

iii Balancing fair executive compensation with the need to maintain a diverse and effective board is crucial for maximizing intellectual capital efficiency and overall firm performance.

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EFFECT OF INNOVATION ON WOMEN ENTREPRENEURS' PERFORMANCE: THE MODERATING EFFECT OF ORGANISATIONAL CULTURE

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Abstract
In today's tough marketplaces, innovations are seen as the main factors affecting a company's long-term success. This study examines the direct effect of product innovation, market innovation and open innovation on women entrepreneurs' performance and the moderating role of an organisational culture (OC) on the relationship between product innovation, market innovation, open innovation and women entrepreneurs' performance in Kano Nigeria. The population of this study was registered women entrepreneurs in the Kano State. Data was generated from women entrepreneurs in Kano, which was analysed using PLS-SEM version 4.0.9. Specifically, the path coefficient exposes a significantly positive relationship between product innovation, market innovation, open innovation and women entrepreneurs' performance. Furthermore, the organisational culture construct positively and significantly moderates the relationship between product innovation, open innovation and women entrepreneurs' performance. However, this study also provides evidence that OC has no moderating effect on the relationship between marketing innovation and women entrepreneurs' performance. Therefore, steps should be taken by the firms to encourage an OC base on competitive advantage on a global scale and should be developed in a way that will support the ability to innovate quickly, and managers' actions should also not be limited by the institutional environment.

Keywords: innovation, organisational culture, open innovation, women entrepreneurs' performance

1. Introduction

Performance is crucial to any business organisation survival and continues patronage by investors, potential investors, creditors, and other stakeholders in the business world (Wambui & Muathe, 2021; Tundui & Tundui, 2021). Every business organisation has an important decision of making returns. This decision is important since the ability of a firm to make returns in this competitive environment determines to a larger extent and its ability to survive in the future (DeClercq, Kaciak & Thongpapanl, 2022). Nevertheless, performance wh ich corresponds with the opinions perspective researchers in the field of management has typically been acknowledged in terms of financial or economic criteria like profitability or market-based measurements of financial success that can be linked to value creation either directly or indirectly (Feng, Ahmad & Zheng, 2023; Kawai & Kazumi, 2021). Within the context of innovation, organisational performance has been linked to external knowledge and is increasingly considered as a critical source of the firm's innovativeness and long term sustained performance (Arcuri, Gandolfi & Russo, 2023; Erhan, et al., 2023; Huang, et al., 2022; Schuldt & Gomes, 2020).

The company's goal to continue to exist, gain and can thrive economic growth if an organisation has innovative capability and good performance (Wambui & Muathe, 2021; Zeb & Ihsan, 2020). Innovative activities are important in creating competitive advantages at both firm and national levels (Chatzoglou & Chatzoudes, 2018). Since female entrepreneurship is one of the fastest-growing categories of entrepreneurship worldwide, female entrepreneurs make an important contribution to innovation and hence economic growth (Arcuri, Gandolfi & Russo, 2023; Byrne et al., 2019). Nevertheless, the constraints and an obstacles that women-owned businesses encountered are to blame for bad performance. It has been argued that women-owned businesses are more likely to remain at the start-up stage and to be smaller, less profitable, employ fewer people, and have lower growth expectations (Corrêa, *et al.*, 2022; Abdelwahid & Kaoud, 2022). Women entrepreneurs' performance is essential to the growth of the Nigerian economy, playing a social and political role in the creation of local jobs, the balanced use of resources and the generation of income (Abdullahi, *et al.*, 2022; Kusa, *et al.*, 2021; Paul, *et al.*, 2017). Despite the minimal data supporting the use of innovation and sustained business performance, it is still being investigated and requires empirical justifications specifically in the developing world. Consequently, taking into account the significance of women entrepreneurs' creative efforts in Nigeria in fulfilling idea-driven enterprises' aims, the present study evaluate the effects of innovation and women entrepreneurs (WE) performance. This study discussed and reflected on the use of innovation in WE businesses to insure organisational performance, a study to be the first of its kind. The research also makes a contribution by providing a framework, highlighting links between product innovation, marketing innovation, organisational culture (OC), open innovation (OI) and WE performance. The incorporation of OC, open innovation (OI) in the models is a novelty. Hence, the paper aims to achieve the following specific objectives and hypotheses:

i. To examines how innovation (product innovation, marketing innovation and open innovation) affect WE performance.
ii. To ascertain the moderating effects of organisational culture on the link between innovation (product innovation, marketing innovation and open innovation) and WE performance.

Research Hypotheses

i. Innovation (product innovation, marketing innovation and open innovation) does not significantly affect the women entrepreneurial performance.
ii. Organisational culture does not significantly moderate the relationship between the product innovation, marketing innovation,

open innovation and women entrepreneurial performance.

2. Literature Review

2.1 Concept of Performance

Performance is a multifarious concept which has no one accepted definition; different people have attached different meaning to it. Individual performance is defined as the how owner/manager is satisfied with the business performance or owner/manager expectations (Alasadi & Abdelrahim, 2008). Therefore, individual level of performance can be subjective and objective and literature has recommended that both can be used as performance measures. Solène and Odyssia (2021) defined performance as profit earned and revenue generated either by man or woman that run business enterprises. Organisational performance is a type of performance that is widely used in research and is usually serve as dependent variable of a study. It is being regarded as firm growth (Gupta et al, 2013).

Innovation

Innovation is in a very important position for the 'health' and future of an enterprise, within the framework of the understanding of the growing and changing markets. Innovation is derived from the Latin word 'nova', which means 'new'. Innovation is the period in which knowledge gained commercial value through the modification, consolidation or synthesis of information in the form of new source, product, process, service, management technique or technology that creates original, correlated, unique solutions and value to fulfil organizational functions (Altuntaş & Dönmez, 2010). Innovation consists of successive processes. Inspiration and imagination are important factors in the emergence of new ideas in innovation (Zeb & Ihsan, 2020).

Innovation, as a term, affects both a process (renewing/renewal) and the result (novelty). Innovation is a process that includes the usage of information about creating new beneficial goods and supplying them to the market (Tuncel, 2012). Innovation is a special tool for entrepreneurs and provides a new capacity to create prosperity, enabling more efficient use of resources. Innovation should be seen as a value rather than a science or technology. Innovation activities cannot be done only within the organization or only outside the organization (Zhang & Li, 2010). While making an innovation, it should be considered as a whole and should be done considering all internal and external environmental factors (Freixanet, Rialp & Churakova, 2020).

2.2 Empirical Review of Related Literature

Despite that the number of women owned enterprises significantly lower when compared to the total share of entrepreneurial activity (Stefan et al., 2021). Therefore, this aspect will dwell on the antecedents of women entrepreneurship and how they can be related to women entrepreneurial performance. Indeed, the aspect will review how product, market and open innovation influences women entrepreneurial performance. Kwajaffa (2023) examined how marketing and organizational innovation affect telecom company performance in Nigeria. The finding of the study established a positive and significant influence of marketing innovation on the performance. Peng, Qin and Tang (2021) findings shows that both market driven and market-driving innovations significantly contribute to a firm's performance. Moreover, their effects are significantly moderated by competition intensity and technological turbulence but not demand uncertainty. Arcuri, et al. (2023) indicated that innovation is crucial for start-up growth and, most importantly, that female entrepreneurs exploit the potential of innovative activities for their firm's growth better than their male peers. Huang et al. (2022) findings reveal that female entrepreneurs' innovativeness significantly and positively related to entrepreneurial performance. Madbouly, et al. (2021) study found that female's education, training and business networks and access to finance are significantly affect performance. Nwangwu (2022) findings revealed that socio-cultural, economic factors have no significant effect on the performance of WEs. Kawai and Kazumi (2021) indicated that the acquisition of social legitimacy required by female entrepreneurs serves as a crucial safety net under which entrepreneurial self-efficacy and tenacity can significantly affect venture growth. Semkunde et al (2022) shows that rural women face unique context-related challenges that hinder them from effectively participating in rural entrepreneurship. Keling, Yap and Ho (2022) findings indicated that indigenous women entrepreneurs with higher enterprising tendencies performed better than those with lower enterprising tendencies

From the above previous studies, it can be observed that there is a link between marketing innovation, product and entrepreneurial performance. It has shown that OC and open innovation have not holistically examine as it relates to WE performance. The review has shown that product and marketing innovation serves as lever that encourage women to choose entrepreneurship as career. Moreover, the literature has not examined how OC and open innovation influence women entrepreneurial performance this gap needs to be bridged by this study. This study holistically combine all the dimensions of innovation such as marketing innovation, product innovation, OC and open innovation and women entrepreneurial performance.

2.3 Theoretical Framework

The RBV theory postulates that employees can help the organizations to achieve its goals when some fundamentals are met. This theory is of the view that individuals harness different types of resources to get entrepreneurial effort of the ground. The theory explains the framework by emphasising on people (women entrepreneurs) as a source of advantage (drivers of performance). More specifically RBV in this framework is used to elaborate the relationship between the innovation and WEs performance. This implies that for women entrepreneurs to be effective and successful, there is the need to capitalise on product innovation, marketing, open innovation to unleash it greatest performance. In line with the empirical literature review and the theories supporting this study the following frame work is developed to guide the conduct of the study. Therefore, based on the above, the framework below depicts the interrelationships among the study variables:

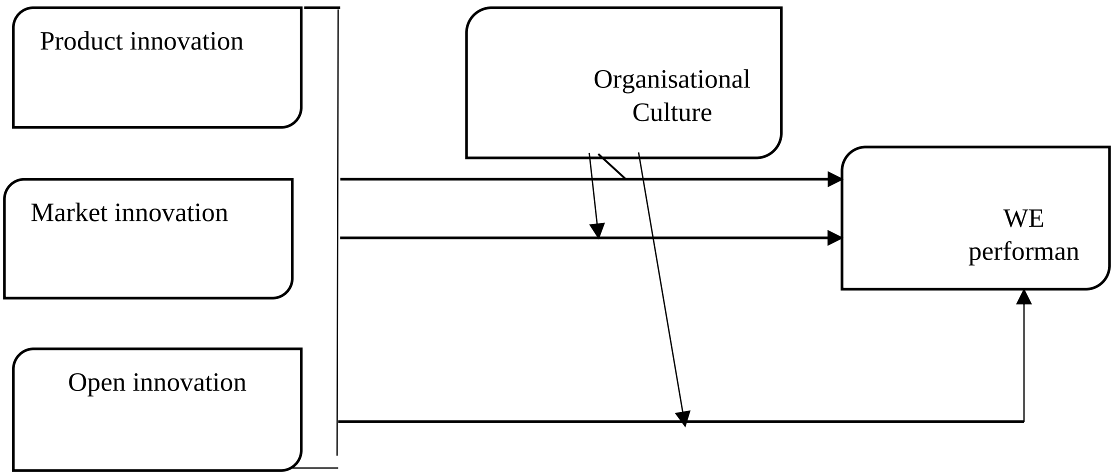

Figure 2.1: *Conceptual Model*

3. Method and Materials

In order to have a clear definition of the population for this research, the researcher selected only registered women entrepreneurs from the Kano State. The total number of registered women entrepreneurs in Kano states as at October, 2023 is Nine thousand, five hundred and eight (9, 508) (NASME, 2023). This was obtained from the list of registered women entrepreneurs in Kano state with validation and verification from documents made available by the National Association of Small and Medium Enterprises (NASME). Thus, according to Krejcie and Morgan (1970) from the total population Nine thousand, five hundred and eight (9, 508) members, three hundred and seventy (370) is good sample size for this research. The study used purposive sampling technique in dealing with the sample size of the study. This study adopted quota purposive sampling technique. By this technique, the sampling is confined to specific types of people who can provide the desired information. Thus, women entrepreneurs that actually owned business enterprises in Kano State form the sample of the study. Specifically, women owners of businesses are the main respondents of the study.

A standardised questionnaire with closed-ended multiple items was utilised in this study, with a five-point Likert scale. Scales with a midway are thought to produce better and more accurate results (Ramayah, et al., 2018; Hair et al., 2014; Sekaran & Bougie, 2013). For data analysis in the current study, Partial Least Square (PLS-SEM) and SPSS version 27.0 was utilised.

3.1 Measures

Within the context of entrepreneurship, entrepreneurial performance has been linked to external knowledge and is increasingly considered as a critical source of innovativeness and long term sustained performance (Schuldt & Gomes, 2020; Greco, *et al.*, 2016). In light of the foregoing explanation, the 6-item scale used to gauge WE performance and modified from the study of Susana, Jose and Camilo (2005). The scale has a reliability score of 0.866. Product innovation measure developed by Zhang and Li (2010) was adopted in this study using five point likert scale. This instrument consisted of 5 items for. Marketing Innovation was measured using 5-items adapted from Gunday, et al. (2011). Each component is measured on a 5-point Likert scale in this current study. The 6-item Zanchirji *et al.* (2019) scale were used to measure the open innovation. A 5-item scale with Cronbach's alpha scales of 0.825 were used to measure the organisational culture. The scales was adapted from Al-Swidi and Mahmood (2012).

4. Results and Discussions

Total of 370 questionnaires were administered to study participants, with 314 questionnaires being completed and returned, producing an average 85% of response rate. Baruch and Holtom (2008) suggests that average response rate for studies in organisational research is 52.7%. However, the current study's response rate is 85% greater than the average response rate, it is therefore deemed satisfactory.

4.1 Measurement Model

To establish the convergent (CV) and discriminant validity (DV) of the instrument used in this study, reliability analysis, CR), AVE and Fornell-Larcker Criterion, were used to confirm its internal consistency and reliability (Henseler, *et al*., 2015; Hair *et al.*, 2013). Hair *et al.* (2013) proposed that factor loadings, CR, and AVE can be utilised to assess the CV. The suggested loading values are >0.5, ≥0.5 for the AVE, and 0.7 for the CR (Hair *et al*., 2014). Figure 2 shows that all of the analyses' variables are considered as a single construct. Furthermore, out of 27 measurement items, 24 were retained to attain the CV, while three were excluded from the model due to low factor loadings. As a result, CV has been greatly improved. Furthermore, the measurement model results outperformed the proposed values, as seen in Figure 2 below.

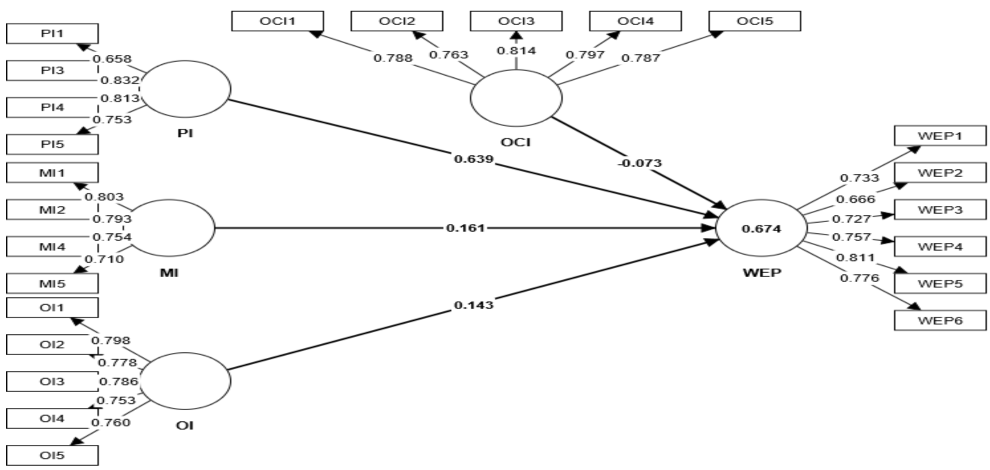

Figure 2: *Measurement Model*

Table 1: *Items Loadings, Composite Reliability and Average Variance Extracted*

Constructs and Items	loadings	Cronbach's Alpha	CR	AVE
Product Innovation		0.762	0.766	0.588
PI1	0.658			
PI2	Deleted			
PI3	0.832			
PI4	0.813			
PI5	0.753			
Market Innovation		0.764	0.769	0.586
MI1	0.803			
MI2	0.793			
MI3	Deleted			
MI4	0.754			
MI5	0.710			
Open Innovation		0.834	0.836	0.586
OI1	0.798			
OI2	0.778			
OI3	0.786			
OI4	0.753			
OI5	0.760			
OI6	Deleted			
OC of Innovation		0.852	0.861	0.624
OCI1	0.788			
OCI2	0.763			
OCI3	0.814			
OCI4	0.797			
OCI5	0.787			
WE Performance		0.840	0.842	0.557
WEP1	0.733			
WEP2	0.666			
WEP3	0.726			
WEP4	0.757			
WEP5	0.811			
WEP6	0.776			

Source: PLS-SEM Output (2024)

The degree to which predictors distinguish across constructs or measure various construct is referred to as DV when investigating the correlations between potential overlapping measures (Ramayah *et al.,* 2018). Fornell and Larcker (1981) technique was used to estimate DV, and it was determined by comparing the AVE with square correlations. When the diagonally indicated square root of the AVE surpasses the values in the columns and rows on that particular construct, the measurements are considered discriminating. According to Table 2, the values in the diagonals are higher than the values in the columns and rows in which they appear. As such, the measurements utilised in this study shows sufficient DV.

Table 2: *Fornell- Larcker Criteria Analysis*

	MI	OCI	OI	PI	WEP
MI	**0.766**				
OC	-0.039	**0.790**			
OI	0.340	0.009	**0.775**		
PI	0.498	-0.160	0.437	**0.767**	
WEP	0.531	-0.180	0.476	0.593	**0.746**

According to Table 2 above, the latent constructs' AVE spans from 0.557 to 0.624, which is in accordance with the recommendations offered. Similar to this, in Table 2, the bold items show the values of the square root of AVE, while the non-bold items show the values of inter correlation between the model's constructs. The results showed that all square roots of AVE values were larger than the off-diagonal elements in their corresponding row and column. According to Table 2 above, all off-diagonal (i.e., non-bolded) values were discovered to be lower than all AVE square root values (i.e., bolded on the diagonal). The results revealed that the Fornell-criterion Larker's was achieved, proving that all of the reflective constructs in this study met predetermined empirical standards for validity.

4.2 Structural Model

The strength of the moderating effect of organisational culture on the link between PI, MI and OI was estimated using a product indicator approach in this study. Collinearity was tested among the predictor variables in the analysis, and the results shows that collinearity is not an issues as all VIF values are less than the threshold of 5 (Hair *et al*., 2013). The R^2 was calculated to determine the structural model's predictive strength. According to Chin (1998), R^2 values of 0.674 may be regarded significant. The findings are shown in Figure 3 and Table 3. T-statistics and path estimates for the hypothesised relationships were calculated using a bootstrapping approach with a resampling of 10,000. Therefore, the results in Figure 3 and Table 3 showed that PI has a substantial effect on WEP (β =0.639, t =15.57, p =0.000). The results also showed that MI has a significant effect on WEP (β =0.157, t =3.84, p =0.000). The results in Figure 3 and Table 3 revealed that OI has significant effect on WEP (β =0.153, t =3.70, p =0.000), based on that hypothesis 1 were not supported. Furthermore, The Table 2and Figure 3 also indicate the estimates after employing a product indicator approach to ascertain the moderating effect of OC on the relationship between product innovation, marketing innovation, and open innovation on WEP. The present relationship is stronger for individuals with higher OCI than those with lower OC. As predicted, the findings in Table 3 and Figure 3 show that the interaction term for product innovation x OCI (β = 0.133, t = 3.82, p < 0.000) is statistically significant. Additionally, hypothesis 2 of the indirect association is not supported as OC moderates the relationship between open innovation and WEP (β = 0.070, t = 2.036, $p \leq 0.042$). However, the relationship between marketing innovation and WEP is not moderated by OCI (*β* =-0.001, *t* =0.017, *p* ≥ 0.05).

Figure 3: *Structural Model with Direct and Indirect Effect*

Table 3: *Results of Direct and Indirect Structural Model*

Relationship	Beta coefficient	Std error	*t*-statistics	Lower bound (2.5%)	Upper bound (97.5%)	*P* values	Decision
PI -> WEP	0.639	0.041	15.574	0.554	0.712	0.000	Not supported
MI -> WEP	0.157	0.041	3.841	0.079	0.241	0.000	Not supported
OI -> WEP	0.153	0.041	3.704	0.073	0.237	0.000	Not supported
OCI x PI -> WEP	0.133	0.035	3.827	3.827	0.200	0.000	Not supported
OCI x MI -> WEP	-0.001	0.035	0.017	-0.074	0.074	0.987	Supported
OCI x OI -> WEP	0.070	0.034	2.036	0.005	0.139	0.042	Not supported

Note: p < *p< .05; p < **p< .01; *** p < .001

4.4 Discussions

The research findings indicated that PI has a significant and positive effect on WEP. This implies that introduction of a new product significantly improved and good or service with respect to its capabilities, user friendliness, components or sub-systems enhance performance of women entrepreneurs in Kano State. Therefore, improvement in product innovation generate new ideas to create value positively affect WEP. The study's finding is consistent with earlier research, which indicates a strong positive relationship between innovation and performance (Arcuri, et al., 2023; Huang et al., 2022; Verhoef, *et al*., 2021; Zeb & Ihsan, 2020; Thakurta & GuhaDeb, 2018; Yazid *et al.,* 2017). The findings of this study is also in line with the findings of Chaubey, Subramanian and Gupta (2013) which revealed that, the product feel, demonstration, opportunity to test and verify product claims are variables that satisfy the customers.

The research findings indicated that MI has a significant and positive effect on WEP. This implies that firm’s market share based on its existing products and technologies enhance performance of women entrepreneurs in Kano State. Hence, marketing innovations helped women entrepreneurs successfully overcome fierce competition, create value and enhance business performance. The finding of this study is consistent with previous studies which indicates significant positive relationship between marketing innovation and performance (Kwajaffa, 2023; Peng, et al., 2021; Tang, Zhang & Peng, 2021). In line with the finding of this study Ungerman, et al. (2018) argued that marketing innovation is perceived as the search for innovative and creative answers to issues and needs that have been highlighted as requirements for firms to increase performance. The outcomes of this study shows significant influence of OI on WEP. The findings supported the argument that creating an opportunity for new product manufacture and service delivery for organisations aids competitiveness and a possible rise in market share as well as performance. This reveals that women entrepreneurs' investment in open innovation activities in terms of market, product or other forms of innovation such as service delivery innovation related to performance level in such an organisation. In accordance with this study findings, OCI significantly moderate for the relationship between PI, OI and WEP. Basically, the magnitude and significance of the moderation findings are used to support the organisational culture perspective. It is revealed that WEP with high OC tended to be high innovative than those with lower organisational culture. The study's findings demonstrated that OCI does not strengthen the relationship between MI and WEP. The addition of OCI as a moderating variable does not indicate a link between MI and WEP, despite the fact that MI is a good predictor of performance. This shows that, if women entrepreneurs effectively implements product innovation, and open innovation, an organisation would feel bound to reply with excellence, and organisational culture is determined by how an organisation evaluate the advantages it receive which will help improve performance.

5. Conclusion

The observations from the analysis of data in this study have identified one of the proposed innovation dimension, namely: product innovation is positively and significantly associated with WEP in the context of Nigeria. The study also concludes that women entrepreneurs place great value on introduction of a new product with respect to its capabilities and user friendliness and this promoted their level of performance. The findings established that marketing innovation has significant positive effect on the WEP. This implies that MI influence WEP. Therefore, this study confirmed that WEP can be enhanced if firm's market share based on its existing products and technologies is increased. Furthermore, this study has shown that firms' ability to access both internal and external skills and adopt the newest and most sophisticated technologies, as well as organisational value can have an impact on the success of innovative practices of women entrepreneurs in Nigeria, which may have an effect on long-term performance as well as the competitive abilities of most of the firms. Similarly, result of this study concludes that organisational culture positively and significantly moderates the relationship between product innovation, open innovation and women entrepreneurial performance. In addition, this study also provides evidence that organisational culture has no moderating effect on the relationship between marketing innovation and WEP. This confirmed that an increase in the OC does not strengthens the relationship between marketing innovation and WEP in Kano Nigeria.

5.1 Recommendations

This study theoretically pushed the boundary of women entrepreneurs forward by achieving the importance of product innovation, marketing innovation and open innovation in an encouraging performance. The current composition emphasised the use of RBV in explaining the entire performance process through the direct and indirect relationships between the studied dimensions and WEP. This has added one more literature to the management knowledge field of study. The uniqueness of this study is three of the innovation dimensions supposedly contributing to the WEP turn out to be as expected to be from the sample data collected. This study has significant implications for women entrepreneurs. The findings support the necessity to enhance each aspect of a firm's performance and demonstrate how other elements might increase it.

i. Women entrepreneurs need to consider other elements that might improve the influence of innovation while developing a firm's open innovativeness, marketing innovation and product. Therefore, concentrating on other capabilities may be more fruitful.
ii. The proper combinations of factors impacting performance are crucial, rather than concentrating on one specific factor.
iii. Therefore, an organisation should develop a range of skills, and the applicability of these skills to depend on the underlying factors.
iv. Moreover, steps should be taken by the firms to encourage an OC base on competitive advantage on a global scale and should be developed in a way that will support the ability to innovate quickly, and managers' actions should also not be limited by the institutional environment.

5.2 Suggestion for Further Studies

This study has limitations although provides suggestions for future research. Therefore, using organisational culture as moderating variable, this study primarily focuses on the link between product innovation, market innovation, open innovation and women entrepreneurial performance. However, other studies may consider diverse digital technical marketing strategies along with demographics like race, work experience, and educational background as a moderating effect. The study's limitations offer various opportunities for more research. In-depth insight on how women entrepreneurs uses product innovation, marketing innovation, organisational culture of innovation and open innovation are provided by the current study.

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Appendix: Questionnaire

Innovation

	Statement	Strongly Disagree				Strongly Agree
	Product Innovation					
PI01	My firm ... placed significant emphasis on new product development through allocation of substantial financial resources	1	2	3	4	5
PI02	developed a large variety of new products or made dramatic changes in existing products	1	2	3	4	5
PI03	Increased the rate of new product introductions to the market.	1	2	3	4	5
PI04	increased its overall commitment to develop new products	1	2	3	4	5
PI05	introduced new products jointly with other firms	1	2	3	4	5
	Market Innovation					
MI01	My firm is… renewing the product promotion techniques employed for the promotion of the current and/or new products	1	2	3	4	5
MI02	renewing the distribution channels without changing the logistics processes related to the delivery of the product.	1	2	3	4	5

MI03	renewing the product pricing techniques employed for the pricing of the current and/or new products	1	2	3	4	5
MI04	renewing the design of the current and/or new products through changes in packaging and shape	1	2	3	4	5
MI05	renewing general marketing management activities	1	2	3	4	5
	Open innovation					
OI01	My firm … seeks new ways to do things.	1	2	3	4	5
OI02	actively introduce improvements and innovations	1	2	3	4	5
OI03	is creative in its methods of operation	1	2	3	4	5
OI04	see technology development as an opportunity.	1	2	3	4	5
OI05	introduces innovative products that are completely new to the market	1	2	3	4	5
OI06	seeks newness and improvement over existing alternatives	1	2	3	4	5
	Organisational Culture of Innovation					
OCI01	My firm… encourages and rewards innovation and risk taking	1	2	3	4	5
OCI02	has produced many novel and useful ideas (services/products)	1	2	3	4	5
OCI03	fosters an environment that is conductive to our own ability to produce novel and useful ideas (services/products)	1	2	3	4	5
OCI04	corporate culture is focused on constant innovation	1	2	3	4	5
OCI05	views failure as an opportunity for learning and improvement	1	2	3	4	5

Women Entrepreneurial Performance

	Statement	**Strongly Disagree**				**Strongly Agree**
P01	I am satisfied with the sales growth of my firm	1	2	3	4	5
P02	I am satisfied with the level of profitability in the last four years	1	2	3	4	5
P03	I am satisfied with the employee's growth in my firm	1	2	3	4	5
P04	I am satisfied with the customer satisfaction in my firm	1	2	3	4	5
P05	I am satisfied with the level of my business innovativeness	1	2	3	4	5
P06	I am satisfied with the overall performance of my firm	1	2	3	4	5

RISK MANAGEMENT COMMITTEE ATTRIBUTES AND VALUE OF LISTED DEPOSIT MONEY BANKS: THE MEDIATING EFFECT OF PROFITABILITY

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Abstract

The study examines the mediating effect of profitability on the relationship between risk management committee attributes and value of listed Deposit Money Banks (DMBs) in Nigeria. Data was extracted using a secondary source from the audited annual reports and accounts of 10 sampled banks for 11-year period (2010 to 2020). Data was analysed using panel data regression analysis. Specifically, the study employed a multiple regression technique for data analysis. Findings revealed that risk management committee size and risk management committee independence have a significant negative relation with profitability, whereas risk management committee financial expertise has no relation with the profitability of listed deposit money banks in Nigeria. Also, the study could not establish a statistically significant relation between risk management committee attributes and value of the banks. Nevertheless, further analysis revealed that profitability has significant mediating effect on the relationship between risk management committee size, risk management committee independence and the value of listed DMBs in Nigeria. Thus, the paper concluded that profitability influences the relationship between risk management committee size, risk management committee independent and value of listed DMBs in Nigeria. Therefore, the study recommended that the management of the banks should consider appropriate size of the risk management committee and ensure a more diverse committee to include more members with financial expertise.

Keywords: Risk, Profitability, Mediation, Risk Management Committee Attributes

1. Introduction

The major aim of corporate risk management is to ensure that the corporations are protected against potential costly situations that could potentially cause financial distress. On the other hand, Risk Management Committee (RMC) was initially designed to reduce the potential costs of dealing with financial challenges and at the same time minimizing and exploiting competitive advantages (Bensaid, 2021). The importance of RMC cannot be over emphasized because it plays significant roles in the success or failure of corporations. However, the tradition was that risk supervision was placed under the audit committee and board of directors which resulted in so many confusions. This is due to the fact that audit was over burdened with more responsibilities because risk related to operations are diverse and broad, including financial and non-financial risk, which may not be adequately controlled by the audit-committee. This argument was strongly supported by Kallamu (2015), adding that in today's dynamic and high-risk corporate environment, audit-committees are no sufficient for monitoring the financial and non-financial risks.

Therefore, the audit committees' complex tasks, the broad responsibilities, dual role and the lack of resources such as expertise and time required to monitor the organizational risks, have necessitated the need for the formation of separate risk management committees.

It is on this premise this study investigates the mediating role of profitability on the relationship between risk management committee attributes and value of listed banks in Nigeria.

2. Theoretical and Empirical Review

2.1 Risk Management Committee Attributes and Firm Value

Several studies have been conducted on the effect of risk management committee attributes on firm value. The most recent ones are Malik et al., (2021), Fali et al., (2020), Redwan et al., (2020), Jimoth and Attah (2020), Olusola et al., (2019), Ahmed and Ismail (2018) and Abubakar et al., (2018). However, the studies focused on direct relationship between risk management committee attributes and firm value, thereby ignoring the role a mediator could play on the said relationship. For example, Malik et al., (2021) investigated the influence of risk management characteristics on the market value of firms. Using six dimensions of board level risk committee attributes which include: committee size, independence, number of meetings, financial expertise, gender diversity and multi-committee directorship and also by employing hierarchical multiple regression. The study revealed that, strong board level risk committee attributes increase firm market value as measured by Tobin's Q.

Fali et al., (2020) also studied the effect of risk management committee attributes and board financial knowledge on the financial performance of listed banks in Nigeria. Their results indicate that risk management committee independence and board financial knowledge have a significant negative relationship with financial performance, while risk management committee size shows insignificant relationship with financial performance.

Again, Redwan et al, (2020) examined the moderating effect of political connection on the relationship between risk committee attributes and firms' performance in Malaysian context. Using both accounting and market based performance measures, the study found that both the accounting and market performance are higher for firms with effective risk management committee. Additionally, the study finds that RMC attributes: RMC Independence, RMC Qualification and RMC Gender are positively and significantly associated with accounting performance, while those of RMC Existence and overlap are positively and significantly related to market performance. The study also finds that RMC Size, RMC Diligence have positive impact on firm performance. Therefore, they conclude that RMC attributes have become widespread and pertinent issue for firms' performance.

Furthermore, Jimoh and Attah (2020) examined the impact of RMC attributes on performance of deposit money banks in Nigeria from 2007 to 2015. Using a sample of 15 banks and multiple regression techniques, the study finds that risk management committee attributes has a positive and significant effect on performance of deposit money banks in Nigeria. Moreover, Olusola et al., (2019), on a sample of twenty-four (24) Insurance firms from 2012 to 2018, investigated the relationship between risk management committee attributes and performance, and the study reveals evidence that risk management committee expertise has negative and significant effect on performance. However, the result shows that risk management committee size and risk management committee independence do not have significant influence on performance. They concluded that risk management committee constrain on management excess risk undertaking will lead to poor performance of insurance firms. Hence, risk management committee should be made effective by inclusion of more members with background on finance in the risk management structure.

Kallamu (2015) conducted studies on risk management committee attributes and company performance of listed finance companies in Malaysia. On the contrary to the recent studies by Malik et al., (2021), Bensaid (2021), Fali et al., (2020), Adegbite et. al., (2011), and Olusola et al., (2019) and Abubakar et al., (2018), their results suggest that better risk management committee attributes (RMC size, RMC independence, RMC expertise and Presence of non-executive director) were positively related to the performance of financial firms proxied by ROA and Tobin's Q. Good risk management committee attributes are actually able to exercise control on the management and limit opportunistic behaviours. Indeed, they stimulate effect managerial processes that, in turn, improve firm value and generate benefits to all stakeholders. On the other hand, Ahmed and Ismail (2018) studied the impact of risk committee on financial performance of UK institutions. Independent variable risk committee characteristics proxied: Existence of Risk Committee, Risk Committee Independence, Risk Committee Size and Risk Committee Meeting. Dependent variable financial performance proxied by: Return on Assets and Return on Equity. Using a sample of 23 listed firms in the United Kingdom from 2010-2014, underpinned by Agency Theory, the study employed multiple regression technique, bivariate analysis and univariate analysis for data analysis. The findings of the study revealed that there is negative relationship between risk committee characteristics and performance of listed firm in the UK. Firms without risk committee perform better than those with risk committee. The study provides insight on the significance of RMC establishment by every corporate firm as those without RMC perform below than those with RMC.

The present study considers a period that covers the pre and post of new corporate governance codes for banks and also investigates risk management committee attributes in terms of risk management size, risk management independence, risk management expertise and banks' value. Due to the inconsistency in the results reported by the previous studies, the present study also considers the introduction of profitability as the mediating variable.

With respect to the risk management committee size, most of the studies reported insignificant relationship with exception of Kallamu (2015) that reported significant relationship between risk management committee size and firm value. This suggests that larger numbers of risk management committee members are important for effective monitoring. In other words, smaller risk management committee size is effective and is often controlled by the CEO.

Risk management committee independence is another important attribute. The committee may have all basic qualities, example people with expertise, dedicated skills, and esteemed knowledge of operational policies and day-to-day activities of the banks. However, the presence of the committee independence could contribute to its good working by bringing new ideas, objectivity and ability experienced in other field (Ahmed & Ismail, 2018). Hence, the independence of risk management may become an important element that improves monitoring function and reduces self-interested actions by managers, by minimizing agency cost (Jimoth & Attah, 2020). This, in turn, improves bank value.

2.2 The mediating effect of Profitability

This study does not only limit its analysis to the direct effect of risk management committee attributes on firm value, but also aim to explain how this influence happen, thus considering the mediating effect of profitability. It has been established in the literature that risk management committee attributes has direct effect on profitability measured using return on assets (Ahmed & Ismail, 2018) and also empirical evidence affirmed that profitability improves firm value. Hence, this circumstance makes the investigation of the mediating role of profitability worthy attention. Moreover, there is paucity of studies that investigated the direct and indirect effect of between risk management committee attributes on firm value.

Jimoth and Attah (2020) for example, find that all risk governance variables, except the risk committee size, are positively related to return on assets and return on equity as indicators of bank performance. Hence, risk management committee members should be properly motivated, meet more frequently, include more independent directors, and financial expert, all these will lead to better performance and consequently higher value. However, the influence and power of risk management committee do not always positively affect bank value, instead in the long run it could enter into a conflict with shareholders. This was documented in the literature by Ahmed and Ismail (2018) who find negative relationship between risk committee characteristics and performance of listed firm in UK.

The role of the committee, indeed, is to reduce the risk exposure, but it is a known fact that high risky activities generate higher profits and returns and, in turn increase bank value. Therefore, the investigation on the mediating role of profitability on the relationship between risk management committee attributes and bank value could help in resolving the conflict of interest that could arise between the management and shareholders' as well as stock prices.

3. Research Methodology

The study adopts descriptive and correlational research design. Considering the nature of the paper which investigates the mediating role of profitability on the relationship between risk management committee attributes and bank value, the chosen design best suit the study.

3.1 Population and sample selection

The population of the study contains the entire listed deposit money banks listed on the Nigerian Exchange Group (NGX) as at December 2020. As at 31st December, 2020 there were fourteen (14) banks listed. However, four banks (Eco bank, FCMB, Ja'iz bank and Stanbic IBTC) were filtered out from the population on the ground of listing status and data availability. Thus, ten (10) banks were used as sample size of the study covering the period from 2010 to 2020.

3.2 Data Sources and measurement of variables

Data for this study were extracted from the annual account and reports of the sampled banks. Consequently, second source of data collection was adopted. Equally, independent variables; risk management committee size (RMCSIZ) is measured as the total numbers risk management committee members, while risk management committee financial expertise (KNOWAC) is measured as proportion of risk management committee members with financial expertise to total members of the committee, and risk management committee independence (INDRMC) is measured as the proportion of non-executive directors in the committee to total risk management committee members. Additionally, dependent variable is measured as the Tobin's Q value, while mediator variables is measures as return on asset (ROA), that is, proportion of profit before interest and tax to total asset.

3.3 Econometric models

To examine whether profitability mediate the relationship between risk management committee attributes and value, the study used Barron and Kenny (1986) taken into account the critics of MacKinnon et al. (2007) and Zhao et al (2010). Barron and Kenny proposed three sequential regressions, first regressing the mediator on the independent variables, second regressing dependent variable on the independent variables. Third regressing dependent variable on both independent variables and mediator. According them the independent variables in the first two equations are expected to be significant, while in third equation the independent variables are expected to be insignificant and statistical significance of the mediator. However, MacKinnon et al (2007) and Zhao et al (2010) argued that the statistical significance relationship between dependent variable and independent variables is not compulsory and can be misleading as it represents the total effect that is direct and indirect effect. According to them, in establishing mediating effect what is important is for the indirect effect to be significant. Hence, the models to test the hypothesis of the study is presented as follows:

$ROA_{it} = \alpha_0 + \beta_1 KNOWAC_{it} + \beta_2 RMCSIZ_{it} + \beta_3 INDRMC_{it} + \beta_4 Lev_{it} + \beta_5 Fsize_{it} + \varepsilon_{it}$ --------- 1

$Tobin's\ Q_{it} = \alpha_0 + \beta_1 KNOWAC_{it} + \beta_2 RMCSIZ_{it} + \beta_3 INDRMC_{it} + \beta_4 ROA_{it} + \beta_4 Lev_{it} + \beta_5 Fsize_{it} + \varepsilon_{it}$ --2

Where:

α = Constant

β_1 to β_3 = Coefficient of the parameters

ε = error term

i= firm

t= time

4. Results and Discussion

4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics of the dependent variables and the explanatory variables. From the table Tobins'Q has an average value of 0.226 with a maximum value of 0.811. The standard deviation of 0.156 which is below the mean value signified insignificant variations among the sample banks. Profitability (ROA) has a mean value of 0.015 and maximum value of 0.066. This implies that on average Nigerian banks earned a profit of 1.5% of every one Naira (₦1) invested in total assets, with maximum profit of 6.6% and a loss of 13.6%. The standard deviation of 0.028 signifies small dispersion from the central value.

Table 4.1. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev	Min.	Max
Tobins'Q	100	0.226	0.156	0.001	0.811
ROA	100	0.015	0.028	-0.136	0.066
KNOWAC	100	0.316	0.092	0.167	0.667
RMCSIZ	100	7.240	1.589	4.000	13.00
INDRMC	100	0.568	0.075	0.364	0.714
Lev	100	0.118	0.132	0.000	0.751
Fsize	100	12.12	0.427	11.19	13.53

Source: Stata 14

With regards to risk management committee attributes, risk management financial expertise (knowledge) has a mean value of 0.316 and maximum value of 0.667 with minimum value of 0.167. This indicates that on average 31.6% of the risk managements committee have financial knowledge. The standard deviation of 0.09 suggests insignificant dispersion among sample banks. Risk management committee size has average members of seven (7) and maximum membership of thirteen (13) with minimum members of four (4). The standard deviation of 1.589 signifies insignificant variations among the sample banks. The proportion of non-executive directors to the total committee size (INDRMC) show a mean value of 0.568 and maximum value of 0.714, with a minimum value of 0.364. This suggest that on average risk management committee attained 57% independent. The standard deviation of 0.075 indicates small variations among the sample size.

Table 4.2 presents the correlations matrix of the dependent variables and the explanatory variables. From tables ROA, KNOWAC RMCSIZ and INDRMC have negative association with Tobins'Q with correlation coefficient of -0.134, -0.333, -0.082 and -0.254 respectively. This suggests that the explanatory variables are moving in the same directions. Furthermore, the table indicates the absence of multicollinearity problems and this assertion was confirmed by the variance inflation factor (VIF) test carried out as all the individual mean of the independent variables are within the acceptable range (<0.05). Thus, the variables are free from multicollinearity problems.

Table 4.2. Correlation Matrix

	Tobins'Q	ROA	KNOWAC	RMCSIZ	INDRMC	LEV	Fsize	VIF
Tobins'Q	1.000							
ROA	-0.134	1.000						1.20
KNOWAC	-0.333	0.189	1.000					1.12
RMCSIZ	-0.082	-0.273	-0.021	1.000				1.30
INDRMC	-0.254	-0.087	0.040	-0.134	1.000			1.23
LEV	0.821	-0.353	-0.345	-0.080	-0.122	1.000		1.34
Fsize	-0.267	0.379	0.318	-0.099	0.106	-0.405	1.000	1.21

Source: Stata 14

Table 4.3 presents the regression analysis using structural equation modelling (SEM) of the study variables. Table 4.3 reveals R-square of 0.61, with a Log likelihood of 395.458 and p-value of 0.000. This implies that the model is statistically significant and fit at 1% level of significance to explain the empirical relationship between the study variables and explanatory variables. Also, about 61% changes in value of deposits money banks (Tobins' Q) are cause by the variables in the model. Hence, 39% of the variation might be as result of other variables not included in the study.

Table 4.3. Regression Results (Path analysis)

	Model I	**(ROA)**		**Model II**	**(Tobins' Q)**	
	Coeff.	**Z - value**	**P-value**	**Coeff.**	**z-value**	**p-value**
Cons.	-0.097	-1.23	0.218	0.009	0.03	0.974
ROA	-	-	-	0.840	2.40	0.016***
KNOWAC	0.003	0.10	0.917	-0.136	-1.40	0.163
RMCSIZ	-0.005	-3.47	0.001***	0.001	0.24	0.809
INDRMC	-0.070	-2.21	0.027**	-0.288	-2.54	0.011***
LEV	-0.063	-3.08	0.002***	1.017	13.67	0.000***
Fsize	0.016	2.61	0.009***	0.023	1.04	0.299
P-value	0.000					
likelihood	395.458					
R-Square	0.61					

Source: Stata 14

From table 4.3, the regression estimates reveal that members' financial expertise (Knowac) has insignificant direct influence on the profitability (ROA) of listed deposit money banks in Nigeria (β0.003, p 0.917). This implies that the presence of directors with finance expertise in the risk management committee board does not affect the banks' ability to earn profit in relations to assets invested. On the other hand, risk management committee size and independence of the committee have negative and significance impact on the profitability of deposits money banks in Nigeria (β-0.005, p 0.001; β-0.070, p 0.027). This indicates that the larger size of the committee and its independent does not guarantee higher profitability (Sanusi, 2010; Waweru 2014).

Furthermore, in model II while controlling for the mediating variable, the SEM estimates reveals that Knowac and risk management committee size have insignificance total effect on value of listed deposits banks in Nigeria (β-0.136, p 0.163; β0.005, p 0.809). Further, the estimates shows that independent of the board committee has negative and significant total effect on value through profitability (Uadiale, 2010; Vives, 2011; Yatim, 2009). The significance of the indirect effect was test using Zhao et al (2010) mediation approach, the results indicates that the relationship between risk management committee size and value of listed deposit money banks could be explained by profitability (z, -1.962 p, 0.05). However, the relationship between knowledge, risk management committee independent and value of deposit money banks could not be explained by its profitability. This suggest that profitability does not significantly mediate the relationship.

5. Concluding remarks

The study examines the mediating effect of profitability on the relationship between risk management committee's attributes and Value of listed deposit money banks in Nigeria with profitability. The study established that risk management committee size and independent of risk management committee have direct negative and statistically significance influence profitability of listed deposit money bank in Nigeria. However, risk management committee financial expertise has no significance impact on profitability. Also, the results reveal a significant mediating effect of profitability on the relationship between risk management committee independent and value of listed deposit money bank in Nigeria. It is therefore, recommended that management of deposit bank in Nigeria should reduce the size of risk management committee as well as the number of financial expertise in the mix.

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CEO TENURE, BLOCKHOLDERS OWNERSHIP AND CORPORATE SOCIAL RESPONSIBILITY

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Abstract
This study explores the moderating effect of blockholders' ownership on the relationship between CEO tenure and corporate social responsibility disclosure (CSRD) in listed non-financial companies in Nigeria from 2015 to 2022. Out of 114 listed non-financial companies, a purposive sampling technique was used to select 56 firms that met two criteria: consistent listing status and complete financial statements for the study period. The findings reveal a significant negative relationship between CEO tenure and CSRD, indicating that extended CEO tenure reduces CSR engagement and disclosure, potentially due to managerial complacency or entrenchment. Blockholders' ownership positively and significantly influences CSRD, highlighting their role in encouraging transparency and long-term value creation. However, the moderating effect of blockholders' ownership on the CEO tenure-CSRD relationship was negative and insignificant. The study recommends the strengthening of governance mechanisms, including CEO term limits and performance-linked incentives, and empowering blockholders to actively monitor managerial actions.

Key Words: **Board Attributes, Blockholders Ownership, CEO, Corporate Social Responsibility Disclosure.**

1.0 Introduction

Corporate Social Responsibility (CSR) has evolved as a central theme in contemporary business practices, transcending the traditional focus on profitability to include broader societal and environmental concerns. As organizations operate within complex economic and social ecosystems, their responsibilities extend beyond shareholders to encompass stakeholders such as employees, customers, communities, and the natural environment. CSR is a critical aspect of corporate governance, especially in developing economies like Nigeria where socio-economic challenges often drive companies to address societal concerns as part of their operational strategies (Afolabi & Dare, 2023; Adediran & Oluwaseun, 2022). As stakeholders increasingly demand transparency and accountability, firms are pressured to disclose their CSR activities more openly, aligning with the growing body of literature that recognizes CSR's role in enhancing corporate reputation, mitigating risks, and fostering sustainable economic development (Alsaeed & Aljohani, 2023).

One critical factor influencing CSR disclosure is the role of corporate leaders, specifically CEOs. CEO tenure, or the length of time a CEO has held office, has been shown to impact strategic decisions, including CSR initiatives. The tenure of the CEO, in particular, emerges as a critical aspect that profoundly influences the organization's CSR engagement (Wei, Ouyang & Chen 2018) and disclosure practices. A CEO's extended period of leadership significantly shapes their understanding of the company's history, industry intricacies, and stakeholder dynamics (Chen et al., 2017, Ferreira et al., 2022). This depth of experience empowers CEOs to make strategic decisions that are not only well-informed but also inherently linked to the organization's long-term commitment to social responsibility. Various empirical studies support the notion that CEO tenure influences CSR practices in companies (Khan et al., 2021; Chen et al., 2023). Conversely, some studies report CEO tenure having an insignificant impact on CSR (Oh, Chang & Cheng 2016; Wei et al., 2018; Harper & Sun, 2019; Ratri et al., 2021).

Given the mixed and inconsistent findings in existing literature, also in the Nigerian context, the dynamics of CEO tenure are particularly complex. Many Nigerian firms operate in environments marked by economic volatility and governance challenges, which can influence how CEOs perceive and engage with CSR (Agbo & Eze, 2023). A potentially influential factor in this relationship is blockholder ownership. Blockholders—individuals or entities holding a significant portion of a company's shares—have substantial voting power and influence over corporate strategies, including CSR initiatives (Abubakar & Mustapha, 2022). Blockholders are often institutional investors or family owners who may have long-term strategic interests that align with CSR goals, or they may seek immediate returns that discourage extensive CSR engagement (Fan et al., 2023). The influence of blockholders can either amplify or diminish the impact of CEO tenure on CSR, depending on their preferences and the level of oversight they exercise (Njoku, 2024). In Nigeria, where ownership structures often feature concentrated blockholder control, it is critical to examine how these powerful shareholders shape CSR activities through their interaction with CEO tenure.

Prior studies have explored the direct impact of CEO characteristics and ownership structure on CSR, but research specifically examining the moderating role of blockholder ownership in this context is limited. Studies by Choi and Paik (2023) and Gbadamosi (2022) indicate that blockholders can either reinforce or undermine CSR efforts depending on the alignment of their objectives with long-term sustainability goals. This study aims to address this gap by investigating the moderating effects of blockholder ownership on the relationship between CEO tenure and CSR disclosure among listed non-financial companies in Nigeria. By examining this relationship, the research contributes to the literature on corporate governance and CSR in emerging markets, providing insights that could guide policymakers, regulatory authorities, and investors in shaping more effective governance frameworks. Additionally, it explored how the unique corporate structures in Nigeria influence CSR activities, offering valuable implications for other developing economies with similar ownership and governance characteristics.

2.0 Literature Review

Socially responsible corporations necessitate socially responsible managers, who may at times need to prioritize social responsibility over corporate objectives and interests (Wood et al., 1986; Diez et al., 2011). The dissemination of ethics and social responsibility within a firm, along with the integration of these values through strategic management, is primarily orchestrated by top managers, particularly CEOs (Singhapakdi et al., 2008). The assumption follows that CEOs, being closer to the significance of ethics and social responsibility, play a pivotal role in promoting higher levels of CSRD practices within their firms (Diez et al., 2011).

Furthermore, CEOs wield significant influence as key decision-makers in CSR-related matters. Their role extends to formulating corporate strategy and actively shaping the public image of their firms through social responsibility initiatives (Waldman et al., 2006). Research suggests that CEOs' attributes, such as experiences, values, and personalities, impact their perceptions, interpretations, and strategic choices related to CSRD, with tenure representing a particularly influential factor (Slater & Dixon Fowler, 2009). CEO tenure, reflecting their accumulated experience within a firm, is recognized as a significant determinant of a firm's strategic decisions (Al-Duais et al., 2021).

Stakeholder theory posits that managers' attention to stakeholder interests is contingent upon their values and moral principles (Huang, 2012). CEO tenure, a crucial attribute, influences a firm's strategic decisions, and longer tenures are associated with increased power accumulation. CEOs with extended tenures may reshape boards over time, co-opting sympathetic members and consolidating their influence. In countries with a high acceptance of power differentials, such as Nigeria, CEOs can build personal authority and induce unquestioned deference. Powerful CEOs, particularly those with lengthy tenures, are more likely to engage in CSR activities and disclosures for personal and organizational benefits (Fabrizi et al., 2014).

Research in this area presents diverse findings. A study by Martínez and Álvarez (2021) exploring the role of CEO power on CSR reporting, with the moderating effect of linking CEO compensation to shareholder return, reveals that CEO tenure has a significant positive impact on CSRD. Similarly, Jeong et al. (2021) investigated the role of CEO's tenure life cycle on CSRD, considering the moderating role of the CEO's political orientation, and found a significant positive impact of CEO tenure on CSRD. Other studies supporting a positive impact of CEO tenure on CSR include those by Malik et al. (2020), Kristiawan (2020), Tran and Adomako (2020) and Al-Duais et al. (2021).

Contrarily, a study by Khan et al. (2021), in their study of CEO tenure, CEO compensation, and corporate social and environmental performance of non-financial Chinese listed firms from 2009 to 2015, found a significant negative impact of CEO tenure on CSRD. Similarly, Chen et al., (2023) on CEO career concerns in early tenure and CSR reporting of US companies from 2001 to 2015 suggests a significant negative impact of CEO tenure on CSRD. Other studies supporting a negative impact of CEO tenure on CSRD include those by Chen et al. (2019), Yuan et al. (2019), and Rashid et al. (2020).

On the other hand, a study by Ratri et al., (2021) on the tenure, meeting frequency of CEOs, and CSRD of 78 Indonesian companies found no significant relationship. Similarly, studies by Harper and Sun (2019) and Adomako anf Nguyen (2020) also reported no significant relationship between CEO tenure and CSRD. The literature thus reflects mixed and inconclusive results regarding the impact of CEO tenure on CSRD.

Therefore, the dynamics of blockholders ownership can shape the nature of this relationship. As substantial shareholders with a significant stake in a company's total outstanding shares, blockholders wield substantial influence over the decision-making processes within a corporation. Given their often prolonged investment horizon and inclination towards sustainable practices, blockholders may foster a corporate environment that encourages CEOs with extended tenures to prioritize CSRD.

3.0. Methodology

The population of this study comprised all listed non-financial companies on the Nigerian Exchange Group for the period of 2015 to 2022. There were 114 non-financial companies listed as at 31 December, 2022 on the Nigerian Exchange Group. The study employs a purposive sampling technique to identify companies suitable for inclusion in the research. This involves applying a two-point filter to select the sample, firstly, selected firms had to be listed throughout the entire research period spanning from 2015 to 2022. Secondly, the chosen companies were required to have a complete set of financial statements for the specified study period, following the criteria established by previous studies (Samaila, 2014 & Garko, 2015).

The first criterion ensured the comprehensive observation of a company's disclosure behavior over the entire study period, facilitating a thorough examination. This approach was essential for conducting a panel study. 24 companies were removed on the basis of the first criteria. The second criterion aimed to avoid redundancy in the sample, enhancing the relevance and efficiency of the selected companies. 34 companies were removed on the basis of second criteria. Accordingly, 56 companies were used as the sample size.

The dependent variable is CSRD, for the purpose of this study CSRD is measured by CSRD index using content analysis with a checklist of 24 items from the 2016 Global Reporting Initiative (GRI) disclosure requirements. The study developed a five-point scale measurement to evaluate the quality of disclosure. This approach aims to overcome the common omission of pictures, graphs, and charts in existing methodologies by adapting Alkayed and Omar (2022) and Freedman and Stagliano (2008) measurement of CSR quality of disclosure. This new five-point scale distinguished between poor and excellent disclosures. A score of 0 indicates no disclosures, 1 and 2 are for non-GRI compliance disclosures (1 for general disclosure and 2 for items with disclosure accompanied by pictures, graphs or charts), and 3 and 4 are for GRI compliance (3 for partial GRI compliance and 4 for full GRI compliance).

While the independent variable CEO tenure is proxies by numbers of years spent as CEO in the respective companies. The moderating variable is blockholders ownership proxied by proportion of shares held by significant shareholders (that is, shareholdings of 5 percent or more). Control variables are: profitability (ROE that is earnings divided by equity), firm size (natural log of total asset) and firm age (number of years of incorporation)

Below is the general model guiding the research which is adapted from Alkayed and Omar (2022) and Haniffa and Cooke, (2005).

$$CSRD_{it} = \beta_0 + \beta_1 CEOT_{it} + \beta_2 PT_{it} + \beta_3 FS_{it} + \beta_4 FA_{it} + \varepsilon_{it} \quad (1)$$

$$CSRD_{it} = \beta_0 + \beta_1 CEOT_{it} + \beta_2 BO_{it} + \beta_3 PT_{it} + \beta_4 FS_{it} + \beta_5 FA_{it} + \varepsilon_{it} \quad (2)$$

$$CSRD_{it} = \beta_0 + \beta_1 CEOT_{it} + \beta_2 BO_{it} + \beta_3 BO * CEOT_{it} \; \beta_4 PT_{it} + \beta_5 FS_{it} + \beta_6 FA_{it} + \varepsilon_{it} \quad (3)$$

Where β_0 =is constant for all entities in the time period
$CSRD_{it}$ = Corporate Social Responsibility Disclosure Index for all entities over the time period
$CEOT_{it}$ =Represent the CEO tenure for all Entities over the Time period
BO_{it} =Represent Blockholders Ownership for all Entities over the Time period
PT_{it} = Profitability for all Entities over the Time period
FS_{it} = Represent Firm Size for every Entity over the Time period
FA_{it} = Represent Firm age for every Entity over the Time period
BO* = Interaction between Blockholders ownership and other independent variable
ε_{it} = Error Term for all Companies over time period
β1- β13 = partial derivatives or the gradient of the independent variable
i = Firm t = time

4.0. Results and Discussion

Table I presents result of regression analysis of the variables of the study. After conducting group wise heteroskedasticity and contemporaneous independence, the tests indicate the presence of heteroskedasticity related to the models proposed by the study see Appendix. Therefore, the study finds Feasible Generalized Least Square (FGLS regression) suitable for the study. The justification for selecting FGLS is that the initial parameters set by the FE and RE are considered biased due to the presence of heteroskedasticity in the models (see Appendix). For this reason, the study finds it suitable to utilize the FGLS model for precise and accurate parameters, as the model is capable of correcting issues in relation to heteroskedasticity (Drukker, 2008). Accordingly, this study found the need for the FGLS model.

Table I: FGLS Regression Result

	MODEL 1		MODEL 2		MODEL 3	
CSRINDEX	Coef.	P>z	Coef.	P>z	Coef.	P>z
CEOT	-0.0188	0.001***	-0.0191	0.001***	-0.011	0.323
BO			0.05998	0.001***	0.054	0.017**
BOCEOT					-0.006	0.753
ROE	0.0012	0.2480	0.0027	0.016**	0.003	0.010**
FA	0.0009	0.1290	0.00233	0.000***	0.002	0.001***
FS	0.0629	0.001***	0.01936	0.403	0.022	0.308
_CONS	-0.1287	0.4960	-0.4174	0.041	-0.468	0.036
Wald	chi2(9)	93.22		89.62		161.04
Prob	> chi2	0.0000***		0.0000***		0.000***

Source: Generated by the author from annual report data of companies using STATA

Table 1 displays the FGLS regression outcomes for model 1, 2 and 3, examining the influence of independent variable CEO tenure; moderating variable blockholders ownership BO; and control variables ROE, firm age FA, and firm size measured by the log of total sales on the CSRD of listed non-financial companies in Nigeria. And also the moderating effects of blockholders ownership on the relationship between CEO tenure and CSRD, Table 1 indicates that the models exhibited statistical significance with a coefficient of 93.22 ,89.62 and 161.04 respectively with a P-value of 0.000 for all models. This implies that FGLS provides precise and improved parameters for the study variables at a 1 percent level of significance.

The results from the regression analysis, presented in Table 1, reveal significant negative impact of CEO tenure on CSRD 1% level of significance with coefficient of -0.0188 in model 1 and -0.0191 in model 2. For every 1 year increase in CEO tenure will lead to 0.0188 and 0.0191 decreases in CSRD respectively. This indicates that as the tenure of CEOs lengthens, there is a corresponding reduction in CSR engagement and disclosure to stakeholders in society. This finding raises important implications regarding the dynamics of leadership continuity and it is influence on CSR practices and disclosure within companies. It implies that prolonged CEO tenure may lead to complacency or a focus on short-term financial goals at the expense of long-term sustainability and stakeholder interests. This discovery aligns with similar negative impacts reported by Chen et al. (2019), Yuan et al. (2019), Khan et al. (2021), and Chen et al. (2023). These studies also found that extended CEO tenure is associated with lower levels of CSR engagement and disclosure. Conversely, it contradicts the findings of Huang (2013), Kristiawan (2020), Malik et al. (2020), Tran and Adomako (2020), Jeong et al. (2021), and Al-Duais et al. (2021) who reported a positive impact of CEO tenure on CSRD, indicating that as CEO tenure increases, so does CSR involvement and disclosure.

This negative relationship between CEO tenure and CSRD could be explained by the one side agency theory's perspective on the principal-agent relationship. According to agency theory, CEOs, as agents, may prioritize their own interests over those of the firm and it is stakeholders. Recent studies (Smith Brown, 2022; Brown & Johnson, 2021; Wilson & White, 2020) support the agency theory perspective, suggesting that as CEO tenure lengthens, there is a greater likelihood of divergence between the interests of executives and broader stakeholder concerns. This can contribute to a decline in CSR activities and disclosure, as CEOs may prioritize their personal gains over societal and environmental responsibilities.

The direct influence of the moderating variable in model 2, blockholders ownership, on CSRD is positive (coefficient of 0.05998) at a 5% significance level as presented in table 1, indicating a significant positive impact on the CSRD of the selected firms. A 1-unit increase in blockholders ownership leads to a 0.05998 increase in CSRD. The finding implies that blockholders owners may align shareholder interests more closely with CSR objectives, as blockholders may have a long-term stake in the company's performance and reputation. This discovery aligns with previous research by Garcia-Meca and Pucheta-Martínez (2017), Mascena et al. (2020), Khan et al. (2021), Javeed et al. (2022), and Alkayed and Omar (2022) which collectively establishes a positive relationship between blockholders ownership and CSRD. Conversely, it diverges from the findings of Ali and Atan (2013), Li et al. (2016), Al-Saidi (2020), Seckin-Halac et al. (2021), Alia and Mardawi (2021), Chen et al. (2023), and Ananzeh et al. (2023) where a negative impact of blockholders ownership on CSRD was identified.

The positive association between blockholders ownership and CSRD can be interpreted through the lens of agency theory, where blockholders, as significant stakeholders, act as monitors of managerial actions. This monitoring role serves to align managerial decisions with the broader interests of shareholders, potentially leading to increased emphasis on CSR initiatives and disclosure as a means of safeguarding long-term corporate value (Smith et al., 2022; Brown & Johnson, 2021; Wilson & White, 2020).

The results in Table 1 indicate a negative and insignificant moderating effect of blockholders' ownership (BO) on the impact of CEO tenure on CSRD, with a p-value of 0.777, as shown in model 3. This implies that blockholders' ownership does not exert an influence on the relationship between CEO tenure and CSRD in listed non-financial companies in Nigeria. This finding contrasts with the results of the direct relationship, which showed a negative and significant impact of CEO tenure on CSRD.

Table 1 also presents findings on the influence of control variables, namely profitability (PT) measured with ROE, firm age, and firm size (measured by the natural log of total assets), on CSRD. The results indicate that these control variables ROE and firm age positively impact CSRD and are statistically significant. These results suggest that an increase in Return on Equity (ROE) is associated with a positive effect on CSR engagement and disclosure. This positive relationship implies that firms with higher returns on equity are more likely to actively participate in CSR activities and disclosure. Similarly, the significance of firm age indicates that, in the context of this study, the age of the firm plays a statistically significant role in influencing CSR practices and disclosure.

5.0 Conclusion

This study examines the moderating effects of blockholders' ownership on the relationship between CEO tenure and corporate social responsibility disclosure (CSRD) in listed non-financial companies in Nigeria. The findings indicate that CEO tenure has a significant negative impact on CSRD, suggesting that prolonged CEO tenure may lead to a decline in CSR engagement and disclosure. This supports the agency theory perspective, where longer CEO tenure may result in managerial complacency or entrenchment, with CEOs prioritizing short-term financial gains over long-term sustainability and stakeholder interests. While blockholders' ownership is positively and significantly associated with CSRD, the moderating effect of blockholders' ownership on the CEO tenure-CSRD relationship is found to be insignificant, highlighting the limited role of blockholders in mitigating the negative influence of extended CEO tenure on CSR practices.

6.0 Recommendations

1. To mitigate the negative impact of prolonged CEO tenure on CSRD, companies should strengthen governance mechanisms by enforcing periodic leadership evaluations and implementing term limits for CEOs. These measures will ensure a dynamic leadership approach that prioritizes long-term sustainability goals. Additionally, firms should consider linking executive compensation to CSR performance metrics to align managerial incentives with stakeholder interests. Establishing independent and diverse boards with a focus on CSR oversight can further enhance governance and promote accountability in corporate decision-making.

2. Blockholders, as significant shareholders, should be encouraged to play a more proactive role in monitoring management decisions related to CSR. This can be achieved through increased engagement in board discussions and policies that facilitate their participation in shaping corporate strategies. Regulatory bodies should introduce guidelines to enhance CSR reporting transparency and incentivize companies to adopt sustainable practices.

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ASSESSING HOW EXTERNAL BUSINESS ENVIRONMENTS AFFECT THE GROWTH OF WOMEN ENTREPRENEURS IN SOUTH WEST NIGERIA

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ABSTRACT

Given the distinct demographic and socioeconomic characteristics of the South Western (SW) region of Nigeria, there is a need to assess the ways in which external business environments impact women entrepreneurs in the region. This study aims to explore how the external business environment in South West (SW) Nigeria affects the growth of women entrepreneurs. The study adopted a survey research design, with sample size of 386 women entrepreneurs in the region. The study was conducted using the partial least square structural equation modeling (PLS-SEM) approach in SMARTPLS. The study discovered that the technological, sociocultural, political, and economic settings all have a statistically significant impact on the growth of women entrepreneurs in SW. Also, the growth of women entrepreneurs in SW is not statistically impacted by the legal environment. The study concludes that all external business environments except legal environment plays a crucial role in fostering the growth of women entrepreneurs in the regions. The study therefore recommends that state governments in the region should set up programs that would give women entrepreneurs access to technology and funding, as well as instruction on digital tools and platforms

I INTRODUCTION

The impact of external business environments on the growth of women entrepreneurs in South West Nigeria remains a significant yet under-researched area of study. The external business environment, comprising economic, social, political, and technological factors—profoundly influences entrepreneurial activities, as highlighted by Brush et al. (2019). Women entrepreneurs face unique challenges and opportunities shaped by these factors, which can either promote or constrain their business growth. Notably, women in South West Nigeria encounter specific barriers such as restricted access to financial resources, limited market opportunities, and socio-cultural limitations, all of which substantially affect their entrepreneurial ventures (Agboola et al., 2017).

The South West region of Nigeria, with its distinctive demographic, socio-economic, and technological characteristics, provides a compelling context for analyzing the effects of external business environments on women entrepreneurs. This focus is critical because many women in this region operate within informal sectors that are vital to local economies yet remain underrepresented in scholarly research.

Most existing studies on entrepreneurial growth in Nigeria address broad national trends or focus on urban centers, often neglecting the region-specific dynamics that influence entrepreneurship in the country (Afolabi, 2015). Additionally, while the significance of supportive policies and infrastructure for entrepreneurship has been documented (Adejumo et al., 2014), there is a lack of research examining how these factors specifically affect women entrepreneurs in South West Nigeria. Addressing this gap is essential for designing targeted policies and interventions to support the growth of women-led businesses in the region.

This study aims to explore the influence of external business environments on the growth of women entrepreneurs in selected states within South West Nigeria. By identifying the external factors that shape their entrepreneurial experiences, this study will provide actionable insights for stakeholders, including policymakers, development agencies, and financial institutions to foster a more supportive and enabling business environment for women entrepreneurs in the region.

II LITERATURE REVIEW CONCEPTUAL REVIEW

External Business Environment

The external business environment includes various external factors and conditions that influence an organization's decisions, operations, and overall performance. These factors cover a wide range, such as economic trends, technological progress, political and regulatory contexts, social and cultural influences, and environmental conditions (Hitt et al., 2017). Together, these external elements play a critical role in shaping how organizations develop strategies and maintain long-term sustainability.

Economic trends, such as market instability or inflation, create both risks and opportunities for organizations, while technological advancements drive change and require continuous innovation. Political and legal frameworks, including government regulations, define the boundaries within which businesses operate, and shifts in societal and cultural preferences shape consumer behavior and market demand (Wheelen et al., 2018).

According to Wu et al. (2016), the external environment consists of all external forces—such as market trends, customer preferences, competition, and legal structures—that affect a business's ability to function and achieve results. Similarly, Fetene (2017) explains that macro-level factors, including economic, political, legal, technological, and social conditions, impact business operations, presenting both challenges and opportunities that organizations must navigate strategically to succeed.

Furthermore, David (2021) highlights those external influences include both macroeconomic and microeconomic factors, such as global economic developments, competitive pressures within industries, government policies, and shifts in consumer demand. By recognizing and responding effectively to these factors, organizations can strengthen their strategic positioning and achieve their objectives.

Women Entrepreneurship

Women entrepreneurship is the process through which women recognize opportunities, mobilize resources, and establish and manage business ventures. This process involves taking on financial risks to achieve their business goals and contribute to economic growth (Marlow & McAdam, 2013). It encompasses the behaviors, strategies, and activities undertaken by women in starting and running businesses, driven by their aspirations, skills, and the socio-cultural contexts in which they operate (Aidis et al., 2012).

According to Welter and Smallbone (2011), women entrepreneurship includes activities such as identifying market opportunities, managing new ventures, and pursuing economic and social objectives. These efforts are often shaped by a combination of individual traits, cultural influences, and institutional frameworks. Brink et al. (2010) further highlight that women entrepreneurs focus on organizing resources and building businesses to achieve financial independence, empowerment, and social impact.

Rasha and Rasha (2023) describe women entrepreneurship as active involvement in identifying opportunities, acquiring resources, creating ventures, and fostering business growth to attain economic success and personal fulfillment. Additionally, it reflects the actions and strategies women employ to navigate socio-cultural challenges, innovate, take risks, and drive value creation for economic prosperity and societal change.

Organizational Growth

Organizational growth describes the process by which an organization expands its size, capabilities, and complexity over time, often reflected in its increased resources, market reach, workforce, and product or service offerings (Hitt et al., 2012). It involves the evolution and progression of a firm through various stages of development, resulting in greater scale, scope, and market presence (Zahra & George, 2002).

As noted by Lumpkin and Dess (1996), organizational growth entails the enhancement of an organization’s activities, resources, and capabilities to improve performance, strengthen its market position, and boost competitiveness. Jansen et al. (2012) emphasize that growth can occur through internal development, collaborations, or mergers and acquisitions, leading to an expanded size, profitability, and influence.

According to Zahra et al. (2009), organizational growth includes expanding an organization’s resources, operational scope, and capabilities to achieve higher performance and competitiveness in its respective industry. Similarly, Peng et al. (2018) highlight that growth encompasses both quantitative and qualitative dimensions, such as increased revenues, market share, product diversity, customer base, and overall organizational effectiveness.

Damanpour (2014) describes organizational growth as the development and expansion of internal systems, structures, and capabilities, enabling firms to adapt, compete, and succeed in dynamic business environments. Furthermore, Hitt et al. (2016) identify it as a planned and systematic process of increasing resources, human capital, and market presence to ensure improved performance and sustainable growth over the long term.

THEORETICAL FRAMEWORK

Intersectionality Theory

Intersectionality Theory, introduced by Kimberlé Crenshaw in 1989, provides a framework for understanding how overlapping social identities—such as gender, race, class, and other categories—interact to shape individuals' experiences, privileges, and challenges (Crenshaw, 1989). Originating within feminist scholarship, the theory critiques single-axis approaches to social analysis and emphasizes that social identity cannot be examined in isolation. Instead, they intersect to create unique experiences of marginalization or privilege (Crenshaw, 1991).

In the context of women entrepreneurs in South West Nigeria, Intersectionality Theory offers a valuable lens for analyzing how multiple social identities influence their entrepreneurial activities. It recognizes that gender alone does not fully explain the challenges and opportunities these women face. Other dimensions, such as socioeconomic status, cultural norms, and geographic location, intersect with gender to shape their entrepreneurial journeys. This theoretical framework underscores the importance of understanding these interconnections to develop holistic insights into the factors influencing women's entrepreneurial growth.

This study adopts Intersectionality Theory as a foundational framework to explore the complex effects of external business environments on the growth of women entrepreneurs in South West Nigeria. By examining the interplay of gender, socioeconomic status, regional dynamics, and other relevant factors, the research aims to uncover the distinctive challenges and opportunities experienced by women entrepreneurs in this context.

Through an intersectional lens, the study investigates how external factors, including regulatory policies, market conditions, and community dynamics, interact to shape the growth trajectories of women-led businesses. This approach seeks to provide a nuanced understanding of how these factors influence entrepreneurial outcomes, revealing the multifaceted nature of their experiences. The findings aim to inform more targeted and effective strategies to support the sustainable development of women entrepreneurs in the region, addressing their unique needs and leveraging their potential contributions to economic growth.

Gender Role Theory

Gender Role Theory, developed by Alice Eagly (1987) and later expanded by Eagly and Carli (1990), provides a sociological framework to understand how societal expectations and norms shape individuals' roles, behaviors, and opportunities based on perceived gender. This theory asserts that cultural norms, stereotypes, and gender biases influence individuals' behavior and self-perception, often dictating the roles they assume in both public and private spheres. Gender roles are socially constructed expectations about masculinity and femininity, encompassing a wide range of behaviors and responsibilities related to work, family, and interpersonal relationships (Eagly et al., 2000).

The internalization and performance of gender roles contribute to the reinforcement of traditional norms, shaping individuals' choices and access to resources, networks, and opportunities. This framework is particularly useful for analyzing the impact of societal structures on women's entrepreneurial activities, as it highlights how gender-based stereotypes and biases influence their growth and development in business. Gender role norms can restrict women’s access to skills, support systems, and financial resources, thereby affecting their entrepreneurial experiences and success (Eagly & Wood, 2012).

In the South West region of Nigeria, Gender Role Theory provides a lens through which to examine the challenges and opportunities faced by women entrepreneurs. Traditional societal norms in the region often prioritize domestic responsibilities for women, limiting their engagement in economic activities. Economic constraints and limited access to resources in the region further exacerbate these gendered expectations, creating barriers for women attempting to enter or expand entrepreneurial ventures.

The theory highlights that societal expectations surrounding femininity can restrict women's access to critical entrepreneurial resources, such as financial capital, professional networks, and institutional support. These challenges impact not only their ability to establish and grow businesses but also their recognition within entrepreneurial ecosystems. By applying Gender Role Theory, this study seeks to uncover the interplay between societal norms and women's entrepreneurial experiences in South West Nigeria, offering insights into strategies for overcoming these barriers and promoting inclusive economic participation.

EMPIRICAL REVIEW

Faloye et al. (2023) investigated the influence of external business environmental factors on the innovative performance of small and medium enterprises (SMEs) in Ondo State, Nigeria. The study adopted a survey research design and determined a sample size of 348 from a population of 2,363 registered SMEs using Watson Jeff’s (2001) formula. Data collection was facilitated through questionnaires, while data analysis employed descriptive and inferential statistical tools, including frequency counts, percentages, and multiple regression. Hypotheses were tested at a 5% significance level, and the findings revealed a positive and significant relationship between technological environmental factors and the innovative performance of SMEs in Ondo State.

Similarly, Ojimba et al. (2023) examined the relationship between external environmental factors and the performance of manufacturing firms in Nigeria's South-

East region. The study specifically assessed the impact of socio-cultural and legal environments on firm performance. A quantitative research approach with a survey design was employed, targeting 2,416 employees across manufacturing firms, with a sample size of 481 respondents determined using Taro Yamane's formula. Achieving a response rate of 97.71%, the study utilized simple regression analysis to analyze the data. Findings indicated a significant positive correlation between the socio-cultural environment and firm performance and a positive influence of the legal environment on performance.

In Kogi State, Labran and Ogbadu (2023) assessed the effect of the external business environment on SME performance. Using primary data collected through structured questionnaires, the study targeted a sample size of 400 managers from SMEs across the three senatorial districts, retrieving 318 completed responses. The analysis, conducted through multiple regression, revealed that economic and socio-cultural factors positively and significantly impacted the sales performance of SMEs in Kogi State.

In a related context, Inalegwu (2022) explored the effects of business environmental factors on SMEs in Benue State, focusing on socio-cultural and technological influences. Utilizing a survey method with a sample of 327 derived from a population of 1,811 registered SMEs, the study found significant positive relationships between socio-cultural and technological factors and SME performance. The research underscored the necessity of understanding socio-cultural dynamics and leveraging technology for value delivery.

Further, Akpoviroro and Owotutu (2018) conducted a comprehensive study on the impact of the external business environment on the performance of frozen fish companies in Nigeria. Reviewing literature on business environment and organizational performance, the study sampled three companies with a total of 120 respondents, collecting data through questionnaires and analyzing it via multiple regression. The findings revealed that political, economic, technological, legal, and socio-cultural factors significantly influenced organizational performance.

Ajayi (2016) explored the influence of external business environmental factors on the performance of Micro, Small, and Medium Enterprises (MSMEs) in Nigeria. This study, grounded in secondary data sources, reviewed literature on MSMEs, business environments, and organizational performance. The research highlighted that various factors, including economic, political, legal, socio-cultural, demographic, natural, technological, global, and financial aspects—affect MSME operators. The study emphasized the importance of understanding these factors to identify opportunities, mitigate threats, and adapt knowledge and skills.

III METHODOLOGY

Research Design

The study adopts a quantitative research methodology, utilizing a survey design to collect numerical data and examine the relationships between variables. The choice of a survey design was driven by its ability to provide a thorough and representative insight into the population under study. This approach allowed for the collection of reliable data and the application of analytical methods that reduce biases and the impact of external factors.

Population of the Study, Sample and Sampling Technique

The study population consists of women entrepreneurs who own businesses and consent to participate, located within selected areas in South West (SW) Nigeria. A total of 386 respondents were purposively selected for the study. These participants represent a range of industries, including the service, retail, and manufacturing sectors, within the South West region of Nigeria.

Method of Data Collection

The study utilized primary data collected through a survey questionnaire administered to a sample of women entrepreneurs in the selected locations in SW. A purposive sampling technique was used to select participants based on their involvement in entrepreneurial activities in the state. This method was chosen due to its simplicity and time-saving nature, making it suitable for studies involving behavioral analysis. To obtain data for the study, a well-structured five-point Likert scale (SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree) was utilized in a close-ended questionnaire. This approach facilitated the collection of relevant data for analysis and interpretation.

Method of Data Analysis and Model Specification

In line with the stated problem and requirements, both descriptive and inferential statistics were utilized for analysis. Survey responses were analyzed using simple percentage tables, mean, and standard deviation. Hypotheses were tested at a 0.05 significance level using partial least square structural equation modeling (PLS-SEM) with the aid of SmartPLS software. If the alpha value is less than the significance level (5% or 0.05), the null hypothesis is rejected, indicating that the overall model is significant. Additionally, the F value highlights the explained variations and assesses the likelihood that the model's results are due to random chance. The Adjusted R Square measures the variance explained by the model; a higher explained variance indicates a more reliable and dependable model.

IV DATA ANALYSIS AND DICUSSION OF FINDINGS

Data Presentation

The study administered 386 copies of questionnaire to the selected SMEs owners/managers who were available on ground and accepted to participate in the study out of which 347 questionnaires were filled representing a response rate of 89%. As a result of having filled, the study did not fall beyond the minimum ample size of 328 and found valid for further analysis and computation. Subsequently, the analyses were conducted using the 347 responses collated as shown in Table 1.

Table 1: Administration of Instrument

Description	Responses	Percentage (%)
Completely filled and returned	347	89%
Not properly filled OR returned	39	11%
Total	386	100%

The researcher personally painstakingly took out time administer the questioners to the respondents of the study, explaining each question to respondents who have no formalized education, those who have were also guided to properly filling of the questionnaire as such none of the questionnaires were either damaged or misfiled. Therefore, 386 questionnaires were administered and same was retrieved for analysis.

Reliability and Validity

To ensure the content validity and reliability of the study, a pilot test was conducted. Content validity refers to the extent to which an instrument accurately measures what it intends to measure. In order to establish face and content validity effectively, the main instrument was subjected to expert scrutiny in the field, and their feedback resulted in modifications to the instrument. The questionnaires, comprising of 30 copies, were administered to women owned enterprise in SW region. Since all relevant constructs were comprehensively addressed through a review of existing literature, the questionnaires were deemed to possess content validity. To assess the reliability of the questionnaire, Cronbach's alpha coefficient was utilized. This statistical measure examines the internal consistency of the variables and indicates the extent of reliability among the indicators. According to a widely recognized source in the field (Taber, 2018), Cronbach's alpha ranges from 0 to 1, with higher values indicating greater reliability. The questionnaire's reliability was evaluated which indicated that alpha values exceeding the recommended threshold of 0.6. Consequently, based on the analysis of the responses and the application of Cronbach's alpha coefficient with the assistance of SMART-PLS3, the research instrument (questionnaire) employed in the pilot study can be considered both reliable and valid (Taber, 2018).

Table 2: Measurement of reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Economic Environment	0.871	0.902	0.905	0.656
Growthy of Women Entrepreneurs	0.757	0.794	0.838	0.518
Legal Environment	0.854	0.895	0.895	0.634
Political Environment	0.762	0.834	0.835	0.518
Sociocultural Environment	0.747	0.833	0.839	0.548
Technological Environment	0.801	0.807	0.862	0.556

Source: SmartPLS Output 2024

It is crucial to ensure that the items used for variable measurement in a study demonstrate reliability and validity. Researchers typically examine the data for reliability and convergent validity, often utilizing convergent validity to gauge the correlation among multiple indicators within a specific dimension (Brown & Smith, 2023). Table 2 provides a comprehensive overview of the measurement of reliability for various factors related to the entrepreneurial environment. The reliability measures, including Cronbach's Alpha, rho_A, Composite Reliability, and Average Variance Extracted (AVE), are reported for different dimensions such as Economic Environment, Growth of Women Entrepreneurs, Legal Environment, Political Environment, Sociocultural Environment, and Technological Environment. Overall, the results indicate high levels of reliability across the board, with Cronbach's Alpha values ranging from 0.747 to 0.871. The Composite Reliability scores are consistently high, ranging from 0.835 to 0.905, suggesting robust internal consistency within each dimension. Additionally, the Average Variance Extracted values, which assess the amount of variance captured by the latent constructs, range from 0.518 to 0.656, indicating satisfactory convergent validity. These reliability measures collectively demonstrate the sound psychometric properties of the measurement instruments used to assess the various environmental dimensions in the study.

Descriptive Statistics

Table 3: Descriptive Statistic

	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
POLE	4.75	5.00	1	5	0.49	2.68	-1.86
TECE	4.35	5.00	1	5	0.83	1.01	-1.27
SOCE	4.38	5.00	1	5	0.73	-0.79	-0.74
LEGE	3.92	4.00	1	5	0.86	-0.60	-0.39
ECOE	4.45	4.00	1	5	0.56	-0.76	-0.45
GWENT	4.35	5.00	1	5	0.83	1.00	-1.26

Source: SMART PLS Output, 2024

Table 3 provides descriptive statistics for six key factors influencing business environments: Political Environment (POLE), Technological Environment (TECE), Sociocultural Environment (SOCE), Legal Environment (LEGE), Economic Environment (ECOE), and Growth of Women Entrepreneurs (GWENT). With 347 observations for each variable, the mean scores reveal the average perceived levels of these environmental factors, ranging from 3.928 to 4.752, with TECE having the lowest mean and POLE the highest. Median values are consistent across all variables, indicating robust central tendencies. The minimum and maximum scores show limited variation, with all variables clustered around high values (ranging from 2.000 to 5.000). Standard deviations are relatively low, suggesting consistency in responses. Excess kurtosis is positive for POLE and GWENT, indicating heavier tails in their distributions, possibly signifying greater extremes in political and women entrepreneurship growth factors. Negative skewness for POLE, TECE, SOCE, LEGE, and ECOE suggests longer left tails, implying a skew towards lower values in these environmental factors.

Indicator Loadings

When evaluating the measurement model, the assessment begins with an examination of item outer loadings. As a general guideline, loadings exceeding 0.70 are recommended, signifying that the construct explains more than 50 percent of the indicator's variance, thus ensuring acceptable item reliability (Hair et al., 2019). However, Hair et al. (2019) also suggest that low but statistically significant indicator loadings (below 0.50) can be considered. Conversely, outer loadings below 0.4 are typically eliminated. In exploratory research, loadings falling between 0.4 and 0.7 may be retained if the average variance extracted criterion is satisfied, as indicated by Hair et al. (2014). This rationale justifies the decision to retain indicators with loadings below 0.70 but above 0.40 within the model.

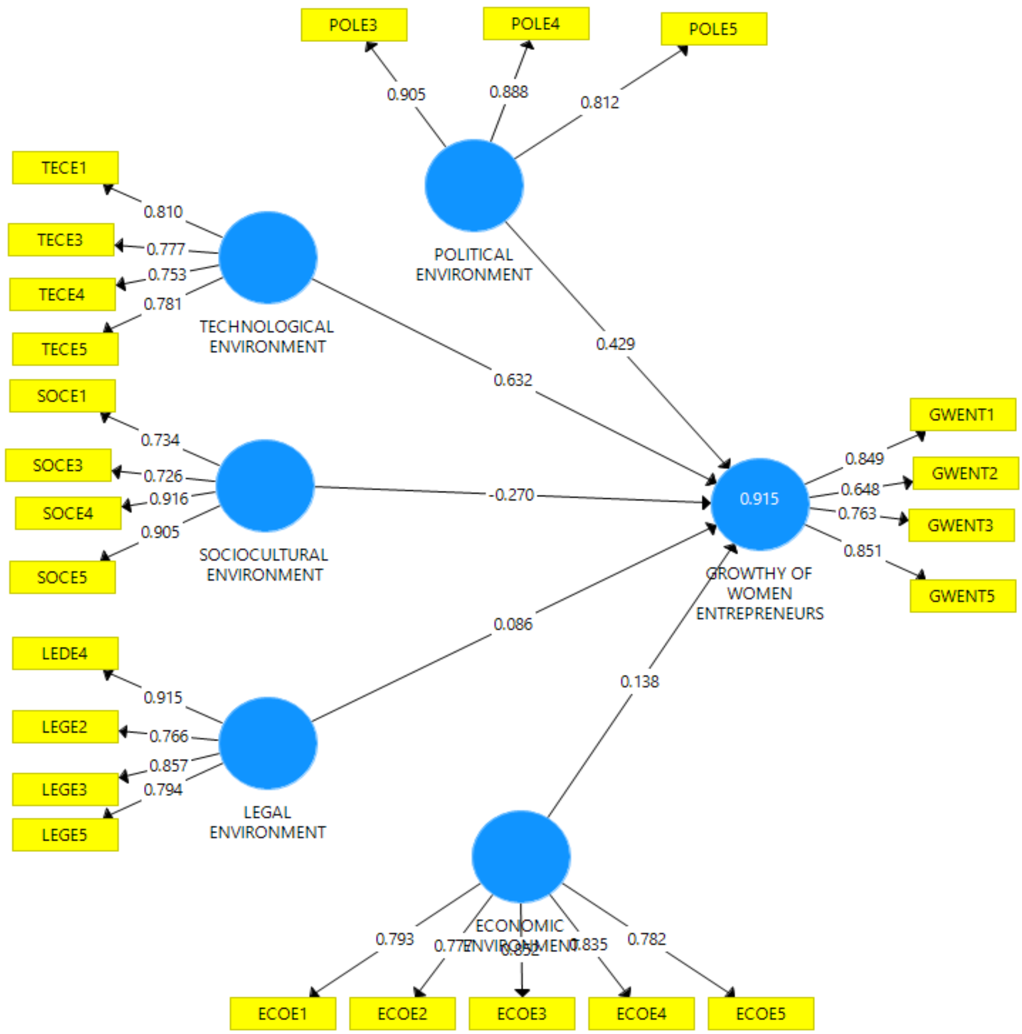

Figure 1: Indicator Loadings of Items

Source: SMART-PLS Output, 2024

Table 4: Factor Loadings of the Constructs

	ECONOMIC ENVIRON -MENT	GROWTHY OF WOMEN ENTREPRE -NEURS	LEGAL ENVIRON -MENT	POLITICAL ENVIRON-MENT	SOCIOCUL-TURAL ENVIRON MENT	TECHNOLO-GICAL ENVIRON-MENT
ECOE1	0.793					
ECOE2	0.777					
ECOE3	0.852					
ECOE4	0.835					
ECOE5	0.782					
GWENT1		0.849				
GWENT2		0.648				
GWENT3		0.763				
GWENT5		0.851				
LEDE4			0.915			
LEGE2			0.766			
LEGE3			0.857			
LEGE5			0.794			
POLE3				0.905		
POLE4				0.888		
POLE5				0.812		
SOCE1					0.734	
SOCE3					0.726	
SOCE4					0.916	
SOCE5					0.905	
TECE1						0.810
TECE3						0.777
TECE4						0.753
TECE5						0.781

Source: SMART-PLS Output, 2024

Construct Reliability

To establish the internal consistency reliability of the construct, it is recommended that both Cronbach's alpha and composite reliability (CR) should exceed the threshold of 0.7. As an alternative to Cronbach's alpha and composite reliability, Dijkstra and Henseler (2015) introduced rho A as an approximate measure of construct reliability, which typically falls between the values of Cronbach's alpha and composite reliability. Therefore, rho A can serve as a reasonable compromise when it is assumed that the factor model is correct.

Discriminant Validity

Discriminant validity assesses the degree to which a construct is empirically distinguishable from other constructs within the structural model. While several traditional methods for evaluating discriminant validity exist, such as cross loadings and the Fornell-Larcker criterion (Fornell & Larcker, 1981), it is advisable for researchers to employ the Heterotrait-Monotrait (HTMT) criterion introduced by Henseler et al. (2014). Traditional methods may not effectively identify a lack of discriminant validity, even when two constructs are highly correlated, making them less suitable for empirical research.

In the context of this study, Table 4.4 presents the HTMT criterion values for all latent constructs. Discriminant validity is considered valid if the upper bound of the 95% confidence interval of HTMT is less than 0.9. As indicated in Table 4.4, this condition is met, confirming the discriminant validity of the constructs.

Table 4: Heterotrait-Monotrait Ratio (HTMT) Criterion

	Economic Environ-ment	Growth of Women Entrepren-eurs	Legal Environ-ment	Political Environ-ment	Socio-cultural Environ-ment	Technolo-gical Environ-ment
Economic Environment	1.00					
Growth of Women Entrepreneurs	0.637	1.00				
Legal Environment	0.652	0.697	1.00			
Political Environment	0.447	0.723	0.526	1.00		
Sociocultural Environment	0.815	0.752	0.832	0.816	1.00	
Technological Environment	0.712	0.528	0.825	0.715	0.462	1.00

Source: SMART PLS Output, 2024

Assessment of the Structural Model

In evaluating the structural model, guidance from Hair et al. (2013) recommends examining critical measures such as R^2, beta coefficients, and their corresponding t-values through a bootstrapping procedure with 5000 resamples. Additionally, researchers are encouraged to report measures of predictive relevance (Q^2) and effect sizes (f^2). The structural model results, along with loadings and R^2 values for customer satisfaction and customer loyalty, are presented in Figure 2. The bootstrapping procedure, involving 5000 resamples, was conducted to assess the significance of the model's coefficients and relationships. This comprehensive approach aids in a thorough evaluation of the structural model's performance.

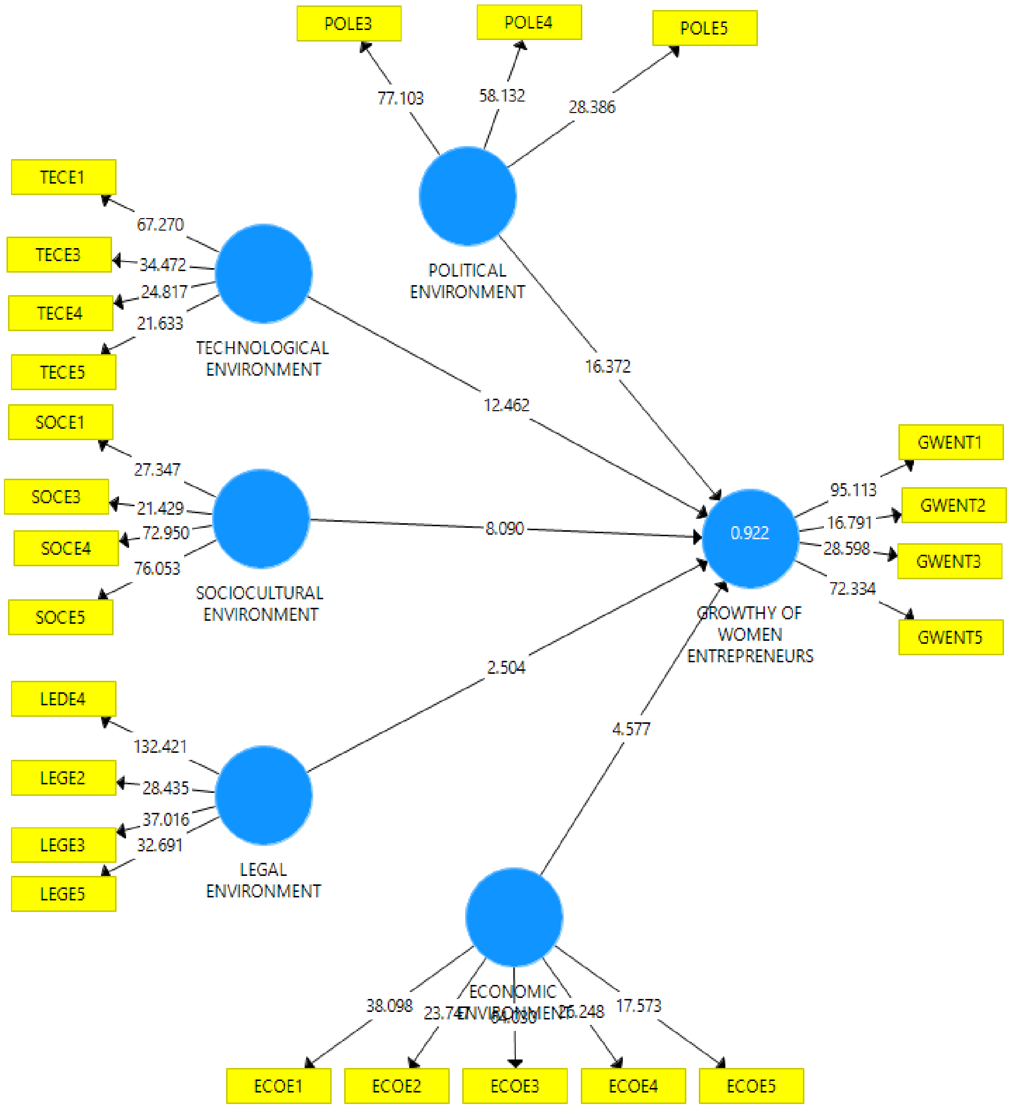

Figure 2: Structural Model
Source: SMART-PLS Output, 2024

Test of Hypotheses

Table 5 shows the path coefficient of the regression results using Smart PLS 3. This is the result for testing the four hypotheses of the study.

Table 5: Path Coefficient of the Model

	Beta	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
Economic Environment -> Growth of Women Entrepreneurs	0.131	0.130	0.026	5.086	**0.000**	**Rejected**
Legal Environment -> Growth of Women Entrepreneurs	-0.018	-0.016	0.023	0.789	**0.430**	**Accepted**
Political Environment -> Growth of Women Entrepreneurs	0.456	0.458	0.028	16.076	**0.000**	**Rejected**
Sociocultural Environment -> Growth of Women Entrepreneurs	0.258	0.255	0.026	10.034	**0.000**	**Rejected**
Technological Environment -> Growth of Women Entrepreneurs	0.680	0.677	0.036	19.163	**0.000**	**Rejected**

Source: SmartPLS Output, 2024

H_{O1}: There is no significant relationship between political environment and the growth of women entrepreneurs in SW.

The analysis of the coefficient table indicates a significant relationship between the political environment and the growth of women entrepreneurs in SW. The hypothesis (H_{O1}) that there is no significant relationship between the political environment and the growth of women entrepreneurs is rejected, as evidenced by a beta coefficient of 0.456 and a p-value of 0.000. This implies that improvements in the political environment positively influence the growth of women entrepreneurs. Political stability, supportive policies, and government initiatives likely create a conducive atmosphere for women entrepreneurs to thrive.

H_{O2}: Technological environment do not have a significant influence on the growth of women-owned enterprises in SW.

Similarly, the technological environment shows a significant positive influence on the growth of women-owned enterprises in SW, leading to the rejection of H_{O2}. With a beta coefficient of 0.680 and a p-value of 0.000, it is clear that advancements in technology play a crucial role in fostering the growth of these enterprises. Access to modern technology, digital tools, and the internet likely provides women entrepreneurs with the resources needed to improve efficiency, expand their market reach, and innovate their business processes.

Ho3: Social and cultural environment do not significantly affect the growth of women entrepreneurs in SW.

The sociocultural environment shows a significant positive influence on the growth of women-owned enterprises in SW, leading to the rejection of H_{O3}. With a beta coefficient 0.258 and a p-value of 0.000. This indicates that the sociocultural environment significantly impacts the growth of women entrepreneurs, albeit the effect is positive according to the provided coefficients. Cultural norms, societal attitudes, and gender roles can either support or hinder women's entrepreneurial activities, and in this context, they appear to have a significant positive effect.

Ho4: Legal environment does not play a significant role in the growth of women-owned enterprises in SW.

The legal environment does not play a significant role in the growth of women-owned enterprises in SW, as the analysis shows an acceptance of H_{O4}. With a beta coefficient of -0.018 and a p-value of 0.430, it is evident that the legal framework does not significantly impact the growth of these enterprises. This could imply that the existing legal structures are either adequate or neutral in their influence, neither providing significant support nor posing substantial barriers to the growth of women entrepreneurs.

Ho5: Economic environment does not play a significant role in the growth of women-owned enterprises in SW.

Lastly, the economic environment is shown to have a significant positive role in the growth of women-owned enterprises, leading to the rejection of H_{O5}. The beta coefficient of 0.131 and a p-value of 0.000 suggest that favorable economic conditions, such as access to capital, market opportunities, and economic stability, are crucial for the growth of women entrepreneurs. This highlights the importance of economic policies and support systems that can enhance the financial and operational capabilities of women-owned businesses, thus contributing to their overall growth and sustainability.

Coefficient of Determination, Effect Size and Predictive Relevance

The model's explanatory power was evaluated using the coefficient of determination (R-square), and the obtained R^2 value, as shown in Table 6, was 0.915. This implies that 92% of the variation in performance can be accounted for by the reward system, as represented by promotion, recognition, salary increases, and compensation. The remaining portion of the variation might be attributed to factors not addressed in this study.

The f^2, which assesses the impact on the endogenous construct's R^2 when a specific predictor construct is removed, was employed. Cohen's (1998) guidelines for measuring effect sizes were used, revealing that all relationships exhibited either small or medium effects.

To evaluate the predictive relevance of the model, the Q^2 value was calculated using blindfolding procedures and the cross-validated redundancy method. As per the guideline, Q² values should exceed zero to indicate predictive accuracy of the structural model for specific endogenous constructs. As observed in Table 6, the Q² values affirm the model's acceptable predictive relevance.

Table 6: R^2 and Predictive Relevance of the model

	R Square	R Square Adjusted
Growth of Women Enterprises	0.915	0.914

Source: SMART-PLS Output, 2024

The predictive sample reuse technique, known as Q², can effectively demonstrate predictive relevance, as outlined by Chin et al. (2008). Q², based on the blindfolding procedure, assesses the model's ability to empirically reconstruct the data using PLS parameters. In this study, Q² was calculated through cross-validated redundancy procedures. As a general guideline, Q² values should exceed zero for specific endogenous constructs to indicate the predictive accuracy of the structural model for those constructs. Typically, Q² values above 0.25 and 0.5 are indicative of small, medium, and large predictive relevance of the PLS-path model, respectively. Conversely, a Q² value less than zero suggests that the model lacks predictive relevance. As presented in Table 6, the Q² values for both endogenous variables demonstrate acceptable predictive relevance, confirming the robustness of the model.

V CONCLUSION AND RECOMMENDATIONS

Conclusion

The study on the effect of external business environments on the growth of women entrepreneurs within SW has revealed several critical insights. The findings indicate that the political, technological, sociocultural, and economic environments significantly influence the growth of women-owned enterprises. Political stability and supportive government policies create a conducive atmosphere for entrepreneurial activities, while advancements in technology provide essential resources that enhance efficiency, market reach, and innovation. The sociocultural environment, contrary to some expectations, has a positive influence, suggesting that societal norms and cultural attitudes in South West Nigeria support women entrepreneurs. Conversely, the legal environment does not significantly impact their growth, indicating that it is either adequate or neutral in its effect. Overall, the economic environment plays a crucial role, highlighting the importance of favorable economic conditions and policies that support the financial and operational capabilities of women-owned businesses.

Recommendations

State government in the region should encourage policymakers to implement and enhance policies that promote gender equality in business. This includes legislation that provides equal access to funding and resources for women entrepreneurs. They should also develop and support government programs specifically aimed at fostering women-owned enterprises. Initiatives could include grants, training programs, and mentorship opportunities.

Furthermore, they should create initiatives to provide women entrepreneurs with access to technology, including training on digital tools and platforms. This could involve partnerships with tech companies or NGOs. Also, they should implement educational programs focused on improving digital literacy among women. Workshops or online courses can help build skills that are essential for operating and expanding businesses in a tech-driven market.

State governments in the region need to promote access to affordable legal assistance specifically for women entrepreneurs. This can help them navigate legal challenges and understand compliance requirements. Also, they should work towards creating a more favorable regulatory framework that supports women-owned businesses. This should include simplifying business registration processes and reducing bureaucratic hurdles.

Government should implement targeted training for women in business management, financial literacy, and marketing strategies. Empowering women with knowledge will strengthen their enterprise capabilities. They should also advocate for policies that create a favorable socio-cultural environment, such as increasing access to finance, promoting gender equality, and reducing barriers for women in business. While they should establish networking platforms that connect women entrepreneurs with mentors, investors, and each other to share experiences and resources. Also, they should Offer training programs that enhance skills in business management, marketing, and technology tailored for women in entrepreneurship.

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JOB SATISFACTION AND EMPLOYEE TURNOVER IN NIGERIAN HEALTH SECTOR: A STUDY OF GBAGADA GENERAL HOSPITAL, GBAGADA, LAGOS

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Abstract

Nigeria is among the 57 countries globally considered by the World Health Organization to be experiencing a critical shortage of healthcare workers. While statistics show that there is high turnover among medical professionals, the reasons for the high turnover rate has not been well studied and investigated. Hence, this study examined the key enablers and drivers of turnover intentions of frontline health workers in Nigeria. Gbagada General Hospital was used as a case study for this research. The study utilized Survey research designed, the total population of medical workers at the hospital is 277 and data was collected using structured questionnaire administer on the medical personnel of the hospital using complete enumeration. The findings indicated that 56% of frontline health workers planned to leave the hospital next year, and 66% said they would look for another work if the situation at the hospital become progressively unsatisfactory. Salary satisfaction, promotion satisfaction, and job satisfaction all influenced turnover intentions according to findings of this study. The majority of medical personnel want to move, thus hospital management should re-evaluate the wage and incentive scheme. Promotions must be offered honestly and equitably, and training and education programs must be established to help frontline health workers advance in their careers. Implementation of friendly healthcare strategies that reflect the needs of frontline health workers is imperative to reduce turnover intention and improve health service outcomes in the hospital.

Keywords: Health services; Hospitals, Job satisfaction, Levels, Turnover intention

INTRODUCTION

People are the lifeblood of any organization. They play a crucial role in the success and growth of businesses, contributing their skills, knowledge, creativity, and dedication to achieving organizational goals. Engaged and motivated employees drive productivity and enhance organizational performance. When individuals are committed to their work, they are more likely to deliver high-quality results, meet targets, and strive for continuous improvement with an overall improvement in the productive capacity of the economy.

The workforce is the cornerstone of organizational success, with motivated and engaged employees driving productivity, achieving goals, and contributing to overall economic growth. Employees' commitment to delivering quality results fosters continuous improvement and enhances organizational performance. This principle extends across sectors, where the role of dedicated professionals is critical to achieving sustainable success and meeting societal demands (Oboh, 2021).

In healthcare, medical professionals play a pivotal role in providing quality services. However, Nigeria faces a severe shortage of healthcare workers due to brain drain, with thousands seeking better opportunities abroad. The doctor-to-patient ratio in Nigeria is now 1:10,000, far below the World Health Organization's recommended 1:1,000. Poor pay, unfavorable working conditions, and limited job satisfaction are key drivers of this trend, leading to substandard care and heightened pressures on remaining healthcare providers (Punch, 2023; Leadership, 2022). These challenges underscore the urgent need for systemic improvements to retain skilled professionals and bolster healthcare delivery.

Globally, job satisfaction is a key factor influencing productivity and employee retention. For Nigerian healthcare workers, dissatisfaction stems from poor compensation, insecurity, and inadequate workplace support. This dissatisfaction results in burnout, increased strike actions, and emigration, which further strain the healthcare system. Addressing these issues requires comprehensive reforms focusing on improved remuneration, better working environments, and job satisfaction to mitigate brain drain and enhance healthcare outcomes (Adeniran et al., 2021; Sieleunou, 2014). The objective of this study is to examine job satisfaction and employee turnover in Nigerian health sector a study of Gbagada general hospital, Gbagada, Lagos

LITERATURE REVIEW

Conceptual Review

Individual movement across an organization's membership boundary is referred to as turnover (Price, 2017). Turnover is defined as an undifferentiated process that includes both internal and external turnover and incidents of voluntary and involuntary shifts motivated by opportunity or fear. Lambert and Paoline (2019) and Matz (2014) identified additional complications because of inconsistent termination documentation practices, which have hampered accurate nursing turnover assessments. When employees leave their jobs and must be replaced, this is referred to as employee turnover. Employee turnover is defined as the ratio of workers who must be returned to the average number of workers employed in each period. Employee turnover is defined by the Chartered Institute of Personnel and Development (2017) as the "ratio comparison of the number of employees an organization must replace in a given time to the average number of total employees."

Abassi and Hollman (2017) define turnover as the "rotation of employees around the labour market; between firms, jobs, and occupations; and between employment and unemployment." According to Iverson and Pullman (2018), turnover can be classified as voluntary (including withdrawals against one's will) or involuntary (to include layoffs and dismissals). Employee turnover is a well-studied phenomenon, but there is no legal reason why people leave their jobs (Shaw, 2018). Turnover generates indirect and direct costs, measured, and factored differently, contributing to the ambiguous findings. The hiring process incurs direct costs such as advertising, recruiting, orientation, and hiring (Jones, 2019).

Employee turnover is a significant part of this study, both theoretically and practically. From a theoretical standpoint, it is critical to understand how the fundamental causes of turnover can be controlled. Alternatively, how important is it to minimize skilled employee turnover to reduce employee replacement costs from a practical standpoint? (Keaveney, 2017). According to the research study findings, employees begin to evaluate both the job and the environments associated with the job, and their decision to continue or quit is influenced by the roles played by the respective organization. Eventually, factors such as pay, company policies, rules and regulations, the Hertzberg hygiene factors, work monotony, and burnouts may influence them to stay with their current job or move on to the next one (Mobley, 2017). Aside from these factors, some others are known as personal and trait-based factors that can influence turnover rates.

More importantly, employee turnover is a cause of concern for healthcare organisations as it bears implications on the quality of service provided to patients. Employee turnover refers to the process of employees leaving an organisation and having to be replaced (Stone 2019). High employee turnover results in increased costs in selection and recruitment; and orientation and training. It also affects organisational productivity as well as morale and motivation of remaining employees. Employee turnover is often found to be negatively correlated with job satisfaction.

Job Satisfaction

On the other hand, job satisfaction has been defined by Locke (2018) as a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences. Thus, it reflects an employee’s general attitude toward, and his feeling about, his job. According to Stamps and Slaritt (2018), the domains of job satisfaction among health professionals include variables such as pay, autonomy, task requirement, organizational requirements, interaction and job prestige. Rad and Moraes (2009) however, found dimensions of job satisfaction among employees in public hospitals to be pay, promotion, supervision, fringe benefits, contingent rewards, working conditions, co-workers, nature of work, and communication.

Job satisfaction in health care has a great impact as it affects quality, productivity, effectiveness, and healthcare costs. In fact, it is an indicator of the well-being and quality of life of the organization’s employees, as it has been variously linked with increased performance and negatively to absenteeism and turnover. Better knowledge of healthcare employees’ job satisfaction and performance can directly contribute to the quality of the services provided to patients and is critical for the success of organizations.

Frontline health workers make up the majority of human resources in hospitals (60-70 percent), so they have a significant impact on the quality of services provided (Abou-Hashish, 2017; Fukui et al., 2019). Frontline health workers working in private hospitals in Nigeria have a higher turnover rate in comparisons to their counterparts in the publicly funded hospitals. Nurse turnover rates in Nigeria ranged from 20 to 35 percent (Agba et al., 2020). A high turnover rate can result in cost losses, such as recruitment and training costs (Jutras & Mathieu, 2016; Alam & Asim, 2019). Furthermore, high turnover rate can have an adverse effect on frontline health workers morale, reducing frontline health workers' ability to meet patient needs and provide quality care (Lee & Kang, 2018; Puhakka et al., 2021).

In their study, Rajamohan et al., (2019) explained that the first sign of turnover is turnover intent. In this context, turnover intention is defined as the employee's intention to leave his job voluntarily, and it is the employee's last resort if the working conditions do not meet their expectations. Many factors influence intention turnover, but several studies have found that job satisfaction has the greatest impact on turnover intention (Salau et al., 2018).

Empirical Review

South Korean researchers Lee et al., (2018) conducted a study on 181 healthcare workers, finding that the most frequently mentioned reasons for healthcare workers' intention to leave their jobs were work overload, rotating shifts (staff organization), and interpersonal conflict, whereas Cavanagh (2019) discovered that the turnover of 232 US hospital healthcare workers could be predicted by Job satisfaction and participation at work, 32 according to Cavanagh and Coffin (2017), are critical variables in the turnover process. They discovered three variables that were significantly related to the intention to stay: job satisfaction, pay, and opportunity ('advancement'), as well as additional demographic factors of kinship responsibilities, which also predicts healthcare worker turnover.

Karera et al., (2023) explained that job satisfaction is an integral component of the personal and professional relationship, one that heavily affects human resource retention and organizational productivity. It is a multidimensional notion, which involves physical and emotional pleasure or contentment in the work an individual performs, the researchers added. Similarly, Abdi and Paul (2021) in their work emphasized that is unlikely that optimal medical care can be delivered by unhappy and maladapted health care providers. They opined that healthcare workers' job performances is affected by job satisfaction with a significant impact on the organizational success. They concluded that it is important that organizations understand whether its workforce is satisfied with their jobs or not. This is because, knowing this in advance and above all understanding factors that determine the level of satisfaction in advance, gives management a rare opportunity to address those concerns and rectify any potential dissatisfaction.

Frontline health workers turnover intentions have been studied extensively in countries other than Nigeria, with the findings indicating that health workers turnover intentions are higher in developing countries than in developed countries. According to a cross-sectional study conducted in Northern Nigeria, as many as 61 percent of health workers planned to leave their jobs. In contrast, a 2010 survey by the American Organization of Frontline health Workers Executives revealed that only 26.8% of respondents were interested in frontline health workers turnover plans. In Nigeria, a similar study conducted at a private hospital in the South East revealed that frontline health workers planned to leave in 2006 at a rate of around 25%, which was significantly lower than the results of a study conducted at a private hospital in the South South, which revealed that frontline health workers planned to leave at a rate of up to 50%.

It is evident from various that there cannot be a uniform definition of job satisfaction and turnover since what constitutes job satisfaction and turnover varies among different sectors. Also, there is an agreement in the literature that job satisfaction and turnover are determined by several factors: working conditions, job descriptions, remunerations, and opportunities for personal advancement (retention). These are crucial to employee job satisfaction and turnover. The literature also sheds some light which states that when health workers have challenging opportunities at work, such as participating in exciting assignments, they are more likely to remain motivated and be disposed towards career advancement where they feel they are making career progress (Odhiambo, 2015). As literature has shown, quality healthcare services, patient care, and turnover in the healthcare sector depend on health workers' job satisfaction.

Several studies in Nigeria have linked job satisfaction to the likelihood of leaving, but the results are mixed. There have been studies that show a link between job satisfaction and turnover intention (Nikkhah et al., 2020; Nguyen & Tran, 2021), but there have also been studies that show no link between job satisfaction and turnover intention (Nguyen, & Tran, 2021). It is against this background that this study assessed the level of job satisfaction and turnover intentions of frontline health workers in Nigeria.

From the empirical review, most of the studies were conducted in different parts of the developed countries such as (South Korean, Lee et al., 2018; Cavanagh, 2019; & Karera et al., 2023) and for the study conducted in Nigeria, private hospitals were used as study domain to understand the relationship of the variables the dependent and independent. For this study public hospital is used as study domain and use promotion satisfaction, salary satisfaction, fairness, promotion opportunity, and salary increase as measurement variables, which other studies have not combine to determine the relationship between the variables.

Theoretical Review

Herzberg's Two-Factor Theory

Herzberg's Two-Factor Theory distinguishes between intrinsic motivators (e.g., achievement, recognition, and responsibility) that drive job satisfaction and extrinsic hygiene factors (e.g., salary, policies, and working conditions) that prevent dissatisfaction. While hygiene factors alone cannot generate satisfaction, their absence leads to dissatisfaction, impacting worker turnover. The theory emphasizes the importance of intrinsic motivators in fostering employee happiness, suggesting that organizations that address both hygiene and motivator factors can enhance job satisfaction and reduce turnover by promoting positive work outcomes and organizational commitment.

Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs views motivation as a progression through five levels: physiological, safety, love/belonging, esteem, and self-actualization. Unlike Herzberg, Maslow posits that these needs must be met sequentially for individuals to reach their full potential. Applied to job satisfaction, unmet lower-tier needs can lead to demotivation and higher turnover, while fulfillment fosters engagement and retention. Both theories highlight the critical role of addressing diverse employee needs, though Herzberg focuses on job-specific factors, and Maslow provides a broader psychological framework.

Therefore, these theories will underpin this study, Herzberg's Two-Factor Theory which suggests that hygiene and motivator factors can enhance job satisfaction and promote work outcome and commitment to the organization for better understanding of variables. While the Maslow's Hierarchy of Needs will support deeper understanding of motivation of healthcare workers.

Theoretical Framework

Hypothesis 1: Pay has no significant influence on employee turnover in the health sector of Nigeria.
Hypothesis 2: Promotion has no significant influence on employee turnover in the health sector of Nigeria.

Hypothesis 3: Working conditions has no significant influence on employee turnover in the health sector of Nigeria.
Hypothesis 4: Nature of the work has no significant influence on employee turnover in the health sector of Nigeria.

METHODOLOGY

The research design adopted for this study is a cross sectional survey research design which is common in social and management sciences to collect and analyse data. The population consists of all health care workers at Gbagada General Hospital, a publicly funded secondary healthcare facility located in Lagos State. The total population of medical workers at the hospital is 277. This number consists of doctors, nurses, pharmacists, radiologists, physiotherapists and laboratory scientists. For the purpose of this study, complete enumeration was employed because the target population is small and reachable.

Instrument

The study examined the influence of job satisfaction factors such as pay, promotion, job safety and security as well as nature of work on employee turnover in a hospital using Gbagada General Hospital, Lagos as a case study. The questionnaire was divided into two sections; the first section pertained to the questions of independent variables of pay, promotion, job safety and security, working conditions, relationship with supervisor, nature of work mediating variable job satisfaction and dependent variable turnover. The second section was about the demographic factors like age, designation, education, experience, gender, job relevancy and nature of job. The five-point Likert scale was used demonstrating a score of 1 for strongly disagree, 2 for disagree, 3 for undecided, 4 for agree and 5 for strongly agree.

4.0. RESULTS

Of the 277 questionnaires that were administered, 200 were returned, representing 72.22% response.

Description		***Frequency***	***%age***
Age	18-24	9	4.5
	25-31	66	33.0
	32-38	47	23.5
	39-45	33	16.5
	46-52	31	15.5
	Above 52	14	7.0
Gender	Male	138	69.0
	Female	62	31.0

Table 1. Analysis of Job satisfaction Dimensions and Turnover Intentions of Frontline Health workers

	Loading	VIF	Γ-Statistic	p Value	AVE	Composite Reliability	Cronbach's Alpha	RhO.A
Constructs	**≥0.7**	**<3.0**	**>1.96**	**<0.05**	**≥0.5**	**≥0.8**	**>0.7**	
Job Satisfaction			10.737	0.001	0.602	0.873	0.799	0.812
Satisfaction with Salary								
SAT_SLR1	0.782	1.927	15.023	0.000				
SAT_SLR2	0.719	1.836	10.654	0.000				
SAT_SLR3	0.763	1.926	11.326	0.000				
SAT_SLR4	0.751	2.164	10.175	0.000				
Satisfaction with Promotion								
SAT_PRM1	0.705	1.888	9.896	0.000				
SAT_PRM2	0.763	1.884	14.295	0.000				
SAT_PRM3	0.821	2.073	18.951	0.000				
Satisfaction with Co-workers								
SAT_COW1	0.703	1.926	3.819	0.001				
SAT_COW3	0.718	1.800	3.742	0.000				
Satisfaction with Superior								
SAT_SUP2	0.784	2.261	6.705	0.000				
SAT_SUP3	0.798	1.993	5.879	0.000				
Satisfaction with work itself								
SAT_WI1	0.923	1.996	21.928	0.000				
SAT_WI3	0.549	1.987	3.011	0.002				
SAT_WI4	0.718	2.286	4.696	0.000				
Turnover Intention of Frontline Health workers **(β = 0.798; R^2 = 0.637)**			11.937	0.000	0.590	0.822	0.768	0.810
TURNINT_1	0.740	1.827	14.108	0.000				
TURNINT_2	0.810	1.973	23.024	0.000				
TURNINT_3	0.747	1.826	12.185	0.000				
TURNINT_4	0.660	2.143	9.985	0.000				

Source: Field survey, 2024

NOTE: TURNITIN – Turnover Intention; SAT_WI – Satisfaction with work itself; SAT_SUP – Satisfaction with supervisors; SAT_COW – Satisfaction with co-workers; SAT_PRM – Satisfaction with promotion; SAT_SLR – Satisfaction with salary

Table 1 shows the factor loadings, composite reliability, Average Variance Extracted (AVE) estimation, and Cronbach's Alpha used to determine the study instrument's validity and reliability. However, the factor loading, composite reliability, AVE, and Cronbach's Alpha standards were fulfilled. All of the constructs' collinearity statistics, i.e., variance inflation factor (VIF) values, were less than 3 (Fornell & Larcker, 1981).

This indicates that the normalcy and multicollinearity assumptions mentioned in Table 1 were fulfilled. AVE values corresponding to the components: job satisfaction dimensions and turnover intentions are 0.602 and 0.590 respectively. According to Fornell and Larcker (1981), AVE ≥ 0.5 confirms the convergent validity and it can be seen that all the AVE values in Table 1 are greater or equal to 0.5. The composite reliability value for components 1 and 2 are 0.873 and 0.822 respectively. Adequate threshold value for Cronbach's alpha is that it should be > 0.7. In Table 1, job satisfaction dimensions and turnover intentions have Cronbach's alpha values 0.799 and 0.768 respectively, which confirmed the reliability of the survey instrument.

Table 3: Distribution of Turnover Intention and Job Satisfaction

SN	Constructs/Items	SD (1)	D (2)	A (3)	SA (4)	Rate
		%	%	%	%	
Turnover Intention Components						
1	Often thinking about finding job information elsewhere	8	30	54	8	2.59
2	Looking for work elsewhere next year	3	41	48	8	2.61
3	Would find a job elsewhere if work conditions become increasingly unfavourable	10	24	52	14	2.88
4	Often thinking of quitting my current job	12	31	44	13	2.72
Job Satisfaction Dimensions						
A.	Satisfaction with salary					
AI	Get paid enough for work done	35	28	18	19	2.88
A2	Pay rise too low	12	14	41	33	5.48
A3	Feeling unappreciated by the hospital management	21	11	28	40	4.61
A4	Satisfied with the chances of a raise	42	29	10	19	2.94
B	Satisfaction with promotion					
B1	Few promotion opportunities	18	17	32	33	4.11
B2	Fair promotional opportunities	21	45	19	15	2.92
B3	Standard promotional opportunities	27	46	10	17	3.48
B4	Satisfied with promotional opportunities	33	40	13	14	3.14
C	Satisfaction with co-workers					
C1	Happy with co-workers	11	10	51	28	5.33
C2	Relationship with co-workers is peaceful	32	39	14	15	3.61
C3	Relatively comfortable with co-workers	13	9	40	38	5.19
C4	Too many fights or grievances	31	35	18	16	3.10
D	Satisfaction with Superiors					
D1	The job is competent enough to do the job	20	10	29	41	4.72
D2	The boss is not fair	37	39	13	11	2.50
D3	The boss does not care	30	41	12	17	2.39
D4	The boss is great	22	13	44	21	4.28
E	Satisfaction with the work itself					
E1	Feel their work is meaningless	36	28	21	15	2.63
E2	Likes the job	18	11	41	30	4.84
E3	Proud to do this job	11	10	39	40	4.70
E4	This work is fun	15	13	41	31	4.76

In Table 3, the details of the turnover intention component indicate that the predominant reason for respondents wanting to find work elsewhere would be if working conditions become Salau, et al. 2022 CJBSS (2022)13(1) 118-139 increasingly unfavourable. Almost evenly, at least half of the respondents seek information about work elsewhere, have the desire to find work elsewhere next year, and even often think of quitting their current job. In the satisfaction component, it is evident that respondents showed less satisfaction with the salary and promotion they obtained. However, respondents are sufficiently satisfied with their co-workers, superiors and their current work. Details of each sub-component are presented in Table 3.

Table 4. Discriminant Validity for Salient Outcomes

	SSAL	SSUP	SCOW	SWIT	SPROM	TURNINT
Satisfaction with salary (SSAL)	**0.819**					
Satisfaction with superior(SSUP)	0.778	**0.790**				
Satisfaction with co-workers(SCOW)	0.662	0.742	**0.811**			
Satisfaction with work itself (SWIT)	0.687	0.646	0.583	**0.784**		
Satisfaction with promotion (SPROM)	0.554	0.772	0.667	0.719	**0.843**	
Turnover Intention (TURNINT)	0.672	0.634	0.725	0.636	0.739	**0.805**

As presented in Table 5, the discriminant validity demonstrates that all the bold values are higher compared to the correlations. This means that the measures used to assess each dimension have a significant positive intercorrelation, and there are no collinearity issues among the latent components (multicollinearity). Thus, the discriminant validity is acceptable as it meets the Fornell–Larcker criterion.

5.0 DISCUSSION

This study assessed the key enablers and drivers of turnover intention of frontline health workers in Nigeria using Gbagada General Hospital Lagos as a case study. The study used a quantitative approach to address the research questions and found that a high percentage of frontline health workers look for job information elsewhere, intend to look for other jobs, and want to leave the hospital. This is consistent with the theory that dissatisfaction-based turnover intentions will lead to thoughts of leaving work, as evidenced by the frequent seeking of employment information elsewhere.

Furthermore, if better opportunities exist outside the hospital where they currently work, frontline health workers will be encouraged to relocate (Adeniji, Osibanjo, Salau, Falola, Igbinoba, Ohunakin & Ogueyungbo, 2019; Agba, Ogaboh & Udom, 2020). According to the findings, 74% of respondents strongly agree that their company's salary increase is currently too low. Employees' job satisfaction would improve if their salaries were increased on a regular basis (Cowin, 2022). Employees who are satisfied with salary indicators on salary increases are less likely to consider leaving their jobs (Falatah, Almuqati, Almuqati & Altunbakti, 2021; Huang & Su, 2016; Knapp, Smith & Sprinkle, 2017).

Promotion satisfaction at the selected hospital has a significant relationship with frontline health workers' variable turnover intention, in addition to salary satisfaction. There hasn't been any published research on this topic, so more research is needed. Respondents in this study expressed a variety of opinions on aspects of promotion satisfaction, statements about fairness, and promotion opportunities, which are clearly the most important factors affecting satisfaction. In addition, to improve frontline health workers' job satisfaction, regular salary increases and other benefits such as nursing services or incentives may be required. In terms of promotion, hospital administration must ensure that promotions are distributed widely and fairly, particularly through continuing education such as training held both inside and outside the hospital, as well as ongoing academic education.

According to the findings, 56% of frontline health workers said they planned to leave the hospital next year, and 66% said they would look for another job if the situation at the hospital became increasingly unsatisfactory. Job satisfaction, salary satisfaction, and promotion satisfaction all have an impact on turnover intentions. Because the majority of nurses want to move, hospital executives should reconsider their wage and incentive structure. Promotions must be given fairly and honestly, and training and education programs must be established to assist frontline health workers in progressing in their careers. It can be concluded that in order to reduce turnover and improve health service outcomes, it is critical to implement friendly healthcare strategies that reflect the needs of frontline health workers. Future research should use qualitative research methods to delve deeper into the reasons for turnover intention, as well as link factors outside the hospital more broadly. It can be concluded that job satisfaction has a positive impact on frontline health workers' intentions to leave the country.

Recommendations

i. The Hospital Management should implement healthcare strategies that reflect the needs of frontline health workers.
ii. The management should ensure that frontline health workers of Gbagada General Hospital, Lagos are satisfied.
iii. The Hospital Management should reconsider their wage and incentive structure, as well as promotion should be given fairly and honestly to impact on frontline health workers' intention to leave the service of the organisation.

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THE EFFECT OF ORGANIZATIONAL POLITICS ON EMPLOYEE JOB SATISFACTION IN THE NIGERIA POLICE FORCE.

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Abstract
This study investigates the effect of organizational politics on employee job satisfaction within the Nigerian Police Force (NPF). Using a quantitative research approach and a survey design, data were collected from 201 police personnel selected from a population of 427 in POLAC, following Krejcie and Morgan's (1970) sampling table. Statistical tools, including correlation analysis, regression analysis, and ANOVA, were employed to analyze the data. The findings reveal a significant negative relationship between organizational politics and job satisfaction, with factors such as favoritism, self-serving behavior, and information distortion contributing to decreased satisfaction levels. Conversely, fairness in promotions demonstrated a positive and significant relationship with job satisfaction. The results suggest that organizational politics explains a substantial portion of the variance in employee job satisfaction, highlighting its critical role in shaping workplace morale and performance. The study concludes that effective leadership practices, equitable reward systems, and transparent communication are essential for mitigating the negative effects of organizational politics. These findings have practical implications for policymakers and leaders within the Nigerian Police Force, emphasizing the importance of fostering a fair and transparent organizational environment. Future research should consider additional moderating variables to provide deeper insights into the dynamics between organizational politics and job satisfaction in law enforcement agencies.

Keywords: Organizational politics, Job satisfaction, Nigeria Police Force, Employee morale, Law Enforcement, Kano State.

Introduction

Organizational politics plays a crucial role in shaping the dynamics of workplace environments, often influencing employee behavior, job satisfaction, and overall organizational effectiveness. Defined as the use of power and influence to achieve personal or group objectives within an organization, political behavior can manifest through practices such as favoritism, manipulation, and conflict (Ferris et al., 1989). In high-stress environments like law enforcement, understanding how these political behaviors affect job satisfaction is essential for fostering a healthy organizational climate and enhancing employee morale.

The Nigeria Police Force (NPF), tasked with maintaining law and order, faces unique challenges that can exacerbate the effects of organizational politics. With a workforce of approximately 35,000 officers in Kano State alone (NPF Annual Report, 2023), the organization is marked by complex hierarchies and internal competition, which can lead to a perception of favoritism and inequity among officers. Previous research highlights that political behaviors in public organizations can lead to dissatisfaction and disengagement among employees, impacting their performance and commitment (Vigoda, 2000; Chang et al., 2009).

Job satisfaction, defined as the degree to which individuals feel fulfilled and content in their work roles, is critical for police officers, as it directly correlates with their performance, commitment to public service, and interactions with the community (Brough & Frame, 2004). Factors contributing to job satisfaction in law enforcement include recognition, fair treatment, and the quality of work relationships (Dantzker, 1997). However, in the context of the NPF, organizational politics can create barriers to job satisfaction, leading to lower morale and higher turnover intentions among officers (Ogunbameru & Saeed, 2018).

Despite the growing body of literature on the impact of organizational politics on job satisfaction, there remains a significant gap in research specifically addressing this relationship within the NPF. Prior studies have primarily focused on general job satisfaction factors in law enforcement without delving into the intricate ways organizational politics uniquely influences officer morale and job fulfillment (Adebayo, 2005).

This study is a proposed model on the effect of organizational politics on employee job satisfaction within the Nigeria Police Force, with a specific focus on Kano State. Using a quantitative research approach, the study will assess the perceptions of police officers regarding political behaviors in their organization and how these perceptions relate to their overall job satisfaction. The significance of this research lies not only in its potential to fill a gap in the literature but also in its implications for improving organizational practices within the NPF. Understanding the dynamics of organizational politics can guide leadership in creating a more supportive and equitable work environment, ultimately enhancing job satisfaction and operational effectiveness.

In summary, this study will explore the relationship between organizational politics and job satisfaction among police officers in Kano State, Nigeria, contributing valuable insights to the fields of organizational behavior and public administration.

1.2 **Problem Statement**

Employee job satisfaction is crucial for organizational success and employee well-being. In various African countries, such as Ghana, Guinea, and South Africa, organizational politics negatively impacts job satisfaction through favoritism, hidden political agendas, and discrimination based on personal or ethnic affiliations. These issues erode employee motivation and lead to frustration, as seen in studies by Takyi-Asiedu et al. (2019),; Soumah and Toure (2021),; Booyse and Nkomo (2020).

Across Africa, organizational politics has been shown to negatively affect employee satisfaction. For instance, in Ghana, the work of Takyi-Asiedu et al.

(2019) highlights that promotion decisions are frequently based on personal connections rather than merit. This practice results in less qualified individuals being promoted over more deserving candidates, leading to frustration and demotivation among employees. The research demonstrates that favoritism and political affiliations are key drivers of dissatisfaction within Ghanaian organizations.

In Nigeria, the impact of organizational politics is pervasive across various sectors, including banking, universities, and healthcare. According to Ogbo et al. (2019), self-interested behaviors in Nigerian organizations, particularly in the banking sector, often lead to dissatisfaction among employees. One prominent issue is leadership favoritism, where certain individuals receive preferential treatment from top management, creates a sense of unfairness and resentment. This practice erodes their sense of accomplishment and diminishes their job satisfaction. n the Nigerian Police Force, instances of promotions being influenced by personal connections rather than merit have been widely reported in both academic literature and media investigations. For example, a study by Adebayo (2020) highlights cases where officers with outstanding performance records were overlooked for promotion, while less qualified individuals with strong connections to senior officials advanced swiftly. Similarly, Oluwole (2021) documented instances where promotions were allegedly tied to loyalty to influential figures rather than measurable achievements or years of service. Such practices foster resentment among hardworking officers, undermine morale, and create a perception of favoritism, ultimately contributing to a toxic work environment where employees feel undervalued and demotivated. These findings emphasize the urgent need for transparent and merit-based promotion systems to restore trust and professionalism within the force.

While the relationship between organizational politics and job satisfaction has been well documented in various sectors, there is a notable gap in research focusing specifically on law enforcement agencies in Nigeria. Most studies on job satisfaction in the Nigeria Police Force have examined factors such as working conditions and remuneration, with limited attention paid to the role of internal politics. This study seeks to fill this gap by providing an empirical analysis of how organizational politics affects job satisfaction among police officers in Kano State, Nigeria.

This study focuses on understanding how organizational politics affects job satisfaction in the NPF, aiming to offer tailored solutions that consider Nigeria’s unique cultural and organizational context. By addressing these issues, the study seeks to enhance working conditions, employee motivation, and overall effectiveness within the force, contributing to better public trust and safety. The study will build on existing research, such as Shahzad et al. (2020), Darku et al. (2020), and Abdullah & AlMubarak (2020), to analyze the relationship between organizational politics and job satisfaction. Through this, it will offer context-specific solutions to mitigate the adverse effects of organizational politics on employee well-being.

2.0 LITERATURE REVIEW

This literature review provides a theoretical and empirical foundation for understanding how organizational politics influences job satisfaction, with a focus on law enforcement, and sets the stage for investigating these issues in the context of the NPF.

2.1 Organizational Politics

Organizational politics refers to the use of power, influence, and manipulation to achieve personal or group interests, often at the cost of organizational goals (Ferris et al., 1989). It includes behaviors like favoritism, lobbying, withholding information, and forming alliances, driven by conflicts of interest, resource scarcity, and unclear objectives (Mintzberg, 1983).

Key dimensions include general political behavior (e.g., spreading rumors, forming alliances), “going along to get ahead” (passive compliance to avoid conflict), and pay and promotion politics (favoritism over merit). Informal power networks and biased resource allocation further exacerbate inefficiency and dissatisfaction (Drory & Romm, 1990; Vigoda-Gadot & Kapun, 2005).

In public organizations like the Nigeria Police Force, politics manifests in biased promotions, unequal resource distribution, and favoritism in appointments, undermining morale, trust, and efficiency (Ogunbameru & Saeed, 2018). Addressing these issues requires transparency, accountability, and merit-based reforms to foster a healthier organizational culture.

2.2 Job Satisfaction

Job satisfaction is a multifaceted concept that reflects how content and fulfilled individuals feel with their work. It encompasses various aspects such as job roles, remuneration, working conditions, relationships with colleagues, and opportunities for career growth (Locke, 1976). While financial compensation is a part of job satisfaction, it is also about emotional and psychological fulfillment derived from one's work. Herzberg's Two-Factor Theory (1959) provides a key framework for understanding job satisfaction, identifying intrinsic and extrinsic factors. Intrinsic factors, such as achievement, recognition, meaningful work, and personal growth, serve as motivators that enhance job satisfaction. Conversely, extrinsic factors, including salary, working conditions, job security, and organizational policies, act as hygiene factors, preventing dissatisfaction but not necessarily boosting satisfaction.

For employees in law enforcement, job satisfaction is even more crucial, as it directly impacts productivity, commitment to duty, and overall effectiveness in maintaining public safety (Dantzker, 1997). Policing is a high-pressure profession, characterized by long hours, exposure to danger, and significant public scrutiny, making adequate job satisfaction mechanisms essential. Research by Brough and Frame (2004) suggests that factors like recognition, opportunities for promotion, fair treatment by superiors, and access to sufficient resources are significant predictors of job satisfaction among police officers. In addition, organizational support, effective communication, and participative decision-making processes have been linked to higher satisfaction levels and reduced stress among officers.

In Nigeria, studies have shown persistent dissatisfaction among police personnel, stemming from inadequate remuneration, poor welfare packages, unfavorable working conditions, and a lack of recognition for outstanding performance (Ojedokun, 2013). Political interference, nepotism in promotions, and opaque reward systems have worsened these challenges. These issues contribute to low morale, high turnover, absenteeism, and diminished commitment within the Nigeria Police Force. Moreover, the lack of professional development opportunities and insufficient access to modern policing tools further demotivate officers. Addressing these challenges requires comprehensive reforms, including improvements in salary structures, transparent promotion policies, better working conditions, and initiatives that recognize and reward officers' contributions. Such changes can foster an environment where officers feel valued, motivated, and committed, ultimately enhancing public safety and trust in the institution.

2.3 Nexus between Organizational Politics and Employee Job Satisfaction

Research consistently shows that organizational politics negatively impacts employee job satisfaction. Ferris and Kacmar (1992) argue that heightened perceptions of organizational politics lead to stress, dissatisfaction, and a sense of unfairness, while Poon (2003) highlights the resulting alienation and mistrust. Empirical studies by Vigoda (2000) and Chang et al. (2009) confirm that political behavior undermines fairness and transparency, contributing to lower satisfaction and higher turnover intentions. In law enforcement, Nalla et al. (2011) and Vigoda-Gadot and Kapun (2005) found that internal politics concerning promotions, assignments, and recognition reduce police officers' job satisfaction and commitment. Similarly, in Nigeria, Adebayo (2005) and Ogunbameru and Saeed (2018) noted that favoritism and biased resource allocation demoralize police officers.

Recent sector-specific studies further support these findings. Takyi-Asiedu et al. (2019) identified favoritism in promotions and resource allocation as significant sources of dissatisfaction among healthcare workers in Ghana. Ogbo et al. (2019) observed self-serving behaviors in Nigeria’s banking sector, leading to reduced employee commitment. Onyishi et al. (2019) highlighted how favoritism and power struggles eroded job satisfaction among university staff. In South Africa, Booyse and Nkomo (2020) noted ethnic favoritism as a significant contributor to dissatisfaction in the public sector. Similarly, Shahzad et al. (2020) reported political maneuvering and unequal resource distribution as major causes of dissatisfaction in Pakistani universities.

Across these studies, common themes such as favoritism, resource manipulation, and power struggles emerge as central drivers of dissatisfaction. These behaviors create perceptions of unfairness, erode trust in management, and reduce employee motivation. Addressing organizational politics through transparent decision-making, equitable reward systems, and inclusive governance can mitigate its adverse effects, ultimately enhancing job satisfaction and fostering a productive workforce.

2.4 THEORETICAL FRAMEWORK

The Social Exchange Theory (SET), developed by Blau (1964), serves as the theoretical foundation for this study. The theory explains human behavior in terms of reciprocal exchanges, where individuals expect fairness and balance in their relationships. In an organizational context, SET emphasizes that employees' satisfaction and commitment are shaped by their perception of the balance between their contributions (e.g., effort, loyalty, and performance) and the rewards they receive (e.g., salary, recognition, and promotions). When employees perceive an imbalance—where rewards do not match their efforts—it often leads to dissatisfaction, reduced morale, and disengagement (Cropanzano & Mitchell, 2005).

In relation to organizational politics, SET helps explain why employees may resort to political behavior when they perceive inequitable reward systems. For example, in environments where promotions, recognition, or resource allocation are influenced by favoritism rather than merit, employees may feel compelled to engage in political maneuvering to secure their interests (Chang, Rosen, & Levy, 2009). Conversely, when employees perceive fairness in the distribution of organizational rewards and opportunities, they are more likely to exhibit higher levels of satisfaction and commitment.

Within the Nigerian Police Force (NPF), where issues such as favoritism, political interference, and lack of transparency in promotion and reward systems are prevalent (Ogunbameru & Saeed, 2018), the principles of SET become particularly relevant. When officers perceive unfair exchanges—where rewards are not proportionate to their contributions—they are likely to experience reduced job satisfaction, diminished trust in leadership, and disengagement from their responsibilities. This study draws on SET to explore how perceptions of unfair exchanges in the NPF, driven by organizational politics, contribute to job dissatisfaction and poor organizational performance. By applying the principles of reciprocity and fairness, this theory provides a valuable lens for understanding the interplay between organizational politics and job satisfaction, offering insights into potential strategies for fostering a more equitable and transparent workplace environment.

3.0 RESEARCH METHODOLOGY

This study outlines the research methodology that would be employed in investigating the effect of organizational politics on employee job satisfaction particularly within the Nigerian Police Force (NPF). It covers the description and discussion on the various techniques and procedures that would be used in the study to collect and analyze the data as it is deemed appropriate (Creswell, 2014). To achieve this objective, a quantitative research approach would be adopted, utilizing a survey design to collect data from employees in various police stations in Kano, Nigeria (Bryman, 2016). The study provides an efficient and accurate means of assessing information to provide a clear explanation of the research design, data collection method, population and sampling techniques data analysis and to ensure the reliability and validity of the sources (Bryman, 2016).

The population for this study comprises all police personnel in the Nigeria Police Academy (POLAC), totaling 427 officers across various ranks and departments. This population represents a diverse group with varying levels of hierarchy, roles, and responsibilities, providing a solid foundation for understanding organizational politics and job satisfaction within the institution. To ensure adequate representation, a sample size of 201 respondents was selected for the study, following the recommendations of Krejcie and Morgan (1970), who provide a standard table for determining sample sizes based on population size. This sample size is statistically significant and allows for meaningful analysis and generalization of the findings while ensuring the data collection and analysis processes remain manageable and efficient.

Hence, by focusing on a population of approximately 371,800 employees of the Nigerian Police Force and a sample size of 201, this study aims to uncover valuable insights into how organizational politics affects job satisfaction. The chosen data analysis methods, grounded in robust statistical principles, will ensure that the findings are valid, reliable, and applicable to the broader context of the Nigerian Police Force.

4.1 RESULT ANALYSIS

4.2 Regression Analysis

Table 4.1 Represents the Model Summary Results

Model									
Model	R	R Sq	Adjusted R Square	Std. error of the estimate	Change Statistics				
					R square change	F change	df1	df2	Sig. F change
1	.45[a]	.20	.18	4.70	.20	5.25	4	194	.001

Source: SPSS output

Interpretation of the Results:

The correlation coefficient (0.45) indicates a moderate positive relationship between organizational politics and job satisfaction, showing that while organizational politics significantly impacts satisfaction, it is not the only influencing factor. The R Square value (0.20) reveals that 20% of the variation in job satisfaction is explained by the model, including factors like leadership style and fairness in promotions. The Adjusted R Square value (0.18) supports this, indicating the model's reliability and generalizability. Additionally, the reduced standard error of the estimate (4.70) suggests improved prediction accuracy compared to the initial model (5.83).

The significance value for the F Change (0.001) confirms the model's robustness in predicting job satisfaction. These findings align with Ferris et al. (1996), who emphasized that while organizational politics is crucial, other factors such as leadership support, fair reward systems, and work-life balance also contribute significantly to job satisfaction, especially in law enforcement settings.

Practically, leadership in the Nigeria Police Force should address not only the negative effects of organizational politics but also enhance management practices, ensure fairness in promotions, and provide adequate resources. A holistic approach to these factors can mitigate the adverse effects of politics, leading to improved job satisfaction and overall performance within the force.

4.2 Analysis of Variance, ANOVA

Table 4.2 Analysis of variance results

ANOVA[a]						
Model		Sum of squares	DF	Mean square	F	Sig
1	Regression	248.56	4	62.14	5.35	.001[b]
	Residual	2283.45	196	11.65		
	Total	2532.01	200			

Source: SPSS output

The ANOVA analysis was conducted to determine if significant differences exist in job satisfaction across varying levels of perceived organizational politics within the Nigerian Police Force (NPF). ANOVA helps evaluate whether organizational politics significantly predicts job satisfaction by analyzing variance across multiple groups.

The results revealed that the Sum of Squares (Regression) was 248.56, representing the variance explained by organizational politics and other model factors, while the Sum of Squares (Residual) was 2283.45, indicating unexplained variance. The Total Sum of Squares was 2532.01, reflecting the total variance in job satisfaction.

The Mean Square for regression was 62.14, and the residual mean square was 11.65, highlighting the average prediction error. The F-value of 5.35 was statistically significant at $p < 0.05$, confirming that the model reliably predicts job satisfaction. The p-value of 0.001 further underscores the statistical significance of the findings.

These results affirm that organizational politics, alongside factors such as leadership support and fairness in promotions, plays a significant role in influencing job satisfaction. This aligns with previous studies by Vigoda-Gadot (2007), Ferris et al. (1996), and Zivnuska et al. (2002), which highlighted the adverse impact of heightened political behavior on employee satisfaction and retention.

4.3Hypothesis Testing

The hypothesis under investigation is:

H1: *Organizational politics has both positive and negative effects on employee job*

Regression Model Equation:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_n X_n + \varepsilon$

Where:

Y = Employee Job Satisfaction

$X_1, X_2, ..., X_n$ = Factors representing organizational politics (e.g., favoritism, self-serving behavior)

- β_0 = Constant
- β_n = Coefficients of organizational politics factors
- ε = Error term

Table 4.3: Regression Results

Variable	Coefficient (β)	Std. Error	t-value	Sig. (p-value)
(Constant)	2.345	0.458	5.12	.001
Favoritism	-.512	.113	-4.53	.000
Self-serving behavior	-.420	.128	-3.28	.002
Information distortion	-.328	.097	-3.38	.001
Perceived fairness of promotions	.365	.101	3.61	.003

Source: SPSS output

The model summary reveals that organizational politics explains 47% ($R^2 = 0.47$) of the variance in job satisfaction among Nigeria Police Force employees, with an Adjusted R^2 of 0.45 indicating a well-fitted model. The F-statistic ($F = 8.47$, $p < 0.01$) confirms the model's statistical significance and reliability.

Negative Effects: Favoritism (*-0.512*), self-serving behavior (*-0.420*), and information distortion (*-0.328*) have significant negative impacts on job satisfaction ($p < 0.01$), suggesting these political behaviors erode trust, morale, and satisfaction.

Positive Effect: Fairness in promotion processes (*0.365*) positively and significantly influences job satisfaction ($p < 0.01$), indicating that transparency and fairness in promotions enhance employee morale and satisfaction.

Hypothesis Testing Conclusion:

The analysis supports Hypothesis H1, confirming that organizational politics significantly influences job satisfaction in both negative (favoritism, self-serving behavior, and information distortion) and positive (fair promotion practices) ways. With *p*-values below 0.05 for all variables, the null hypothesis is rejected, validating the claim.

These findings align with Ferris et al. (1996) and Vigoda-Gadot (2007), emphasizing that while negative political behaviors undermine satisfaction, fair systems, especially in promotions, can foster positive outcomes in employee morale and organizational commitment.

Table 4.4 Calculated Coefficient results

Coefficients[a]						
Model		Unstandardized coefficients		Standardized coefficients	*t*	Sig
		B	Std error	Beta		
1	(Constant)	3.412		.523	6.52	.001
	Organizational Politics	-.635	-.472	.142	-4.47	.000

Source: SPSS output

Interpretation:

The regression analysis reveals a significant negative relationship between organizational politics and employee job satisfaction within the Nigeria Police Force. The constant value (3.412) represents the predicted baseline level of employee job satisfaction in the absence of organizational politics, indicating that even without political interference, a foundational level of job satisfaction exists. The unstandardized coefficient for organizational politics (-0.635) suggests that for every one-unit increase in perceived organizational politics, employee job satisfaction decreases by 0.635 units. This negative relationship is statistically significant, supported by a t-value of -4.47 and a p-value of 0.000 ($p < 0.01$), confirming the robustness of the finding. Additionally, the standardized beta coefficient (-0.472) indicates a moderately strong negative impact, highlighting that increased perceptions of organizational politics significantly reduce employee satisfaction levels. These findings support the hypothesis that organizational politics has a significant negative effect on employee job satisfaction, emphasizing the need for organizational leaders to address political behaviors within the workplace to foster a more positive and satisfying work environment.

5.0 CONCLUSION

This study examined the relationship between organizational politics and employee job satisfaction within the Nigerian Police Force, offering valuable insights into the dynamics influencing workplace outcomes in a critical national institution. The findings revealed a significant negative relationship between perceived organizational politics and employee job satisfaction, indicating that increased levels of favoritism, self-serving behaviors, and information distortion contribute to reduced satisfaction among personnel. Conversely, fairness in promotions emerged as a mitigating factor, positively influencing job satisfaction despite the presence of organizational politics.

The statistical analyses, including regression, correlation, and ANOVA, consistently supported the hypothesis that organizational politics significantly impacts job satisfaction. The results showed that organizational politics explains a notable portion of the variance in job satisfaction, emphasizing its role as a key determinant of employee morale and organizational commitment.

From a practical perspective, the study underscores the need for leadership within the Nigerian Police Force to implement transparent management practices, promote fairness in reward distribution, and minimize politically motivated behaviors. Addressing these issues can foster a more positive work environment, enhance job satisfaction, and ultimately improve overall organizational performance.

Future research should explore additional moderating variables, such as leadership style, organizational culture, and employee resilience, to provide a more comprehensive understanding of the relationship between organizational politics and job satisfaction in similar security agencies.

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UNCERTAINTY AVOIDANCE INDEX AND EMPLOYEE PRODUCTIVITY IN KWARA STATE PUBLIC SERVICE

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Abstract
This study investigates the effect of the uncertainty avoidance index on employee productivity within the Kwara State public service. The research addresses the critical need to understand and integrate cultural dynamics into workforce management to drive higher productivity levels. Specifically, it examines how employees' preferences for risk-taking initiatives and predictability influence their productivity in a public sector environment. By exploring this relationship, the study aims to bridge the gap in understanding the role of cultural dimensions in shaping employee outcomes and enhancing organizational efficiency. Utilizing a survey research design, the study draws data from sample of 395, from a population of 32,500 public service employees. Primary data were collected from 395 respondents across various Ministries and parastatal headquarters located in Ilorin, the state capital, using structured questionnaires. Using regression analysis, the results reveal that uncertainty avoidance index has a significant effect on employee productivity ($\beta = 0.581$; $t = 3.827$; & p-value <0.005) at a 95% confidence level. These findings accentuate the importance of cultural dimensions in shaping organizational outcomes, particularly in public sector environments where clarity and structure are essential to effective service delivery. The study concludes that addressing employees' cultural preferences for certainty and stability can enhance productivity and recommends structured work environments, comprehensive training programs, and culturally informed policy-making as strategies for improving performance in the Kwara State public service.

Keywords: Efficiency, **Employee Productivity, Public Service,** Structured Work Environments**, Uncertainty Avoidance Index.**

1. Introduction

Employee productivity often hinge on the psychological and cultural traits of employees, which influence their decision-making processes, creativity, and overall workplace behaviors. One such psychological dimension is the Uncertainty Avoidance Index (UAI), a construct introduced by Hofstede (1980) to describe the extent to which individuals within a culture feel threatened by uncertainty or ambiguity. This index reflects how risk-averse or risk-tolerant individuals or groups shapes their approach to problem-solving, innovation, and work execution.

Public service organizations, such as those in Kwara State, operate within structured and rule-bound environments, where employee behavior is often guided by established norms and policies (Babatola, 2022; Manjo, 2019). The UAI plays a fundamental role in this context, as employees with high uncertainty avoidance are more likely to adhere to strict procedures and avoid risk, potentially stifling creativity and innovation (Babatola, 2022; Triandis, 1995). Conversely, employees with low uncertainty avoidance may exhibit greater flexibility and willingness to embrace novel approaches, enhancing productivity and adaptability (Fietz, Hillmann & Guenther, 2021; House *et al.,* 2004).

Globally, studies have highlighted the need to fill the gap that ascertained the effect of uncertainty avoidance on workplace outcomes. Fietz *et al* (2021); Shane (1995) noted that high uncertainty avoidance cultures often prioritize stability over innovation, potentially leading to reduced adaptability in dynamic environments. In contrast, low uncertainty avoidance has been associated with proactive behavior and enhanced performance, particularly in settings requiring flexibility (Nguyen, Taylor & Bradley, 2017; Erez & Earley, 1993). However, most existing studies largely focused on broader organizational or cultural factors affecting public sector performance in Nigeria (Akanbi & Ofoegbu, 2014). There is a lack of empirical evidence linking uncertainty avoidance to specific outcomes like employee productivity, creativity, and decision-making within this context. This gap limits the ability of administrators to tailor interventions that align with the unique cultural and psychological traits of employees in the Kwara State public service.

Kwara State's public service, like many public sector organizations in Nigeria, faces challenges such as inefficiencies, bureaucratic inertia, and resistance to change (Manjo, 2019). These issues are often compounded by employees' attitudes toward risk-taking, which can affect their ability to innovate, solve problems, and respond to dynamic challenges. Understanding the influence of uncertainty avoidance on employee productivity is thus essential for developing targeted interventions to improve performance and foster a culture of efficiency and innovation.

Furthermore, employee productivity in the Kwara State public service has been a longstanding concern, with reports of inefficiency, low morale, and resistance to change frequently emerging in organizational assessments (Adeoti, 2017). Despite efforts to reform public sector operations, the cultural and psychological factors underlying these challenges, particularly employees' attitudes toward uncertainty and risk-taking, remain inadequately addressed. Thus, the specific implications of this dimension within the Nigerian public service, particularly in Kwara State, remain underexplored, creating a significant gap in the literature. Therefore, the specific objective of this paper is to examine the effect of uncertainty avoidance index on employee productivity in Kwara State public service. The study hypothesis could be therefore be stated as: H_1:

uncertainty avoidance index have significant and positive effect on employee productivity in Kwara State public service.

2. Literature Review

Employee Productivity

Employee productivity is a critical measure of organizational performance, particularly within public service sectors (Hasan, 2020). It basically measures output quantity through quantifiable metrics (Macleod & Brady, 2018). This study measured employee productivity using task completion rate (TCR), which refers to the proportion of tasks completed within a given timeframe compared to assigned tasks. This reflects efficiency and adherence to structured work environments (Pandey, 2023).

However, employee productivity is influenced by several factors, including organizational culture, leadership, and individual motivation. Studies have shown that high uncertainty avoidance cultures can either positively or negatively affect productivity (Nguyen, *et al.* 2017). Pugh and Hickson (2016) argue that structured environments enhance clarity and reduce stress, enabling employees to focus on task completion. However, excessive rigidity may stifle creativity and slow decision-making, leading to inefficiencies (Hendry, 2022; Nguyen *et al.*, 2017).

Studies have shown mixed results regarding the relationship between uncertainty avoidance and employee productivity. For instance, a study on manufacturing firms in Anambra State, Nigeria, found that uncertainty avoidance did not significantly affect employee performance (Onyekwelu, 2019; Al-Qurashi, 2013). Conversely, research conducted among government employees in Pahang Darul Makmur indicated a positive relationship between uncertainty avoidance and job performance, suggesting that higher uncertainty avoidance could enhance employee performance (Hasan, 2020; Onyekwelu, 2019).

Applying these insights to the Kwara State public service requires a clear understanding of the local cultural context (Manjo, 2019). Nigeria’s cultural profile, as evaluated by Hofstede's dimensions, indicates a moderate level of uncertainty avoidance, suggesting that while formal rules are valued, there is also some tolerance for ambiguity (BusinessDay, 2020; Onyekwelu, 2019; Oboreh, 2020). Therefore, implementing clear policies and providing structured environments may enhance employee productivity in this setting (Kim, *et al.*, 2022).

Uncertainty Avoidance Index

Uncertainty avoidance, a concept introduced by Hofstede (1980), refers to the extent to which members of a culture feel threatened by uncertain or unknown situations. It emphasizes a society's tolerance for ambiguity and its ability to manage uncertainty through the creation of formal rules, policies, and structured systems. The UAI quantifies this cultural dimension and has been widely used to understand organizational behavior and productivity (Fietz, *et al.* 2021; Hendry, 2022).

Invariably, high uncertainty avoidance cultures tend to value stability, structured hierarchies, and detailed regulations to mitigate ambiguity (Hofstede, Hofstede, & Minkov, 2010). In such environments, employees often prefer clearly defined roles and responsibilities, predictable outcomes, and formalized processes. Conversely, low uncertainty avoidance cultures are more comfortable with flexibility, innovation, and taking calculated risks (House *et al.*, 2004). The level of uncertainty avoidance directly impacts organizational decision-making, leadership styles, and employee adaptability.

In public service settings, particularly within developing economies, high levels of uncertainty avoidance often lead to a strict adherence to bureaucratic procedures (Manjo, 2019). While this rigidity can hinder efficiency and stifle innovation, it can also enhance accountability and minimize errors when systems are well-designed and appropriately implemented (Ayodele, 2019). Uncertainty avoidance, as defined by Hofstede's cultural dimensions, refers to how societies respond to ambiguity and unstructured situations. This study assesses the UAI through measures of tolerance for ambiguity and risk aversion, which capture public employees' comfort with uncertainty and unpredictability.

Furthermore, uncertainty avoidance is typically assessed through surveys and indices developed by Hofstede and other cultural researchers. For this study, Hofstede's Cultural Dimension Survey, widely regarded as the most prominent tool for measuring the UAI was employed (Ebereonwu, 2021). This survey uses qualitative methods to capture cultural attitudes and perceptions toward ambiguity and uncertainty. Employees with a high tolerance for ambiguity exhibit low uncertainty avoidance, demonstrating adaptability to flexible rules, comfort with ambiguity, and a propensity for innovation, all of which promote productivity. Conversely, societies characterized by high uncertainty avoidance favor strict regulations, structured environments, and predictability, often resulting in lower productivity (Hofstede, 1980; Pandey, 2023).

Uncertainty Avoidance and Employee Productivity

The relationship between uncertainty avoidance and employee productivity is complex and context-dependent. In the Kwara State public service, acknowledging the cultural predisposition towards moderate uncertainty avoidance and tailoring management practices accordingly could potentially enhance employee productivity (BusinessDay, 2020; Dumitrascu, 2008; Ebereonwu, 2021; Obuobisa-Darko, 2020). In the context of Kwara State's public service, where formal bureaucratic systems dominate, the high uncertainty avoidance culture aligns with the need for regulatory compliance and standardized practices (Manjo, 2019). It equally poses challenges, such as resistance to change, low adaptability to innovative practices, and a focus on process over outcomes (Oke, 2021). These issues can hinder the state's ability to meet dynamic public service demands effectively.

Furthermore, the public service in Kwara State operates within a high uncertainty avoidance framework, characterized by hierarchical structures and strict adherence to formal rules (Adeoye & Adebayo, 2020). While these attributes ensure stability and procedural compliance, they may also contribute to inefficiencies, such as delayed decision-making and low employee morale. Addressing these challenges requires balancing the benefits of structure with the need for flexibility and innovation (Manjo, 2019). Initiatives such as capacity-building programs, digital transformation, and adaptive leadership models could help improve employee productivity in this context. Thus, the interplay between uncertainty avoidance and employee productivity in public service is complex, particularly in a high UAI environment like Kwara State (Manjo, 2019).

It is noteworthy to state that most existing studies largely focused on broader organizational or cultural factors affecting public sector performance in Nigeria (Akanbi & Ofoegbu, 2014). There is a lack of empirical evidence linking uncertainty avoidance to specific outcomes like employee productivity, with particular reference to decision-making within this context. This gap limits the ability of administrators to tailor interventions that align with the unique cultural and psychological traits of employees in the Kwara State public service. Therefore, this study investigates the effect of the Uncertainty Avoidance Index (UAI) on employee productivity in the Kwara State public service. Thus, by examining the relationship between risk-taking tendencies and productivity outcomes, this research aims to provide actionable insights for enhancing performance and fostering a culture of innovation within the sector.

Theoretical Framework

A unique theoretical framework for examining the relationship between Uncertainty Avoidance Index (UAI) and Employee Productivity in the Kwara State Public Service has been done by integrating elements of Cultural Contingency Theory and Behavioral Adaptation Theory. This is called "Cultural Adaptation-Performance Theory (CAPT)". The theory posits that employee productivity is significantly influenced by the alignment between cultural dimensions, such as uncertainty avoidance, and organizational practices (Ang & Van Dyne, 2007; Pandey, 2023; Saka, 2019). Drawing from Cultural Contingency Theory, which emphasizes the impact of cultural norms on organizational behavior, and Behavioral Adaptation Theory, which focuses on how individuals adjust their behaviors to fit organizational and cultural contexts, CAPT provides a comprehensive framework for understanding this dynamic (Kim, 2001). Thus, by emphasizing the balance between structured systems and flexibility, CAPT suggests that meeting both organizational goals and cultural needs is essential for optimizing performance (Kim, 2001).

CAPT underpins this study by highlighting that public service organizations in Kwara State should align their policies and procedures with employees' preferences for structured yet adaptable environments (BusinessDay, 2020). The theory further emphasize the need for policy and structure alignment, thereby promoting employees' productivity. Invariably, in high uncertainty avoidance cultures, clear policies, well-defined roles, and job security contribute to productivity. CAPT supports this study by suggesting that the public service in Kwara State can enhance productivity by implementing structured systems that reduce ambiguity for employees (Sabuhari, Jabid, Rajak, & Soleman, 2021).

Furthermore, CAPT explains how employees in Kwara State public service adjust their behaviors to meet organizational expectations. The study investigates whether organizational policies adequately support this adaptation, especially in contexts where uncertainty avoidance affects motivation towards productivity (Hofstede's, 1980; Sabuhari, *et al*, 2021). Thus, by emphasizing the alignment of organizational practices with cultural dimensions, CAPT provides insights into how public service organizations can optimize employee productivity through culturally informed management strategies (Hofstede's, 1980).

3. Methodology

The focus of this paper is to examine how employees' aversion to or willingness to take risks influences their productivity in terms of decision-making processes within Kwara State's public service sector. Thus, the geographical scope of this research is limited to Kwara State, Nigeria. The state's unique cultural, political, and socioeconomic characteristics may influence the organizational culture and employee performance dynamics within the public service institution (Oyeleye & Akinyele, 2019). Thus, by narrowing the study's scope to this specific region, it becomes possible to contextualize the findings and recommendations within the unique challenges and opportunities that the Kwara State Civil Service encounters. The survey research design method was employed for the study because it allowed us to describe, examine, analyse, and interpret the variables in the study. It is descriptive in nature and has the fundamental characteristics that involve the collection of data to facilitate the answer of research questions through which the test of hypothesis could be done (Hair et al., 2017). The study population comprises of all staff categories within the Kwara State Civil Service, Nigeria. This include all the 32,500 workforce civil servants from various departments, ministries, and agencies responsible for delivering public services across key sectors, such as education, healthcare, transportation, public safety, and social welfare, as at 2022 (Kwara State Civil Service Commission, 2022).

This study utilized a convenience sampling approach to select participants from the headquarters of various ministries and parastatals within the state. In this instance, convenience sampling is appropriate as each of the characteristics that were spelt out as criteria relates to important roles civil servants played in public service delivery. Thus, participants were selected based on their roles and responsibilities within various departments, ensuring a diverse representation of employees.

To determine the sample size for this study, we used the Taro Yamane formula, which is appropriate for estimating a sample size from a known population. The Taro Yamane formula is given as follows:

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

Where:

n = Sample size

N = Total population size

e = Margin of error (expressed as a proportion)

The margin of error is typically set based on the desired level of precision for the study's results. For most studies, a common margin of error is 5% (0.05) or 10% (0.10). Then, we calculate the sample size (n) as:

$$n = 32,500 / (1 + 32,500(0.05)^2)$$

$$n = 32,500 / (1 + 32,500(0.0025))$$

$$n = 32,500 / (1 + 81.25)$$

$$n = 32,500 / 82.25$$

$$n \approx 394.28$$

Since we cannot have a fraction of a participant, we rounded up the sample size to the nearest whole number:

$$n \approx 395$$

Therefore, the estimated sample size for this study was 395 participants. This sample size provide sufficient statistical power to draw meaningful conclusions about the variables under consideration.

Primary data were collected through a self-developed questionnaire using a four-point Likert scale, measuring responses from strongly agree to strongly disagree. Reliability was ensured through the test-retest method and Cronbach's Alpha, which yielded a reliability index shown in table 3.1, indicating high consistency and reliability.

Table 3.1 Reliability Statistics of Research Variables

S/N	**Variables**	No. of Items	Cronbach's Alpha	Composite Reliability	Remark
1	**Uncertainty Avoidance Index (UnAvIn)**	5	0.789	0.787	Reliable
2	**Employee Productivity (EmPro)**	5	0.737	0.712	Reliable

Sources: Pilot Survey 2024

Descriptive and inferential statistical analyses were employed to present and analyze the data collected from the field study, utilizing IBM Statistical Package for Social Sciences (IBM SPSS version 27.0). Descriptive statistics, particularly percentage count was used to provide a comprehensive overview of the respondents' demographic characteristics. Regression analysis was used to examine the effect of **Uncertainty Avoidance Index** on **Employee Productivity**. Significant relationships were determined based on p-values: if the p-value was below 0.05, the null hypothesis was rejected; if above, it would not be rejected. This approach clarified the strength and significance of the relationships among the variables.

Model Specifications for the Hypothesis

EmPro = f(**UnAvIn**)

EmPro =ß0+ $ß_1$**UnAvIn** + Ɛ

Where:

EmPro = **Employee Productivity** (Dependent variable)

ß0= Intercept of the model.

ß1= Estimate of the parameter of the independent variable in the model of the slope.

E= Error term.

UnAvIn = **Uncertainty Avoidance Index** (Independent variable)

The a priori expectation is as; thus, $\beta 1 > 0$. According to the a priori anticipation about the link stated above, **Uncertainty Avoidance Index** have a significant positive effect on **employee productivity in term of decision making process in Kwara State Civil service**. The calculated value would be larger than or equal to the critical value for the null hypothesis to be rejected; otherwise, the null hypothesis is accepted at any level of significance.

4. Results and Discussion

4. 1 Socio-demographic Characteristics of Respondents

The table below presents the socio-demographic characteristics of the respondents in frequency and percentages.

Table 4.1: Socio-demographic Characteristics of Respondents N=395

Demographic Variable	Frequency	Percentage (%)
Gender		
Female	172	43.5
Male	223	56.5
Total	**395**	**100**
Marital Status		
Married	201	50.9
Single	174	44.1
Divorced	05	1.3
Widowed/Widower	15	3.8
Total	**395**	**100**
Age		
21-30 years	59	14.9
31-40 years	226	57.2
41-50 years	65	16.5
Above 50 years	45	11.4
Total	**395**	**100**
Academic Qualification		
SSCE/NECO/NABTEB/ Equivalent	13	3.3
NCE/ND	32	8.1
HND/First Degree	257	65.1
M.Sc./MA/M.Ed/MBA/Equivalent	48	12.2
Ph.D	15	3.8
Professional Certification	18	4.6
Others	12	3.0
Total	**395**	**100**
Years of Working Experience		
Less than 10 Years	137	34.7
10-15 Years	107	27.1
16-20 Years	105	26.6
21-25 Years	33	8.4
Above 25 Years	13	3.3
Total	**395**	**100**
Staff Category		
Junior Staff	257	65.1
Senior Staff	123	31.1
Directors	15	3.8
Total	**395**	**100**

Source: Field Survey, 2024.

Analysing demographic traits offers valuable insights into the study's participant makeup. It illuminates the distribution of essential variables like gender, marital status, age, educational background, work experience, and job category. Grasping these demographic aspects helps place subsequent findings in context and establishes links between research goals and participant backgrounds.

The study's participant pool is comprised of 395 individuals, with 56.5% (223) being male and 43.5% (172) female. This distribution aligns with the broader gender dynamics found in various organizational settings. Gender diversity within the sample sets the stage for exploring potential gender-related variable in the study's research objective, such as the effect of uncertainty avoidance index on employee productivity across genders.

Regarding marital status, the majority of participants (50.9%, n=201) report being married, 44.1% (n=174) identified as single; 1.3% were reported as divorced (n=5); while 3.8% (n=15) were widowed and widower. The mixed inclusion of respondents reflects the current composition of the sample. Marital status has been found to influence job attitudes and performance (Kooij *et al.*, 2018), providing a backdrop for examining the relationship between marital status and employee productivity.

The age distribution highlights that the majority of participants fall within the 31-40 years range (57.2%, n=226), followed by 41-50 years (16.5%, n=65), and 21-30 years (14.9%, n=59), and then by above 50 years (11.4%, n=45). Age has been shown to influence work-related attitudes and behaviours (Kooij *et al.*, 2018). This distribution sets the context for investigating how age might moderate the relationships between uncertainty avoidance index and employee productivity.

In terms of highest academic qualification, the majority of participants hold a HND/First Degree (65.1%, n=257), followed by M.Sc./MA/M.Ed/MBA/Equivalent (12.2%, n=48), then by NCE/ND (8.1%, n=32), then by Professional Certification (4.6%, n=18), then by Ph.D (3.8%, n=15), then by SSCE/NECO/NABTEB/ ETC (3.3%, n=13), and lastly by other qualification not specify in the instrument (3.0%, n=12). Academic qualification is often linked to job roles and career advancement (Kooij *et al.*, 2018). The distribution of academic qualifications provides a foundation for understanding how varying educational backgrounds relate to the constructs under study.

Regarding years of working experience, a significant proportion (34.7%, n=137) of participants report having less than 10 years of experience; 27.1% were reported to have 10-15 years (n=107); 26.6% were reported to have 16-20 years (n=105); 8.4% were reported to have 21-25 years (n=33); while 3.3% (n=13) have above 25 Years. This distribution offers insights into the potential impact of experience on performance.

The staff category distribution reveals that junior staff members comprise the largest proportion (65.1%, n=257) of the sample, followed by senior staff category (31.1%, n=123), then directors senior staff (3.8%, n=15). Staff category often influences job roles, responsibilities, and performance expectations (Morgeson & Humphrey, 2006). The distribution of staff categories forms the basis for exploring how different levels of responsibility relate to the study's objective.

In summary, the analysis of demographic characteristics provides a comprehensive profile of the study's participants, setting the stage for investigating the relationships between uncertainty avoidance index and employee productivity within the context of gender, age, academic qualification, experience, and staff category.

4.2 Descriptive Statistics of Variables

Employees in the Kwara State Civil Service who met the sample's eligibility criteria responded to a series of inquiries concerning aspects such as **Uncertainty Avoidance Index** and **Employee Productivity**. These inquiries were evaluated using a four-point Likert scale, where Strongly Agree (SA) was assigned a code of 1, Agree (A) a code of 2, Disagree (D) a code of 3, and Strongly Disagree (SD) a code of 4.

Table 4.2: Measurement of Mean

Mean Value	Description
1.0 – 2.0	Positive/true statement
2.1 – 3.0	Neutral position
3.1 – 4.0	Negative/false statement

Source: Field Survey, 2024

The descriptive statistics of the responses are shown in the following tables. Further insights into the descriptive analysis are presented in the discussion of findings.

Table 4.3: Effect of risk-taking initiative (UnAvIn) on employee productivity (EmPro) N= 395

Variables	**SA (%)**	**A (%)**	**D (%)**	**SD (%)**	**Mean**	**SD**
The organization is comfortable with risk-taking.	46 (11.6)	203 (51.4)	127 (32.2)	19 (4.8)	**2.30**	**0.736**
Organization relies on clearly stated rules, and procedures to alleviate unpredictability of future events.	126 (31.9)	230 (58.2)	39 (9.9)	0 (0)	**1.78**	**0.608**
The system at work allows me to take initiative sometimes in line with organization policy.	107 (27.1)	222 (56.2)	37 (9.4)	29 (7.3)	**1.97**	**0.812**
Risk-taking (initiative)					**2.02**	**0.719**

Source: Field Survey, 2024.

The table 4.3 presents respondents' perceptions regarding the organization's stance towards risk-taking, reliance on rules and procedures to mitigate unpredictability, and the extent of employees' ability to take initiative in alignment with organizational policy. The interpretation of these perceptions aligns with the theoretical framework, exploring how the organization's risk-taking orientation and employee initiative relate to the uncertainty avoidance dimension.

A minority (11.6%) of respondents held a Strongly Agree perception that the organization is comfortable with risk-taking, while the majority (51.4%) agreed to some extent. This result reflects the organizational attitude towards risk and uncertainty. The outcome indicates that risk-taking is not a prominent organizational trait, aligning with the objective of determining the extent to which employee performance is affected by the organization's uncertainty avoidance index.

A significant proportion (58.2%) of respondents agreed that the organization relies on clearly stated rules and procedures to alleviate the unpredictability of future events. This finding underscores the role of formalized procedures in managing uncertainty. It implies that the organization emphasizes structure to mitigate uncertainty, aligning with the objective of examining the relationship between risk-taking and organizational procedures.

Respondents' perceptions regarding the extent of employee initiative taking within organizational policy are diverse. While 56.2% agreed that the system allows for initiative within policy bounds, a substantial proportion (27.1%) expressed uncertainty, and a smaller percentage (7.3%) disagreed. This outcome reflects the balance between autonomy and alignment with organizational policy. It suggests that the organization's approach to employee initiative varies, aligning with the objective of investigating how employee performance is affected by the level of risk-taking and autonomy.

The overall mean score for the effect of risk-taking (initiative) on employee performance is 2.02, indicating a neutral perception of the influence of risk-taking behaviour on performance. This mean score aligns with the theoretical framework's emphasis on the dynamic interplay between risk-taking and organizational control.

In conclusion, the results in Table 4.3 provide insights into respondents' perceptions concerning the effect of risk-taking behaviour and initiative on employee performance. The Agree responses reflect the complexity of risk-taking behaviour and its impact on organizational performance. These findings align with the research objectives, confirming the relevance of risk-taking behaviour in shaping employee performance within the organizational context.

4.5 Assumptions for Multiple Regression Model

A number of diagnostic tests were run before regression analysis was carried out. This was done to make sure the data didn't deviate from the assumptions supporting the use of linear regression. These evaluations covered linearity, multicollinearity, and normalcy.

Normality Test

It is common practise in statistics to presumptively presume that the observations are normal. This premise underpins the whole statistical framework, and the inference fails if the premise is broken. Before doing any statistical data analysis, it is imperative to verify or test this premise.

Table 4.5: Tests of Normality

	Uncertainty Avoidance Index	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Employee Productivity	STRONGLY AGREE	.346	779	.000	.767	779	.000
	AGREE	.389	630	.000	.708	630	.000
	DISAGREE	.437	151	.000	.576	151	.000
	STRONGLY DISAGREE	.348	19	.000	.641	19	.000
a. Lilliefors Significance Correction							

Source: Own Data SPSS Result, 2024.

The normality tests were performed for each response level ("Strongly Agree," "Agree," "Disagree," "Strongly Disagree") within the "Employee Productivity" variable. The Kolmogorov-Smirnov test yielded varying statistics for each independent variable, with corresponding p-values of 0.000. Similarly, the Shapiro-Wilk test produced p-values less than 0.001 for all subcategories. These findings suggest that the distributions for all subcategories of "Employee Productivity" conform significantly to normality.

Multicollinearity Test

Table 4.6: Multicollinearity Result

Model		Collinearity Statistics	
		Tolerance	VIF
1	RISK-TAKING INITIATIVE	.385	2.596
a. Dependent Variable: Employee Productivity			

Source: Own Data SPSS Result, 2024.

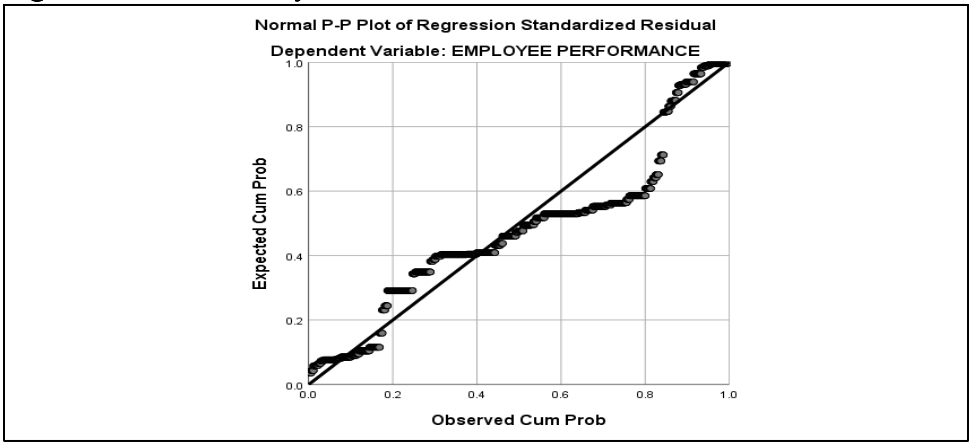
Multicollinearity, a statistical phenomenon in multiple regression models, occurs when two or more predictor variables exhibit strong correlations. It's an undesirable situation when the independent variables are highly interrelated. Statistical tools used to gauge multicollinearity include tolerance and variance inflation factor (VIF). Tolerance values nearing 1 suggest minimal multicollinearity, indicating that most variance isn't shared among predictors. In our findings, all tolerance values exceed 0.2, suggesting no severe multicollinearity concerns.Typically, a VIF value above 5 or 10 implies potential multicollinearity issues. In our results, all VIF values remain below 5, which is generally considered acceptable. Based on the presented collinearity statistics, there doesn't appear to be a significant multicollinearity problem among the predictor variables in the regression model.

Linearity Test

Linearity, assessing the alignment of changes in the dependent variable with the independent variables, was tested. Figure 1 displays a scatter plot of residuals, showing minimal spread. This indicates a linear relationship between Uncertainty Avoidance

Index (independent variable) and employee productivity (dependent variable).

Figure 4.5.3: Linearity Test Result



Source: Own Data SPSS Result, 2024.

4.6 Multiple Regression Analysis

A regression study explored how uncertainty avoidance index affect employee productivity. Multiple Regression Analysis was used to quantify this impact, with the table showing R^2 values indicating explained variance in employee performance.

Table 4.7: Summary of Results of Linear Regression Analysis for the Effect of Uncertainty Avoidance Index on Employee Productivity in Kwara State Public Service

Model: **EmPro**= ß0+ $ß_1$**UnAvIn** + Ɛ		Effect of Uncertainty Avoidance Index on Employee Productivity in Kwara State Public Service							
	B	t	Sig.	R	R^2	AdjR^2	df	F	Sig
(Constant)	1.858	13.626	<.001	.632[a]	.399	.398	1	294.613	<.001[b]
UnAvIn	.581	3.827	.000				394		
a. Dependent Variable: EmPro									

Source: Own Data SPSS Result, 2024.

The summary of the regression model as illustrated in table 4.7 postulates that uncertainty avoidance index (UnAvIn) is a positive and significant predictor of employee productivity (EmPro). The correlation coefficient (R) value of 0.692 (69.2%) portrays that there is significant relationship between uncertainty avoidance index (UnAvIn) and employee productivity (EmPro). The table similarly revealed that the coefficient of determination, R-square value of 0.399 (39.9%) depicts that 39.9% variability changes in employee productivity (EmPro) could be explained by a unit change in employee productivity (EmPro).

Additionally, the adjusted R^2 value of 0.398 suggests that uncertainty avoidance index (UnAvIn) definitely contributed to variation in the level of changes in employee productivity (EmPro). This is good enough in determining the goodness of fit for the model and for making predictions.

Moreover, the results for regression coefficients point out that the significant value of the F-statistics at F=294.613>F-table=3.84 at a degree of freedom of (1, 394) with p-value=0.000 which is less than 0.05 or 5% error term. This posits that the independent variable of uncertainty avoidance index (UnAvIn) has a significant effect on the dependent variable of employee productivity (EmPro) at 95% confidence level.

Furthermore, as displayed in the table, employee productivity (EmPro) was 1.858 when all other variables were held to zero. It would however increase by 0.581 when there is a unit increase in uncertainty avoidance index (UnAvIn). Additionally, the table shows that the beta coefficient in respect to uncertainty avoidance index is 0.581 with t-test value of 3.827 and p<0.005 at 5% level of significance. Therefore, uncertainty avoidance index has a significant and positive effect on employee productivity since the coefficient of trend analysis were β=0.581 at 5% significant level. The t-statistics associated with the regression parameters was t= 3.827 which is greater than ±1.645 at a degree of freedom of 394. Thus, the study accept the hypothesis which posits that uncertainty avoidance index have significant and positive effect on employee productivity in Kwara State public service 95% level of confidence.

Discussion of Findings

The findings from test of hypothesis suggest that the uncertainty avoidance index have significant effect in enhancing employee productivity in Kwara State public service (β = 0.581; t = 3.827; & p-value <0.005). This significant effect underscores the influence of cultural dimensions, particularly uncertainty avoidance, on workplace outcomes. In contexts where uncertainty avoidance is high, employees may prioritize stability and structured work environments, which could lead to enhanced productivity when these preferences are met. This finding align with existing literature that explores the impact of cultural dimensions on organizational outcomes. The study of Pauzi (2020) found that higher levels of uncertainty avoidance were associated with specific job performance metrics, underscoring the influence of cultural factors on employee behavior and productivity. Similarly, research by Ebba (2021) investigated the impact of organizational culture, including uncertainty avoidance, on employee performance. The study concluded that high levels of uncertainty avoidance could hinder creativity among employees, potentially affecting overall performance. These studies collectively highlight the importance of understanding cultural dimensions like uncertainty avoidance in organizational settings. They suggest that employees in high uncertainty avoidance cultures may prefer structured environments with clear guidelines, which can influence their productivity. Conversely, in low uncertainty avoidance cultures, employees might be more adaptable to change and ambiguity, affecting productivity differently.

Conclusion and Recommendations

The findings from the hypothesis testing provide strong evidence that the uncertainty avoidance index significantly impacts employee productivity in the Kwara State public service. This suggests that cultural dimensions, particularly uncertainty avoidance, play a fundamental role in shaping workplace outcomes. Employees in the Kwara State public service are likely influenced by their preferences for structure, predictability, and clear guidelines, which are hallmarks of high uncertainty avoidance. Thus, by aligning organizational policies and management practices with these cultural preferences, productivity can be enhanced. This study highlights the importance of considering cultural factors in public service management to improve efficiency and effectiveness. The relationship between and productivity underscores the need for culturally informed decision-making in public administration.

Therefore, the following recommendations were made based on findings:

i. Public service managers in Kwara State should create structured work environments that could cater for the high uncertainty avoidance tendencies of employees. This includes providing clear job roles, well-defined processes, and consistent communication channels to reduce ambiguity.

ii. It is equally essential to provide regular training programs towards equipping employees with the skills and knowledge needed to navigate changes and uncertainties effectively. Training sessions should also emphasize the benefits of structured yet adaptive work approaches.

iii. The management should ensure that organizational policies aligned with cultural preferences by developing structured work environments and clear operational guidelines to cater to employees' preferences for stability in high uncertainty avoidance contexts.

iv. Finally, it is important for public service managers to promote a communication platform that ensure employees understand expectations, roles, and responsibilities towards reducing ambiguity in tasks.

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IMPACT OF ORGANISATIONAL AGILITY ON THE PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN GOMBE STATE, NIGERIA

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ABSTRACT
This study examined the impact of organizational agility on the performance of Micro, Small and Medium Enterprises (MSMEs) in Nigeria. Specifically, the study assessed the influence of sensing agility, decision-making agility, acting agility and innovativeness on the performance of MSMEs in Gombe state. The study adopts cross-sectional survey research design and collected primary data using structured self-administered questionnaire. The population was 779 MSMEs that are registered with ministry of trade, industry and tourism in Gombe state where the sample of 264 MSMEs were selected using Taro Yamane formula. The data collected was analyzed using multiple regression technique with the help of SPSS version 23. The regression analysis shows that sensing agility, decision-making agility and acting agility have significant positive effect on MSMEs performance in Gombe state. On the other hand, innovativeness was found to have insignificant effect on the performance. In line with the findings, the paper concludes that the dimensions of organizational agility are crucial for the success, growth and sustainability of small businesses particularly in developing countries like Nigeria that are constraint with political instability. In view of that, the study recommended MSMEs to invest in robust market intelligence systems to effectively monitor and anticipate environmental changes. Their management should also streamline decision-making processes, empower employees to take initiative, and develop flexible operational structures. Finally, the enterprises should invest in leadership development programs that emphasize strategic thinking, problem-solving, and adaptability.

Keywords: Acting agility, Decision-making agility, Innovativeness, MSMEs performance Organizational agility, and Sensing agility.

INTRODUCTION

Throughout the world, environments where business entities operate is continually evolving and becoming increasingly unpredictable, turbulent and complex. This necessitate businesses to be dynamic and adopt agile management practices to rapidly respond to environmental turbulence and unpredictability by adopting strategies that equip personnel, invest in technology, and research to compete favourably to manage uncertain situations (Languir et al., 2023). Accordingly, agile organizations have structures, information systems, and personnel to respond to market variations and probable disruptions through their conversion into competitive opportunities. In this regard, Yildiz and Aykanat (2021) buttressed the necessity of agility to ensure that business thrives and expands with customer satisfaction as the core pillar for competitive advantage. To identify the effectiveness of organisational agility in an organisation, several dimensions were outlined in the literature, which includes sensing, decision-making, innovativeness and acting agility.

Precisely, sensing agility as a force that empowers business entities to acquire market information so as to enable them adapt for changes quickly, through a systematic environmental survey (Panda, 2023). Therefore, it contributes to the Micro, Small and Medium Scale Enterprises (MSMEsperformance by having competitive advantage of early adopters or early avoiders status thereby contributing to the competitive performance and overall business growth. In addition, after the information was collected in sensing agility stage, decision-making agility build-on to evaluate the relevant acquired information to identify the opportunities and threats based on the interpretation of events (Qader et al., 2021). Hence, the interpretations in this stage enable enterprises to evaluate the con.sequence of the planned action and select the suitable one for competitive purposes. This makes it one of the major predictors of performance. Furthermore, acting agility is the stage where implementation of the selected decision is carried out by pooling resources and personnel to achieve the intended outcome (Tomomitsu & Moraes, 2021). Thus, it aligns the market demand and the strategic decisions of the enterprises and therefore drives performance (Goncalves et al., 2022). Lastly, innovativeness fosters growth by supporting the efficient management of tangible and intangible assets that sustain the company's capability to innovate in a continuous sustainably (Sujianto et al., 2020). In this regard, only innovativeness can sustain the performance of SMEs in the dynamic business environment.

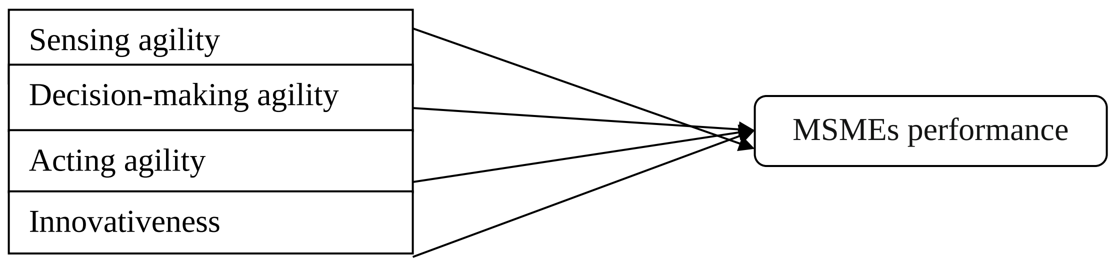
Accordingly, the importance of MSMEs to Nigerian economy cannot be overemphasized as it contributes about 50% to the GDP and employed over 70% of the entire labor force of the country (NBS, 2024). However, MSMEs' owners are facing many challenges of poor management skills which range from lack of adequate expertise to respond to environmental changes, poor capital, inaccurate records and an unfavourable business environment (Siddique & Khan, 2022). Furthermore, most business establishments and MSMEs alike find it to be an enormous task to maintain positive performance continuously, which makes them liquidate before their second or third anniversary (Vitolina et al., 2022). In order to address that, organizations respond to change through strategic planning, however; the change nowadays is rapid and also complex to understand, which makes strategic planning no longer compatible with such dynamics (Khoshlahn & Ardabili, 2020). Also, Tallong et al. (2020) added that bureaucracies, with their steep chains of command, cannot move fast enough to take advantage of opportunities in a Volatile, Uncertain, Complex and Ambiguous marketplace. Evidently, evidence from literature shows that this area was deeply considered by foreign studies with very little attempt in Nigerian context, particularly Gombe state. In this regard, the present study fills the gap by including innovativeness alongside other organizational agility determinants to predict MSMEs performance in Nigeria MSMEs. Specifically, this study examines the impact of sensing agility, decision-making agility, acting agility and innovativeness on MSMEs performance in Gombe state.

LITERATURE REVIEW

Conceptual Framework and Review

Conceptual framework helps in explaining the relationship that the study tries to establish. In this study, the independent variables are sensing agility, decision-making agility, acting agility and innovativeness while the dependent variable is MSMEs performance.

Independent variables **Dependent variable**



Source: Siddique and Khan (2022).

Concept of Organizational Agility

Organizational agility refers to the capability and skills of the organization to respond rapidly to the changes in the market needs, wants, and makes quick responses to these variations in local and worldwide locations (Siddique & Khan, 2022). Moreover, the concept refers to the ability of adapting quickly and proficiently to an unpredictable, continuously changing, competitive global market that is driven by culture, not processes, which means that effectiveness is achieved when leaders and people match an agile culture, i.e., agile behavior and values (Goncalves et al., 2022). Further, agility is used the ability to respond to unexpected changes in the turbulent business environment (Kanani, 2016). Also, organizational agility has been defined as the "ability of the organization to renew itself and stay flexible without sacrificing efficiency (Elali, 2021).

Concept of MSMEs Performance

Generally, performance is defined as the process of optimizing the organization's and equity holders' profits through competitiveness and productivity at the same time meeting the needs of group of individuals that are affected by the organization's activities (Yildiz & Aykanat, 2021). In MSMEs context, Tallon et al. (2020) defined MSMEs performance as the result of a comparison between the outcome and the objective of the enterprise, which makes fulfillment of stated objectives a certain measure of performance. Equally, the performance represents the MSMEs' total value of goods and services they produced in the economy over a period, which is measure by their ability to create wealth in the economy (Sujianto et al., 2020).

Concept of Sensing Agility

Sensing agility is the skills of the organization to tactically check the ecological changes that have an impact on an organization's performance and policies. The main task is to gather information about environmental variations and analyze this information effectively and efficiently (Siddique & Khan, 2022). Similarly, sensing agility is the ability and skills of the organizations to view and examine the different events and variations in the environment whether these events were associated with a new competitor, customers or the machinery used by the organizations (Wicaskana et al., 2022). Sensing Agility in the view of Qader et al. (2021) is the organizational ability to screen, monitor and capture events of environmental change (changing customer preference, new competitor moves, and new technology) in the best time.

Concept of Decision Making Agility

Decision-making agility refers to the ability of an organization to collect the relevant data from a variety of sources and provide information to enable decision makers to make speedily appropriate decisions, as well as analyzing opportunities and threats in the environmental events, and developing plans (Hashemi & Mitrrofanova, 2020). It involves activities that intend to interpret the captured events, define opportunities and threats, and decide on this basis to maximize the profit and minimize the risks (Zarravasan & Ashrafi, 2019). Furthermore, decision making agility contains series of steps and interrelated activates that collect information from different sources, records the sources in right way, summarize the information and analyzing of this information in right way to identify the implementation of the activates and function of the organizations (Siddique & Khan, 2022).

Concept of Acting Agility

Acting agility consists of many events with the aim of restructuring and rearranging the organization's resources and make changes with the changes environments to identify the competitor in the marketplace and by making new products, as the organizations must know their competitor to survive in the market (Siddique & Khan, 2022). According to Qader et al. (2021), acting agility is the ability to dynamically and radically reconfigure resources, modify operations, restructure supply change relationships based on actual plans, and deliver new products and services and rapid market models in a timely manner. Similarly, Hashemi and Mitrofanova (2020) defined acting agility as the pooling of resources and realignment of process to suit changes in the environmental factors with the needed speed in responding to emerging new opportunities in the business environment.

Concept of Innovativeness

The term innovation can be defined as the implementation of new, or significantly improved, products (goods or services) or processes or new methods of marketing, organizational practices, work organization, and establishment of external relations (Quandt et al., 2017). Whereas the term innovativeness is the ability to break established procedures, and thus facilitate the generation of innovative ideas, experimentation, and creativity, which in turn would lead to the development of new products and technologies (Vitolina et al., 2022). Innovativeness as one of the technological readiness dimensions refers to the degree to which a person or entity is excited to conduct experiments with the technology and eager standing in the frontline in the effort to try a new product or service based on the latest technology (Nugroho & Fajar, 2017).

Empirical Review

Numerous studies were conducted in the area of organizational agility determinants in relation to performance of different entities in different contexts. Notable among them include Siddique and Khan (2022), which investigate the impact acting agility, sensing agility and decision-making agility on the quality of work-life. The primary method through questionnaire was employed for data collection. Descriptive statistics, correlation and regression analysis were used for data analysis. It was found that acting agility and sensing agility have significant positive impact on work-life balance, while decision-making agility was negative. In the same vein, Qader et al. (2021) investigates the relationship between organizational agility and organizational commitment in the Jordanian cement company. Primary data was collected using questionnaire from 302 respondents in the company, which was analysed using descriptive and multiple regression analysis. The result shows that, organizational agility dimensions (sensing agility, decision-making agility) have a significant positive association with organizational commitment of Jordan cement companies.

Furthermore, Holotiuk et al. (2018) investigate the relationship between two dimensions of organizational agility (sensing and acting) on organizational effectiveness in Germany. Data was collected through an online survey from 217 respondents and analyzed using Structural Equation Model (SEM). The SEM output revealed that sensing and acting agility positively and significantly influence organizational effectiveness at 1% significant level. Again, Almahirah (2020) examined the effectiveness of organizational agility on enhancing organizational competitiveness of industrial sector companies in Jordan. Primary data through questionnaire was obtained from 60 workers of the selected construction company in Jordan. The multiple regression finding revealed that sensing, decision-making and acting agilities have a significant positive influence on organizational competitiveness in Jordan.

Vitolina et al. (2022) assessed the impact of organizational innovation practices on organizational performance by focusing on 600 SMEs from various industries in Latvia based on primary data. The findings revealed that organizational innovation practices affect organizational performance positively and significantly. Similarly, Sujianto et al. (2020) examined the effect of organizational innovativeness on the performance of Indonesian SMEs. Descriptive and SEM statistical methods were used for the analysis based on primary data collected. The finding revealed that organizational innovativeness significantly and positively influenced the performance of

SMEs which is determined in a single model.

2.3 Theoretical Review

2.3.1 Dynamic Capabilities Theory

Teece, Pisano and Shuen propounded Dynamic Capabilities Theory (DCT) in 1997 based on the believe of organizations' dynamic ability to utilize its resources and achieve a desired objective. Dynamic capability is defined as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece et al., 1997). Further, it examines how firms address or bring about changes in their turbulent business environment through reconfiguration of their firm-specific competencies into new competencies (Teece, 2007). The concept of DCT explained the mechanism that links resources and product markets to competitive advantage and firm survival (Arokodare & Asikhia, 2020). The theory help scholars to understand the foundations of long-run enterprise success while helping managers delineate relevant strategic considerations and the priorities they must adopt to enhance enterprise performance (Teece, 2007). It also explains the interplay that connects a firm's resources and product markets to competitive advantage and organizational survival. Hence, it helps to show how organizations achieve sustainable competitive advantage and survive for many years in a business environment that is dynamic and turbulent.

With these presumptions, the nexus between the theory and this study can be observed. Firstly, sensing agility of an organization against performance can be observed on firm's capacity to sense and shape the required personnel, equipment and other resources needed to achieve the desired output with minimal resource. Secondly, decision-making agility against performance can be based on the collective opinion of the strategic personnel to seize the sensed opportunity in the market in order to act timely and accordingly. Lastly, for acting agility against performance, the theory presumed the third preposition is to maintain competitiveness through the reconfiguration of firm's asset. Therefore, organization's act to implement the decisive opinion agreed on, in the earlier stage to efficiently utilize their asset and ensure performance. In view of the above, the theory can support organizational agility dimensions to improve performance.

The Entrepreneurship Innovation Theory (EIT)

The Entrepreneurship Innovation Theory (EIT) was propounded by Schumpeter (1934, 1942). The theory ascribed that entrepreneurship is about combining resources in new ways such as introduction of new products with better attractions, new methods of production, discovery of a new market(s), identification of new source (s) of supply of raw materials and alteration of existing market arrangements through innovation that brings about radical changes in the market. Schumpeter regards innovation as a tool of an entrepreneur. The assumption of the theory includes the discovery of a new product, opening of a new market, reorganization of an industry and development of a new method of production (Arokodare & Asikhia, 2020). In this regard, innovativeness is assumed to make organization discovered new resources to achieve competitive advantage. Therefore, performance as one of means of competitive advantage, innovativeness is expected to improve it by ability to discover new product.

METHODOLOGY

The research design employed by this study is cross-sectional survey research design. It is a survey because it entails going to the field for data collection, while it is cross-sectional because it involves one time data collection. The population of this study is 779 MSMEs registered in Gombe state. This was based on the data from Ministry of Trade, Industry, and Tourism Gombe State as at 7th October 2024. The sample size of the study was obtained using Taro Yamane formula of sample determination as follows:

$$n = \frac{N}{1 + Ne^2};\ n = \frac{779}{1 + 779(0.05)^2} = 264$$

The formula displayed above was used to arrive at 264 sampled MSMEs respondents. The selection of the respondent enterprises was done using random sampling technique and the data was collected using structured questionnaire. This questionnaire was validated using both face and content validity, while reliability test was conducted based on Cronbatch Alpha threshold of 0.7 with SPSS software. Accordingly, the analysis for the data collected was done using multiple regression analysis with the help of SPSS version 23.

Model Specification

$$SP = \beta_0 + \beta_1 SA_i + \beta_2 AA_i + \beta_3 DA_i + \beta_4 IA_i + e$$

Where: SP = MSMEs' Performance, SA = Sensing Agility, AA = Acting Agility,
DA = Decision making agility, IA= Innovativeness Agility and e = error term.

IV. RESULT AND DISCUSSION

4.1 Presentation of Results

A total number of 264 copies of questionnaires were distributed to the sampled respondents in the selected MSMEs in Gombe state. However, up to 247 copies of the questionnaires representing 93.56% were retrieved out of which 32 among them were rejected due to either incomplete information or outliers. Hence, the valid and useful questionnaires were 232 representing 87.88%.

Coefficient of Determination

The Coefficient of Determination presented in Table 1 of this study expressed that the regression equation is significant with the following result: R= 0.659, R^2= 0.438, Adj. R^2= 0.417. This therefore infers that the exogenous variables (sensing agility, decision-making agility, acting agility and innovativeness) accounts for 43.8% variance in MSMEs performance in Gombe state. Accordingly, Cohen (1992) classified R^2 into 3 orders as follows: 0.02 as weak, 0.13 as moderate and 0.26 as substantial. Going by this classification, the value of R^2 in the regression result of this study is substantial.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659[a]	.438	.417	.361748

a. Predictors: (Constant), SA,DA,AA,IA

Regression Analysis and Hypothesis Testing

Regression analysis is a statistical technique that measures the degree or extent of the relationship between the variables of the study (Sekaran & Bougie, 2013). For the purpose of this study, multiple regression analysis was employed to test the research hypotheses that explain the extent of relationships that exist between the independent variable (sensing agility, decision-making agility, acting agility and innovativeness) and the dependent variable (MSMEs performance). Consequently, regression analysis as presented in Table 2 was conducted and the outcome of the analysis was used for answering the research questions of this study.

Table 4.7: Multiple Regression Result

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.827	.297		9.517	.000		
SA	.869	.399	.196	2.179	.021	.421	2.374
DA	.593	.309	.159	1.913	.033	.923	1.083
AA	.758	.376	.175	2.014	.030	.597	1.675
IA	.067	.071	.047	.938	.216	.722	1.385

a. Dependent Variable: SP

In view of the regression result obtained, it implies that the MSMEs performance in Gombe state is significantly and positively impacted by sensing agility, decision-making agility and acting agility, whiles the impact of innovativeness is relatively insignificant. The following sections present the discussion of findings based on the obtained result.

4.2 Discussion of Findings

Discussion of findings is the section where the researcher outlines the implication of the result as well as the justification of the findings with previous studies. Regarding the first objective, evidence from the regression result revealed that, there is significant positive relationship between sensing agility and the performance of MSMEs in Gombe state evident from the coefficient and p-value of 0.869 and 0.021 respectively. This implies that increase in sensing agility will lead to better performance of MSMEs in the study area. As such, the first null hypothesis, which stated the "there is no significant relationship between sensing agility and MSMEs performance" is rejected and therefore the alternate hypothesis, which proposed significant relationship is accepted. Accordingly, this result is in line with the finding of Siddique and Khan (2022), which investigate the association between organization agility and quality of work-life of SMEs in Pakistan. It also corroborates with Qader et al. (2021), which investigates the relationship between the variables of organizational agility and organizational commitment in the Jordanian cement company. These studies found a significant positive relationship between sensing agility and performance.

Secondly, the regression result also revealed a significant positive relationship between decision-making agility and the performance of MSMEs in Gombe state based on the coefficient value of 0.593 and p-value of 0.033. Based on that, the second null hypothesis, which postulated the lack significant relationship between decision-making agility and MSMEs performance, is rejected and the alternate hypothesis is accepted. Therefore, this finding can be justified by the result of Hashemi and Mitrofanova (2020); Nafei (2016), which investigate similar relationship and found significant positive result. Also, the result aligns with Qader et al. (2021), which investigates the relationship between the variables of organizational agility and organizational commitment in Jordan.

Furthermore, the result of the third objective found a significant positive association between acting agility and the performance of MSMEs in Gombe state looking at the coefficient of 0.756 and p-value of 0.030. Based on that, the third null hypothesis, which stated the "there is no significant relationship between acting agility and MSMEs performance" is rejected and the alternate hypothesis which postulates the relationship is accepted. In view of that, the result corroborate with the outcome of Shakhour et al. (2021), which examined the impact of organizational agility (sensing and acting agility) on achieving organizational excellence in healthcare services organizations in the UAE. The result also agrees with Hashemi and Mitrofanova (2020) assess the relationship between organizational agility and human resource maintenance of private universities in Kurdistan region of Iraq. These studies among others affirmed a significant positive relationship between acting agility and performance related constructs in different contexts.

Finally, the result of the forth objective found an insignificant positive relationship between innovativeness and MSMEs performance in Gombe state looking at the coefficient of 0.067 and p-value of 0.216. Based on that, the fourth null hypothesis, which stated the "there is no significant relationship between innovativeness and MSMEs performance" cannot be rejected and the alternate hypothesis which proposed the existence of relationship is therefore rejected. In view of that, the result corroborate with the outcome of Vitolina et al. (2022), which assessed the impact of organizational innovation practices on organizational performance and found an insignificant positive effect. The lack of significance could imply that while innovation is important, it may not play an immediate or strong role in determining performance outcomes in the specific context of MSMEs, potentially due to limited resources or market constraints in the state.

CONCLUDING REMARKS

Conclusions

This study concludes that the dimensions of organizational agility are crucial for the success, growth and sustainability of small businesses particularly in developing countries that are constraint with political instability. This political instability in Nigeria for instance lead to inconsistent economic environment making it difficult for businesses especially small ones, to have long-term planning without fear of environmental changes due to it is dynamism. As such, the enterprises have no alternatives but to remain agile and respond to every business environment changes in order to remain competitive and relevant in the market. Consequently, organizational agility as a multifaceted construct encompasses a dynamic interplay of sensing, acting, decision-making, and innovative capabilities. As such, MSMEs that excel in these dimensions are better equipped to navigate the complexities and uncertainties of the contemporary business landscape. By swiftly detecting and responding to market shifts, making timely and effective decisions, and fostering a culture of innovation, agile MSMEs can create sustainable competitive advantages.

5.2 Recommendations

In view of the conclusions presented in this study, the following recommendations were made thus:

i. Based on the finding of firs objective, MSMEs should invest in robust market intelligence systems to effectively monitor and anticipate environmental changes by cultivating a culture of information sharing, encouraging employee feedback, and leveraging digital technologies to gather and analyses data.
ii. Secondly, there is need for management of MSMEs to streamline decision-making processes, empower employees to take initiative, and develop flexible operational structures. This can be achieved decentralization of authority and use of cross-functional teams that can expedite the implementation of strategic changes.
iii. In line with the third objective result and in order to foster a culture of experimentation and risk-taking for agile decision-making, MSMEs should invest in leadership development programs that emphasize strategic thinking, problem-solving, and adaptability. Additionally, leveraging data analytics can provide valuable insights to support informed decision-making.
iv. Finally, MSMEs should create a conducive environment that

encourages creativity and experimentation in order to drive innovation in their operations. This involves providing employees with the necessary resources, time, and support to develop new ideas. Collaboration with external partners, such as research institutions and other MSMEs will also contribute.

The concluding remark of this study advocates for further research to explore other contextual variables that might influence the agility-performance relationship. For example, future studies could investigate how cultural factors, institutional support, or technological advancements affect the dynamics between agility, environmental uncertainty, and firm performance.

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EFFECT OF ECONOMIC ENVIRONMENT ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN BAUCHI STATE, NIGERIA

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Abstract
The objective of this study is to examine the impact of economic environmental factors on the performance of Small, and Medium Enterprises (SMEs) in Bauchi State. The study adopted a cross-sectional survey research design and collected primary data through self-administered questionnaires distributed to owners and managers of SMEs in the state. The population of the study consisted of 9,225 SMEs in Bauchi State, from which a sample size of 384 was determined using the Taro Yamane formula. Data analysis and hypothesis testing were conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS4. The findings revealed that inflation and exchange rates have a significant negative effect on the performance of SMEs in Bauchi State. Conversely, interest rates showed an insignificant effect, while digital innovation exhibited a positive and significant influence on SMEs' performance. Based on these findings, the study recommends that SMEs diversify their revenue streams to mitigate the adverse effects of inflation on sales. SMEs are also advised to focus more on domestic markets to reduce dependence on foreign markets and exports, which are vulnerable to exchange rate fluctuations. Finally, SMEs in Bauchi State should continue investing in digital infrastructure, such as media visibility among others to enhance operational efficiency and maintain competitiveness, which are critical for long-term success.

Keywords: Digital innovation, Exchange rate, Inflation rate, Interest rate, and SMEs performance.

Introduction

Throughout the world, small businesses are vital to global economies, contributing significantly to job creation, poverty reduction, and GDP growth. In Nigeria, Small and Medium Enterprises (SMEs) account for 50% of GDP and employ over 70% of the labour force (Aduloju, 2023). However, their performance is heavily influenced by external macroeconomic factors such as inflation, exchange rates, and interest rates (Ugwu et al., 2023). For example, **inflation** negatively impacts SMEs by eroding purchasing power, increasing production costs, and reducing profitability. Nigeria's inflation rate reached a 21-year high of 28.92% in 2023, with projections suggesting it could rise to 31.85% in the last quarter of 2024 (Jaiyeola et al., 2024). Similarly, **exchange rate instability** creates uncertainty, increases the cost of imports and exports, and limits SMEs' access to global markets. In Nigeria, the naira's value has significantly depreciated, reaching over ₦1,600 per dollar in 2024, making foreign transactions unaffordable for many businesses (Ojimba et al., 2023; Okunbanjo et al., 2022).

In addition, high interest rates restrict SMEs' ability to secure funding for growth and also discourage long-term investments thereby further hindering their economic contribution (Nenna et al., 2020). In this regard, to boost SMEs' contributions to the economy, interest rates need to be kept reasonable to facilitate loan repayments and encourage borrowing (Thomas et al., 2020). Furthermore, digital innovation is considered one of the contribution to economic environment study due to the advance movement of global nations (including Nigeria) to digital economy (Abbas et al., 2024). This makes it one of the determinants in economic environment and become vital for SME survival and growth, enabling improved efficiency, profitability, and competitiveness. Digitalization can boost revenues by 26% and reduce costs by 22% for Nigerian SMEs, contributing over $53 billion to GDP annually (Aduloju, 2023). In Nigeria, Bauchi State as one of the states of northeast faces extreme poverty, with a poverty index of 66.9%, the highest among other regions nationwide (Statistisense, 2023). This economic hardship underscores the need to examine the effects of economic environmental factors and digital innovation on SME performance.

As mentioned earlier despite the significant contributions of SMEs to nation-building, they are currently facing severe challenges, particularly due to the arbitrary fluctuations of some environmental variables (Ugwu et al., 2023). These challenges include unpredictable prices and costs, unreliable infrastructure, and uncertain competitive responses, which contribute to a high rate of SME mortality, especially in emerging economies (Okunbajo et al., 2022). Additionally, the rapid adoption of digital technologies has added layers of complexity and speed to the external environment, challenging firms, particularly SMEs, to adopt digital transformation for sustainability (Nnenna et al., 2022). Accordingly, while numerous studies have investigated the economic environment's impact on SME performance, many relied on secondary data from national databases, which may not reflect regional economic variations. However, digital innovation is now a critical factor influencing business success due to globalization and digital economy target by countries, as noted by Abbas et al. (2024). Therefore, this research aims to assess the effects of inflation, exchange rate, interest rate, and digital innovation on SMEs performance in Bauchi State, Nigeria.

CONCEPTUAL REVIEW

SME Performance

Performance in SMEs refers to the process of optimizing profits and meeting the needs of stakeholders through organizational activities. Measuring performance is crucial for managers to monitor results and identify business problems (Atugeba, 2021). According to Ojimba et al. (2023), SME performance involves comparing outcomes with organizational objectives, and is also measured by the ability to create wealth. Also, Nwachukwu et al. (2023) describe organizational performance as a complex relationship involving seven criteria: efficiency, effectiveness, productivity, product quality, innovation, quality of work, and profitability.

Inflation Rate

Inflation is the persistent increase in general price levels over time, reducing the purchasing power of a country's currency (Ojimba et al., 2023). It erodes the real value of financial claims, harms lenders, and benefits borrowers (Dvorsky et al., 2020). High inflation reduces disposable income and weakens firms' ability to survive and grow. However, moderate inflation can act as an incentive to production and contribute positively to the performance of the SME sector (Nnenna et al., 2020). Notwithstanding, zero inflation can be detrimental to economic growth as it may lead to stagnation (Ugwu et al., 2023).

Exchange Rate

The exchange rate is the proportion at which a currency is measured or exchanged with another currency (Nnenna et al., 2020). It reflects the price of one currency in terms of another and is considered a measure of how competitive a country's currency is internationally (Ugwu et al., 2023). Exchange rates play a crucial role in the macroeconomic environment, influencing international competitiveness and private investment (Anochie et al., 2023). As a result, SMEs are struggling due to the low dollar/naira exchange rate, leading to reduced domestic investment and a high rate of enterprise mortality due to exchange rate volatility (Anochie et al., 2023).

Interest Rate

The interest rate refers to the fee charged by the lender to the borrower, or it can be seen as the cost of borrowing money (Oanh et al., 2021). Similarly, an interest rate is the price paid for using borrowed money, with lenders expecting compensation for transferring their claims to borrowers (Otieno et al., 2021). Consequently, high interest rates can deter business investments and innovation, increase loan defaults in the banking system, and negatively affect business revenues and profits (Okunbanjo et al., 2022). Conversely, lower interest rates provide companies with opportunities to borrow at lower rates, facilitating expansion and improving cash flows (Ugwu et al., 2023).

Digital Innovation

Digital innovation involves leveraging digital technologies to create new or significantly improved products, services, or business models (Abbas et al., 2024). It enhances efficiency, customer experience, and competitive advantage by optimizing business processes and enabling new operational management systems (Kim & Ha, 2023). In today's digital world, businesses that embrace digital innovation can produce high-quality products and respond to evolving market demands more effectively (Abbas et al., 2024). Thus, it allows SMEs to introduce innovative products and expand their reach through digital channels such as e-commerce, big data analytics, and the Internet of Things (Peter & Peter, 2024).

Conceptual Framework

Independent variables **Dependent variable**

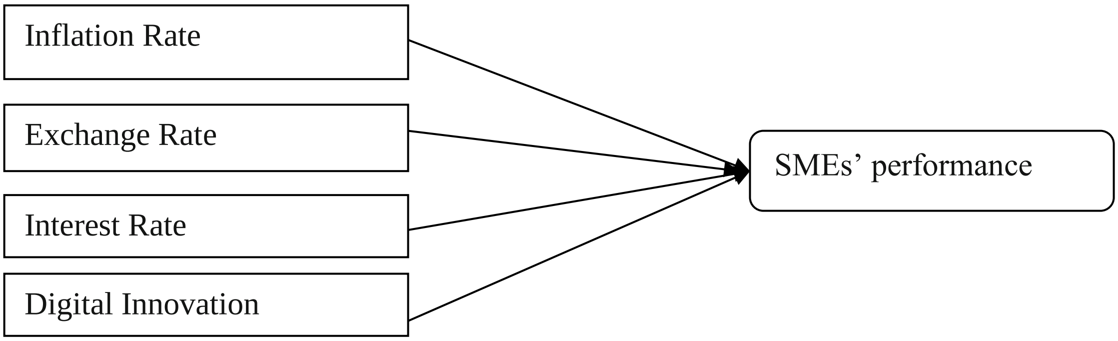

Figure 1. Research Framework adapted from: Ojimba et al. (2023).

As shown by the framework above, this study extended the framework from the work of Ojimba et al. (2023), which examine the effect of economic environment (inflation rate, exchange rate and interest rate) on organizational performance in pharmaceutical firms of Anambra State. In this regard, the present study extends the model with digital innovation considering the advancement of digital economy in Nigeria. Consequently, this study developed the unique framework with four independent variables as shown in Figure 1 above of Bauchi state SMEs.

Empirical Review

The empirical studies reviewed include Zailani et al. (2024), which examined the impact of inflation and increased Premium Motor Spirit (PMS) prices on SMEs performance in Yola North Local Government Area, Adamawa State. The study surveyed 700 SMEs with a sample of 201 using questionnaires analyzed via one-sample test correlation coefficient with SPSS. The findings indicated that inflation and increases in PMS prices have a significant negative effect on SMEs performance in Adamawa State. Similarly, Dvorsky et al. (2020) assessed the influence of economic factors like inflation, employment, monetary policy, interest rates, and population on the business environment quality of SMEs in Czech Republic and Slovakia and found significant influence of inflation and employment, while monetary policy and interest rates did not affect the business environment.

Furthermore, Banda and Habazoka (2024) studied the impact of foreign exchange rates on the financial performance of power utility companies in Zambia, finding a positive relationship between foreign exchange rates and financial performance indicators. However, this finding may not be applicable in the Nigerian context due to differing exchange rates across countries. Moreover, Ojimba et al. (2023) found that both interest rates and inflation rates have significant negative effects on the organizational performance of pharmaceutical firms in Anambra State, while exchange rates had a positive effect. However, the study's focus was limited to pharmaceutical firms, making its generalizability to other sectors or SMEs in different regions questionable. Akkad and Mouselli (2023) explored the challenges faced by Syrian SMEs during the Covid-19 pandemic, identifying high interest rates and inflation as significant barriers to performance.

Moreover, Peter and Peter (2024) examined the influence of digital transformation on market performance of SMEs in Nigeria. Using a mixed-method approach with surveys and interviews, the study found that digital innovation significantly enhances product and service visibility, thereby boosting market performance. However, its generalizability is limited to one state in Southern Nigeria, suggesting the need for empirical validation in other regions. Equally, Abbas et al. (2024) analyzed the role of digital financial innovation as a mediator in the relationship between product market competitiveness and firm performance using secondary data from the Pakistan stock exchange. The study found that digital financial innovation positively influences firm performance, reinforcing the role of digital innovation as a key predictor.

Underpinning Theories

Institutional Theory

Institutional Theory was introduced by Meyer and Rowan in 1977 in their seminal work, *"Institutionalized Organization: Formal Structures as Myth and Ceremony"*. The theory explores how organizational structures, norms, and practices are influenced by the broader social, political, and cultural environment (Meyer & Rowan, 1977). It emphasizes the role of established institutions (such as laws and regulations) in shaping organizational behavior and decision-making (Akkad & Mousalli, 2023). According to the theory, organizations are not isolated entities but are embedded within and constrained by the institutional framework surrounding them (Trung, 2021). Thus, external pressures, such as legal regulations, government policies, and influential stakeholders, drive organizational changes (Scott, 2008). Institutions such as governments and central banks regulate economic activities, setting the rules for production, exchange, and distribution (Ojimba et al., 2023).

Institutional theory serves as the underpinning theory for this study, which posits that the business environment surrounding firms exerts pressure on firm performance. For instance, during inflation, governments often implement monetary policies, such as raising interest rates or introducing wage and price controls to stabilize the economy. These policies make borrowing more expensive, limit access to capital for SMEs, and negatively impact their performance. The theory also relates to exchange rates and SME performance, as a volatile exchange rate affects import and export costs, forcing SMEs to adapt their strategies to remain competitive and legitimate in the global market. High interest rates also pressure SMEs to adopt industry norms related to financial management to avoid financial instability and insolvency.

Diffusion of Innovation Theory

The Diffusion of Innovation (DOI) theory was initially developed by Rogers in 1962, focusing on how organizations adopt new ideas and the impact of these ideas on organizational change. DOI is commonly used to describe the adoption and acceptance of innovations, particularly in IT research (Rogers, 1962). Rogers (1971) emphasizes the connection of ideas, processes, and technologies across members within a social system. The theory identifies five key characteristics including relative advantage, compatibility, complexity, trialability, and observability, which facilitate the adoption and faster dissemination of technological innovations (Ojimba et al., 2023). DOI theory is particularly relevant to the present study as it explains how SMEs adopt and integrate digital technologies such as e-commerce platforms, cloud computing, or artificial intelligence, and the impact of these adoptions on their business operations, competitiveness, and financial performance.

METHODOLOGY

Population and Sample

The population of this study comprised the 9225 SMEs in Bauchi state registered with Corporate Affairs Commission (CAC) as at October 2024. This population was obtained from the office of the database administrator of CAC in October 2024. Moreover, Taro Yemane (1967) sampling model was used to determine the appropriate sample size. The formula applied is given as:

$$\text{n} = \frac{N}{1 + Ne^2} \quad \text{therefore,} \quad \text{n} = \frac{9225}{1 + 9225(0.05)^2} = 384$$

Where n = Number of samples, N = Total population, e = Error tolerance and 1 = adjusted constant. Therefore, the sample size of this study is 384 owners or managers of the selected SMEs in Bauchi state of Nigeria that are selected using stratified sampling technique.

RESULTS AND DISCUSSION

Path Model Result

In this study, structural equation modeling with the partial least squares estimation (PLS-SEM) approach was used to test the hypotheses proposed earlier. Notwithstanding, there are two different stages of PLS-SEM. This include measurement model (MM) which is also known as outer model and structural model (SM) also knows as inner model. The measurement model was assessed using five criteria: 1) indicator reliability, 2) internal consistency reliability, 3) convergent validity, 4) discriminant validity, and 5) model fit evaluation, while the structural model was used to test the hypotheses.

1. Reliability of the measures

The outer loadings of each latent construct are used to assess the reliability of the indicators (Hair et al., 2013). Normally, for the indicator to be reliable, the item loading should be greater than 0.70. However, an indicator with the loading of 0.4 could be retained if its deletion would reduce the composite reliability. Thus, based on the criteria given by Hair et al. (2011) and Hair et al. (2013), of a total 31 items in the research instrument, the study retained 21 items by deleting 10 items that have loadings below the specified threshold outlined. Precisely, the items' loadings for this study ranges from 0.624 (for DGI6) to 0.843 (for EXR4), which means the values are within the threshold discussed earlier.

2. Internal Consistency Reliability

This study used composite reliability only to measure internal consistency in PLS. The composite reliability should be 0.60 or more for exploratory research and 0.70 for confirmatory research, which serves as the threshold used in this research. On this premise, the composite reliability of all the latent constructs ranged from 0.748 to 0.882, which exceeded the minimum threshold of either 0.60 or 0.70 for exploratory research or confirmatory research, confirming that all the latent constructs had strong internal consistency.

3. Convergent Validity

Convergent validity measures the extent of agreement among multiple items measuring a particular concept (Hair et al., 2011). The most commonly used measure of convergence validity is the Average Variance Extracted (AVE), with a minimum threshold of .5 (Hair et al., 2013). Average variance extracted values for this study ranged from 0.508 to 0.655, which were also above the minimum threshold of 0.50, indicating that the constructs had strong convergence validity.

Table 1: ***Indicator Loadings, Composite Reliability, and Average Variance Extracted of Latent Constructs***

Latent construct	Items	Item Loading	Composite Reliability	AVE
SMEs Performance (MSP)	MSP1	0.743	0.748	0.561
	MSP3	0.629		
	MSP4	0.675		
	MSP6	0.765		
	MSP7	0.683		
Inflation Rate	IFR2	0.718	0.882	0.508
	IFR3	0.788		
	IFR4	0.697		
	IFR6	0.690		
Exchange Rate	EXR1	0.699	0.780	0.655
	EXR2	0.794		
	EXR4	0.843		
	EXR5	0.800		
Interest Rate	ITR3	0.708	0.859	0.534
	ITR4	0.759		
	ITR5	0.803		
	ITR6	0.826		
Digital Innovation	DGI1	0.738	0.808	0.615
	DGI2	0.817		
	DGI5	0.731		
	DGI6	0.624		

Source: researcher's compilation in PLS-SEM 4.0

4. **Discriminant Validity**

Discriminant validity is the extent to which a particular latent construct differentiates itself from other constructs (Hair et al., 2022). This method requires that, for a construct to achieved discriminant validity, the square root of AVE value for each construct should be greater than the value of the latent constructs (Fornell & Larcker, 1981; Hair et al., 2011). Given these criteria, the value obtained in the Fornell and larker table shows that the discriminant validity of the latent constructs is achieved.

Table 2: Discriminant Validity

	DGI	EXR	IFR	ITR	MSP
DGI	**0.784**				
EXR	0.352	**0.809**			
IFR	0.461	0.367	**0.713**		
ITR	0.65	0.451	0.463	**0.731**	
MSP	0.534	0.562	0.543	0.491	**0.749**

Note: *MSP = SMEs Performance; EXR = Exchange Rate; IFR = Inflation; ITR= Interest Rate; and DGI= Digital Innovation.*

5. **Model Fit Evaluation**

SRMR value of was believed to be reliable measure of evaluating model fit in PLS Path modelling. The model of a study is considered fitted if the SRMR value is above 0.05 (Sarstedt et al., 2021). Consequently, the SRMR value of this study is 0.122, which is above the threshold of 0.05. Hence, the model of the relationship between economic environment proxies and SMEs performance is considered fitted and ready for the analysis.

Table 3: *Model Fit Estimation*

	Saturated model	Estimated model
SRMR	0.122	0.122
d_ULS	3.416	3.416
d_G	1.952	1.952
Chi-square	827.152	827.152
NFI	0.474	0.474

Source: researcher's compilation in PLS-SEM 4.0

PLS Structural Model Results

Following the successful evaluation of the measurement model, which is a pre-requisite for successive analyses in PLS, the structural model was also evaluated. This section describes the method and criteria that were used in assessing the structural model. Standard bootstrapping procedure with 5,000 bootstrapped samples and 371 cases was used in assessing the significance of path coefficients of the structural model (Hair et al., 2013)

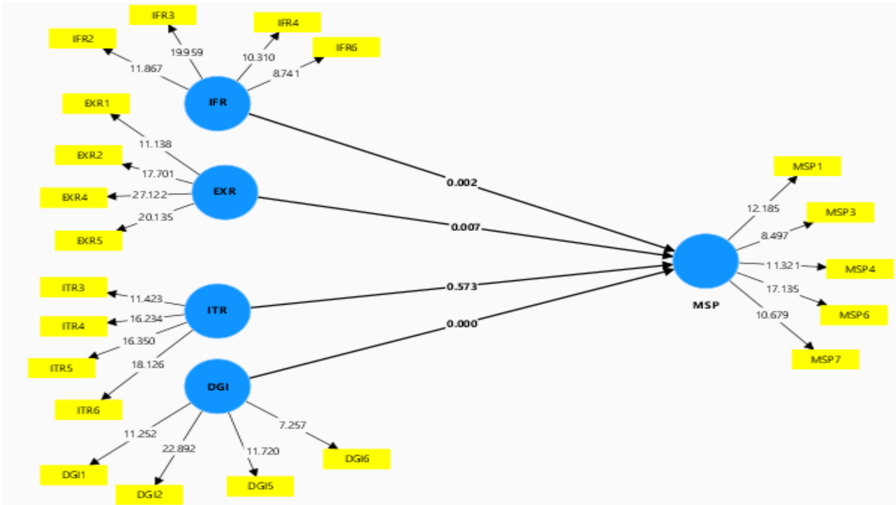

Figure 4.2: PLS-SEM Structural Model

Table 4: *Total Effect*

Hypotheses	Relationship	β	SE	T statistics	P values	Decision
H1	**IFR -> MSP**	-0.259	.085	-3.053	0.002	Accepted
H2	**EXR-> MSP**	-0.244	.090	-2.720	0.007	Accepted
H3	**ITR -> MSP**	-0.035	.062	-0.564	0.573	Rejected
H4	**DGI -> MSP**	0.528	.096	5.355	0.000	Accepted

***Note**:* Significant at the $p < 0.05$ level

Evaluation of Coefficient of Determination (R^2)

The value of R^2 in Figure 1 for the complete model of this study is 0.863, which means the independent variables of this study have 86.3% variation in SMEs performance. Precisely, this implies that the independent variables (inflation, exchange rate, interest rate, and digital innovation) explained 86.3% of the variance in SMEs performance in the study area, while other factors not included in the model explained the remaining 13.7%.

Discussion of Research Findings

The finding of the first objective of this study revealed that inflation has significant negative influence on the performance of SMEs in Bauchi State, Nigeria. This allows the rejection of the first null hypothesis (H_{O1}) with β = -0.259, t = -3.053 and p = 0.002. This result aligns with Zailani et al. (2024) that found a significant negative effect of inflation on SMEs performance in Adamawa State, which is consistent with the results from this study in Bauchi State. Theoretically, Institutional theory explains how organizations conform to the norms, rules, and pressures of their external environment. Accordingly, the negative effect of inflation on SMEs performance is justified because it imposes external pressures on the enterprises.

In addition, the finding of the second objective revealed that exchange rate has significant negative influence on SMEs performance in Bauchi State. As such the second null hypothesis (H_{O2}) was rejected ($\beta = -0.244$, $t = 2.720$, $p = 0.007$). Numerous studies provide empirical support for this relationship, including Nwachukwu et al. (2023) which examined macroeconomic determinants of SME performance in Nigeria, finding a significant negative effect of exchange rate on SMEs performance. Theoretical support for this result comes from institutional theory, which explains how organizations adapt to the external pressures of their regulatory and social environments. Exchange rate fluctuations often lead to new government regulations or economic policies, such as import/export restrictions.

The result of the third objective of this study revealed that interest rate has insignificant influence on SMEs performance in Bauchi State. Thus, the third null hypothesis (H_{O3}) cannot be rejected with ($\beta = -0.035$, $t = 0.564$, $p = 0.573$). The findings align with previous studies, such as Atugeba (2021) and Thomas et al. (2020), which reported that interest rate does not influence SMEs performance in other contexts. Theoretically, while institutional theory suggests that interest rate should impact finances and investment decisions, the limited financial inclusion and alternative financing sources of SMEs in developing countries like Nigeria could explain the insignificant relationship. The possible reason for this contradiction may be due to the reliance of SMEs on informal financing sources rather than formal loans, which reduces the influence of interest rate fluctuations on their operations.

Lastly, the result of the fourth objective of this study found that digital innovation has significant positive influence on SMEs performance in Bauchi State, which lead to the rejection of the fourth null hypothesis H_{O4} ($\beta = 0.528$, $t = 5.355$, $p = 0.000$). This result is supported by the finding of Peter and Peter (2024), which found a significant positive effect of digital transformation on SME market performance in Nigeria. Abbas et al. (2024) also supported this relationship by examining the role of digital financial innovation in enhancing firm performance. Theoretically, the Diffusion of Innovation (DOI) theory justifies the positive effect of digital innovation on SMEs performance, explaining how new technologies spread through organizations and cultures. According to DOI, the adoption of digital innovation provides a relative advantage, improving efficiency, reducing costs, enhancing customer satisfaction, and increasing competitiveness.

Conclusion

The study concludes based on the findings of each objective. Inflation and SMEs Performance: Findings shows that SMEs in Bauchi state are significantly impacted by inflation, facing increased costs and reduced profit margins. The pressure of rising costs affects their pricing strategies and consumer demand due to reduced purchasing power. Thus we conclude that inflation poses a severe challenge, particularly for small businesses with limited financial resources. Secondly, exchange rate fluctuations have a detrimental effect on SMEs performance in Bauchi state. Thus, it is concluded that weaker exchange rate negatively impacts the demand for local products and raises the cost of doing business for SMEs, especially those dependent on imports.

Furthermore, interest rate does not affect the SMEs performance. As such, SMEs in Bauchi state rely less on formal financing and more on personal savings, crowd-funding, and other traditional financing methods that are less sensitive to interest rate changes. This shields their businesses from the direct impact of interest rate volatility. Finally, it is concluded that digital transformation allows SMEs to lower operational costs, enhance customer satisfaction, and boost profitability. This expansion of digital platforms supports business growth and increased revenue streams, contributing significantly to the overall performance of SMEs in the region.

Recommendations

In line with the findings and conclusions of this study, the following recommendations were suggested:

i. To protect against declining sales due to on-going inflation, SMEs should diversify their revenue streams by offering new products or expanding into new markets.

ii. The SMEs should also review their pricing strategies and adopt a dynamic pricing approach, allowing them to adjust prices more frequently in response to rising costs.

iii. In addition, SMEs that are importing goods should diversify their supplier base to include local suppliers or suppliers from countries with more stable currencies. This reduces the cost pressure associated with exchange rate fluctuations.

iv. They should also engage with banks to negotiate better loan terms, such as subsidized interest rates, longer repayment periods, or lighter collateral requirements.

v. Moreover, the enterprises should continue investing in digital infrastructures like cloud computing, data analytics, and automation tools to enhance operational efficiency and maintain a competitive edge.

vi. Finally, they should develop the digital skills of their workforce to ensure employees are proficient in digital tools and technologies, maximizing the benefits of digital innovation for long-term success in the current digital era.

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MEDIATING EFFECT OF EXTERNAL ENVIRONMENTAL FACTORS ON THE CONNECTION BETWEEN ENTREPRENEURIAL MARKETING AND PERFORMANCE OF SMEs IN KANO STATE

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Abstract
The conventional marketing practices in Nigeria are believed to be inadequate in addressing the current challenges faced by most small and medium enterprises. Thus, drawing upon contingency theory, the study examined the mediating effect of external environmental factors on the link between entrepreneurial marketing dimensions and performance of SMEs in the context of Kano State Nigeria. The study sample comprises of owners or managers of such enterprises totaling 520 obtained through cluster - multistage sampling method. The data obtained were analyzed using PLS SEM. The study found that external environmental factors have positive and significant effect on SMEs performance. Similarly, mediating effect of EM dimensions consisting of Opportunity Focus, Proactiveness and Risk taking were established. However, there was no mediating relationship between Customer Intensity, Innovativeness, Resource Leveraging and Value Creation on the link between external environmental factors and performance. Therefore, it is recommended that managers and owners of SMEs pay more attention to the external environmental factors. They need to also exploit the untapped opportunities prevailing in the contemporary marketing settings, be proactive and take considerable level of risks to survive and be competitive.

Key words: entrepreneurial marketing, external environmental factors, SMEs' performance

Introduction

It is a well-known fact that SMEs are playing pivotal roles towards employment creation, industrialization and general economic growth and development of countries. Businesses are currently operating in dynamic, complex and hyper-competitive marketing landscapes. The conventional marketing constructs are inadequate in addressing the contemporary challenges faced by most organizations. Hence, the need to incorporate some emerging concept such as EM, and see how it will contribute towards the achievement of organizational performances. Today, organizations must act innovatively and proactively and be agile and smart enough to exploit the abundant opportunities offered by the environment. Their ability to embrace the concept of EM as opined by Gontur, et al., (2023) will make them more competitive, relevant, and successful.

Nagaty and El-Menawy (2023) posited that, EM offers business firms a paradigm shift in marketing, as it entails innovative and creative approach to create enhanced values to their clients. Thus, organizations need to embrace EM as a new marketing approach for them to be relevant in the contemporary marketing domain characterized with high uncertainty, which will also fit the peculiarities of MSMEs (Sari et al., 2023). Also, EM has the tendency to boost the growth and ensure the survival of many business organizations as innovative practices and actions substitute the conventional marketing tactics carried out by the entrepreneurs and other managers of SMEs (Sadiku-Dushi et al., 2019). Equally, the conventional marketing practices offered less explanation of marketing in the context of SMEs. Thus, EM is perceived to be more dynamic, customer oriented, cost friendly and more innovative in marketing application.

There is a growing concern arising from the unpredictability of business operating environment especially among SMEs. The inconsistency of government on economic environment clearly reveals the need for environmental assessment which is apparently significant to the Nigeria SMEs. The need to understand environmental factors becomes a necessity. The conventional marketing practices is not designed to suit the peculiarities of the SMEs. Hence the need for the owners to use some innovative behaviors like EM to achieve their objectives. Although the concept of EM in the marketing scholarship has emerged in the 1980s in an annual conference organized by the American Marketing Association in collaboration with Council for Small Business, however, it has not been receiving the needed attention (Adel et al., 2020). Although scholars are given consideration on marketing practices of smaller organizations, it is perceived that there is a vacuum regarding how marketing is observed and practiced in SMEs' context (Sá et al., 2022). Most prior studies as observed by Yadav, and Bansal (2021) were not grounded on sound theories. Hence, the suggestion that upcoming studies should be backed by affective theoretical underpinnings. Being an evolving field of study, there is dearth of empirical studies related to the concept of EM as most prior studies were purely conceptual and theoretical in nature (Most et al., 2018). Also, Hallbäck and Gabrielsson (2013) suggested for further empirical studies that will examine the connection between EM and performance in various settings and contexts. Specifically, Nagaty, and El-Menawy (2023) added that, researchers should investigate the effect environmental factors on EM – performance. Also, scholars concentrated their efforts mainly in the advanced countries with less attention to the developing or under developed nations, there is dearth of researches that explored the concept in the emerging markets and developing countries (Yadab & Bansal, 2021). In fact, even in the developing nations like Nigeria paucity of studies on the concept have been observed despite its usefulness (Hanmaikyur, et al, 2016). Also, Amjad et al. (2020) found that most studies pertaining EM are conducted in the developed nations (about 77%) with the remaining 23% shared by the developing and under developed nations. Thus, the aim of the study is to examine the mediating effect of external environmental factors on the link between EM and SMEs performance in Kano state Nigeria.

Literature Review

Performance of SMEs

There is no agreement on the exact definition of performance. Performance denotes the ability of business organizations to achieve their objectives **(**Hoque & Awang, 2019). It represents the ability of a firm to meet the aspiration of its shareholders. Firms with high performance are capable of getting rid of the numerous barriers prevailing in the marketing domain. Thus, high firm performance helps SMEs in exploring untapped opportunities, thereby ensuring their survival and competitiveness. It normally determines the overall success of firms. As a complex construct, performance can be determined using objective and/or subjective measures. For example, sales growth, investment efficiency, acquisition of clients, market share growth and returns can be used to measure the concept.

SMEs performance denotes the degree to which firms achieve their financial and non-financial goals. Other determinants of performance entail profitability, social performance, customer satisfaction, environmental performance, growth, employee satisfaction and market value (Santos & Brito 2012). The financial measures re determined by profitability, sales turnover and market value determinants, while the non-financial are measured via customer satisfaction, owners and or employee satisfaction as well as the social and environmental performance. Becherer et al. (2012) affirmed that performance can be measured based on the profitability level of a firm in carrying out its tasks and achieve shareholders' objectives. Similarly, Mojekeh et al. (2018) added that financial performance is determined through returns on assets, return on equity, market share growth, return on investment and profitability, while customer contentment, staff commitment, innovation power, effective service deliver and business improvement process enhancement are the non-financial performance indicators. On their part, Hendijani and Seyyed (2018) identified SME performance in terms of production, market, and Innovative performances. Similarly, Olusola asserts that it can be assessed through employment levels, profitability, capital strength and size. As performance is being determined by how successful firms are over certain period of time, high performance organizations stand a better chance of getting rid of some barriers and exploit untapped opportunities. Thus, owners and managers of SMEs should ensure the enhancements of their firm's performance through the adoption of innovative strategies.

Conceptualizations of EM

Scholars didn't fully agree on the exact dimension(s) that predict entrepreneurship behaviors, as they are context and/or industry specific (Kilenthong, et al 2015). Bjerke and Hultman (2002) identified three dimensions called pillars of EM, which are; entrepreneurship, resources, process and actors. The entrepreneurship encompasses proactiveness, innovation and opportunity search as well as the ability to explore opportunities and utilize them for customer value creation. Fabian et al., (2020) developed and validated measurement scale of EM and investigated their influence on firms' performance. Taking 1156 firms as sample, they developed three dimensions of EM, which are; change-driving, bootstrapping and risk-taking. Expectedly, they were found to have positive influence on performance. Yadab and Bansal (2020) have conceptualized EM based on; 1. Entrepreneurial Orientation explained by organizations' proactiveness, innovativeness and risk taking. Resource leveraging, responsiveness towards competitors, Ps of marketing, and networking 2. Innovation orientation; knowledge infrastructure and propensity to innovate Customer orientation; Brand value, customer relationship management, communication and Customer intensity and 3. Performance; marketing innovation, financial and organizational consideration. Hansen, and Eggers (2010) conceptualized and operationalized the concept as the activities that relate to both market orientation and entrepreneurial orientation.

Morris et al., (2002) employed seven variables in conceptualizing EM which are; proactiveness, opportunity focus, customer intensity, innovativeness, value creation, risk taking and resource leveraging. These dimensions were adopted in prior studies such as Hoque and Awang, (2019). This study employed this conceptualization as its well encompassing and reflect the peculiarity of the environment of the study.

Underpinning theory

Contingency theory maintained that organizations irrespective of their sizes should not depend on 'one-size-fits-all' approach in managing their businesses. The theory holds that the strategies and tactics employed by organizations in tackling or responding to emerging challenges could be obtained through proffer scanning of their prevailing situation (Schuler, 2000). He affirmed that, organizations should imbibe multiple strategic choices to address their challenges and achieve their objectives. Venkatraman, (1989) affirmed that the notion of 'fit' best explain the theory as it is in agreement with the concepts of is contingent upon and or aligns with the various resources of the organizations. Thus, the presumption that environmental characteristics serve as the contingent variables that might explain the theory. In effect, a favorable fit is among environmental complexity, hostility, dynamism and diversity will greatly boost the SMEs performances.

Contingency theory is the theory that underpins this study. It has been used in prior studies that relate to management and entrepreneurship contexts in an attempt to proffer solutions to their enormous challenges (Garengo, & Bititci, 2007; Ramirez, & Lim, 2021).

Empirical review

Scholars have conducted many studies on EM in both anecdotal and empirical studies in various contexts. For example, the work of Sari et al (2023) affirmed that EM and firms' innovation capabilities have positively impacted on the performance of MSMEs in Indonesia during the COVID-19 pandemic era. The study involved 290 MSMEs, the data were analyzed using SmartPLS. Performance was measured by ROI, productivity, firms' competitiveness, owners' satisfaction with innovation, domestic market share and profit margin sustainability. Gontur et al (2023) investigated the link between EM and competitive advantage among SMEs of Plateau Nigeria. The study involving 286 managers/owners of the enterprises established that there is weak relationship between risk taking dimension of EM and competitive advantage. However, the study found a strong and positive connections between change-driven and bootstrapping with competitive advantage.

Wijayanti et al (2022)'s work found that external environmental variables had a positive and significant influence on EM and performance in the context of Indonesian MSMEs. EM was also found to have a positive and significant effect on performance. Sarwoko, and Nurfarida, (2021)'s study examined the effect of EM on firms' performance along with the influence of entrepreneurial personality traits as determinants of EM in the context of Indonesian SMEs. Data were retrieved from 187 owners/managers of SMEs and analyzed with SEM-PLS. The findings revealed that business performance is greatly determined by EM. Also, personality traits of the owners/mangers such as conscientiousness, agreeableness and extraversion played a vital role towards implementing the EM tactics.

Drawing from Resource-Advantage theory, Amadi, (2017) investigated the direct and indirect connection between EM and customer retention in hospitality context of Port Harcourt Nigeria. The study involved 144 staff of an upscale restaurant. The work used three dimensions of EM (proactiveness, innovativeness, and resource-leveraging). The study validated a model that confirmed EM played a vital role towards customer retention. Rashad (2018)'s work examined the effect of EM dimensions on the performance of organizations in the context of Saudi Arabian SMEs operating in Jeddah, the quantitative study involving 50 managers/owners. The study found that the dimensions of EM that comprise of value creation, calculated risk and opportunity focus positively and significantly relate to performance.

Hoque and Awang (2019) investigated the influence EM on the performance of SMEs in Bangladeshi, and at the same time, examine the moderating effect of gender in the relationship. The study engaged 220 owners of the SMEs that were randomly picked from two cities of Dhaka and Narayanganj. The analyzed data obtained through SEM-AMOS 25.0 model, indicated that significant and direct connection exists between EM and firms' performances. Similarly, gender had a moderating effect in the relationship.

Drawing upon Resource-Based view, Stephen et al, (2019), investigated the influence of EM dimensions on competitive advantages of the SMEs operating in Enugu state Nigeria. The study involved 356 owners/managers and validated a model that indicated lack of significant relationship between proactiveness and competitive advantage, while opportunity is statistically significant to competitive advantage. However, risk-taking, customer intensity, and resource leveraging were not significantly related with competitive advantage. But innovativeness and value creation significantly determined competitive advantage. Mohammed, et al, (2017) investigated the connection between entrepreneurial orientation and competitive advantage, and also the moderating influence of financial support on the link between entrepreneurial orientation and competitive advantage in Iraq. Using 680, the result found that entrepreneurial orientations had a significant influence on competitive advantage. Also, financial support was found to be a moderator on entrepreneurial orientation and competitive advantage relationship.

Olannye and Edward (2016) studied the influence of EM on performance in restaurants' context of in Asaba Delta of Nigeria. 160 employees and customers were involved in the study. The study shown that the dimensions of EM (proactiveness, innovation and opportunity recognition) had a significant positive influence on competitive advantage. Asikhia, and Naidoo, (2021)'s work aimed at examining the influence of marketing environment on SMEs performance established a significant negative effect between the environment and performance. Specifically, various components of the environment had diverse influence on the performance. Hence, the conclusion that most failures of the SMEs were as a result of environmental turbulence. Becherer et al. (2012) studied the connection between the well-known seven dimensions of EM and the performance of SMEs. Engaging sample size of 174 owners of SMEs, the result indicated that EM dimensions greatly determine SMEs performances.

The studies addressed above enhance our knowledge of understanding various dimensions of EM as they were applied and measured in several contexts. Similarly, most of the studies were fragmented, as direct relationships among variables were observed. Performances are context specific. Hence the assumption that their application in a given country may not necessarily lead to similar result in another country, perhaps, due to the peculiarities that exist in different countries. As observed, there is dearth of studies that viewed external factors from the dynamism, complexity, hostility, and dynamism view point. Hence, the intervention of this work to fill such gaps.

Judging from the above empirical review, the study proposes the following hypotheses;

H_1: External environmental factors have a significant positive relationship on the performance of SMEs in Kano state.

H_2: External environmental factors mediate the relationship between entrepreneurial marketing and SMEs performance in Kano state.

Methodology

A survey method was employed with the retrieved data from the owners/mangers of SMEs in Kano state The population of the study is 42,969 comprising of 39,994 (small) and 2,975 (medium) enterprises operating in Kano (NBS 2021). The study used multistage sampling technique in arriving the sample. Specifically, samples were drawn from the eight local governments of the Kano metropolitan (clusters) comprising of Nassarawa, Fagge, Kano Municipal, Dala, Kumbotso, Ungogo and Tarauni local governments areas. Proportional to size random sampling technique was used to arrive at the subsample of from each of the eight clusters. Simple random sampling method was then employed in identifying the SMEs that partook in the study. In determining the sample, the researchers used

Krejcie and Morgan (1970) table for sample determination. An addition of 50% was done to minimize non-response bias (Bartlett, et al,2001). Out 620 of the questionnaires distributed, 547 were successfully retrieved, 27 were found to be invalid because substantial parts of the questionnaire were left blank or double checked. In the end, 520 questionnaires were valid and found suitable for the analysis. With this number, the study achieves a response rate of 65%.

The adapted measurements used are measured on a five-point Likert scales ranging from "strongly disagree" to "strongly agree". Specifically, SMEs performance was adapted from the work of Brito and Santos (2012), EM was adapted from the study of Becherer, et al (2012), and the measurement of external environmental factors were adopted from the original study of Chi (2006). In examining the relationships among the variables of the study, PLS 3.0 was utilized in the evaluation of both the measurement along with the structural models.

Table 1: Summary of measurement of the research variables

Variables	Items	Sources
SMEs Performance	16	Santos and Brito (2012)
Entrepreneurial Marketing	42	Becherer, et al (2012)
External Environmental Factors	17	Chi (2006)

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Results and Analysis

PLS-SEM 3.0 was employed in analyzing the data of the study. The study adopted a two-stage analysis for the evaluation and reporting the results of PLS-SEM modelling as recommended by Hair et al., (2017). The individual item reliability, and internal consistency reliability along with the convergent and discriminant validities were examined. 36 items were deleted out of the 75 items. They were deleted for the fact that values of their loadings felt below the acceptable threshold of 0.40 that ensures the validity of the constructs (Hair et al., 2017). In effect, 39 items were found to be appropriate for the main analysis.

Regarding the convergent validity, which is the degree at which a latent construct is truly captured by its indicators' variance (Hair *et al.*, 2017), or "the degree to which multiple methods of measuring a variable provide the same results". Average Variance Extracted (AVE) procedure was used (Fornell & Larcker 1981). Based on the recommendations of Chin (1988), and Hair et al (2017) that a value of 0.50 and above were deemed as acceptable AVE requirement on every individual latent construct, the study ensured that this requirement is achieved. This emphasizes that the constructs had adequate convergent validities. Table 2 indicated the items loadings, Cronbach's alpha, composite reliability along with the average variance extracted

With respect to discriminant validity, which denotes the extent to which a particular construct differs from others in terms of how it relates with them, and how many indicators capture an individual construct (Hair et al 2017), the suggestion of Chin (1988) was followed. He emphasized that the entire indicator loadings must be greater than the corresponding cross-loadings. That is, measures of a construct must not overlap into other construct(s). In the study, the discriminant validity was sufficiently achieved as shown in table 3.

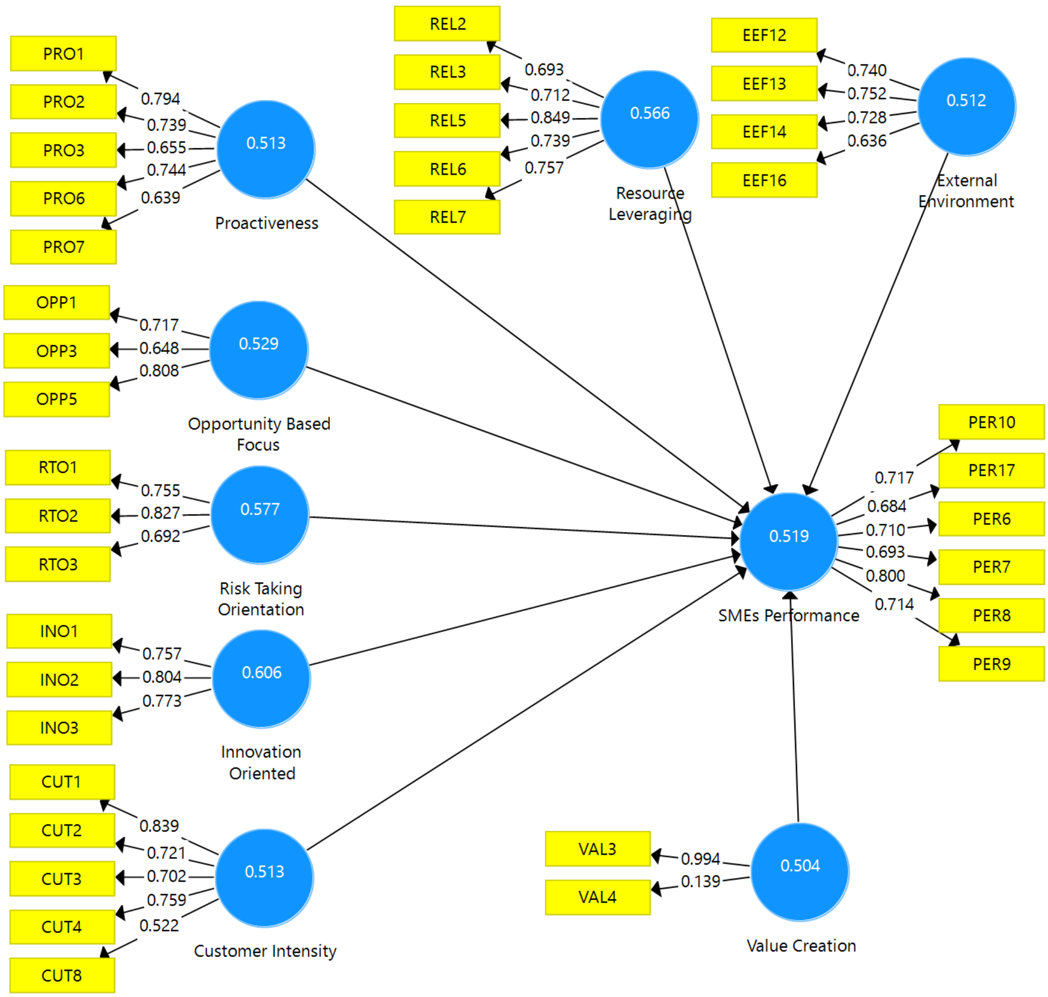


Figure 1: measurement model

Table 2: Outer Loadings

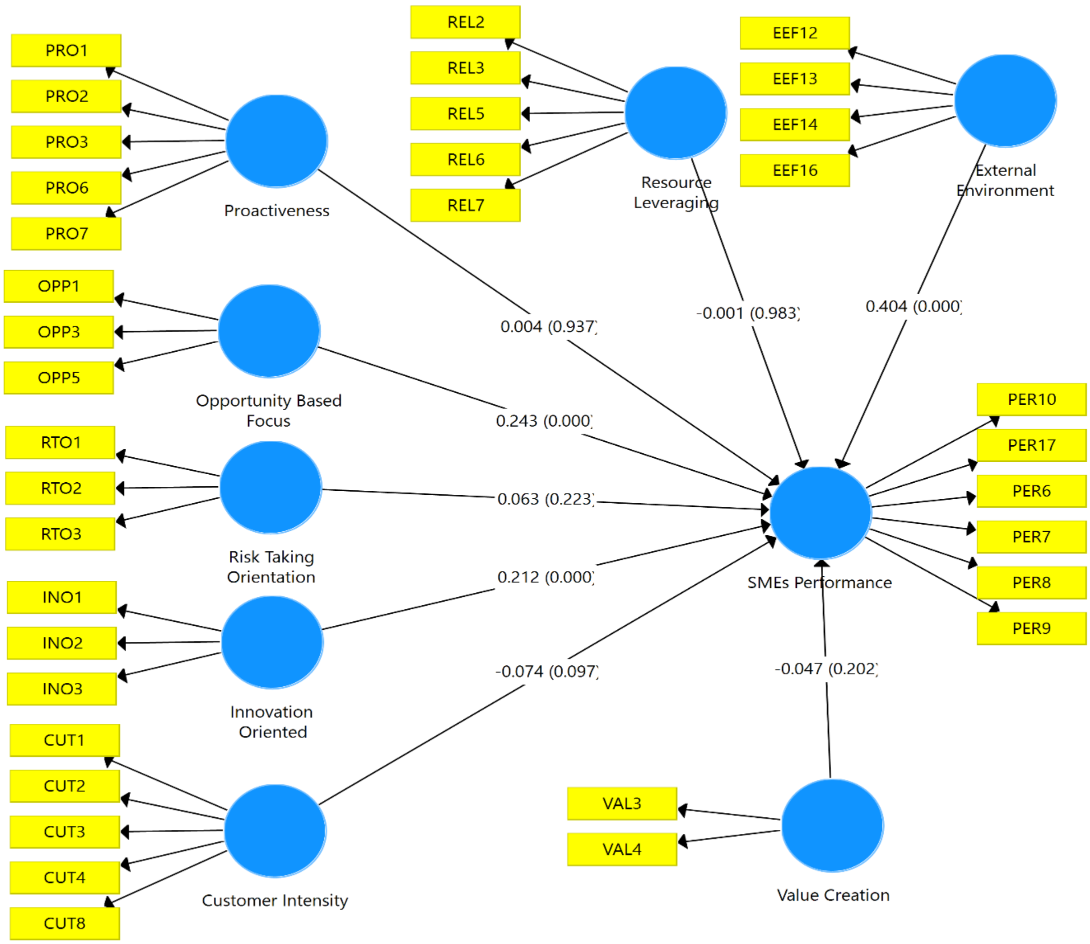
Items	Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Proactiveness		**0.766**	**0.840**	**0.513**
PRO1	0.794			
PRO2	0.739			
PRO3	0.655			
PRO6	0.744			
PRO7	0.639			
Opportunity Based Focus		**0.767**	**0.770**	**0.529**
OPP1	0.717			
OPP3	0.648			
OPP5	0.808			
Risk Taking Orientation		**0.734**	**0.803**	**0.577**
RTO1	0.755			
RTO2	0.827			
RTO3	0.692			
Innovation Oriented		**0.777**	**0.822**	**0.606**
INO1	0.757			
INO2	0.804			
INO3	0.773			
INO1	0.757			
INO2	0.804			
INO3	0.773			
Customer Intensity		**0.772**	**0.838**	**0.513**
CUT1	0.839			
CUT2	0.721			
CUT3	0.702			
CUT4	0.759			
CUT8	0.522			
Resource Leveraging		**0.808**	**0.866**	**0.566**
REL2	0.693			
REL3	0.712			
REL5	0.849			
REL6	0.739			
REL7	0.757			
Value Creation		**0.698**	**0.564**	**0.504**

VAL3	0.994			
VAL4	0.539			
VAL3	0.994			
VAL4	0.539			
External Environment		**0.780**	**0.807**	**0.512**
EEF12	0.740			
EEF13	0.752			
EEF14	0.728			
EEF16	0.636			
SMEs Performance		**0.815**	**0.866**	**0.519**
PER10	0.717			
PER17	0.684			
PER6	0.710			
PER7	0.693			
PER8	0.800			
PER9	0.714			

Table 3: **Discriminant Validity**

Variables	**CUS**	**EEF**	**INO**	**OPP**	**PRO**	**REL**	**RTO**	**PER**	**VAL**
Customer Intensity	**0.716**								
External Environment	0.051	**0.715**							
Innovation Oriented	0.108	0.414	**0.778**						
Opportunity Based Focus	0.069	0.556	0.485	**0.727**					
Proactiveness	0.089	0.537	0.548	0.595	**0.717**				
Resource Leveraging	0.608	0.065	0.082	0.071	0.069	**0.752**			
Risk Taking Orientation	0.102	0.579	0.517	0.590	0.608	0.072	**0.760**		
SMEs Performance	0.153	0.673	0.542	0.619	0.530	0.126	0.562	**0.721**	
Value Creation	0.233	0.067	0.038	0.077	0.072	0.289	0.038	0.122	**0.710**

Cross Loadings



Hypotheses Testing

Table 4 shows the results of the relationship between external environmental factors and SMEs performance. It indicates that external environmental factors have a significant relationship with SMEs performance (β = 0.677, standard deviation = 0.031, t-stat = 21.676 and p = 0.000). Hence, this hypothesis is accepted.

Table 4: **Direct Relationship**

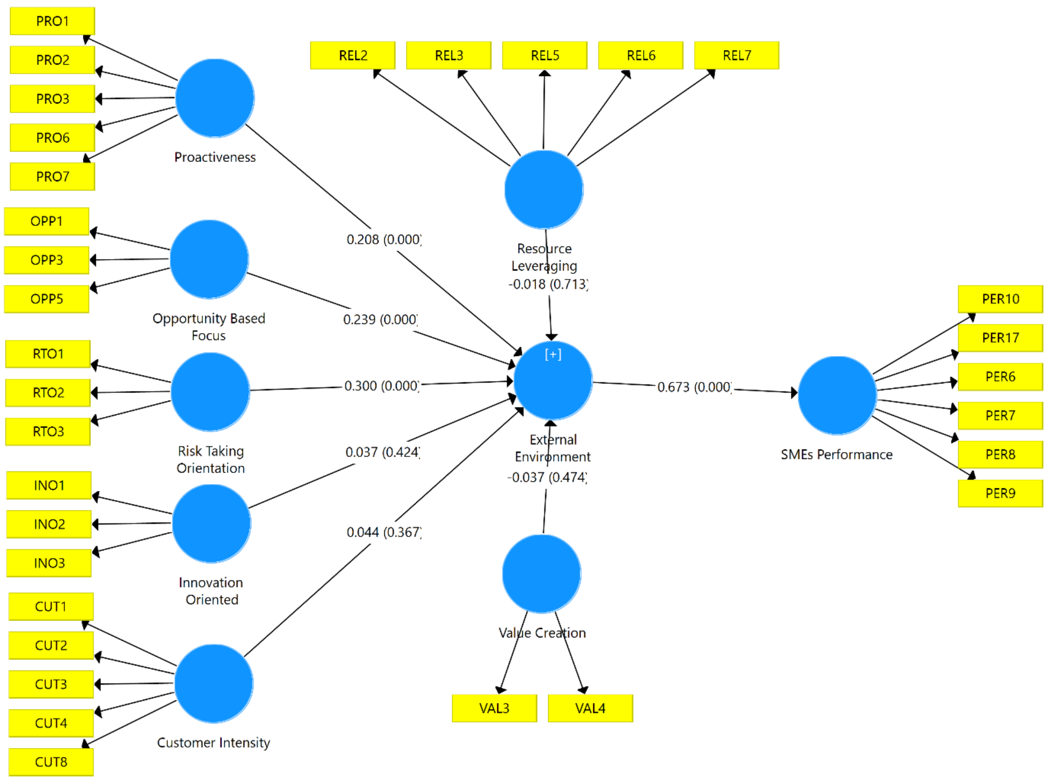
Hypotheses	Beta	Std. Dev	T Stat.	P Values	Decision
External Environment => SMEs Performance	0.677	0.031	21.676	0.000	Accepted

The result of the second hypothesis regarding indirect (mediating) relationship is depicted in table 5. External environmental factor was not found to have a mediating effect on the relationships (β = 0.017, standard deviation = 0.033, t-stat = 0.900 and p = 0.368). thus, the hypothesis was rejected. Similarly, external environmental factors did not mediate the link between Innovation Orientation and SMEs performance (β = 0.024, standard deviation = 0.031, t-stat = 0.791 and p = 0.429). Expectedly, a mediating effect was established between external environmental factors and Opportunity Based Focus-performance relationship (β = 0.161, standard deviation = 0.041, t-stat = 3.904 and p = 0.000), thereby accepting the hypothesis. Also, external environmental factor served as a mediating variable on Proactiveness-SMEs performance linkages (β = 0.143, standard deviation = 0.033, t-stat = 3.613 and p = 0.000). the hypothesis was accepted.

Mediating Relationship

Hypotheses	Beta	Std Dev.	T Stat.	P Values	Decision
Customer Intensity => External Environment => SMEs Performance	0.017	0.033	0.900	0.368	Rejected
Innovation Oriented => External Environment => SMEs Performance	0.024	0.031	0.791	0.429	Rejected
Opportunity Based Focus => External Environment => SMEs Performance	0.161	0.041	3.904	0.000	Accepted
Proactiveness => External Environment => SMEs Performance	0.143	0.039	3.613	0.000	Accepted
Resource Leveraging => External Environment => SMEs Performance	-0.018	0.033	0.366	0.714	Rejected
Risk Taking Orientation => External Environment => SMEs Performance	0.201	0.040	5.015	0.000	Accepted
Value Creation => External Environment => SMEs Performance	-0.029	0.035	0.712	0.476	Rejected

Furthermore, external environmental factor didn't mediate the link between Resource Leveraging and performance (β = 0.018, standard deviation = 0.033, t-stat = 0.366 and p = 0.714) thus, rejecting the hypothesis. Also, external environmental factors mediated the connection between Risk Taking and performance (β = 0.201, standard deviation = 0.040, t-stat = 5.015 and p = 0.000). Finally, a mediating effect between external environmental factors on Value Creation and performance was not established (β = 0.029, standard deviation = 0.035, t-stat = 0.712 and p = 0.476).



Discussion of findings

The study established that external environmental factors determine the performance of the SMEs. This is in agreement with prior empirical studies (Kim and Lin 1988; Miller, 1988). For SMEs to be relevant in today's complex and dynamic marketing domain, they have to come up with sound and effective strategies and align them with what is existing in the external business landscape by continuously being on alert, scan the environment and align such strategies to be in agreement with is in existence externally. The owners/managers of the SMEs must device means of exploring the abundant untapped opportunities available in the market. They must also work proactively by putting all hand on deck for them to survive and be relevant. Also, they must take the desired and acceptable level of risks to be able to stay ahead of their competitors. Although, mediating effect of external environmental factors were not established between the dimensions of EM comprising of customer intensity, Innovation orientation, Resource Leveraging and Value Creation on the performance of SMEs, which might be due to scarcity of resources on the part of the SMEs to favorably compete with big organizations and create more value to their clients. The complexity of today's customers who have large varieties of options and vast information at their disposal, also served as major constraints to the SMEs.

The study also has several implications to the policy makers in identifying some of the challenges that mitigate the SMEs to be more innovative and add more value to their clients. As the findings found that external environmental factors ensure the performance of SMEs, the policy makers are therefore urged to provide conducive atmosphere of SMEs to thrive, considering their role of addressing unemployment challenges, boosting the economic growth and developments of nations and poverty alleviation.

In conclusion, the study has made a positive contribution to the body of knowledge by investigating the mediating effect of external factors on EM-SMEs performance connection, as most prior studies were fragmented. As majority did not involve a mediating, and or moderating variables in their works. Similarly, Kano state which is the economic hub of northern Nigeria is involved in the study s there are paucity of empirical works in the area. Even with these, there are some suggestions for future researchers to make. For instance, upcoming studies on the concept should consider using a qualitative study and pay attention to different context, settings and populations.

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A CRITICAL REVIEW OF INVESTMENT INDICATORS AND ECONOMIC GROWTH: NIGERIAN EXPERIENCE.

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Abstract
Most developing countries, including Nigeria, are stuck in a vicious cycle of low investment caused by insufficient domestic savings, resulting in inadequate capital formation and a large savings-investment gap. Given the significance of investment in poverty alleviation and economic growth, the study conducted a disaggregated analysis on the impact of various measures of investment on economic growth in Nigeria from 1981 to 2022. Using the conventional and structural break stationarity tests, as well as the autoregressive distributed lag (ARDL) approach, the epistemological findings confirm a compelling co-integrating relationship among the study variables and show that credit to the private sector, domestic investment, economic liberalization, foreign portfolio investment, and interest rate have a significant positive impact on long-term growth, whereas foreign direct investment, capital expenditure, and inflation rate retarded growth substantially in the long-run. Furthermore, the short-run results revealed that economic liberalization, private-sector credit, and portfolio investment all correlate positively with growth. In contrast, foreign direct investment, infrastructure spending, and inflation rate are profoundly negative. The study therefore advocated for effective fiscal and monetary policy coordination to lower the cost of doing business, incentivize and open opportunities for domestic and foreign investors, increase infrastructure spending to create jobs, reduce poverty and sustain growth.

Keywords: Investment, Capital formation, Growth, Poverty, Savings,ARDL.

1. Introduction

Investment entails the purchase or acquisition of new capital equipment such as machines, buildings, and other means of production that boost the economy's productive capacity. It plays a critical role in a country's economic growth by allowing for the use of modern production methods, stimulating innovation, technology transfer and expanding countries' production efficiency. Countries see investment as a major element in increasing productivity by advancing technological progress and reducing unemployment as they advance toward economic growth (Bidemi et al., 2018. Developing economies around the world face challenges of growth and stability, apart from struggling to achieve structural transformation in accordance with the requirements of the twenty-first century economies. As a result, several nations are focusing on creating more favourable friendly investment environment. (Kinyanjui et al., 2022).

Investment comprises both domestic and foreign components that can be broadly classified into four basic types: the private domestic investment (private investment), public domestic investment (government investment), foreign direct investment (FDI) and foreign portfolio investment (FPI). Through domestic public investment, the government and public corporations buy properties, invest in real estate, and purchase tangible assets (Victor and Dickson, 2013). According to Hussain and Haque (2017), public investment is necessary to build the social capital and infrastructure required for private sector investments in the economy's sectors that offer the highest returns on capital. Conversely, private investment refers to a fundamental economic tenet in a market-based economy where physical and financial resources are frequently owned privately and production decisions are driven by the desire for profit maximization.(Babu et al., 2020). Productivity in the private sector is typically higher than that of the public sector due to the relatively lower level of corruption there (Herman et al., 2022). Public investment, on the other hand, has the potential to displace private investment if the public and private sectors function as competitors, which would have a detrimental impact on growth (Herman et al., 2022). According to the rule, public sector spending must be directed toward projects that enhance private-sector investment rather than displace it (Abdulkarim and Mohd, 2021a, 2021b, 2021c). The main benefit of the influx of foreign capital is that it promotes growth, especially in the nations that attracted it (Osuka et al., 2022). For least developed countries (LDCs), FDI is regarded as a significant source of capital formation, technological know-how, employment creation, increasing tax revenues, promoting trade opportunities, enhancing management and labour skills in host countries. (Chinasa et al., 2022).

Foreign portfolio investment (FPI) refers to a subset of global capital flows that includes the transfer of financial assets like cash, stocks, and bonds across international borders in an effort to increase profits (Ezeanyeji and Maureen, 2019). (Osuka et al., 2022). Nigeria has been categorized as an economy with low savings and even lower investment (Marcus and Vale, 2022). Evidently, promoting balanced investment in physical and financial assets as well as human, natural, and environmental capital is necessary for the promotion of sustained economic growth (Babu et al., 2020). The difference between the current rate of savings in less developed countries (LDCs) and the required rate of investment is enormous. The study, which uses annual time series data covering the years 1981 to 2020, aims to empirically address the following: What are the distinct long- and short-term impacts of disaggregated investment components in generating growth in Nigeria? Policymakers concerned about the growth of domestic and foreign investment in Nigeria will benefit from the findings' insightful details, as will other researchers in this and related fields. The research's findings are also crucial for creating short and long-term stabilization programmes and development strategies. The causes of both short-term and long-term growth are distinguished in economic theory. Given the significance of time horizons in econometric modelling, the study adopted the autoregressive distributed lag (ARDL) bounds testing approach developed by Pesaran and Shin (2001), which enables simultaneous estimation of a model's long-run and short-run parameters as well as the speed of adjustment to long-run equilibrium caused by any short-run external shocks.

The study's theoretical foundation is covered in section 2 while the methods and procedures are covered in section 3 and section four discusses the empirical findings of the study. Section five wraps up the study and offers policy recommendations.

2. Theoretical background of the research

Theoretical research on the relationship between investment and economic growth is quite extensive and has produced a class of well-defined theories, including but not limited to the accelerator theory, Jorgensen's neoclassical or user cost theory, and Tobin's Q theory of investment. The theoretical foundation of this study is based on the crowding-in and crowding-out acceleration theory of investment and the Solow–Swan neoclassical growth model. According to the accelerator theory, investment changed as a linear function of output changes. The theory places a strong emphasis on how demand condition goes on to explain how this expansion draws in more investors, which accelerates growth (Treadway, 1971). The accelerator theory has several variants used in applied research which includes the simple, flexible, and the crowding-in and crowding-out accelerator theory (Abdulkarim and Mohd, 2021b). The simple accelerator theory of investment presumes that each time period results in the desired stock of capital and describes investment as a function of output growth alone. It indicates that the change in the capital stock is equal to a fraction of the change in output. This version of accelerator theory assumes a fixed capital-output ratio, suggesting that the interactions between investment and production is technologically fixed. Accelerator theories in which investment responds slowly over time to changes in production levels are often called flexible accelerator models. The theory of flexible accelerator has been developed by Goodwin (1948) and Chenery (1952), Koyck (1954) but the most accepted approach is by Koyck (1954). One of the main flaws in the simple acceleration theory—that the capital stock can be modified optimally immediately—is eliminated by the flexible accelerator theory. According to the flexible accelerator theory, there are delays in the course of adjustment between the level of production and the level of capital stock (Koyck, 1954). The main factors that link public policy to economic investment are the crowding-in and crowding-out acceleration theories. Babalola and Onikosii-Alliyu (2020) describes crowding-out as a decrease in private capital expenditure that is caused by a rise in interest rates instigated by expansionary fiscal policy. Public spending on infrastructure alongside the supply of public goods, however, can also be an obvious complement to private investments. The demand for inputs and support services may boost the demand for private production, which in turn raises the demand for private output, while aggregate demand and savings can improve the supply of resources in general (Babu et al., 2020). Public investment of this kind can also improve private investment prospects and enhance the efficiency of capital. An expansionary fiscal policy would have the effect of increasing consumers' disposable income, thereby increasing their aggregate demand. Investors will have a robust profit due to a decrease in taxes and a consequent rise in demand (Abdulkarim and Mohd, 2021a). Government deficit financing via domestic and external borrowing may result in greater borrowing costs, fewer funds to spend, and wage increases, all of which reduce business profitability and consequently, private investment. As a result, private investment may be discouraged or crowded out, lowering an economy's output (Babalola and Onikosi-Alliyu, 2020). If the economy is in a slump or operating at less than full capacity, expansionary fiscal policy can boost growth while generating an advantageous multiplier effect, leading to increased private sector investment. Crowding-in is more probable during a recession because the private sector has unspent savings. Crowding-out will occur when the economy is nearing full capacity and there are few spare savings (Herman et al.,2022). Solow (1956) and Swan (1956) have made significant contributions to our understanding of the factors that influence the rate of economic growth in various countries.

3.1 Data and methodology

This study used the quantitative approach and a descriptive research design. Answering who, what, when, where, and how questions about a research problem is made easier by descriptive research designs (Abdulkarim and Mohd, 2021c). Secondary data sourced from the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), and the statistical database for the World Development Indicators were used for this study. The subjects of the data collection included the real gross domestic product (RGDP), various components of investment disaggregated into Foreign Direct Investment Inflow as a percentage of GDP (FDI), foreign portfolio investment (PINV), gross fixed capital formation as a percentage of GDP (GFCF) (proxy for private investment), and government capital expenditure (CAPEX) (proxy for public investment), and control variables such as domestic credit to private sector (CPS), inflation rate (INFR), effective interest rate (INTR) and economic liberalisation (ELB) adopted as a dummy variable, respectively. Economic liberalisation was included in the model as a dummy variable to investigate whether a planned economy encourages more growth than a deregulated or free market economy. The variable was measured with the value of 1 in years 1986 to 1993 and 2007 to 2020 when major attempt at economic liberalization started in Nigeria following the implementation of the Structural Adjustment Programme (SAP) and the National Economic Empowerment and Development Strategy (NEEDS) and zero for other years (Abdulkarim and Mohd, 2021c). All variables were taken on annual basis in nominal and percentage terms from 1981–2020. Data on RGDP, CAPEX, CPS and PINV taken in nominal forms were log-transformed to stabilize the variance of the series and make interpretation in proportionate terms while the GFCF, INFR and INTR retained their percentage form. E-views 12 statistical package was utilized for data analysis. Following the lead of Omojolaibi et al. (2016), Kengdo et al. (2020) and Babu et al. (2020), the study modelled economic growth proxy by RGDP as a function of disaggregated forms of investment and the aforementioned control variables. In accordance with the literature and the study's objectives, an

Autoregressive Distributed Lag (ARDL) model with modifications, presented in its general form as an unrestricted error-correction model (UECM) regression from which all tests and estimations are conducted.

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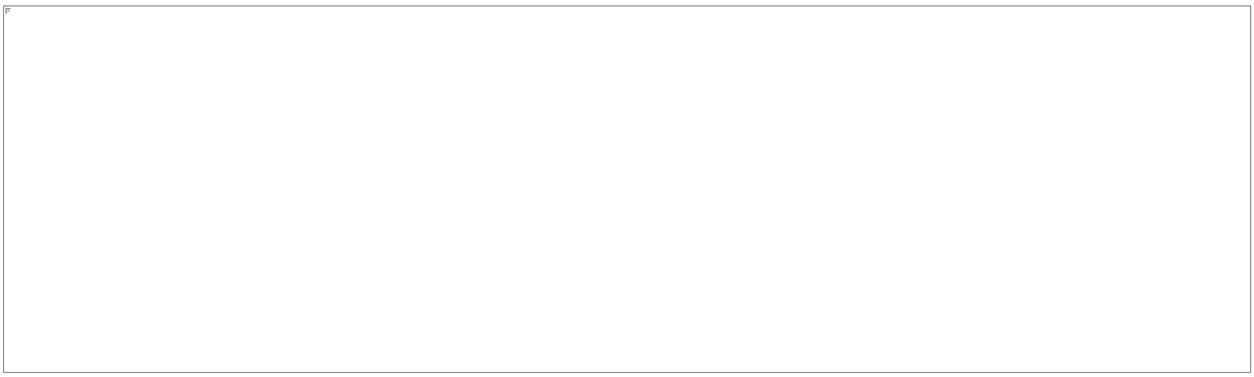
Where: ∝0 = Intercept and i is the lag indicator. ∝2, ∝3, ∝4, ∝5, ∝6, ∝7, ∝8 and ∝9, represent the long-run multipliers which show the long-run effects of the identified determinants of investment on economic growth to be calculated. Δ = Denotes the first difference operator, t = deterministic time trend consisting of years from 1981 to 2020. β2, β3, β4, β5, β6, β7, β8 and β9 are the shortrun dynamic coefficients which help to estimate the error correction mechanism and the model's convergence to equilibrium. k is the number of explanatory variables, and ξ is the disturbance term that is uncorrelated with the x's. while ECTt-1 is the error correction term's one-period lag value and the speed adjustment parameter that gauges how quickly the variables, in the event of a disturbance, returned from short-run disequilibrium to long-run equilibrium. The coefficient must be negative, less than one and statistically significant in order to achieve long-run equilibrium. The coefficient's value provides the long-run annual path to equilibrium GDP. A test of the disturbance term, Et, can confirm that the regression includes an adequate lag length. If the error series is serially uncorrelated and indicative of a white noise process, the lag lengths included are sufficient (Abdulkarim and Mohd, 2023).

3.2 Estimation procedure.

The co-integration relationship between the variables was examined using the ARDL bounds test developed by Pesaran and Shin (2001). According to Pesaran and Shin (2001), one of the most important characteristics of co-integrated variables is their proclivity to react to any shock that might require a break from long-run predictability. As a result, the ARDL method's error correction model depicts the degree to which the variables are vulnerable to short-run shocks on the one hand, as well as the measure of such variations caused by shocks that are adjusted within a year on the other. Due to its robustness, reliability, and statistical properties, which are thought to be superior to other long-run analytical techniques in the literature, the ARDL has been widely used in recent empirical analysis. When compared to previous and traditional co-integration methods proposed by Engle and Granger (1987) and the maximum likelihood method suggested by Johansen (1988, 1990); Johansen and Juselius (1990), which require a long sample period and all variables to be I (1), the ARDL methodology has several advantages. The first is that the ARDL approach does not require that all variables under study be integrated in the same order and can be used regardless of whether the fundamental variables are integrated in order one, order zero, or a mixture of both. However, when the basic variables are integrated of order I. (2), this model cannot be used. In this study, none of the variables were integrated of order I(2). As a result, the obligation of assessing the order of integration among variables and pre-testing for unit roots is lifted from the econometric methodology (Ewetan et al., 2020). However, Pesaran and Shin (2001) explained that the dependent variable must be first difference stationary as a prerequisite for the co-integrating relationship to be valid. Rahman and Islam (2020) assert that any I(2) variable or variables may result in a system failure. The ARDL approach to co-integration was chosen because it is suitable for studies with comparatively small sample sizes, like the one under consideration. According to Pesaran and Shin (2001), the short and long-run parameters obtained through the ARDL technique are fairly more accurate, robust, and better in the context of small and limited sample data sizes. Furthermore, when compared to vector autoregressive (VAR) models, the ARDL model allows for more variables and is more versatile about lag structure since it can incorporate different optimal lag structures for different variables in the model

4.1 Results and discussion

Preliminary analysis of study variables. By outlining the key characteristics of the investigated variables in our model, this initial evaluation gave an overall understanding of the nominal data set and determined whether the data series are normally distributed and appropriate for using the OLS regression. Table 1 summarizes the descriptive statistics for the study variables in their nominal form.



Source: Author’s Computation 2023 using E-views 12 statistical package

The standard deviation in Table 1 illustrates the degree of variable volatility. It displays how much each variable deviates from the mean. The skewness of the data reveals the asymmetry of the data. The data in Table 1 show that all of the variables under scrutiny are positively skewed, which suggests a slightly heavy-right tail. Kurtosis measures the acuteness of a normal distribution curve's peak. With kurtosis values under 3, RGDP displays a platykurtic distribution, indicating that the variable produces outliers that are both less prevalent and less severe compared to those observed in the normal distribution. But every explanatory variable exhibits a leptokurtic distribution with a kurtosis value above 3. This suggests that these variables have higher-than-average kurtosis and larger-than-average tail weights in their population density functions. In terms of skewness and kurtosis, the Jarque-Bera statistic assesses the degree to which sample data match a normal distribution. As shown by the probability values of the Jarque-Bera statistics for the INTR, LOGRGDP, LOGCAPEX, LOGCPS, and LOGPINV series, the null hypothesis is securely acknowledged for these data points. As a consequence, since the associated Jarque-Bera probability values have a threshold of significance above 5%, it can be said that these variables have a normal distribution. On the contrary, FDI, GFCF, and INFR series exhibit significant Jarque-Bera probability values of below 0.05, which amply demonstrate the absence of normality in their residuals. This implies that these variables are extremely vulnerable to shocks and other economic swings, that may have resulted in outliers and residual non-normality. For the purposes of our regression analysis, the Jarque-Bera probabilities for each of the logged variables revealed that they are all normally distributed. The ARDL co-integration method used in this study is not, however, dependent on the normality of the data distribution (Rahman and Islam, 2020). To assess the impact of multi-collinearity on the precision of estimated regression coefficients, researchers frequently use the correlation coefficient and the variance inflation factor (VIF) test among pairs of predictors (Babu et al., 2020; Robert, 2007). The Pearson Product Moment Correlation Coefficient was used in the study to assess the level of multi-collinearity issues and the degree of linear dependability among the explanatory variables included in the empirical model. Nevertheless, the correlation analysis makes no inferences regarding the direction or strength of any causality or association among the variables under investigation. The correlation coefficient of the explanatory variables in their nominal form are displayed in Table 2. Since the correlation coefficients of the study variables were found to be within the permissible upper limit of 0.80, multicollinearity among the variables clearly mentioned in the model does not pose a significant threat (Abdulkarim and Mohd, 2023). However, one should exercise caution when translating high VIF values or correlation coefficients of the variables as proof of an elevated level of multi-collinearity. The importance of comparing VIF (and tolerance) threshold values to other variables influencing the variance of the regression coefficient is emphasized by Robert (2007). Values of the VIF of 10, 20, 40, or even higher do not, by themselves, invalidate the findings of regression studies, advocate the application of ridge regression, or encourage the combination of two or more independent variables into a single new variable to fix the problems associated with multicollinearity. Similar to this, a number of recent research studies have demonstrated that multi-collinearity may not always be problematic or that the method often employed to address multicollinearity difficulties in regression analysis may occasionally cause greater problems than they try to solve (Nguyen, 2020; Babu et al., 2020; Robert, 2008).

4.2 Test of stationarity of study variables.

Time series analysis requires that the data be checked for stationarity. The literature on time series econometrics has made it clear that test results can be misleading if the estimated variables are non-stationary and/or not co-integrated. When time series data is not stationary, shocks in the data will disintegrate rather than be amplified, whereas shocks are neutralized and the data returns to its mean value when time series data is stationary. All study variables are checked for unit root issues since time series data are susceptible to them, ensuring a reliable and useful time series evaluation. The stationarity of the time series must be examined to make certain that none of the variables are integrated above one (I (1)) to guarantee the accuracy of the co-integration bounds test (Abdulkarim and Mohd, 2023). The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests as well as structural breakpoint methods were used to check the order of integration of the variables under analysis. This is significant since the accuracy and dependability of empirical results are impacted by the econometric analysis of non-stationary variables. ADF tests approximate the autoregressive moving average (ARMA) structure of the test regression errors using parametric auto-regression, whereas PP tests help to correct the bias brought on by ADF tests due to neglected autocorrelation. The way the Phillips-Perron (PP) unit root tests handle serial correlation and heteroscedasticity in the errors is where they basically differ from the ADF tests (Abdulkarim and Mohd, 2022).

Source: Author's Computation 2023 using E-views 12 statistical package

Notes: a, b and c denote the rejection of the null hypothesis at 1, 5 and 10% significance levels, respectively, while n denotes Not Significant.

The ability to veto a false unit root null hypothesis will be limited if this break is not explicitly

Source: Author's Computation 2023 using E-views 12 statistical package

Table 3 displays the outcomes of the traditional and structural breakpoint unit root tests. As can be seen in Table 3, the outcomes of the conventional and structural breakpoint unit root tests were comparable. At levels and the first difference, the variables under consideration were stationary, but none at the second difference. The dependent variable (RGDP) was also stationary at the first difference, demonstrating that the prerequisites for applying the ARDL method were fulfilled.

4.3 Short-run impact of investment determinants on economic growth in Nigeria.

Utilizing the most effective lag length, the researchers estimated an unrestricted error correction model (ECM) linked to the long-run relationship from Eq. (1) to scrutinize the model's short-run dynamics. About 87.8% of the short-run disequilibrium brought on by shocks in previous years returns to long-run equilibrium in the current year. The economy should recover from any short-run outliers and return to its long-run optimal growth path in about 1.14 years due to the relatively quick pace of adjustment

Source: Author's Computation 2023 using E-views 12 statistical package

Note: (**) Significant at the 5%, (***) Significant at the 1% and (NS) Not Significant. R-squared = 0.8880, Adjusted R-square = 0.7819, F-statistics = 8.3701, Prob. (F-statistics) = 0.0000, Durbin-Watson (DW) statistics = 2.1586. Cointeq = LOGRGDP – (0.1529ELB – 0.0195*FDI + 0.0073***GFCF – 0.0024**INFR + 0.0141***INTR – 0.1957***LOGCAPEX + 0.3451***LOGCPS + 0.0396** LOGPINV.***

Clearly, a percentage increase in the present rate of foreign direct investment inflow is associated with about 1.52% decline in current level of economic growth. Foreign direct investment (FDI) is frequently asserted as a viable vehicle for economic growth because it is thought to be less vulnerable to crisis since investors typically have better investment arrangements and comprehend the host country's economic complexities. While it appears that FDI can provide greater technology transfer to host economies, the results indicate that Nigeria has not successfully attracted FDI commensurate with its vast resources or accomplish a high growth rate because it failed to develop the absorptive capacity to benefit from foreign investment. The amount of FDI inflow has decreased as Nigeria's level of insecurity has risen. The government's apparent inability to provide a safe and secure environment for people, property, and the conduct of business and economic activities is what is causing an increasing exodus of foreign direct and portfolio investment from Nigeria to other West African nations, which has a detrimental effect on revenue generation and economic growth.

Pervasive and structural security issues generate economic risks and uncertainties that change people's saving, investing, and consumption habits, skewing the equilibrium resource allocation within a nation. Infrastructure damage brought on by terrorist actions can disrupt commerce and increase a nation's cost of doing business. The short-run coefficient of present inflation rate in Nigeria D(INFR) in concord with the long-run result initiated a negative influence on the current level of economic growth that is significant at one percent level. Evidently, a percentage increase in the present inflation rate will stimulate a decline of -0.22 percent in the current rate of economic growth. Monetary policy, in contrast to fiscal policy, can address the problem of economic shocks very quickly. Monetary policy goals include managing a variety of monetary targets, such as fostering economic growth, achieving full employment, stabilizing prices, preventing economic crises, and maintaining real exchange rates and interest rates. However, as rising prices reduce disposable income and push people into poverty, the significance of maintaining pricing stability is frequently emphasized. Consumers' decreasing purchasing power as a consequence of income erosion brought on by price increases leads to a drop in standard of living.

The McKinnon-Shaw hypothesis stipulates that a high deposit rate is a necessary policy tool for galvanizing financial savings for investment. Contrary to the McKinnon-Shaw hypothesis, the Neo-Keynesians hold that financial liberalization is bad for investment and growth. They stress that saving is determined by investment and that a high interest rate may lower savings by suppressing investment. Besides, financing working capital with borrowed money at high interest rates may result in cost-push inflation.

Increased government spending on infrastructure facilities lowers businesses' overhead and per unit cost of production, stimulating private investment growth and lowering poverty levels. Improved government spending is frequently designed to support growth and its use must be both economically and politically efficient and effective. As a result, effective management of social regulations is required so that government expenditure policies remain optimal, efficient, and effective in stimulating economic growth. However, the study result indicated that government infrastructural spending in Nigeria has been inefficient and retarding growth during the review period. The current level of domestic credit to private sector D(LOGCPS) has a significant positive influence on economic growth at the 5% probability level, in line with the long-run result. The coefficient of the one-year lag of private sector credit D(LOGCPS(-)) variance with the long-run result, on the other hand, is associated with a negative and significant impact on the current level of economic growth, which is significant at 5 percent. As a result, a percentage increase in previous levels of private sector lending motivated a drop in current economic growth of around 10.46 percent. For both new and existing businesses, the private sector may apply for credit to increase labour productivity. Nigeria has insufficient domestic savings, which may make it difficult for financial institutions and markets to meet domestic credit demand solely through savings. These gaps imply that additional funding sources, such as foreign capital inflows, may be needed to supplement domestic savings in order to meet the private sector's credit demand. Foreign capital enhances domestic resources by advancing capital stock, technology, managerial aptitude, entrepreneurial prowess, brands, and market access.

4.3 Long-run effects of investment determinants on economic growth in Nigeria.

The study estimated the conditional ARDL long-run model for Eq. (1) to determine the long-run effects of determinants of investment on economic growth in Nigeria. Table 5 contains the long-run estimated results. The long-run coefficient of economic liberalisation (ELB) is positively correlated with economic growth and statistically significant at one percent level. Findings as in Table 5, increased liberalisation of the Nigerian economy is expected to boost economic growth by 15.29 percent. The result is consistent with the findings of Gitahi et al. (2013) who reported a significant positive impact of economic liberalisation on private investment and growth in Kenya.

Source: Author's Computation 2023 using E-views 12 statistical package

The long-run coefficient of foreign direct investment inflow (FDI) showed evidence of an inconsequential negative effect on economic growth in Nigeria during the review period. The negative sign of the coefficient indicate that FDI limits growth in Nigeria during the review period which shows that Nigeria needs significant inflows of foreign direct and portfolio investment to propel growth because it is a developing nation with weak domestic capital formation and a shortage of necessary infrastructure. The long-run coefficient of domestic investment (GFCF) displays a positive effect on economic growth that is significant at 1% level, suggesting that increased domestic capital formation is required to engender growth. The findings indicate that a percentage increase in domestic investment may stimulate an increase in economic growth of about 0.7 percent.

The findings support earlier hypotheses, Solow's (1956) growth theory, which explains the connection between capital formation and economic growth, as well as recent studies by Apanisile and Okunlola (2014), Babu et al. (2020) and Daniel (2022), which found an important beneficial association between domestic capital formation and long-term economic growth in Nigeria.

The results are in line with those of Akinlo and Oyeleke (2018) and Nguyen (2020), who found an important negative correlation between the rate of inflation and economic growth in Nigeria. The availability of financial services, including a productive interest rate, is a critical component for encouraging healthy and equitable economic growth. The result is consistent with the findings of Nonvida and Amegnaglo (2017), Miftahu (2019) and Babu et al. (2020) who found significant evidence of a positive effect of interest rate on economic growth in Benin, Nigeria and Sub-Saharan Africa, respectively.

Source: Author's Computation 2023 using E-views 12 statistical package

Note: (**) Significant at the 5%, (***) Significant at the 1% and (NS) Not Significant. R-squared = 0.8880, Adjusted R-square = 0.7819, F-statistics = 8.3701, Prob. (F-statistics) = 0.0000, Durbin-Watson (DW) statistics =

The long-run coefficient of foreign portfolio investment (LOGPINV) generated a positive impact on economic growth that is statistically significant at 5% level. Based on Table 5, a percentage increase in foreign portfolio investment, while holding other explanatory variables constant, elicited a rise in economic growth of around 3.96 percent.

In light of the growing gap between their domestic capital stock and capital requirements, emerging nations are feeling the need for foreign capital to augment domestic resources. An important method for boosting the amount of funds available for domestic investment is through foreign capital inflow. To close the savings and foreign exchange shortfalls related to the quick wealth generation and growth required to end the pervasive poverty in developing nations, foreign capital inflow is necessary.

5. Conclusion and Recommendations

Due to low levels of income and domestic savings, Nigeria has a very large gap between investment and saving. In order to increase job creation, combat poverty, and foster growth, the nation has opened up several economic sectors to foreign investors and provided a number of investment incentives after realizing the ineptitude of domestic capital. The study conducted a disaggregated analysis of the impact of various investment indicators on economic growth of Nigeria over a 40- year period from 1981 to 2020.

Domestic investment was disaggregated into private and public investment while foreign investment was disaggregated into foreign direct and portfolio investment. Credit to private sector, inflation, interest rates and economic liberalisation were adopted as control variables and their relative effects on economic growth were tested using the ARDL methodology. The empirical findings confirm co-integration among the study variables and demonstrate a significant positive impact of economic liberalisation and credit to private sector on economic growth both in the long and short-term while domestic investment, foreign portfolio investment, and interest rate were efficient and associated with a significant improvement in economic growth only in the long-run. The study advocated for effective fiscal and monetary policy coordination to lower the cost of doing business, incentivize and create an enabling environment for domestic and foreign investors, and improved infrastructure spending to generate jobs, alleviate poverty, sustain growth and achieve overall macroeconomic stability. This study has important policy implications, including the need to liberalize the financial industry, improved access to credit and enhanced financial inclusion.

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MITIGATING THE ADVERSE EFFECTS OF SHOCKS DURING SHORT RUN BUSINESS CYCLES: THE ROLE OF AUTOMATIC FISCAL STABILIZERS IN NIGERIA

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Abstract

The short run impact of automatic fiscal stabilizers mitigating and absorbing shocks in aggregate spending in Nigeria the period 2001q_1 -2021q_4 is examined using a simulation methodology. The research found out that in the short run automatic fiscal stabilizers in Nigeria have stabilisation coefficient values of -0.78 during economic boom and 0.00008 during recession, implying that they are preventing about 0.008 per cent deviation in output during recession, but increasing deviation in output by as much as 78 per cent during boom. It was also discovered that about 13 per cent, 15 per cent and 14 per cent of output are stabilised by automatic stabilizers in the case of shocks in government expenditure, private consumption expenditure and private investment expenditure respectively. Based on these, the study recommends that policy makers in Nigeria should increase and emphasise the use of transfer payments such as unemployment benefits so as to make the stabilisation coefficient more effective, thereby embracing automatic stabilisation in the short run during recession and contenting with a slower but smoother growth pattern. Incidence of tax leakages, avoidance and evasion should all be reduced to make the stabilisation power of the automatic fiscal stabilizers more effective.

Key words: Automatic fiscal stabilizers, contraction, expansion, fiscal policy, shocks, stability.

1.1 Introduction

An automatic stabilizer is a rule in the fiscal system that leads to significant automatic adjustments in government revenues and outlays relative to total output in response to business-cycle fluctuations while keeping the laws constant (Buettner & Fuest 2010). The tax-and-transfer system's inherent flexibility is what makes sure that during a recession, taxes go down and spending goes up. Even though the implications for fiscal policy may be complicated and contentious, the idea of automatic stabilizers is clear-cut and simple. When private income falls during an economic contraction, tax responsibilities automatically decrease without changes in tax rates (Spilimbergo et al., 2010). Similarly, when unemployment rises during a contraction, unemployment compensation and other transfer payments automatically increase without any modifications to transfer programs. Personal and corporate private income available for spending will not decrease as much as national income, and private investment and consumer expenditure would not decrease as much as it would if tax liabilities and transfer payments were not automatically altered (Girouard & Andre, 2005).

Automatic stabilizers, though part of a fiscal policy regulation, do not encompass all of the systematic fiscal policy responses particularly some government programs, as they do not provide optional policy modifications. Various studies (e.g Follette & Lutz, 2010; Dolls et al., 2012; Dolls et al., 2015) indicated that the automatic stabilization coefficient varies significantly across nations and sources of disturbances. In the case of the income shock, we find the highest stabilization coefficients for Denmark (56%), Belgium (53%), Germany (48%) and Hungary (48%). Although South Africa was found to have lower than 10% stabilisation coefficient, little or no empirical evidence of the stabilisation coefficients of the stabilizers for Nigeria in particular has been accessible, with the economy struggling with output growth and stability ever since after the 2008/2009 global financial crises. The purpose of this paper is therefore to evaluate the short impacts of the automatic stabilizers in Nigeria.

2.1 Literature Review

2.1.1 Conceptual issues

Fiscal policy is generally viewed as the deliberate manipulation of government income and expenditure to achieve economic and social objectives and sustain growth. And government spending and taxes are the primary tools of fiscal policy, and they are managed to accomplish effective resource allocation, economic stabilization, income redistribution, and economic growth (Tanzi, 2008). This means that the main objective of fiscal policy is to promote economic conditions conducive to business growth in consistence with macroeconomic stability. To stabilize the business cycle, fiscal policy works in at least two general ways. It either works through automatic stabilizers or through the implementation of discretionary measures (Boushey et al., 2019). While an increasing number of studies have indicated that automatic stabilizers are effective in alleviating the impact of negative shocks (Maravalle & Rawdanowicz, 2020), discretionary measures have also proved crucial in mitigating the effects of adverse shocks during the Great Recession and the early stages of the COVID-19 pandemic (Romer & Bernstein, 2009; OECD, 2020 & IMF, 2021). However, many contend that the implementation delays and knowledge gaps of counter-cyclical discretionary fiscal policy restrict its stabilizing effect (Blinder, 2004; Blanchard, 2010; Eichenbaum, 2019; Mohl et al., 2019).

Automatic stabilizers, on the other hand, are integral component of the government budget that are intended to lessen economic activity swings without requiring arbitrary government intervention. When output deviates from its potential trend, the tax code and spending regulations automatically activate the policy instrument. The goal of spending programs like unemployment benefits is to increase disposable income during hard times. This means that taxes are the most obvious and much considered source of automatic stabilisation on the revenue side (Auerbach & Feenberg, 2000), and unemployment benefits, on the expenditure side. This, however, may not be applicable to Nigeria and most developing economies where there is no effective tax system and appropriate and ideal transfer payment programmes, making it different from the traditional automatic stabilizers usually found in industrial countries (Udoh & Ebong, 2011), and hence the effect of fiscal stimulus measures and tax reductions are unlikely to be at their best.

2.1.2 Empirical Literature

Discussions about automatic stabilizers go back to Keynes's time but the earliest theoretical work on automatic stabilizers began with Musgrave and Miller (1948). As Blanchard and Perroti (2002) pointed out, automatic stabilizers are a very old and very highly Keynesian influenced idea. While Veld et al., (2012); Mohl et al., (2019); and Maravalle and Rawdanowicz, (2020) revealed that automatic fiscal stabilisers have been quantified using a variety of methods, other researches such as Auerbach and Feenberg, (2000) and Immvervoll et al., (2006) believed that the direct stabilization role of automatic fiscal stabilisers in smoothing household disposable income, usually following a shock to market income, is evaluated using household-level data and micro simulations that mimic an income tax system. For instance, Karass and Yang (2022) using data from 29 European countries over 2002Q1–2019Q4 revealed that that higher automatic stabilizers are associated with lower output volatility, and the relationship is statistically significant and remarkably robust. At the same time, however, the "stabilization benefit" of automatic stabilizers is shown to have varied considerably across countries and over time, with automatic stabilizers found negatively and statistically significantly related to the severity of business cycles. This is as Blanchard and Summers, (2020) discovered that, by virtue of their mechanical nature, automatic stabilizers tend to respond more quickly compared to discretionary fiscal policy. This means that spending programs, such as unemployment benefits, are intended to boost disposable income in times of economic distress. According to Hofer, Hanappi and Müllbacher (2012), using micro-simulation model ITABENA in Austria, automatic stabilizers will absorb 46% of the shock in the event of a proportionate income shock. Likewise, 68% of the shocks caused by unemployment are absorbed by automatic stabilizers. The study also found that the magnitude of Austria's automatic stabilizers is mostly unaffected by recent changes to the income tax code, and that automatic stabilizers enhance the redistributive impacts of the country's tax benefit system. Similarly, Kingi and Rozema (2015) used micro-simulation model to develop a policy relevant estimator for the size of the tax system's automatic stabilizers in U.S.A. and found out the tax system reduced aggregate consumption's sensitivity to changes in income by 19.5% on average between 1988 and 2009 (from 0.164 to 0.132).

By proposing a model that combines the new Keynesian model of nominal rigidities and business cycles with the conventional incomplete-markets model of consumption and inequality, McKay and Reis (2014) found that while tax and transfer policies that impact inequality and social insurance in U.S.A. can have a greater impact on aggregate volatility, the traditional claim that stabilizing disposable income will stabilize aggregate demand has little bearing on business cycle dynamics. Using a VAR approach to investigate the role of pro-cyclical debt as automatic stabilizers in the United States, Wesselbaum (2013) discovered that government debt generates a wealth effect that has been largely ignored but has a significant impact on business cycle fluctuations, and debt moves pro-cyclically with output. Again, using a different approach, Fatás and Mihov (2011) found a strong negative correlation between automatic stabilizers proxied by government size and output volatility for the sample of 20 OECD countries and for the states in the USA. In Turkey, Sen and Kaya (2013) found that the there is a unidirectional causal relationship between taxes and the best taxes for reducing business cycle swings are the personal income tax and the corporate income tax. In a similar work in Germany, Buettner and Fuest (2010) discovered that demand stabilization through the corporate income tax amounts to roughly 8% of an initial shock to gross revenues, taking into account the income tax rates and the disparities in firm sizes. This stabilizing influence tends to grow during cyclical downturns and fluctuates throughout the business cycle. Thereafter, Auerbach and Feenberg (2000) considered the effect of the federal tax system as an automatic stabilizer using the TAXSIM model for the years 1962–1995 and found individual federal taxes to potentially offset up to 8% of the early GDP shocks.

Given these reviewed studies, a gap is identified in the context of the objectives pursued, variables used, methodology adopted as well as the place this study is conducted. Despite similarities with some past studies (e.g. Auerbach & Feenberg, 2000; McKay & Reis, 2014; Veld *et al*., 2012) none of them was conducted using simulation and model building and employing same variables within Nigerian context.

3.1 Data and Methodology

The study adopts a simulation technique involving a particular type of modelling in a less detailed and less complex way, which explicitly includes the automatic stabilizers A total of 59 quarterly Nigerian financial and macroeconomic time series data sourced from the Central Bank of Nigeria (CBN) Statistical publications, National Bureau of Statistics (NBS), Organization of Petroleum Exporting Countries (OPEC), International Financial Statistics and FIRS publications for various years were used for the period 2001 – 2021. We started by determining the stationary property of the data using the augmented Dickey-Fuller (ADF) test and Phillip Perron (PP) test for stationarity to ensure the level of integration of the variables.

In modelling the economy, we represent the economy by the national income identity:
$Y_t \equiv PCE_t + PI_t + GE_t + (X_t - M_t)$ …………………………………………… **(3.1.1)**

And split it into four sectors – public sector, private sector, financial sector and external sectors, modelled with their peculiar behavioural equations as follows:
Public sector→ $FD_t \equiv GR_t - GE_t$…………………………………………….. **(3.1.2)**

That is, fiscal deficit defined by the difference between government revenue and expenditure. And this consists of a number of government revenue, government expenditure, automatic stabilizers and identity equations.

Private sector→ $PDI_t = \beta_{01} + \beta_{11}Y_{t-1} + \beta_{21}CPS_t + \beta_{31}MLR_t + \beta_{31}R_t + \sigma_1 \ldots\ldots$.. (**3.1.3)**

That is, one of the main equations here is private domestic investment. And there are also foreign direct investment, private consumption expenditure and identity equations here.

Financial sector→ this is modelled by the equations of money demand and money supply represented by net foreign assets, net domestic credit, currency in circulation, demand deposit and other equations and identities

Foreign sector→ $M_t = \gamma_{03} + \gamma_{13}Y_{dt} + \gamma_{23}RER_t + \gamma_{33}MLR_t + \gamma_{43}TAR_t + \mu_3 \ldots$...... (**3.1.4)**

That is, the sector is represented by imports equation and other equations of exports, exchange rate, and foreign reserves.

The coefficients of these behavioural equations were then estimated and baseline simulation carried out to determine how best the estimated model tracks the economy. We then carried out the simulation and policy analysis, which involves simulation in first mode and simulation in second mode. The first mode refers to simulation with unchanged model. In the second mode simulation all taxes are assumed to remain constant over the time span under consideration. Estimates of effectiveness for the various time spans were then be calculated by comparing the changes in gross domestic product which occurred with the impact of the stabilizers *included* to the corresponding changes which would have occurred with the impact of the stabilizers *excluded***.** Short run and long run analyses of automatic stabilizers then followed.

The short run effectiveness of automatic fiscal stabilizers was measured with the Musgrave formula

$$\boldsymbol{\emptyset = 1 - \frac{\Delta Y_t}{\Delta Y_A}} \ldots \quad \textbf{(3.1.5)}$$

where $\emptyset$ is the fraction of the change in gross domestic product over a time span which is prevented because of the automatic stabilizers, $\boldsymbol{\Delta Y_t}$ is the change in gross domestic product which occurred with the actual tax system (the first simulation mode), and $\boldsymbol{\Delta Y_A}$ is the change in gross domestic product which would have occurred if taxes were held constant (the second simulation mode).

The total effect measure is employed and computed with the following formula:

$$\theta = 1 - \sum_{i=1}^{N} \frac{[\Delta Y_t]}{[\Delta Y_A]} \ldots \quad \textbf{(3.1.6)}$$

θ is the fraction of the total deviations from the initial level of gross domestic product which is prevented because of the automatic stabilizers, ΔY_t is the deviation from the initial level of gross national product which occurred in the *i*th quarter of the time span with the actual tax system (the first mode), ΔY_A is the deviation from the initial level which would have occurred in the *ith* quarter if taxes and were held constant (the second mode), and N is the number of quarters in the time span under consideration.

4.1 Empirical Results and Discussion

4.1.1 Unit Root Test Results

Table 4 reports the ADF and PP unit root test results. All the variables are in natural logarithm except oil price (OilP), Consumer Price Index (CPI), Interest rate (IR), Interest rate differential (IRD), Inflation (INF), Foreign Inflation (FCPI), U.S Interest rate (USIR), Tax avoidance and Evasion variable (TAXAE), Term of Trade (TOT), Treasury Bill rate (TBR), Maximum lending rate (MLR) and Monetary policy Rate (MPR). According to the two tests, all the variables are integrated in their first difference (i.e. *I* (1)) with the exception of INF, IRD, and Oil-P, and CIC, VAT, RGDP which are stationary at level, i.e. *I*(0), and FRY that is established as *I* (1) by PP test only. They are however also integrated in their first difference. Similarly, ADP test established MP as *I* (0) and PP test found it to be *I*(1). It is however integrated in first difference by both methods/tests. Based on this, all the structural equations, the system as well as the model of the study are estimated with the variables at their integrated level.

Table 4: Augmented Dickey Fuller (ADF) and Phillips Peron (PP) Unit Root Tests

Variable	ADF Unit Root Test				PP Unit Root Test			
	At Level and First Difference				At Level and First Difference			
	WC	**WCT**	**WOCT**	**OOI**	**WC**	**WCT**	**WOCT**	**OOI**
CIC-Lv.	-2.12	-0.86	0.88		-1.87	-1.89	4.18	
-Diff	-1.74	-2.56	-1.09		-13.0***	-16.5***	-9.92***	*I*(1)
CPS	-0.96	-0.96	3.71		-1.44	-0.93	5.34	
	-6.22***	-6.25***	-2.83***	*I*(1)	-6.24***	-6.29***	-4.05***	*I*(1)
CPI	4.95	0.24	11.9		7.34	1.04	13.24	
	-1.69	-4.07**	-0.40	*I*(1)	-7.26***	-11.1***	-3.98***	*I*(1)
CPIS	-1.77	-2.59	0.55		-1.77	-2.69	0.56	
	-9.09***	-9.08***	-9.00***	*I*(1)	-9.10***	-9.08***	-9.00***	*I*(1)
DB	-1.26	-3.24	0.71		-1.05	-3.02	0.76	
	-6.42***	-6.37***	-6.34***	*I*(1)	-6.42***	-6.37***	-6.32***	*I*(1)
DC	-2.25	-2.79	-0.40		-2.25	-2.83	-0.40	
	-9.08***	-9.10***	-9.00***	*I*(1)	-9.08***	-9.11***	-9.00***	*I*(1)
DD	-0.44	0.04	-0.76		-0.95	-0.21	-0.72	

	-7.68***	-7.94***	-7.69***	*I*(1)	-7.7***	-7.94***	-7.70***	*I*(1)
DDP	-1.32	-1.58	-0.44		-1.57	-1.79	-0.46	
	-7.75***	-7.76***	-7.8***	*I*(1)	-7.77***	-7.77***	-7.81***	*I*(1)
DSPY	0.20	-3.33	2.85		-0.72	-2.97	4.08	
	-4.09***	-4.11***	-2.81***	*I*(1)	-5.27***	-5.23***	-4.48***	*I*(1)
DTAX	-1.84	-2.68	0.49		-1.16	-2.15	0.78	
	-4.16***	-4.21***	-4.07***	*I*(1)	-4.28***	-4.30***	-4.20***	*I*(1)
ED	0.21	-0.93	-1.02		0.31	-0.83	-1.01	
	-6.30***	-6.69***	-6.21***	*I*(1)	-6.38***	-6.77***	-6.29***	*I*(1)
FCPI	-0.55	-2.00	1.43		-0.56	-2.03	1.43	
	-8.97***	-8.91***	-8.70***	*I*(1)	-8.97***	-8.9***	-8.7***	*I*(1)
FDI	-1.19	-0.35	0.48		-1.83	-0.67	1.36	
	-1.20	-2.27	-1.99**	*I*(1)	-5.3***	-5.42***	-5.2***	*I*(1)
FRY	-1.04	-1.91	1.42		-0.17	-1.83	3.77	
	-1.79	-1.60	-1.06		-4.29***	-4.27***	-3.37***	*I*(1)
GE	-0.34	0.04	-0.71		-0.83	0.037	-0.68	
	-7.71***	-8.06***	-7.72***	*I*(1)	-7.73***	-8.06***	-7.74***	*I*(1)
GR	-0.05	0.52	-0.75		-0.60	0.52	-0.70	
	-7.49***	-7.89***	-7.49***	*I*(1)	-7.51***	-7.89***	-7.55***	*I*(1)
INF	-4.46***	-4.59***	-1.50	*I*(0)	-3.45**	-3.64**	-1.2723	*I*(0)
	-7.19***	-7.17***	-7.19***		-9.05***	-9.01***	-9.07***	
IR	-2.74*	-3.30*	-1.13		-2.27	-2.64	-0.10	
	-5.84***	-5.60***	-5.86***	*I*(1)	-5.85***	-5.81***	-5.87***	*I*(1)
IRD	-3.41**	-3.38*	-1.44	*I*(0)	-2.67*	-2.65	-1.13	
	-5.16***	-5.11***	-5.19***		-5.23***	-5.19***	-5.27***	*I*(1)
M2	-1.58	-0.72	6.81		-1.67	-0.61	6.81	
	-9.95***	-10.1***	-1.70*	*I*(1)	-9.94***	-10.16***	-6.83***	*I*(1)
MD	-0.20	-3.38*	2.48		0.011	-2.96	3.16	
	-6.69***	-6.66***	-5.97***	*I*(1)	-6.71***	-6.68***	-6.02***	*I*(1)

MLR	-1.83	-1.84	0.20		-1.64	-1.66	0.24	
	-6.60***	-6.56***	-6.61***	$I(1)$	-6.59***	-6.55***	-6.61***	$I(1)$
MP	-0.99	-1.46	3.73		-0.02	-3.84**	2.66	$I(0)$
	-5.18***	-5.14***	-1.51***	$I(1)$	-5.31***	-5.22***	-4.58***	
MPR	-1.77	-2.15	-0.63		-1.88	-2.28	-0.64	
	-8.37***	-8.31***	-8.42***	$I(1)$	-8.37***	-8.32***	-8.42***	$I(1)$
NDC	-1.49	-1.74	-0.48		-1.76	-1.99	-0.49	
	-7.74***	-7.71***	-7.78***	$I(1)$	-7.75***	-7.72***	-7.80***	$I(1)$
NCG	-1.07	-0.65	-1.19		-1.25	-0.75	-1.36	
	-8.59***	-8.73***	-8.61***	$I(1)$	-8.59***	-8.73***	-8.61***	$I(1)$
NER	-2.74*	-2.00	0.58		-2.74*	-2.01	0.51	
	-8.25***	-8.54***	-8.06***	$I(1)$	-8.25***	-8.53***	-8.06***	$I(1)$
NFA	-1.10	-0.57	0.32		-1.17	-1.18	0.04	
	-8.00***	-8.02***	-7.89***	$I(1)$	-8.21***	-8.23***	-8.15***	$I(1)$
NGDP	3.73	-1.39	6.05		-0.14	-7.71**	3.90	
	-3.80***	-8.07***	-1.43	$I(1)$	-17.9***	-20.2***	-11.2***	$I(1)$
NONAGY	-1.11	-0.66	1.68		-1.69	-0.41	7.93	
	-2.46	-2.64	-1.38		-3.98***	-4.12***	-2.27**	$I(1)$
NONOIGR	-1.54	-2.62	1.84		-0.83	-2.81	1.69	
	-3.74***	-3.82**	-2.96***	$I(1)$	-5.59***	-5.55***	-5.27***	$I(1)$
NONOILY	-1.21	-0.37	1.88		-2.10	-0.32	8.75	
	-2.74*	-2.99	-1.28	$I(1)$	-4.53***	-4.73***	-2.05***	$I(1)$
NONOIX	-1.43	-2.20	0.70		-0.89	-2.20	1.56	
	-2.26	-2.17	-2.13**	$I(1)$	-4.93***	-4.90***	-4.75***	$I(1)$
OAN	-2.09	-1.99	-1.64*		2.32	-2.28	-2.08**	$I(0)$
	-2.99**	-3.02	-3.01***	$I(1)$	-4.65***	-4.63***	-4.67***	
ODP	-1.62	-1.39	4.04		-2.09	-1.14	4.34	
	-10.8***	-11.0***	-2.28**	$I(1)$	-10.9***	-11.3***	-8.83***	$I(1)$
OILGR	-1.78	-0.58	-0.04		-1.92	-0.35	0.64	
	-3.56***	-4.51***	-3.61***	$I(1)$	-3.64***	-4.01**	-3.69***	$I(1)$

OILP	-1.60	-3.00	-0.49		-1.63	-2.09	-0.53	
	-7.59***	-7.64***	-7.62***	*I*(1)	-6.82***	-6.86***	-6.87***	*I*(1)
OILX	-1.38	-1.08	0.44		-1.74	-0.73	1.30	
	-3.94***	-2.50***	-3.97***	*I*(1)	-4.01***	-4.19***	-4.02***	*I*(1)
OILY	-1.36	-1.01	0.18		-1.87	-0.80	1.17	
	-3.93***	-4.22***	-3.85***	*I*(1)	-3.89***	-4.08***	-3.94**	*I*(1)
OPEC	-3.60***	-3.53**	-0.02		-3.05**	-3.00	-0.06	
	-3.93***	-3.96**	-3.96***	*I*(1)	-5.44***	-5.43***	-5.48***	*I*(1)
PCE	0.019	-4.21***	3.01		-0.72	-3.25*	2.35	
	-6.88***	-6.87***	-5.77***	*I*(1)	-6.08***	-6.05***	-5.77***	*I*(1)
PCGDP	-0.74	-2.24	1.35		-0.92	-1.88	2.16	
	-3.01**	-2.96	-2.64***	*I*(1)	-5.14***	-5.13***	-4.91***	*I*(1)
PDI	0.92	-3.05	3.52		-0.55	-3.03	3.43	
	-3.90***	-4.09***	-1.82*	*I*(1)	-5.28***	-5.25***	-4.52***	*I*(1)
PI	-1.29*	-0.51	0.92**	*I*(0)	-2.23	-0.24	2.09	
	-2.73	-2.97	-2.58		-4.56***	-4.80***	-4.30***	*I*(1)
PLR	-1.48	-2.27	-0.66		-1.85	-2.28	-0.62	
	-7.31***	-7.27***	-7.30***	*I*(1)	-7.42***	-7.37***	-7.5***	*I*(1)
RER	-1.01	-1.92	1.34		-1.06	-1.92	1.19	
	-7.76***	-7.71***	-7.46***	*I*(1)	-7.70***	-7.65***	-7.48***	*I*(1)
RES	-1.76	0.16	0.11		-2.39	0.18	0.36	
	-5.54***	-6.19***	-5.58***	*I*(1)	-5.54***	-6.19***	-5.58***	*I*(1)
RGDP	-1.23	2.12	-1.82*	*I*(0)	-0.78	0.19	-0.63	
	1.53	1.80	0.03		-5.66***	-5.89***	-5.66***	*I*(1)
RIM	-1.38	-2.89	1.21		-1.22	-2.82	1.07	
	-11.4***	-11.4***	-11.3***	*I*(1)	-11.4***	-11.4***	-11.3***	*I*(1)
SANDTY	-1.20	-0.64	1.80		-1.89	-0.34	9.03	
	-2.60*	-2.84	-1.11	*I*(1)	-4.42***	-4.59***	-1.87*	*I*(1)
TAR	-2.99**	-3.32*	-1.36		-3.16**	-3.62**	-1.37	

	-8.95***	-8.90***	-9.00***	*I*(1)	-8.95***	-8.90***	-9.00***	*I*(1)
TAXAE	-2.78*	-2.78	-2.03**		-3.03**	-3.043	-2.162**	
	-8.96***	-8.91***	-9.00***	*I*(1)	-8.97***	-8.91***	-9.00***	*I*(1)
TBR	-2.24	-2.74	-0.91		-2.32	-2.86	-0.91	
	-8.71***	-8.66***	-8.76***	*I*(1)	-8.71***	-8.66***	-8.76***	*I*(1)
TD	0.0238	-0.1310	-0.8679		-0.4859	-0.2998	-0.8059	
	-7.62***	-7.93***	-7.61***	*I*(1)	-7.63***	-7.93***	-7.62***	*I*(1)
TDL	0.2773	-3.23*	3.1546		-0.1868	-3.0931	2.2130	
	-6.63***	-6.63***	-5.49***	*I*(1)	-5.91***	-5.88***	-5.62***	*I*(1)
TDS	-0.4036	-0.0343	-0.7384		-0.9166	-0.2099	-0.7066	
	-7.60***	-7.89***	-7.61***	*I*(1)	-7.62***	-7.89***	-7.63***	*I*(1)
TOT	-2.95**	-2.9564	-1.4507		-2.98**	-3.0020	-0.7610	
	-3.16**	-3.60**	-3.16***	*I*(1)	-4.58***	-4.46***	-4.62***	*I*(1)
TTAX	-1.7352	-0.0989	0.8587		-1.1675	-1.2695	1.8344	
	-1.9972	-2.4619	-1.616*		-4.59***	-4.67***	-4.29***	*I*(1)
USINF	-9.23***	-9.63***	-2.53*	*I*(0)	-7.09***	-7.09***	-4.94***	*I*(0)
	-6.77***	-6.74***	-6.79***		-21.0***	-20.7***	-21.1***	
USIR	-2.0191	-2.8216	-1.6105		-1.6573	-2.4192	-1.4429	
	-4.58***	-4.55***	-4.56***	*I*(1)	-4.75***	-4.72***	-4.73***	*I*(1)
VAT	-2.0312	2.1937	0.0530		-4.2838	0.2842	3.7878	
	-1.1333	-2.7358	-1.5789		-3.83***	-5.13***	-2.26**	*I*(1)
XP	-1.3547	-1.0008	0.4670		-1.7079	-0.5908	1.3529	
	-3.86***	-2.2709	-3.89***	*I*(1)	-3.94***	-4.13***	-3.94***	*I*(1)

Notes: (*) Significant at the 10%; (**) Significant at the 5%; (***) Significant at the 1%.
*MacKinnon (1996) one-sided p-values.
Source: Researcher's Computation Using E-views 9.0(2023)

4.1.2 Baseline Simulation Analysis

According to Table 4.1, the simulated values for most of the endogenous variables are close to the actual series based on their minimum bias proportion. With the exception of currency in circulation, domestic debt, net domestic credit, and non-oil exports, all the endogenous variables have very significant dynamic coefficients, implying high representation of the true movement of the economy.

Table 4.1: Baseline Simulation Results

Bloc	Endogenous Variable	Theil's Inequality Coefficient	
Public Sector		**Bias Prop.**	**Coefficient**
	Oil Government Revenue	0.005560	0.032
	Non-oil Government Revenue	0.0064575	0.035
	Value Added Tax	0.017986	0.011
	Direct Taxes	0.006872	0.045
	Government Expenditure	0.006764	0.025
	Domestic Debt	0.000820	0.069
	External Debt	0.057160	0.040
Private Sector	Private Domestic Investment	0.009853	0.028
	Foreign Direct Investment	0.006779	0.044
	Private Consumption Expenditure	0.009853	0.029
Financial Sector	Net Foreign Asset	0.009881	0.052
	Net Domestic Credit	0.004993	0.193
	Credit to Private Sector	0.055000	0.030
	Demand Deposit	0.001029	0.490
	Other Deposit	0.001329	0.029
	Currency in Circulation	0.000814	0.051
Foreign Sector	Oil Export	0.090093	0.028
	Non-oil Export	0.001470	0.053
	Import	0.000874	0.031
	Nominal Exchange Rate	0.000000	0.038
	Foreign Reserves	0.105469	0.038

Source: Researcher's Computation Using E-views 9.0(2023)

4.1.3 Short run Simulation Analysis

Table 4.2 reports the values of the built-in stabilizers and the total effect measures during both contraction and expansion. During expansion, the value of built-in stabilizers vary from a minimum of -13.16, indicating a destabilizing impact of the automatic stabilizers, to a maximum of 8.05, indicating an over-stabilizing impact. Most of the Ø values, however, lie between the values of zero and one, indicating the expected fractional stabilization. The implication of these estimates is that, with values such as 0.14, and 0.668 the automatic stabilizers were able to prevent up to either 14 per cent or 67 per cent of the change in gross domestic product in the corresponding quarters during expansions. While the value -0.49 implies that the automatic fiscal stabilizers lead to an increase of 49 per cent deviation in gross domestic product during that particular quarter. Hence, within the short run period of economic expansion, automatic fiscal stabilizers have mixed effects, fractionally-stabilizing and fractionally-destabilizing. Similarly, during a contraction the values of ∅ vary from a minimum of fractionally destabilizing -0.000047 to a maximum of fractionally-stabilising 0.0002756, with most of the values being zero, indicating a zero stabilising impact of the automatic stabilizers.

On the other hand, the total effect value of θ is a *fractionally-destabilising* -0.78 during expansion and a negligibly *fractionally-stabilising* 0.0008 during a contraction. This means that the size of automatic fiscal stabilizers in Nigeria is -0.78 during expansion and 0.0008 during contraction, implying that during the overall short run, the stabilizers lead to an increase in 78 per cent of total deviation from the gross domestic product during economic expansion and could prevent up to 0.8 per cent change in gross domestic product during contraction.

Table 4.2: Built-in Values of Short run Automatic Fiscal Stabilizers

Automatic Stabilizers during Expansion				**Automatic Stabilizers during Contraction**			
ΔY_t	ΔY_A	$\frac{\Delta Y_t}{\Delta Y_A}$	∅	ΔY_t	ΔY_A	$\frac{\Delta Y_t}{\Delta Y_A}$	∅
6.988549	21.098	0.331242	0.668758	-26.407	-26.408	0.999962	3.79E-05
30.30399	11.3589	2.667863	-1.66786	1.4885	1.4878	1.00047	-0.00047
9.550756	12.5097	0.763468	0.236532	8.7757	8.7753	1.000046	-4.6E-05
-40.5468	20.3036	-1.99703	2.997025	17.6672	17.667	1.000011	-1.1E-05
8.790795	11.6115	0.757077	0.242923	66.5415	66.5418	0.999995	4.51E-06
32.81662	2.3182	14.15608	-13.1561	21.5744	21.5749	0.999977	2.32E-05
53.09788	-7.5285	-7.05292	8.052917	15.4431	15.4435	0.999974	2.59E-05
-26.407	-38.8115	0.680391	0.319609	9.651	9.6515	0.999948	5.18E-05
1.4885	0.9971	1.492829	-0.49283	-6.5209	-6.5197	1.000184	-0.00018
8.7757	8.3325	1.053189	-0.05319	3.9148	3.9154	0.999847	0.000153
17.6672	17.7393	0.995936	0.004064	1.8137	1.8142	0.999724	0.000276
66.5415	65.6827	1.013075	-0.01307	2.8635	2.8639	0.99986	0.00014

21.5744	23.1883	0.9304	0.0696	-3.5142	-3.5142	1	0
15.4431	18.1018	0.853125	0.146875	-0.441	-0.4408	1.000454	-0.00045
9.651	14.0088	0.688924	0.311076	-0.0423	-0.0423	1	0
Total Effect Measure			**-0.78**				**0.0008**

Source: Researcher's Computation Using E-views 9.0(2023)

In order to arrive at some general conclusions about the short-run effectiveness of the automatic stabilizers, the three aggregate spending, that is, government expenditure, private domestic expenditure and private investment expenditure are subjected to shocks, and the role of the automatic stabilizers in absorbing these shocks are examined. The information on the short run measures of effectiveness is summarized in Tables 4.3.

Table 4.3: Mean Values of Short run Automatic Fiscal Stabilizers with Shocks in Aggregate Spending

AFS/ Quarters	∅ with 5% Increase in GE	∅ with 5% Decrease in GE	∅ with 3% Decrease in PCE	∅ with 3% Decrease in PI
	Built-in Stab.	**Built-in Stab.**	**Built-in Stab.**	**Built-in Stab.**
1	1.8E-05	-0.09069	0.324775	0.313436
2	-0.0005	-0.16577	-0.519	-0.54964
3	-3.6E-05	-0.1506	-0.05102	-0.05537
4	-5.6E-06	-0.09261	0.007256	0.002951
5	4.57E-06	-0.04475	-0.01058	-0.01345
6	1.29E-05	-0.224	0.073319	0.0688
7	2.21E-05	-4.22161	0.150494	0.146357
8	1.43E-05	-0.00121	0.311786	0.311754
9	-12.897	0.00331	2.452093	2.95556
10	-0.11034	1.2E-05	0.548593	0.564432
11	-0.16363	-0.0001	0.622684	0.647408
12	-0.14044	-7.8E-05	0.499167	0.514361
13	0.221939	-1.7E-05	0.047019	0.053116
14	-1.04527	-4.4E-05	1.236759	1.420519
15	-0.59081	-5E-05	0.971634	1.066491
Total effect	**-0.22942**	**0.128374**	**0.152674**	**0.138539**

Source: Researcher's Computation Using E-views 9.0(2023)

Table 4.3 reports the results of shocking the three aggregate spending and the resulting role of automatic stabilizers in absorbing these shocks. With 5 per cent increase in government expenditure during a contraction, the value of the built-in stabilizers vary from a minimum of -12.9, indicating a *destabilizing* impact of the automatic stabilizers, to a maximum of 0.22, indicating a *fractionally-stabilising* impact. Most of the $\emptyset$ values, however, lie between a negative numbers with absolute values less than one to a positive number less than one, indicating the expected fractional destabilization in some periods and fractional stabilization in others. Similarly, during an expansion, a 5 per cent decrease in government expenditure gives the values of $\emptyset$ varying from a *destabilizing* -0.091 to a fractionally-stabilizing 0.00331, with most of the values lying between negative numbers, indicating destabilising and positive numbers less than one, implying *fractionally-stabilising* impact of the automatic stabilizers.

Introducing a 3 per cent shock in private consumption expenditure, however, witnessed a minimum value of $\emptyset$ of -0.519 indicating *destabilising* impact of the automatic stabilizers and a maximum value of 2.45 indicating an *over-stabilising* impact. Most of the $\emptyset$ values, however, lie between the values of zero and one, indicating the expected fractional stabilisation. Surprisingly, a 3 per cent shock in private investment expenditure saw gross domestic product respond in almost similar pattern as in 3 per cent shock in private consumption expenditure. The minimum value of $\emptyset$ is a *destabilising* -0.55 and a maximum of 1.42 of *over-stabilising* impact, with most of the values lying between zero and one, implying a fractionally-stabilising impact of the automatic stabilizers on shock in private investment expenditure.

On the other hand, the total effect value of θ is a *fractionally-destabilising* -0.23 and 0.13 response to 5 per cent increase and 5 per cent decrease in government expenditure respectively. This implies that automatic fiscal stabilizers lead to 15 per cent more fall in gross domestic product in response to 5 per cent increase in government expenditure and, 13 per cent stabilizing of gross domestic products associated with 5 per cent decrease in government expenditure is provided by the automatic fiscal stabilizers. While the fractionally-stabilising values of 0.14 and 0.15 imply that the automatic stabilizers have absorbed 14 per cent and 15 per cent of the 3 per cent shocks in both private consumption and investment expenditures respectively.

4.2 Results and Discussions

Based on the data analysed, it can be inferred that, despite the commonly held view that automatic stabilizers do not work in developing economy as they do not have effective tax-transfer-payment system, they can marginally be effective in Nigeria in output stabilisation in the short run. First of all, over the 2001q1- 2021q4 period, the stabilizers have mixed effects during expansion, as they can absorb up to 14 per cent and 67 per cent shocks to gross domestic product on one hand, and inducing increase in deviation of up to 49 per cent on the other hand. During contraction, the stabilizers are significantly inactive; although overall they are fractional stabilizing about 0.8 per cent variation in gross domestic product. Thus, the stabilizers are slightly impressive in contraction but rather disappointing in expansion, with a destabilising value of 0.78, especially for those who advocate extensive reliance on the automatic stabilizers. Again, without any shocks in the government spending, private consumption and investment expenditure, the stabilizers can mitigate the impacts of contraction in real GDP, particularly on consumers' purchasing power and other macroeconomic variables, thereby providing cushioning effects. This means that automatic fiscal stabilizers make recession less severe and fast track the process of recovery when they are effective. However, during expansion, their work is insignificant.

These findings are similar to those of Van den Noord, (2000), Auerbach and Feenberg (2000), Tödter and Scharnagl (2004) and Follette and Lutz (2010) and contrary to that of Dolls et al. (2012). The results have important implications and raise some challenging questions for economists and policy-makers. Is the automatic stability in short-run, caused by the tax system worth the sacrifice in growth? How would the capacity of the stabilizers be if effective transfer payment system existed in Nigeria? Should Nigeria adopt a less responsive tax and transfer payments system to increase growth and thus place more reliance on discretionary stabilization of the economy? Or should the economy increase the responsiveness of the tax and transfer payment system to increase automatic stabilisation and be content with a slower but smoother growth pattern? The answer to these questions, of course, depend on other factors, such as the equity of the tax structure, incidence of tax avoidance and tax evasion, tax leakages, as well as the influence of tax system on price stability; but the quantitative estimates of this study should at least put the challenge and the decision to be made in a clearer light

5.1 Conclusion and Recommendations

Based on the findings of this study, the following conclusions were drawn. First, automatic fiscal stabilizers are fractionally-stabilising in the short run during contraction, but greatly destabilising during an expansion. Secondly, automatic stabilizers are fractionally-stabilising during contraction only with shocks and during expansion without and with little shocks. They are also stabilising to shocks in aggregate spending in the short run in Nigeria, thereby mitigating the adverse effects of these shocks. Finally, these results are dependent upon the validity of the model of the economy and without the transfer payments, the battery of automatic fiscal stabilizers is one-sided, and this may of course strengthen, weaken or neutralise the stabilisation capacity of the automatic fiscal stabilizers, depending on its relative importance in the system.

Given the above, the following recommendations have been made:

i. There is need to have more reliance on automatic stabilizers in the short run contraction. Government and policy makers should therefore emphasise the use of transfer payments such as unemployment benefits so as to make the stabilisation coefficients more effective and to handle the downward trajectory in purchasing power of the people during economic recession.

ii. Measures should be taken by the government to reduce incidence of tax leakages, tax avoidance and evasion since they significantly weaken the power of the stabilizers as shown in the structural equations of the stabilizers.

iii. Discretionary fiscal policy should e emphasized to stabilize the economy during short run expansion as automatic stabilizers are not effective there.

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THE DETERMINANTS OF THE MANUFACTURING SECTOR OUTPUT IN NIGERIA

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ABSTRACT
Manufacturing sector is an engine of growth in many economies, which calls for promoting such sector. Hence, this study examined the effects of a number of postulated determinants of manufacturing output in Nigeria. To accomplish this task, the study adopted the Cobb-Douglas production function, which shows the relationship between a manufacturing output and its determinants. The functions were specified for each of the 4 categories of manufacturing output, which were manufacturing output (MAO). food, beverages and tobacco (FBT), textile, apparel and footwear (TAF) and the other manufacturing output (OMO). An identical list of five explanatory variables features in each estimated model and these were agricultural output (AO), public capital stock (PCS), private capital stock (PRCS), government total expenditure on manufacturing sector (GE) and credit availability to the manufacturing sector (CA). The data employed covered the period between 1981 and 2021 and were obtained from the World Bank's World Development Indicators as well as the Central Bank of Nigeria Database and International Monetary Fund (IMF) database. The study adopted ARDL estimation approach, which was informed by the long-run relationship confirmed to exist by the ARDL Bounds test to cointegration. The result of the estimation showed that agricultural output, labour force, government expenditure on manufacturing sector, manufacturing credit availability and public capital stock have positive effects on manufacturing output in Nigeria. On the basis of these findings, the study recommended that policymakers should implement policies that increase agricultural output and encourage more hands in the manufacturing sector. Furthermore, policies that intensify budgetary appropriation to the manufacturing sector was suggested. Finally, it was recommended that policymakers should prioritise formulating and implementing policies that ensure that more credit is available to manufacturers.

KEY WORDS: Manufacturing sector, Manufacturing Output.

1. Introduction
Relevance of manufacturing sector to the global economy can hardly be overemphasised. This is because the living standards of human beings and the development of numerous economies are dependent on the state of the manufacturing sector. In this regard, the ability of the sector to promote wide and efficient forward and backward linkages among other sectors of

the economy attests to its importance (Kenny & Nnamdi, 2019). Technological innovations and growth are driven by the manufacturing sector. Similarly, the sector provides millions of jobs worldwide. Coincidentally, the labour abundance that prevails in Africa makes manufacturing activities an opportunity that can be harnessed and taken advantage of. Thus, it is viewed as the ideal sector to drive Africa's growth and development (Olufayo, 2019). Although the sector remains vital to the economy, its capacity utilisation is below expectations due to over-reliance on imported inputs (Nigeria Bureau of Statistics [NBS], 2015) and the sector has been grappling with several challenges like high cost of production, inadequate power supply, etc (Rafiq, 2018). Opinions have been expressed in the literature that the sector's contribution to the Nigerian economy has been below expectation due to issues relating to access to finance, foreign exchange problems and high interest rates, etc being experienced in the country (Ogundipe & Olarewaju, 2020). Empirical studies have tried to shed light on the factors driving the tempo of manufacturing activities, as evidenced by a number of theoretical studies as well as empirical ones (Aminu, James & Yakubu (2022); Ajudua and Ojima, (2016); Afolabi & Laseinde (2019). However, such studies are few, particularly regarding those for Nigeria. The findings of existing studies on the relationship between manufacturing output and its determinants are inconsistent. While Afolabi & Laseinde (2019) reported unidirectional causality between real GDP and manufacturing output, Falade (2021) found bi-directional causality. These contradictions indicate a lack of consensus and highlight the need for further studies to clarify the relationships and shed more light on the unresolved issues.

2. Literature Review

In this study, the Cobb-Douglas (1928) Production Function was reviewed. The Cobb-Douglas framework captures how various inputs interact to influence manufacturing output. Labor (L) represents the workforce actively engaged in manufacturing activities. The manuscript's findings on labor's positive and statistically significant effect underscore its critical role in driving manufacturing output, aligning with expectations from the Cobb-Douglas function. Capital (K), divided into public capital stock (infrastructure investments) and private capital stock (enterprise-level investments), provides the physical foundation for production. The manuscript highlights how public capital stock positively impacts certain subsectors (e.g., food, beverages, and tobacco); consistent with theories that infrastructure enhances productivity. In addition, agricultural output is introduced as a sector-specific input that supplies raw materials to manufacturing industries, particularly textiles and other processing sectors. Its positive elasticity in specific models reflects the synergistic relationship between agriculture and manufacturing, a vital dynamic in Nigeria's economy. Meanwhile, government expenditure and credit availability factors that not traditionally included in the classical Cobb-Douglas formulation are integrated to account for their enabling effects. These inputs capture the policy environment's role in shaping manufacturing productivity, as suggested by the study's findings.

In its traditional form, the Cobb-Douglas function is expressed as $Y = AL\alpha\ K\beta \ldots \ldots .(1)$

where Y= the flow of output; L = quantity of labour input; K = quantity of capital input and A = efficiency parameter; α, β = positive constants that represent the output elasticities of labour and capital (L and K) respectively and the values of which are determined by the available technology; and α, β < 1 and α + β = 1, with α + β showing the degree of homogeneity or returns to scale. The estimated function by Cobb and Douglas was presented as: $Y = 1.01L^{0.75} K^{0.25}$. Since α + β = 1, that original Cobb-Douglas production function is a linearly homogeneous production function that, hence, has a constant returns to scale, implying that when L and K increase by a given proportion, the output level will also increase by the same proportion. The Cobb-Douglas production function has since been extended and generalised in a number of ways. In particular, the factor inputs are now often extended beyond labour and capital while the degree of homogeneity is no longer restricted to 1, which can now be less than or greater than 1.

2.2 Review of Empirical Studies

The review of some previous studies conducted both outside and within Nigeria showed mixed findings and diversity of adopted methodologies. For instance, when the determinants of the manufacturing sector in Sub-Saharan African countries were reviewed, a significant relationship between a number of postulated determinants and the manufacturing output was reported (Sokunle and Harper, 2016).. Similarly, a positive and significant relationship between the industry value-added and foreign direct investment, gross fixed capital formation, and number of workers was reported in Egypt (Mohamed, 2021). Further, a positive and significant relationship between credit availability and manufacturing was reported in the industrial sector in India (Singh & Kumar, 2021). In the same vein, Zemene, Amare and Fekade (2023) analysed the determinants of capacity utilisation in medium and large manufacturing industries in Ethiopia. The outcome of the study showed that the manufacturing industry was a major contributor to the Ethiopian economy.

Likewise, Ajudua, Ojima and Nwokoro (2016) conducted a study seeking to identify the determinants of output of the Nigerian manufacturing sector. The study found a significant relationship between bank credit and the manufacturing sector output in Nigeria. Similarly, Kenny (2019) found that the public capital has a positive impact on the Nigerian economy and, particularly, manufacturing sectors, both in the short run and long run. Cyril (2016) investigated the potential of Nigeria's fiscal policy tools' ability to stimulate the performance of the manufacturing sector. The finding revealed that capital expenditure by the government had a significant effect on manufacturing sector performance in Nigeria. Eze (2020) evaluated the relationship between agriculture and manufacturing industry output in Nigeria. The long-run empirical evidence showed the existence of both short-run and long-run positive relationship between agricultural output and manufacturing sector output. Similarly, Falade (2021) reported a positive significant direct relationship between manufacturing output, trade openness and other variables like increase in consumption tax, real exchange rate and liberalisation of the Nigerian economy.

Conversely, Kothakapa, Bhupatiraju, and Sirohi (2021) investigated the association between financial development and industrialisation in low and middle-income countries. The regression result showed that the variables had a nonlinear connection in the sense that financial development impedes industrial development until a point at which the effect reverses. Likewise, Amoah and Jehu-Appiah (2022) found that trade openness had a negatively significant effect on the manufacturing sector. Raymond, Samuel and Ayobola (2022) reported a negative effect of the African countries' government expenditure on manufacturing output.

In Nigeria, Aiyedogbon and Anyawu (2016) examined the effect of macroeconomic determinants on industrial productivity. The study's findings showed that the effect of credit on the manufacturing sector was negative. Similarly, Aras and Odebode (2019) reported the existence of foreign shocks relating to trade openness that transmitted large shocks to the dependent variables and that domestic shocks, especially a fall in output, exerted serious pressure on the Nigerian manufacturing output and vice versa.

3. Methodology

This study employs a quantitative research design, anchored on the Cobb-Douglas production function, to examine the determinants of manufacturing output in Nigeria. Annual time-series data from 1981 to 2021 were sourced from the Central Bank of Nigeria Statistical Bulletin, World Bank's World Development Indicators, and the IMF Capital Stock Dataset. The dependent variables represent four categories of manufacturing output: Total Manufacturing Output (MAO), Food, Beverage, and Tobacco Output (FBT), Textile, Apparel, and Footwear Output (TAF), and Other Manufacturing Output (OMO). Explanatory variables include Agricultural Output (AO), Labor Force (N), Government Expenditure (GE), Manufacturing Credit Availability (MCA), Public Capital Stock (PCS), and Private Capital Stock (PRCS). All variables were log-transformed for consistency. The study model is as follow:

$$lnA = \beta_3 \ln{(AO)_t} + \beta_4 GCF_t + \beta_5 lnGE_t + \beta_6 \ln(1 + CA) \dots\dots\dots\dots\dots\dots\dots .6$$

The study adopts the Autoregressive Distributed Lag (ARDL) approach, suitable for datasets with mixed integration orders (I(0)I(0)I(0) and I(1)I(1)I(1)), as confirmed by the Augmented Dickey-Fuller (ADF) test. The ARDL Bounds Test established long-run relationships between the variables in all models. Diagnostic tests, including heteroscedasticity, serial correlation, multicollinearity, and stability checks, confirmed the robustness of the models. Long-run elasticities were estimated for each category of manufacturing output, focusing on the effects of the explanatory variables. The methodology provides reliable insights into the drivers of manufacturing performance in Nigeria, forming the basis for actionable policy recommendations.

4. Data Analysis

Table 1: The Descriptive Statistics

Variables	Mean	Median	Min.	Max.	Std.Dev.
MAO – Manufacturing Output, in billions of 2010 constant value of Naira	3333.43	1065.38	28.23	19539.55	4762.53
FBT – Food, Beverages, and Tobacco Output, in billions of 2010 constant value of Naira	1647.84	702.83	18.37	7240.43	1953.35
TAF – Textile, Apparel, and Footwear Output, in billions of 2010 constant value of Naira	629.51	107.79	2.82	4306.95	1096.87
OMO - Others Manufacturing output, in billions of 2010 constant value of Naira	1056.077	254.76	6.87	7992.17	1778.444
AO – Agricultural Output, in billions of 2010 constant value of Naira	7696.41	1761.92	17.05	37241.61	10016.06
N – Labor Force, in millions of workers (Individual actively employed)	4.80	4.80	3.19	6.86	9.27
GE – Government Expenditure on Manufacturing industry, in billions of 2010 constant value of Naira	2250	984	9.64	10200	2820
MCA – Manufacturing Credit Availability, in billions of 2015 constant value of Naira	626.96	174.09	2.66	3191.37	863.1433
PCS – Public Capital Stock, in billions of 2017 constant value of Naira	591.32	591.74	492.14	641.27	31.73
PRCS – Private Sector Capital Stock, in billions of 2017 constant value of Naira	813.97	790.89	705.52	979.22	60.42

Authors' Computation, 2024.

The summary statistics in Table 1 indicates manufacturing output (MAO) had a mean of ₦3,333.43b in 2010 naira value, a median of 1,065.38, and a standard deviation of 4,762.53. The minimum value was ₦28.23b, while the maximum value was ₦19,539.55b. Food, beverage, and tobacco output had a mean of ₦1,647.84b, a median of 702.83 and a standard deviation of 1,953.35. The minimum value was ₦18.37b, while the maximum value was ₦7,240.43b. Textile, apparel, and footwear output had a mean value of ₦629.51b, a median of 107.79, and a standard deviation of 1096.87. The minimum value was ₦2.82b, while the maximum value was ₦4,306.95b. Other manufacturing outputs had a mean value of ₦1,056.077b, a median value of ₦254.76b and a standard deviation of 1778.444. The minimum value was ₦6.87b, while the maximum value was ₦7,992.17 billion.

Table 2: Augmented Dickey Fuller Unit Root Test Result for Stationarity

Variables	At Levels		At First Difference		Order of Integration
	Statistic	P-value	Statistic	P-val	
lnMAO	2.713	0.999	-4.531	0.000	I (1) Series
lnFBT	2.352	0.999	-4.502	0.000	I (1) Series
lnTAF	-0.362	0.916	-3.108	0.026	I (1) Series
lnOMO	-0.098	0.949	-4.301	0.000	I (1) Series
lnAO	-1.684	0.439	-3.776	0.003	I (1) Series
lnN	0.208	0.973	-3.728	0.004	I (1) Series
lnGE	-1.552	0.508	-4.245	0.001	I (1) Series

lnMCA	-0.886	0.7925	-3.218	0.019	I (1) Series
lnPCS	-1.906	0.329	-3.479	0.009	I (1) Series
lnPRCS	-4.160	0.000	-	-	I (0) Series

Author's Computation, 2024.

Given in Table 2, unit root test results and because PRCS that is found to be stationary is an explanatory variable, it can be seen that all the variables are integrated of different orders, i.e. the variables in each of the equations are a mix of I (0) and I (1) series. But, in all cases, the dependent variable has a unit root. As a result, the appropriate co-integration test method that is to be employed to find out whether there are long-run relationships among the variables is the ARDL Bounds Test and this is discussed next.

Table 3: ARDL Bound Test

	Model 1 for MAO (Manufacturing Output)		**Model II for FBT (Food, Beverages, and Tobacco)**		**Model III for TAF (Textile, Apparel, Footwear)**		**Model IV for OMO (Other Manufacturing Output)**	
K	6		6		6		6	
Computed F-statistic	5.023		5.096		4.635		5.021	
	I (0) Bound	I (1) Bound	I (0) Bound	I (1) Bound	I (0) Bound	I (1) Bound	I (0) Bound	I (1) Bound
Upper and lower bound of the F-statistics at 5% significance level.	2.45	3.61	2.45	3.61	2.45	3.61	2.45	3.61

Author's Computation, 2024.

As shown in Table 3 in respect of the models for MAO, FBT, TAF and OMO, the computed F-statistic is 5.023, 5.096, 4.635 and 5.021 respectively, which, in each case, is greater than the 3.61 upper bound critical value at 5% significance level. It is thus concluded that the models are all co-integrated, meaning that there exists a long-run relationship between each of the dependent variables and its regressors.

Table 4: ARDL Long-Run Estimates of the Models for the Four Categories of Manufacturing Output

	Manufacturing Output (or MAO) Model			Food, Beverage, Tobbaco Output (or FBT) Model			Textile, Apparel, Footwear Output (or TAF) Model			Other Manufacturing Output or (OMO) Model		
Variable	**Coeff**	**t-Stat**	**P-value**	**Coeff**	**t-Stat**	**P-Value**	**Coeff**	**t-Stat**	**P-Value**	**Coeff**	**t-Stat**	**P-Value**
LnAO	-0.085	-1.28	0.212	-0.124	-1.35	0.19	1.901	2.22	0.036	0.668	3.44	0.002
LnN	0.447	2.19	0.045	0.758	2.34	0.027	2.381	2.1	0.048	0.545	2.57	0.021
LnGE	0.107	2.13	0.047	0.165	2.21	0.037	0.222	0.31	0.759	-0.374	-1.55	0.134
LnMCA	0.167	2.39	0.025	0.148	2.26	0.033	2.352	2.15	0.040	6.371	3.14	0.004
LnPCS	0.0007	1.40	0.174	0.004	2.43	0.020	0.023	3.51	0.002	0.068	0.54	0.597
LnPRCS	0.007	1.48	0.152	0.012	1.71	0.100	0.048	0.69	0.499	0.105	1.66	0.110
ECT_{t-1}	-0.451	-2.64	0.014	-0.479	-2.77	0.010	-0.276	-2.2	0.037	-0.537	-3.20	0.004
R-Squared	0.609	-	-	0.633	-	-	0.708	-	-	0.89		
Adjusted R-Squared	0.554	-	-	0.591	-	-	0.653	-	-	0.80		
F-statistic for the R^2	11.223	-	0.000	12.170	-	0.000	9.418	-	0.000	81.160	-	0.000
Breusch-Pagan-Godfrey test statistic for	2.93	-	0.152	1.85	-	0.459	1.29	-	0.256	3.39	-	0.066
Breusch-Godfrey test statistic for serial correlation	1.64	-	0.315	1.24	-	0.371	1.95	-	0.161	0.36	-	0.548
Jarque-Bera Test statistic for normality	1.36	-	0.211	1.74	-	0.207	0.68	-	0.712	1.11	-	0.573
Average VIF test statistic for multicollinearity	1.87	-	-	1.87	-	-	1.87	-	-	1.87	-	-
Observation	40	-	-	40	-	-	40	-	-	40	-	-

Author's Computation, 2024.

Evaluation of Diagnostic Test Results for the Estimates

The evaluation of the explanatory power of the models is first discussed below, before evaluating sequentially the diagnostic test results covering heteroscedasticity, serial correlation, multi-collinearity, normality in the distribution of residuals, stability and model misspecification.

The R-squared for MAO, FBT, TAF and OMO models are 0.609, 0.633, 0.708, and 0.890 respectively, indicating the respective proportion of variations in each dependent variable that has been explained by the explanatory variables. The F-statistics for MAO, FBT, TAF and OMO are 11.223, 12.170, 9.418 and 81.160 respectively, with corresponding p-values of 0.000 in each case. These indicate that the models have goodness of fit.

In respect of the test for heteroscedasticity, the test statistics for MAO, FBT, TAF and OMO are 2.93, 1.85, 1.29, and 3.39 respectively, with their corresponding p-values of 0.152, 0.459, 0.256, 0.066. According to the decision rule, there is no problem of heteroscedasticity or unequal variance of error terms since the p-values are greater than the 0.05 significance level. Concerning autocorrelation, F-statistics for MAO, FBT, TAF and OMO are 1.64, 1.24, 1.95 and 0.36 respectively, with their corresponding p-values of 0.315, 0.371, 0.161 and 0.548. This implies that none of the models suffers the serial correlation problem, as the p-values all exceed 0.05. Regarding normality in the distribution of the residuals, the generated Jarque-Bera statistics for MAO, FBT, TAF and OMO models are 1.36, 1.74, 0.68, and 1.11 respectively, with their corresponding p-values of 0.211, 0.207, 0.712 and 0.573. This implies that none of the models suffers from the problem of non-normality in the distribution of the residuals. In respect of the multicollinearity problem, the computed average VIF statistic for MAO, FBT, TAF and OMO was 1.87 in all cases. This implies that none of the pairs of explanatory variables is too seriously collinear. In conducting the test for stability of the models, it was found that the CUSUM graphs for MAO, FBT, TAF and OMO indicate that the models are stable as the lines of the models in all of the CUSUM graphs (as presented in Figures A1 to A4) are between the 5% significance level lines.

Figure A1

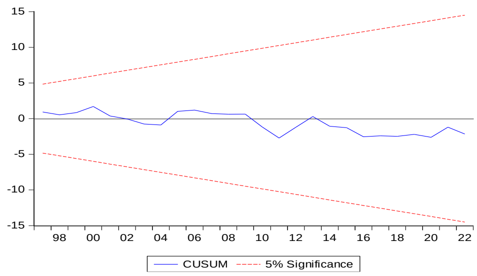


Figure A2

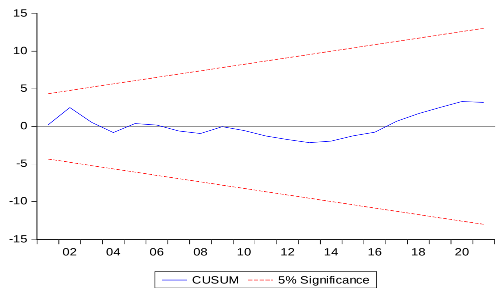


Figure A3

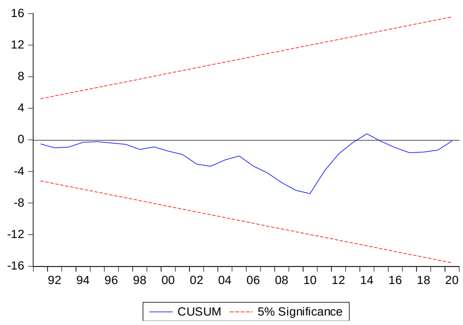
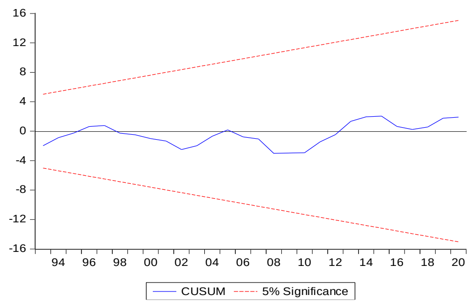


Figure A4



Evaluation of the Explanatory Variables' Performance in the Models for Manufacturing Output

(a) Agricultural Output (AO): The long run coefficient of AO in the models for MAO, FBT, TAF and OMO are -0.085, -0.124, 1.901 and 0.668 respectively, with corresponding p-values of 0.212, 0.190, 0.036 and 0.002. Thus, AO has nil effect on MAO and FBT, but has positive effects on TAF and OMO. That is, agricultural output has a positive linkage effect on each of TAF and OMO, with this linkage effect of TAF being the greater of the two. As the variables are in logarithms, the estimated coefficients represent elasticities so that the manufacturing output elasticities of TAF and OMO with respect to AO are 1.901 and 0.668 respectively. This finding of a positive effect of AO on each of TAF and OMO supports previous studies like Shamsuddeen (2023), Kamilu and Yisau (2023), Kenny (2019) and Amoah and Jehu-Appiah (2022).

(b) Labour Force (N): The effects of labour force on MAO, FBT, TAF and OMO are as shown by the coefficients of the labour force, viz: 0.447, 0.758, 2.381 and 0.545, with p-values of 0.045, 0.027, 0.048 and 0.021 respectively. This implies that the coefficients of labour force are positive and statistically significant. The observed positive effects correspond with the positive effect postulated earlier in the paper and what several previous studies, like Sokunle and Harper (2016), Mohamed (2021), Włodarczyk, Szturo, Ionescu, Firoiu, Pirvu, and Badircea, (2018) and Otalu and Anderu (2015), have reported.

(c) Government Expenditure on Manufacturing Industry (GE): The coefficients of GE in the models for MAO, FBT, TAF and OMO are 0.107, 0.165, 0.222 and -0.374 respectively, with corresponding p-values of 0.047, 0.037, 0.759 and 0.134. This indicates that GE has positive effects on MAO and FBT, while it does not affect TAF and OMO. The observed positive effects of government expenditure on the MAO and FBT manufacturing variables are in tandem with the apriori expectation as postulated earlier in the paper and what several previous studies, like Włodarczyk et al (2018), and Otalu & Anderu (2015), have reported.

(d) Manufacturing Credit Availability (MCA): The effect of manufacturing credit availability on MAO, FBT, TAF and OMO are captured by the reported coefficients of MCA in the models for them, which are 0.167, 0.148, 2.352 and 6.371 respectively, with corresponding p-values of 0.025, 0.033, 0.040 and 0.004. This implies that the coefficients of manufacturing credit availability are positive and statistically significant across all the four manufacturing output categories. The observed positive effects are in line with some previous studies, like Ilemona and Adejoh (2021), Mosab et al (2022), Omonode (2022), Kothakapa et al. (2021) and Włodarczyk et al (2018).

(e) Public Capital Stock (PCS): The coefficients of PCS in the models for MAO, FBT, TAF and OMO are 0.0007, 0.004, 0.023 and 0.068 respectively, with corresponding p-values of 0.174, 0.020, 0.002 and 0.597. This indicates that PCS has a positive effect on each FBT and TAF, while it does not affect MAO and OMO. The observed positive effect in the long run aligns with what had been reported in number of previous studies, like Aiyedogbon and Anyawu (2015), Ezeh and Kenneth (2016), Cyril (2020) and Falade (2021).

(f) Private Capital Stock (PRCS): The coefficients of PRCS in the models for MAO, FBT, TAF and OMO are 0.007, 0.012, 0.048 and 0.105 respectively, with corresponding p-values of 0.152, 0.100, 0.499 and 0.110. This implies that private capital stock does not affect any of the MAO, FBT, TAF and OMO. The nil effect is against the positive effect reported in a few previous studies like Omonode (2022) and Kothakapa et al (2021). The nil effect of private capital stock on these categories of manufacturing output in Nigeria may be attributed to the fact that it is the economy-wide capital stock that is employed as a proxy for the capital stock used in producing each category of manufacturing output in respect of which statistics are not available.

(g) One Period Lag of the Error Correction Term (ECTt-1): The coefficient of ECT_{t-1} in the model for MAO, FBT, TAF and OMO are -0.451, -0.479, -0.276 and -0.537 respectively, with corresponding p-values of 0.014, 0.010, 0.037 and 0.004. This implies that the one-period lag of the error correction terms is negative, less than unity in absolute value and statistically significant across all the four models. This supports the previously observed existence of cointegration or long-run relationship between each dependent variable and its regressors while conducting the formal cointegration tests.

5. Conclusion and Recommendations

Manufacturing industry is considered one of the significant contributors to GDP globally. However, the relevance of the manufacturing industry and its ability to perform its role effectively in the economy depend on numerous factors, the interplay of which has led to the perception in some quarters that the sector has been developing at a slow pace. It is against this backdrop that the current study aimed at filling the identified gaps in the existing studies that tried to identify the determinants of manufacturing output in Nigeria. Anchored on the Cobb-Douglas production function as its theoretical framework, the study estimated production function, using annual data for Nigeria over 1981 to 2020 that were sourced from CBN’s Statistical Bulletin, 2022, for each of the four categories of manufacturing output, viz: (i) manufacturing output (MAO), (ii) food, beverages and tobacco output (FBT), (iii) textile, apparel and footwear output (TAF); and (iv) other categories of manufacturing output (OMO). The explanatory variables considered were agricultural output, labour force, government expenditure on the manufacturing sector, manufacturing credit availability, public capital stock, and private capital stock. Based upon the outcome of the preliminary unit root and co-integration tests, the ARDL methodology was adopted in estimating these models and appropriate diagnostic tests were carried out to ensure the validity of the estimates.

Based on this methodology, the findings are that agricultural output, labour force, government expenditure on the manufacturing industry, manufacturing credit availability, public capital sock and private capital stock all have positive effects on all or most categories of manufacturing output in Nigeria. On the basis of these findings, the study recommended:

i. Policymakers should implement policies that increase agricultural output.
ii. Implement policies that encourage more hands or men power in the manufacturing sector
iii. Intensify budgetary appropriations to the manufacturing sector should be pursued

Policymakers should prioritise formulating and implementing policies that ensure that more credits are available to manufacturers.

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SYSTEMATIC TRAINING AND DEVELOPMENT AND EMPLOYEE COMPETENCY IN KWARA STATE PUBLIC SERVICE

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Abstract
This study investigates the effect of systematic training and development on employee competency within the Kwara State public service. The research addresses the critical need to understand and integrate structured training frameworks into workforce management to enhance employee skills and organizational effectiveness. Specifically, it examines how targeted training programs and professional development initiatives influence employees' competencies in a public sector environment. By exploring this relationship, the study aims to bridge the gap in understanding the role of structured training and development in shaping employee outcomes and improving public service delivery. Utilizing a survey research design, the study draws data from a sample of 395 respondents, from a population of 32,500 public service employees. Primary data were collected across various Ministries and parastatal headquarters located in Ilorin, the state capital, using structured questionnaire. Employing regression analysis, the results reveal that systematic training and development have a significant effect on employee competency ($\beta = 1.154$; $t = 13.845$; p-value <0.005) at a 95% confidence level. These findings accentuate the importance of training and development in fostering employee capabilities, particularly in public sector environments where skill enhancement and adaptability are critical to achieving strategic objectives. The study concludes that implementing well-structured training and development programs is essential for improving employee competency and recommends comprehensive training strategies, continuous professional development, and policy reforms to support a skilled and efficient workforce in Kwara State public service.

Keywords: Employee Competency, Public Service, Training and Development, Systematic Training Initiatives

1. Introduction
Employee competency is a cornerstone of effective public service delivery. Globally, and particularly in Nigeria, training and development are pivotal in enhancing employee skills and knowledge to improve organizational performance (Mullins, 1999). In Kwara State Public Service, systematic training programs are essential to meet the evolving demands of governance and public administration (Dada, 2019).

Training and development involve organizational efforts to enhance the performance of individuals and groups by equipping them with relevant knowledge, skills, and abilities (Alabi, Salahu, Ambali, Yero & Kuranga, 2024; Adamolekun, 1983; Onah, 2012). Such initiatives are critical for adapting to policy shifts, technological advancements, and changing societal expectations (Anas, 2024). However, Nigeria's public sector faces challenges like inadequate funding, poor coordination of training activities, and insufficient needs assessments, which hinder effective training implementation (Obot, 2019). These issues result in a workforce often lacking the necessary skills for optimal performance (Alabi et al., 2024; Dada, 2019; Anas, 2024).

Employee competency is pivotal for effective public service delivery. In Kwara State Public Service, the need for a skilled and adaptable workforce is crucial given the evolving demands of governance and administration. However, despite various training interventions, public servants in the state often lack the necessary competencies to meet the challenges of their roles effectively. This deficiency leads to suboptimal service delivery, inefficiencies, and a diminished ability to implement government policies effectively (Manjo, 2019; Obot, 2019; Olowu et al., 2022).

In Kwara State, public service plays a key role in implementing government policies and delivering essential services. However, empirical evidence suggests employees often lack the necessary competencies for effective performance, leading to suboptimal service delivery (Manjo, 2019; Olowu et al., 2022). Addressing this requires a comprehensive examination of training and development programs as strategies for competency enhancement. Effective training programs are linked to improved employee competency, job satisfaction, and organizational productivity (Saka, Salman & Akewusola, 2022). They also enable employees to adapt to new technologies and foster innovation, driving continuous service delivery improvements (Adiele, 2019; Ifaka & Unufe, 2021).

Thus, for Kwara State Public Service, such programs are vital to building an efficient workforce. Meanwhile, substantial research links training and development to employee competency globally, but gaps exist in the context of Kwara State. Limited studies have explored these relationships within the state’s unique socio-economic and administrative dynamics, necessitating tailored approaches to addressing competency gaps. This study seeks to address this gap by examining the impact of systematic training and development on employee competencies in Kwara State Public Service. By identifying the relationship between structured training initiatives and workforce effectiveness, the study aims to provide actionable insights into designing and implementing robust training programs tailored to the state’s specific needs. Thus, this study will contribute to the broader discourse on public sector efficiency and the role of human resource development in achieving sustainable governance and service excellence. The hypothesis is as follows:
H1: ***Systematic training and development significantly affect employee competency in Kwara State Public Service.***

2. Literature Review

Concept of Employee Competency

Competency combines knowledge, skills, abilities, and attitudes essential for effective job performance (Boyatzis, 2008). It significantly influences organizational success by enhancing productivity, service quality, and adaptability. Competency frameworks typically include technical skills, like job-specific proficiency, and behavioral competencies, such as teamwork and communication (Salas *et al.,* 2022).

This represents the dependent variable (DV) used in this study and it is defined as the combination of knowledge, skills, abilities, and attitudes that enable effective job performance in Kwara State Public Service (Saka *et al.* 2022). It encompasses technical skills (job-specific proficiency and expertise); behavioral skills (teamwork, communication, and problem-solving abilities); adaptability (ability to embrace new technologies, policies, and processes) and ethical standards (adherence to public service norms and values). Competency reflects the overall capability of employees to meet their job requirements and align with organizational objectives (Salas, *et al.*, 2020).

In Kwara State Public Service, competency involves delivering high-quality services, upholding ethical standards, and effectively implementing policies. However, gaps persist due to inadequate training, outdated curricula, and misaligned skills (Olowu *et al.*, 2022). Addressing these issues requires a robust and tailored competency framework to align employee skills with organizational needs, enhancing public service effectiveness.

Concept of Training and Development

Training and development are vital components of human resource management, essential for enhancing employee competencies and driving organizational success (Aguinis & Kraiger, 2021; Oforegbunam, 2011). Training focuses on structured activities designed to improve skills, knowledge, and performance in specific job roles (Adiele, 2019; Alabi et al., 2024), while development prepares employees for future responsibilities by fostering critical thinking and broader strategic capabilities (Dada, 2019; Mullins, 1999). Together, these processes address immediate competency gaps and equip employees for long-term challenges, enhancing organizational resilience (Ifaka & Unufe, 2021; Noe, 2022).

Training emphasizes short-term skill acquisition tailored to job requirements (Armstrong & Taylor, 2020), while development involves broader, long-term initiatives for future leadership roles (Dessler, 2023). Contemporary perspectives underscore lifelong learning, adaptability, and innovation in response to technological and organizational changes (Salas et al., 2022). These continuous processes are increasingly critical in fostering a workforce capable of navigating modern complexities.

Systematic Training and Development represent the independent variable, which is the cause or factor hypothesized to influence the dependent variable. Systematic training and development in this study refer to structured and organized efforts aimed at improving employee skills, knowledge, and performance. It is conceptualizes to include targeted training programs (focused sessions designed to address specific competency gaps), continuous professional development (ongoing learning opportunities for skill enhancement) and technological integration (The use of digital platforms, e-learning, and blended learning approaches). These systematic initiatives are intended to prepare employees to adapt to dynamic job requirements, thereby enhancing their overall competency (Salas *et al.*, 2022).

In Nigeria, public service has historically prioritized training to improve employee performance and service delivery. The 1974 Public Service Review Commission highlighted the importance of continuous training for result-oriented service (Adamolekun, 1983). However, challenges such as inadequate funding and political inertia have impeded implementation (Dada, 2019; Okafor & Agu, 2020). In Kwara State, public servants face unique challenges, including digital literacy, ethical decision-making, and effective policy implementation, necessitating systematic training and development programs (Adeoye & Elegbeleye, 2023).

Empirical studies confirm the positive impact of training on employee performance. For example, training at the Nigerian Gas Company significantly enhanced organizational productivity (Adeoye, 2019). Training also improves job satisfaction, reduces turnover, and fosters better interpersonal relations, driving overall organizational success (Jehanzeb & Bashir, 2020). Effective programs align with both organizational goals and employees' specific needs, ensuring resource optimization and employee engagement (Aguinis & Kraiger, 2021). Conversely, poorly matched initiatives can lead to resource wastage and disengagement (Noe, 2022).

Technological advancements have revolutionized training delivery, shifting from traditional methods to e-learning and immersive virtual reality (Gillet et al., 2023). Blended learning approaches, combining online and in-person sessions, are increasingly effective in meeting training objectives. Continuous learning fosters employee adaptability, enhances competencies, and supports organizational agility in dynamic environments (McKinsey & Company, 2022). Invariably, training and development are indispensable for addressing competency gaps, preparing employees for future challenges, and fostering organizational effectiveness. In Kwara State, leveraging systematic, tailored, and technologically advanced training programs is crucial for equipping public servants with the skills needed to meet the demands of modern governance.

Interrelationship between Training and Development, and Employee Competency

The relationship between training, development, and employee competency is direct and reciprocal (Aguinis & Kraiger, 2021). Training enhances competencies, while competencies shape the effectiveness of training programs. For example, a project management training program in Kwara State Public Service would improve employees' technical and managerial skills, enabling more efficient implementation of government projects (Salas *et al.*, 2022).

Studies show that targeted training initiatives boost job performance, employee satisfaction, and organizational outcomes (Aguinis & Kraiger, 2021). Competency-based training programs are particularly effective as they align learning objectives with specific skill requirements (Salas *et al.*, 2022). However, a notable gap exists between training initiatives and actual competency needs in public service. Limited research explores this misalignment in Kwara State and its impact on service delivery.

Theoretical Framework

Human Capital Theory

Becker's (1964) theory highlights that investments in employee training and development enhance individual competencies, boosting organizational performance through increased productivity and innovation. This concept applies to the Kwara State Public Service, where structured training can address skill gaps among civil servants. Public sector employees often lag in adopting modern administrative practices and technological tools (Aguinis & Kraiger, 2021). Programs focusing on digital literacy and policy management can significantly enhance competencies, enabling employees to meet evolving job demands. Additionally, Becker's economic rationale emphasizes the need to justify public spending. Adeoye and Elegbeleye (2023) found that training investments in Nigeria's public service improve service delivery and citizen satisfaction, reinforcing the economic and social value of effective training initiatives.

Social Learning Theory

Bandura's (1977) theory emphasizes observation, imitation, and modeling in skill acquisition, suggesting effective training should include mentorship and real-world examples. This approach aligns with public service structures, where experienced civil servants in Kwara State could mentor younger employees, facilitating the transfer of institutional knowledge and best practices (Eze *et al.*, 2023). Exposure to exemplary leaders can inspire ethical practices and efficient governance, while role-modeling sessions help employees navigate bureaucratic challenges effectively. Complementing this perspective, the theory underscores the strategic value of investments in training and development to enhance employee competencies (Becker, 1964; Aguinis & Kraiger, 2021). Targeted training in areas like e-governance and public financial management can significantly boost competencies over time (Adeoye & Elegbeleye, 2023).

This theory offers a comprehensive framework for examining the relationship between training and employee competency in Kwara State Public Service. It highlights how investments in education and skill acquisition improve employee value, organizational productivity, and overall service delivery. Training initiatives informed by this theory can address competency gaps in areas like administrative efficiency, digital literacy, and public sector ethics, fostering enhanced performance and adaptability within the public service.

3. Methodology

This paper examines the impact of systematic training and development on employee competency within the Kwara State public service. Focusing on Kwara State, Nigeria, the study considers the unique cultural, political, and socioeconomic factors that shape organizational culture and employee performance dynamics in the civil service (Manjo, 2019; Oyeleye & Akinyele, 2019). A survey design was adopted, allowing for the description, analysis, and interpretation of key variables. This method enables data collection to answer research questions and test hypotheses effectively (Hair et al., 2017). The study's population includes all 32,500 civil servants employed in various departments, ministries, and agencies, responsible for delivering essential services such as education, healthcare, transportation, public safety, and social welfare (Kwara State Civil Service Commission, 2022).

A convenience sampling method was used to select participants from the headquarters of various ministries and parastatals. Participants were chosen based on their roles and responsibilities, ensuring a diverse representation across departments. This approach facilitates a comprehensive understanding of training and development effects on employees at different levels of the public service in Kwara State. To determine the sample size for this study, we used the Taro Yamane formula, which is appropriate for estimating a sample size from a known population. The Taro Yamane formula is given as follows:

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

Where:

n = Sample size

N = Total population size

e = Margin of error (expressed as a proportion)

The margin of error is typically set based on the desired level of precision for the study's results. For most studies, a common margin of error is 5% (0.05) or 10% (0.10). Then, we calculate the sample size (n) as:

$$n = 32{,}500 / (1 + 32{,}500(0.05)^2)$$

$$n = 32{,}500 / (1 + 32{,}500(0.0025))$$

$$n = 32{,}500 / (1 + 81.25)$$

$$n = 32{,}500 / 82.25$$

$$n \approx 394.28$$

Since we cannot have a fraction of a participant, we rounded up the sample size to the nearest whole number:

$$n \approx 395$$

Therefore, the estimated sample size for this study was 395 participants. This sample size provide sufficient statistical power to draw meaningful conclusions about the variables under consideration.

Primary data were collected through a self-developed questionnaire using a four-point Likert scale, measuring responses from strongly agree to strongly disagree. Reliability was ensured through the test-retest method and Cronbach's Alpha, which yielded a reliability index shown in table 3.1, indicating high consistency and reliability.

Table 3.1 Reliability Statistics of Research Variables

S/N	**Variables**	No. of Items	Cronbach's Alpha	Composite Reliability	Remark
1	Systematic Training and Development (TrDev)	5	0.774	0.769	Reliable
2	**Employee Competency (EmCom)**	5	0.813	0.801	Reliable

Sources: Pilot Survey 2024

Data analysis was conducted using IBM SPSS (version 27.0), employing descriptive and inferential statistics. Bar charts illustrated respondents' demographic characteristics, while regression analysis assessed the effect of systematic training on employee competency. Relationships were evaluated using p-values, with significance set at $p < 0.05$. If the p-value was below 0.05, the null hypothesis was rejected; otherwise, it was not. This approach highlighted the strength and significance of relationships between the study variables.

Model Specifications for the Hypothesis

EmCom = f(**TrDev**)

EmCom =ß0+ $ß_1$**TrDev** + Ɛ

Where:

EmCom = **Employee Competency** (Dependent variable)

ß0= Intercept of the model.

ß1= Estimate of the parameter of the independent variable in the model of the slope.

E= Error term.

TrDev = **Systematic Training and Development** (Independent variable)

The a priori expectation is as; thus, $\beta 1 > 0$. According to the a priori anticipation about the link stated above, **systematic training and development** have a significant positive effect on **employee's competency in term of decision making process in Kwara State Civil service**.

The calculated value would be larger than or equal to the critical value for the null hypothesis to be rejected; otherwise, the null hypothesis is accepted at any level of significance.

4. Results and Discussion

4. 1 Socio-demographic Characteristics of Respondents

Analyzing demographic traits provides insights into the participants' makeup, including variables like gender, age, education, work experience, and job category, which contextualize the findings. Figure 1 illustrates the socio-demographic distribution of 395 respondents: 56.5% (223) are male, and 43.5% (172) are female. This gender distribution reflects broader organizational dynamics and helps establish connections between participant backgrounds and research goals. Bar charts further present these characteristics in percentages for clarity and relevance.

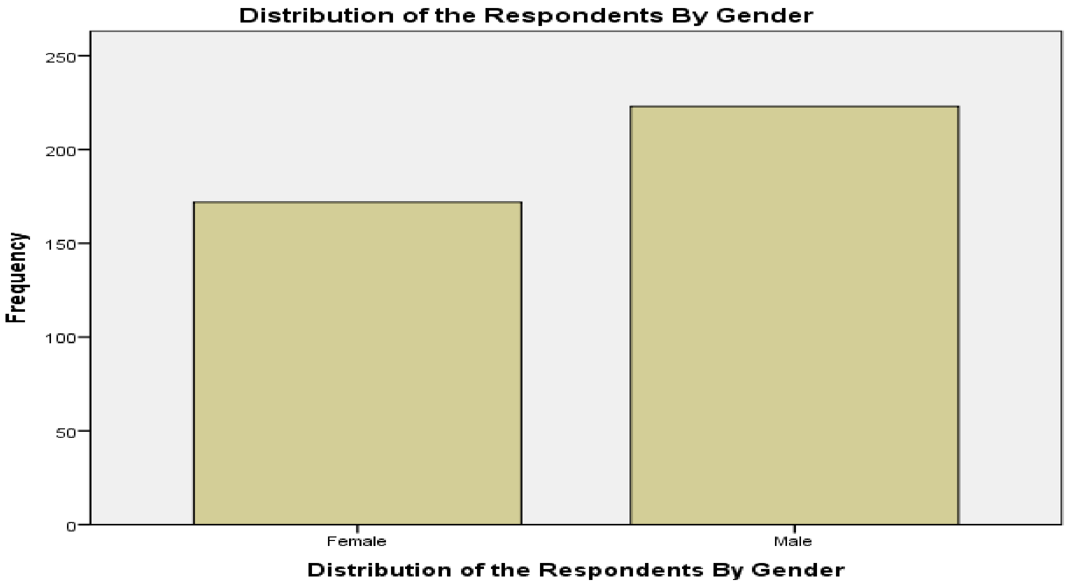

Fig. 1: Distribution of the Respondents By Gender
Source: Field Survey, 2024.

Figure 2 shows the marital status distribution: 50.9% (201) are married, 44.1% (174) single, 1.3% (5) divorced, and 3.8% (15) widowed. This diverse sample composition reflects current demographics. Marital status, linked to job attitudes and performance (Kooij *et al.,* 2018), provides context for analyzing its relationship with employee productivity, enriching the study's findings.

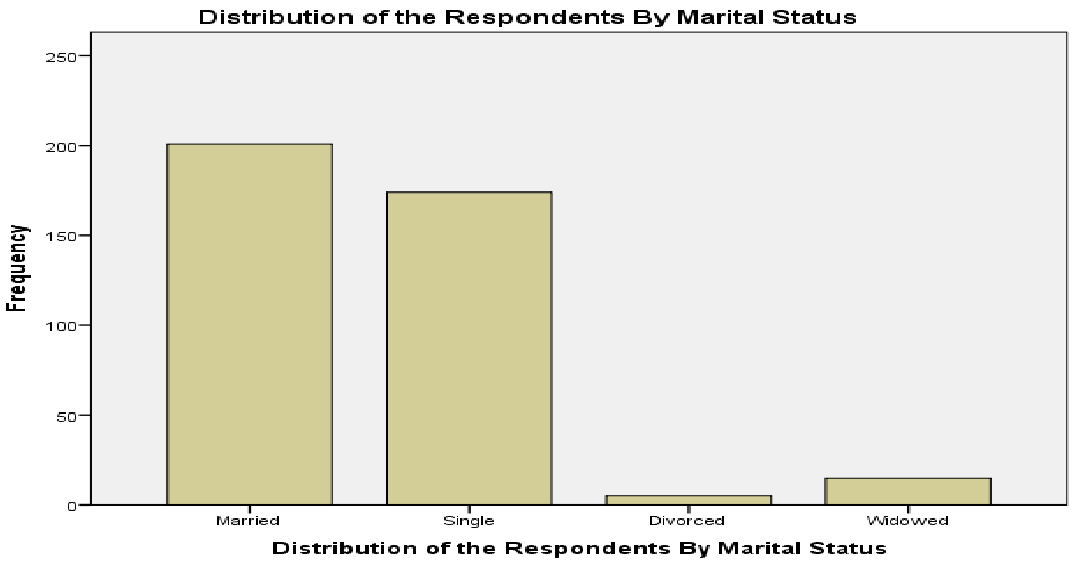

Fig. 2: Distribution of the Respondents by Marital Status
Source: Field Survey, 2024.

Figure 3 shows the age distribution: 57.2% (226) are 31-40 years, 16.5% (65) are 41-50 years, 14.9% (59) are 21-30 years, and 11.4% (45) are above 50. Age influences work attitudes and behaviors (Kooij et al., 2018), providing context for exploring how it moderates the relationship between uncertainty avoidance and employee productivity.

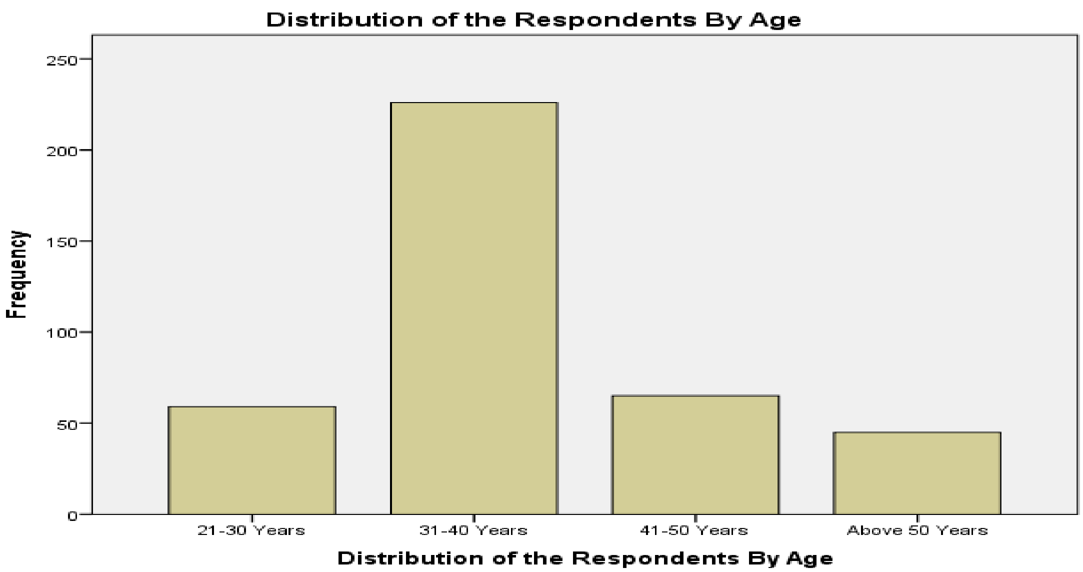

Fig. 3: Distribution of the Respondents by Age
Source: Field Survey, 2024.

Figure 3 illustrates the age distribution of participants: 57.2% (226) are aged 31-40, 16.5% (65) are 41-50, 14.9% (59) are 21-30, and 11.4% (45) are above 50. Age significantly impacts work attitudes and behaviors (Kooij et al., 2018), offering valuable context for analyzing how it moderates the relationship between uncertainty avoidance and employee productivity in the study.

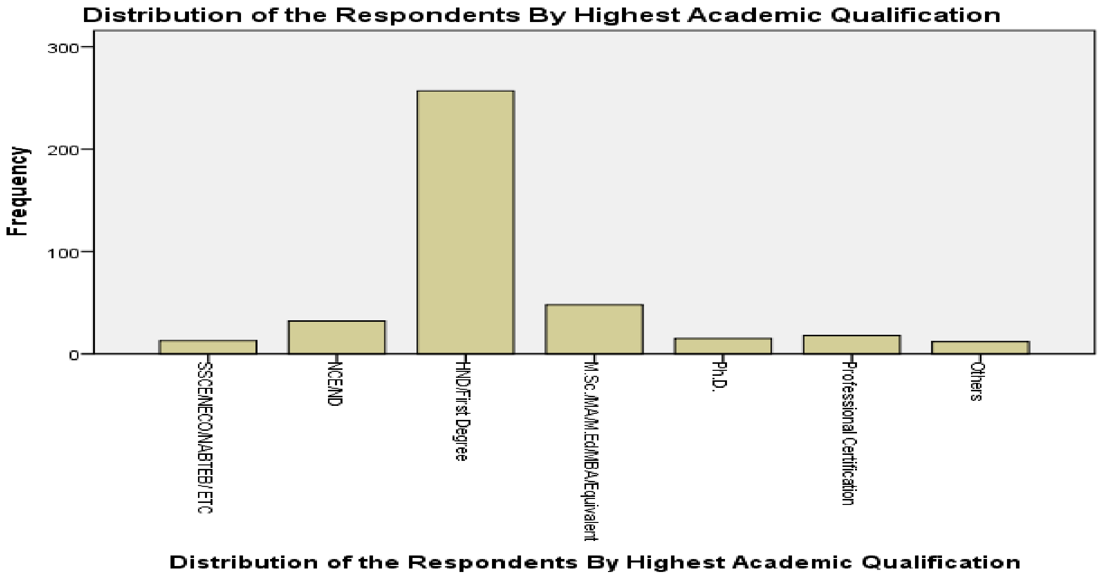

Fig. 4: Distribution of the Respondents by Highest Academic Qualification
Source: Field Survey, 2024.

Figure 3 shows the age distribution: 57.2% (226) are 31-40, 16.5% (65) are 41-50, 14.9% (59) are 21-30, and 11.4% (45) are above 50. Age influences work attitudes and behaviors (Kooij et al., 2018), providing context for its moderating role on uncertainty avoidance and employee productivity.

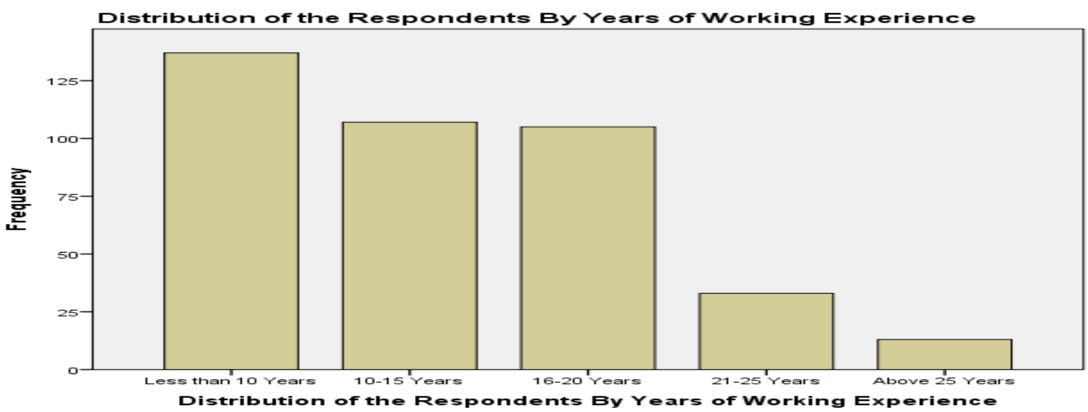

Fig. 5: Distribution of the Respondents by Years of Work Experience
Source: Field Survey, 2024.

Figure 6 shows the staff category distribution: junior staff make up 65.1% (257), senior staff 31.1% (123), and directors 3.8% (15). Staff categories influence job roles, responsibilities, and performance (Morgeson & Humphrey, 2006), providing a basis for examining how varying responsibility levels relate to the study's objectives.

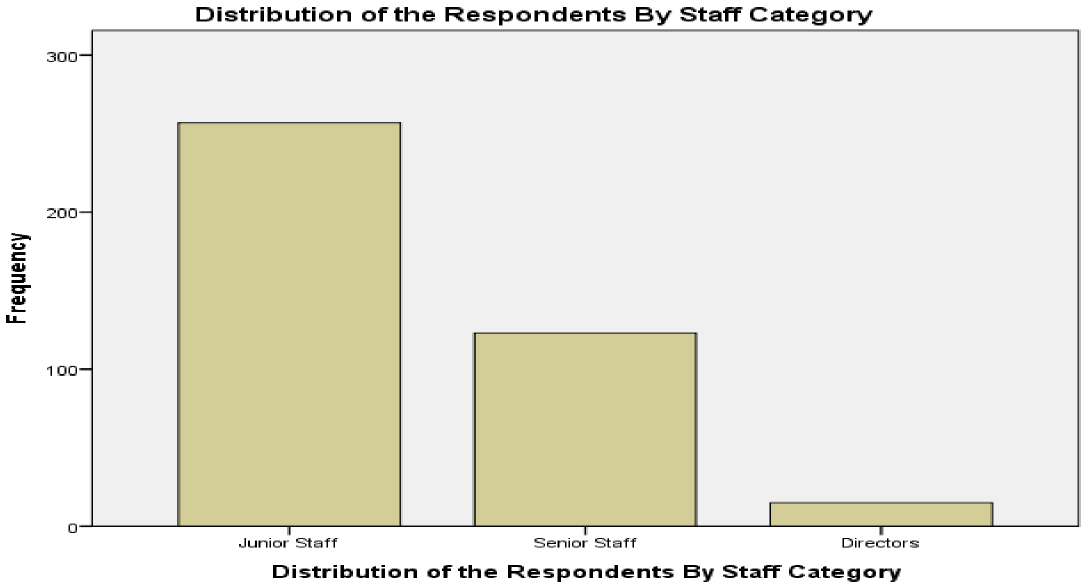

Fig. 6: Distribution of the Respondents by Staff Category
Source: Field Survey, 2024.

In summary, the analysis of demographic characteristics provides a comprehensive profile of the study's participants, setting the stage for investigating the relationships between systematic training and development and its relative effect on employee competency within the context of gender, age, academic qualification, experience, and staff category.

4.2 Descriptive Statistics of Variables

Eligible Kwara State Civil Service employees responded to questions on training, development, and competency using a four-point Likert scale: Strongly Agree (1), Agree (2), Disagree (3), and Strongly Disagree (4). This scale facilitated the evaluation of their responses.

Table 4.1: Measurement of Mean

Mean Value	Description
1.0 – 2.0	Positive/true statement
2.1 – 3.0	Neutral position
3.1 – 4.0	Negative/false statement

Source: Field Survey, 2024

The descriptive statistics of the responses are shown in the following tables. Further insights into the descriptive analysis are presented in the discussion of findings.

Table 4.2 Descriptive Statistics of Effect of training and development on employee competency **N= 395**

Variables	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
Training & development aids organizational culture acquisition.	309 (78.2)	86 (21.8)	0 (0)	0 (0)	**1.22**	**0.413**
Organization considers training as part of organizational procedure.	243 (61.5)	133 (33.7)	19 (4.8)	0 (0)	**1.43**	**0.585**
Training and development helps employees' skills acquisition.	339 (85.8)	56 (14.2)	0 (0)	0 (0)	**1.14**	**0.349**
Training programs helps employees' competence.	292 (73.9)	103 (26.1)	0 (0)	0 (0)	**1.26**	**0.440**
Training and development					**1.26**	**0.447**

Source: Field Survey, 2024

Table 4.2 presents respondents' perspectives on the relationship between systematic training, organizational culture, and employee competence. The findings provide valuable insights into how employees perceive training and development's role in shaping competency within organizational culture. A majority (78.2%) strongly believe that training fosters organizational culture, aligning with Hofstede's model, which highlights training's influence on cultural values (Hofstede, 1980). This suggests employees view training as instrumental in instilling desired cultural norms, reinforcing its importance in enhancing competency.

Additionally, 61.5% strongly agree that training is integral to the organization's procedural framework. This indicates employees perceive training as a core organizational commitment, emphasizing its role in linking rewards and productivity (Noe, 2013). An overwhelming 85.8% agree that training significantly develops employees' skills, reflecting literature on training's impact on knowledge and skill enhancement (Baldwin & Ford, 1988). This confirms that training initiatives are effective in improving employee abilities, supporting the study's objective of exploring the connection between training and employee competency.

Moreover, 73.9% of respondents agree, and 26.1% strongly agree, that training programs enhance competence. This highlights training's critical role in fostering collaboration and teamwork, essential for employee performance (Awuah & Amoako, 2016). The overall mean score of 1.26 indicates a broadly positive perception of training's impact on competence, aligning with the study's theoretical framework. In summary, the results in Table 4.2 emphasize the positive link between training and organizational culture, skill development, and employee competence, supporting the research objectives.

4.5 Assumptions for Multiple Regression Model

Diagnostic tests for linearity, multicollinearity, and normality were conducted to ensure the data met the assumptions required for accurate linear regression analysis.

Normality Test

It is common practise in statistics to presumptively presume that the observations are normal. This premise underpins the whole statistical framework, and the inference fails if the premise is broken. Before doing any statistical data analysis, it is imperative to verify or test this premise.

Table 4.3: Tests of Normality

	Uncertainty Avoidance Index	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	Df	Sig.
Employee Competency	STRONGLY AGREE	.346	779	.000	.767	779	.000
	AGREE	.389	630	.000	.708	630	.000
	DISAGREE	.437	151	.000	.576	151	.000
	STRONGLY DISAGREE	.348	19	.000	.641	19	.000
a. Lilliefors Significance Correction							

Source: SPSS Result, 2024.

Normality tests for "Employee Competency" response levels showed p-values of 0.000 (Kolmogorov-Smirnov) and <0.001 (Shapiro-Wilk) across subcategories. These results indicate significant conformity to normality for all subcategories.

Multicollinearity Test

Table 4.4: Multicollinearity Result

Model		Collinearity Statistics	
		Tolerance	VIF
1	Systematic Training and Development	.379	2.485
a. Dependent Variable: Employee Competency			

Source: SPSS Result, 2024.

Multicollinearity occurs in regression models when predictor variables are strongly correlated, potentially affecting results. Tolerance and variance inflation factor (VIF) assess this issue. Tolerance values near 1 indicate minimal multicollinearity; all values in this study exceed 0.2, showing no severe concerns. Similarly, VIF values below 5, as observed here, are acceptable. These results confirm no significant multicollinearity among predictor variables in the regression model.

Linearity Test

Linearity, assessing the alignment of changes in the dependent variable with the independent variables, was tested. Figure 7 displays a scatter plot of residuals, showing minimal spread. This indicates a linear relationship between Uncertainty Avoidance Index (independent variable) and employee productivity (dependent variable).

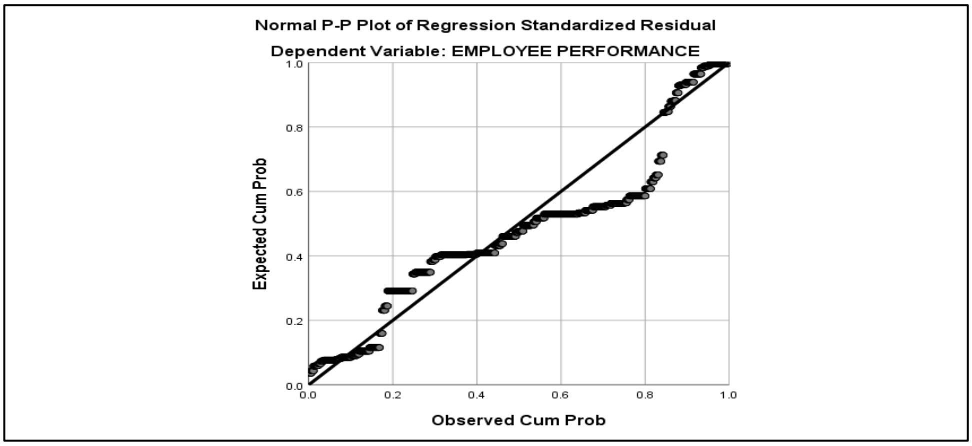

Figure 7: Linearity Test Result
Source: SPSS Result, 2024.

4.6 Multiple Regression Analysis

A regression study explored how uncertainty avoidance index affect employee productivity. Multiple Regression Analysis was used to quantify this impact, with the table showing R^2 values indicating explained variance in employee performance.

Table 4.5: Summary of Results of Linear Regression Analysis for the Effect of Systematic Training and Development on Employee Competency

Model: **EmCom** = ß0+ $ß_1$**TrDev** + Ɛ		Effect of Systematic Training and Development on Employee Competency							
	B	t	Sig.	R	R^2	AdjR^2	df	F	Sig
(Constant)	.750	2.007	<.001	.581[a]	.337	.335	1	191.677	<.001[b]
TrDev	1.154	13.845	.000				394		
a. Dependent Variable: EmCom									

Source: SPSS Result, 2024.

The regression analysis summarized in Table 4.5 reveals that systematic training and development (TrDev) is a significant predictor of employee competency

(EmCom) in Kwara State Public Service. The correlation coefficient (R) of 0.581 (58.1%) indicates a strong positive relationship between TrDev and EmCom. Additionally, the R-square value of 0.337 (33.7%) suggests that 33.7% of the variability in EmCom is explained by systematic training and development. The adjusted R^2 value of 0.335 confirms TrDev's contribution to variations in EmCom, demonstrating a good model fit for prediction. The F-statistic (F=191.677) is highly significant ($p=0.000$, $p<0.05$), indicating a strong overall model fit.

The regression coefficients further support the positive relationship: when other variables are held constant, EmCom starts at 0.750 and increases by 1.154 for every unit increase in TrDev. The beta coefficient for TrDev is 1.154, with a t-value of 13.845 ($p<0.005$), underscoring the significant effect of TrDev on EmCom. More so, the t-statistic exceeds the critical value of +1.645 at 394 degrees of freedom, supporting the hypothesis that systematic training and development significantly improve employee competency. At a 95% confidence level, the findings confirm that TrDev positively influences EmCom in Kwara State Public Service.

Discussion of Findings

The findings from the hypothesis testing reveal that systematic training and development significantly enhance employee competency in Kwara State Public Service ($\beta = 1.154$; $t = 13.845$; $p < 0.005$). This significant effect underscores the influence of structured training programs on workplace outcomes, particularly improved employee competency. The results provide strong evidence that systematic training and development (TrDev) positively impact employee competency (EmCom).

The correlation coefficient ($R = 0.581$) indicates a moderate to strong relationship, aligning with research emphasizing the role of structured training in workforce development (Noe et al., 2022). An R-square value of 0.337 suggests that 33.7% of the variability in employee competency is attributable to systematic training and development. While this demonstrates a substantial impact, it also highlights that other factors contribute to competency, such as organizational culture, leadership, and individual motivation (Aguinis & Kraiger, 2009).

The adjusted R^2 value (0.335) validates the model's robustness, confirming that training initiatives meaningfully influence competency. This aligns with Elnaga and Imran's (2013) findings that training enhances employee skills and productivity. The significant F-statistic ($F = 191.677$, $p < 0.000$) further supports the model's reliability and underscores systematic training and development as a key determinant of employee competency.

Additionally, the t-statistic ($t = 13.845$, $p < 0.005$) affirms the hypothesis, echoing conclusions by Kadiresan *et al.* (2015) that systematic training enhances technical skills and adaptability to organizational changes. However, the R-square value also indicates that 66.3% of competency variability is influenced by other factors, such as workplace environment, leadership, individual characteristics, and external socio-economic conditions. Salas *et al.* (2020) emphasize the interplay of these variables in shaping competency, advocating a holistic approach to employee development.

The study's contextual limitation to Kwara State Public Service suggests the findings may not generalize to other public sector organizations with different operational and cultural nuances. Hofstede (2020) highlights the influence of cultural and institutional factors on employee behavior and outcomes, warranting caution in broader application.

These findings have significant implications for public sector management in Kwara State. The positive relationship between systematic training and competency highlights the need to institutionalize structured training as a core workforce development strategy. Policymakers should prioritize continuous learning initiatives, customized training modules, and regular competency assessments to align with organizational goals. Additionally, leveraging technology-driven training platforms can improve accessibility and engagement, supporting modern e-learning advancements (Andriotis, 2021).

Conclusion and Recommendations

The study confirms that systematic training and development significantly enhance employee competency within the Kwara State Public Service. Training initiatives are pivotal for improving employee performance, adaptability, and skill enhancement. However, the findings also highlight the influence of broader organizational and contextual factors, underscoring the need for a holistic approach to workforce development.

To optimize employee competency, the following recommendations are proposed:

i. Kwara State Public Service should establish and sustain tailored training programs addressing employees' technical, managerial, and soft skill needs. These programs must be periodically reviewed and updated to remain relevant and effective in meeting the dynamic demands of public service.

ii. Managers should leverage e-learning platforms and technology-based training tools to improve accessibility and efficiency. Interactive modules, virtual simulations, and assessments can enhance engagement and provide flexible learning opportunities, particularly for remote or underserved employees.

iii. Addressing the 66.3% variability in competency not explained by training requires fostering supportive workplace environments, promoting leadership development, and introducing motivational initiatives. Cultural and organizational dynamics must be considered to align with employees' preferences for stability and predictability, ensuring optimal outcomes. Thus, by implementing these recommendations, Kwara State Public Service can significantly enhance employee competency, thereby improving overall service delivery.

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CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE OF SELECTED NIGERIAN DEPOSIT MONEY BANKS

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Abstract
This study investigates the connection between corporate governance factors and financial outcomes in Nigerian deposit money banks from 2012 to 2022. Utilizing panel regression analysis, three different estimators (Pooled OLS, Fixed Effect, and Random Effect) were employed to explore the impact of CEO Gender Diversity (CGD), Board Gender Diversity (BGD), Board Independence (BI), Board Size (BS), and Board Meetings (BM) on Return on Equity (ROE), Return on Capital Employed (ROCE), and Profit Before Interest and Tax (PBIT). Results indicate a positive association between CEO Gender Diversity and ROE, although a trade-off is observed with ROCE. Board Meetings demonstrate a consistent negative impact on financial metrics, while Board Gender Diversity and Board Independence exhibit limited significance. Recommendations include fostering diverse leadership and prioritizing efficient board meeting practices to enhance financial performance. Continuous monitoring and adaptation of corporate governance practices are essential for the stability and effectiveness of Nigerian deposit money banks.

Keywords: corporate governance, financial performance, deposit money banks, Nigeria, panel regression

INTRODUCTION

Corporate governance includes the rules, customs, and procedures that control a company's administration and oversight, it is essential to the functioning of all organizations, including banks. Building investor and stakeholder trust in the banking industry requires openness, accountability, and integrity, all of which are fostered by effective corporate governance. Strong corporate governance frameworks are known to have a major impact on banks' financial performance by encouraging moral and responsible management behaviors (Adefemi et al., 2018; Alshehhi, 2023). Furthermore, banks with sound governance typically have better risk management systems, which lowers the possibility of monetary losses and improves overall performance.

Agwor and Amuchechukwu (2020) assert that deposit money banks, which account for a sizeable amount of Nigeria's GDP, contribute significantly to the country's operations and growth. The Nigerian banking sector has faced recurrent corporate governance challenges, particularly evident during the 2009 banking crisis, which was largely attributed to governance deficiencies among consolidated banks (Adegboye, 2022). Issues such as board misconduct, executive malfeasance, and inadequate oversight have often resulted in declines in shareholder wealth and corporate failures.

These challenges underscore the importance of examining corporate governance mechanisms, including board size, independence, meeting frequency, and CEO gender diversity, to ensure effective management and oversight. Agency theory highlights the separation of ownership from management and the role of governance in enhancing firm performance and shareholder value (Jensen & Meckling, 2014)

This study evaluates the impact of corporate governance mechanisms on the financial performance of Nigerian deposit money banks, focusing on key metrics such as Return on Equity (ROE), Return on Capital Employed (ROCE), and Profit Before Interest and Taxes (PBIT). A novel aspect of this research is the inclusion of CEO gender diversity as a variable, offering fresh insights into its role in financial performance. By analyzing governance components like board size, independence, meeting frequency, and gender diversity, this study aims to provide actionable insights into strengthening corporate governance practices in the Nigerian banking sector, ultimately contributing to economic development and stability.

LITERATURE REVIEW

2.1 Corporate Governance

Oluwole (2021) described corporate governance as systems that regulate management to enhance performance, accountability, and shareholder value while considering stakeholder interests. Williamson (2018) asserts that corporate governance is intricate and involves several facets, highlighting the significance of duty and accountability. According to Victor (2021), corporate governance is centered on managing and supervising companies. There is a need for careful observation and evaluation of company activities since the owners of publicly supported enterprises are sometimes different from the management. There is a division between directors, who act as managers, and shareholders, who represent many owners in a typical traded firm. These stakeholders have conflicting interests inside the organization; directors, who frequently have no stock in the company, prioritize their pay and incentives, while shareholders, among other goals, want to protect their assets.

CEO Gender Diversity (CGD), Board Gender Diversity (BGD), Board Independence (BI), Board Size (BS), and Board Meetings (BM) are among the supervisory elements that are included in corporate governance. Effective corporate governance guarantees equity, openness, transparency, and accountability in an organization's dealings with stakeholders, according to Dada et al. (2023). Kumo et al. (2023) argued that it entails effective resource management, protecting the interests of shareholders, and fostering long-term shareholder value.

Hypotheses

H_{01}: There is no substantial connection between corporate oversight factors and Return on Equity (ROE).

H_{02}: There is no substantial connection between corporate oversight and Return on Invested Capital (ROCE).

H_{03}: There is no substantial connection between corporate oversight factors and Profit Before Interest and Taxes (PBIT).

2.2 Financial performance

Financial performance refers to the assessment of a company's capability to generate and allocate funds over a specified period (Adewara et al., 2023). According to Dagunduro et al., 2022 and Kolawole et al., 2023, financial performance evaluation takes into account a variety of characteristics such as capital adequacy, liquidity, solvency, operational efficiency, leverage, and profitability. This research will evaluate statement of profit or loss using Return on Capital Employed (ROCE), Return on Equity (ROE), and Profit Before Interest and Taxes (PBIT). This article examines the relationship between corporate governance and financial performance, utilizing Return on Shareholder Equity (ROE), Return on Invested Capital (ROCE), and Profit Before Interest and Taxes (PBIT) as indicators. The study uses these three performance criteria to undertake a detailed investigation of how corporate governance affects the financial performance of selected Nigerian money deposit banks. The inclusion of ROE, ROCE, and PBIT as performance measures enhances the study by providing a comprehensive view of a bank's financial performance. These factors evaluate a bank's profitability, efficiency, and capacity to create returns for shareholders. Furthermore, they provide a more sophisticated assessment of the bank's performance over time and against industry benchmarks.

ROE measures a bank's profitability by evaluating the net income relative to shareholders' equity, providing insights into how effectively the bank utilizes its capital to generate profits (Musdholifah & Wulandari, 2020). ROCE evaluates profitability by considering the net income in relation to the total capital employed, offering insights into the bank's utilization of both equity and debt for profit generation. PBIT focuses on the bank's operational efficiency by excluding interest expenses and taxes from profit calculation, thus highlighting its core operational performance. By incorporating these performance indicators, the study can conduct a multifaceted analysis of financial performance, assessing profitability, capital utilization efficiency, and operational effectiveness. This approach reduces reliance on a single measure and enables a complete grasp of the relationship between corporate governance policies and financial results (Pestovskaya, 2016).

2.3 *Theoretical Framework*

The foundation of this research is Agency Theory, which was first presented by Alchian and Demsetz in 1972 and then improved upon by Jensen and Meckling in 1976. The link between principals (like shareholders) and agents (like executives) in businesses is examined by agency theory. It emphasizes how principals give agents the power to make decisions since they are trusted to run the company on their behalf. But when agents put their own interests ahead of the principals', this connection frequently leads to agency difficulties, which can lead to disputes and inefficiencies (Jensen & Meckling, 1976).

The applicability of agency theory in the banking industry is supported by empirical data from Nigeria. According to studies, boards of directors are better equipped to oversee and counsel management when they meet more regularly, which improves financial performance (Eluyela et al., 2018). In a similar vein, agency theory has been connected to the influence of other corporate governance characteristics on bank performance, including ownership structure and board composition. (Jarboui & Affes, 2023; Wakisuka-Isingoma et al, 2016). By using tools including board monitoring and contractual agreements to balance the interests of principals and agents, it aims to resolve agency issues (Clarke, 2004, as quoted in Abdullah, 2009). In order to safeguard the interests of shareholders, governance procedures are essential for guaranteeing openness and accountability. For instance, Dhaliwal, Naiker, and Navissi (2010) show how internal governance procedures, including independent audit committees, assist prevent opportunistic actions and guarantee adherence to legal requirements.

This study is relevant to agency theory because it explains how governance structures, including board independence (BI), board size (BS), board meetings (BM), CEO gender diversity (CGD), and board gender diversity (BGD), affect financial results. This study uses agency theory to investigate the connection between corporate governance practices and the financial performance of Nigeria's deposit money institutions, with a particular focus on governance methods that lower agency costs and improve organizational performance. This conceptual underpinning is consistent with other studies that highlight the function of governance in reducing agency disputes and enhancing financial results (Sami, Wang, & Zhou, 2011).

2.4 Empirical Theory

The relationship between corporate governance and financial performance in financial institutions, particularly Nigerian deposit money banks, has been extensively studied (Wakaisuka-Isingoma et al., 2016; Kanu & Nwali, 2019; Awoyemi & Ihesiaba, 2020; Ajayi & Sosan, 2013). Okoye, Erin, Ahmed, and Isibor (2017) analyzed corporate governance using board size, independence, and gender diversity as indicators, and financial sustainability with return on assets (ROA) and operating self-sufficiency. Similarly, Wisdom et al (2021). examined board size, board composition, and CEO duality, finding significant influences on financial performance.

However, these studies reveal critical gaps that this research seeks to address:

1. Most studies emphasize internal governance mechanisms (e.g., board characteristics), with limited exploration of gender diversity of key players.
2. Existing research primarily uses accounting-based metrics like ROA and return on equity (ROE), which emphasize short-term performance but overlook long-term value creation and sustainability.

By filling in these gaps, this study seeks to offer a more thorough understanding of how corporate governance, more especially, the gender diversity of the CEO, the board, the size, the independence, and the meetings of the board, affects the financial performance and overall institutional sustainability of Nigerian deposit money banks.

Methodology

The study focused on 10 Deposit Money Banks (DMBs) selected from a pool of 21 listed DMBs in Nigeria. The chosen banks reflect a mix of leading players in the Nigerian banking sector, capturing a diverse range of governance structures, operational sizes, and financial performance levels. This ensures the findings are representative of the industry. Given the scope of the study, analyzing all 21 listed banks would have been resource-intensive and may not have added proportionate value. The sample size of 10 DMBs strikes a balance between data richness and analytical feasibility. Access Bank Plc, Ecobank Nigeria Plc, Fidelity Bank Plc, Guaranty Trust Bank Plc, First City Monument Bank, First Bank Plc, Union Bank Nigeria Plc, United Bank for Africa Plc, Sterling Bank, and Zenith Bank Plc are selected banks.

The study used judgmental sampling approaches to choose the ten banks within the required time frame of eleven years, from 2012 to 2022. This approach was justified by the need to focus on banks with readily available and reliable data over the study period. The selected banks represent a significant portion of the banking sector in terms of asset size, market share, and governance practices, ensuring the findings are generalizable to the broader population of Nigerian DMBs. The research focused on assessing the published annual reports of these selected banks. Secondary data sourced from audited financial statements of these 10 selected DMBs listed on the Nigerian Stock Exchange (NSE) over a decade, from 2012 to 2022, formed the basis of analysis. When yearly reports were not accessible in the NSE fact book, they were obtained from the relevant banks' corporate websites.

Data Analysis Method and Model Specification

The panel least squares approach was used to obtain meaningful results. In addition, the Hausman test for specifications was used to find the best method between fixed-effect and randomized-effect models for evaluating panel data. The significance threshold of 5% was largely accepted. This study used a variety of proxies for corporate governance and performance. The following models were used to study the relationship between corporate governance practices and the profitability of banks in Nigeria.:

$$Y_{1t} = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

$$Y_{2t} = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

$$Y_{3t} = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

Where Y_{1t}, Y_{2t} and Y_{3t} are ROE, ROCE and PBIT over period or time *t*.

Table 1: Corporate Governance Mechanism

S/N	Independent Variables	Meaning
1	CEO Gender Diversity (CGD)	refers to the representation of both male and female chief executive officers (CEOs) within a company. It measures the gender diversity at the highest executive level of the organization. CGD = 1, if the firm's top manager is a woman, 0 otherwise.
2	Board Gender Diversity (BGD)	refers to having both male and female directors on the organization's board of directors.
3	Board Independence (BI)	assesses how independent board members are from the company's management.
4	Board Size (BS)	indicates the total number of executives that serve on a company's board.
5	Board Meetings (BM)	refers to the frequency and regularity of meetings held by the board of directors.

Return on Equity (ROE) measures the profitability of a company in relation to its shareholders' equity. The formula for ROE is:

$$ROE = \frac{Net\ Income}{Shareholder's\ Equity}$$

Return on Capital Employed (ROCE) assesses the efficiency of a company's capital utilization to generate profits. The formula for ROCE is:

$$ROCE = \frac{Operating\ Income}{Capital\ Employed}$$

Profits Before Interest and Taxes (PBIT) assets indicates a company's profitability before accounting for interest and taxes, relative to its total assets. The formula for PBIT assets is:

$$PBIT = \frac{Profits\ Before\ Income\ and\ Taxes}{Total\ Asset}$$

Data Presentation and Result

Table 2: Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	N
ROE	0.3728	0.3711	0.7411	0.1443	0.1133	110
ROCE	0.3637	0.3500	0.9056	0.0473	0.2162	110
PBIT	0.0225	0.0145	0.3269	0.0008	0.0323	110
CEO Gender Diversity (CGD)	0.1364	0.0000	1.0000	0.0000	0.3447	110
Board Gender Diversity (BGD)	22.5935	23.0769	60.0000	0.0000	9.8320	110
Board Independence (BI)	61.8811	60.0000	90.0000	35.0000	9.8606	110
Board Size (BS)	14.1546	14.0000	22.0000	6.0000	3.0626	110
Board Meetings (BM)	6.9182	7.0000	16.0000	1.0000	2.5777	110

Source: Author's Estimation (E-Views v9.0), 2023

Table 2 presented an overview of all the variables under investigation, there is a notable range in returns (11.33%), with the average Return on Equity (ROE) for the chosen Nigerian Deposit Money Banks at 37.28%. Return on Capital Employed (ROCE) varies more than ROE, with a median of 35% and an average of 36.37%. The standard deviation is larger at 0.2162. With a low standard deviation of 0.0323 and a mean Profit Before Interest and Taxes (PBIT) of 0.0225, the spread appears to be small. The CEO and board gender diversity have substantial fluctuation, with averages of 13.64% and 22.59%, respectively. With moderate fluctuation, board independence averages 61.88%, while board meetings vary (mean = 6.92). The average board size is 14.

Table 3: Pearson Correlation Matrix

Variables	ROE	ROCE	PBIT	CGD	BGD	BI	BS	BM
ROE	1.00	0.33	-0.02	0.17	-0.02	0.02	0.13	-0.28
ROCE	0.33	1.00	-0.04	-0.22	0.24	-0.32	0.20	-0.19
PBIT	-0.02	-0.04	1.00	-0.10	-0.04	-0.10	-0.08	-0.26
CGD	0.17	-0.22	-0.10	1.00	0.13	0.04	0.14	0.23
BGD	-0.02	0.24	-0.04	0.13	1.00	-0.32	0.13	0.17
BI	0.02	-0.32	-0.10	0.04	-0.32	1.00	-0.46	-0.09
BS	0.13	0.20	-0.08	0.14	0.13	-0.46	1.00	0.14
BM	-0.28	-0.19	-0.26	0.23	0.17	-0.09	0.14	1.00

Source: Author's Computation (E-views v9.0), 2023

The correlations between corporate governance and financial success in Nigerian Deposit Money Banks are shown in the correlation matrix in Table 3. Return on Equity (ROE) and Return on Capital Employed (ROCE) have a somewhat positive association (0.33), indicating that banks with higher ROE also exhibit superior capital efficiency. A modest positive association (0.17) exists between CEO

Gender Diversity (CGD) and ROE, suggesting that more diverse leadership yields marginally higher returns. There is a modestly favorable correlation (0.24) between ROCE and Board Gender Diversity (BGD). Board Size, on the other hand, has a negative connection with BI (-0.46) and Board Independence (BI) with ROCE (-0.32). Overwhelming board meetings have a detrimental effect on performance as well.

Panel Regression Analysis

Phase two examines how the profitability of Deposit Money Banks is affected by CEO Gender Diversity (CGD), Board Gender Diversity (BGD), Board Independence (BI), Board Size (BS), and Board Meetings (BM), with particular attention to ROE, ROCE, and PBIT. To determine the most effective estimator for examining the connection between corporate governance and bank profitability, three regression estimators — pooled OLS, fixed effect, and random effect—are employed, and their consistency and efficiency are evaluated using the post-estimation Hausman test.

Hypothesis One

H_{01}: There is no substantial connection between corporate oversight factors (such as CGD, BGD, BI, BS, and BGD) and return on equity (ROE) as a metric of the statement of profit and loss..

$$ROE = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

Table 4: Pooled Ordinary Least Square for ROE as dependent variable

Variable	Coefficient	t-Statistic	Prob.
CGD	0.0740	2.3812	0.0191
BGD	0.0000	0.0394	0.9686
BI	0.0007	0.5244	0.6011
BS	0.0062	1.6323	0.1056
BM	-0.0155	-3.7608	0.0003
C	0.3408	2.8030	0.0060
R-squared		0.160315	
Adjusted R-squared		0.119945	
S.E. of regression		0.106257	
Sum squared resid		1.174221	
Log-likelihood		93.6099	
F-statistic		3.971189	
Prob(F-statistic)		0.002455	

Source: Author’s Computation (E-views v9.0), 2024

Table 4 results provide evidence to reject Hypothesis One (H01), which posited that there is no notable connection between the bank's governance variables and Return on Equity (ROE) as a financial performance indicator. The findings indicate that certain corporate governance variables indeed have a statistically significant impact on ROE, as illustrated by the coefficients and associated t-statistics. Specifically, the coefficient for CEO Gender Diversity (CGD) is statistically significant at the 0.05 level, suggesting that increasing gender diversity among CEOs is associated with higher ROE. This finding supports the notion that diversity at the top executive level can positively influence financial performance.

Hypothesis Two

H_{02}: There is no substantial connection between corporate oversight factors (such as CGD, BGD, BI, BS, and BGD) and Return on invested capital (ROCE) as a metric of the statement of profit and loss.

$$ROCE = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

Table 5: Pooled Ordinary Least Square for ROCE as dependent variable

Variable	Coefficient	t-Statistic	Prob.
CGD	-0.1363	-2.4032	0.0180
BGD	0.0049	2.4178	0.0174
BI	-0.0041	-1.8365	0.0691
BS	0.0104	1.4949	0.1380
BM	-0.0179	-2.3755	0.0194
C	0.5028	2.2646	0.0256
R-squared		0.231606	
Adjusted R-squared		0.194664	
S.E. of regression		0.194025	
Sum squared resid		3.915148	
Log likelihood		27.37626	
F-statistic		6.269431	
Prob(F-statistic)		0.00004	

Source: Author's Computation (E-views v9.0), 2024

The alternative hypothesis is supported by Table 5, which demonstrates a substantial correlation between corporate governance factors and Return on Capital Employed (ROCE) for Deposit Money Banks in Nigeria. While Board Gender Diversity (BGD) has a positive coefficient, meaning that more gender-diverse boards are related with greater ROCE, CEO Gender Diversity (CGD) has a negative coefficient, meaning that more CEO gender diversity is associated with lower ROCE. Additionally, there is a negative correlation between ROCE and Board Meetings (BM), suggesting that frequent meetings might be an indication of inefficiency. Nevertheless, there are no statistically significant impacts of Board Size (BS) or Board Independence (BI) on ROCE.

Hypothesis Three

H_{03}: There is no substantial connection between corporate oversight factors (such as CGD, BGD, BI, BS, and BGD) and Profit

Before Interest and Taxes (PBIT) as a metric of the statement of profit and loss.

$$PBIT = \beta_0 + \beta_1 CGD + \beta_2 BGD + \beta_3 BI + \beta_4 BS + \beta_5 BM$$

Table 6: Pooled Ordinary Least Square for PBIT as dependent variable

Variable	Coefficient	t-Statistic	Prob.
CGD	-0.0012	-0.1382	0.8903
BGD	-0.0001	-0.3355	0.7379
BI	-0.0006	-1.6906	0.0939
BS	-0.0013	-1.1577	0.2496
BM	-0.0032	-2.6138	0.0103
C	0.1039	2.8871	0.0047
R-squared		0.097994	
Adjusted R-squared		0.054629	
S.E. of regression		0.031441	
Sum squared resid		0.10281	
Log-likelihood		227.5612	
F-statistic		2.259719	
Prob(F-statistic)		0.053843	

Source: Author's Computation (E-views v9.0), 2024

The alternative hypothesis is partially supported by Table 6, which shows a substantial correlation between PBIT for Nigerian Deposit Money Banks and specific corporate governance characteristics. The only variable that exhibits a statistically significant negative correlation with PBIT is Board Meetings (BM), indicating that more frequent meetings are linked to poorer profitability. Higher operating expenses or interruptions brought on by frequent discussions might be the cause of this. The lack of substantial correlations between PBIT and CEO Gender Diversity (CGD), Board Gender Diversity (BGD), Board Independence (BI), and Board Size (BS) suggests that these factors have little effect on profitability in the chosen DMBs.

Table 7: Fixed Effect Estimation

Sample: 2012 – 2022						
Cross-sections included: 10						
Total panel (balanced) observations: 110						
	ROE		**ROCE**		**PBIT**	
Variable	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
CGD	0.0740	0.0191	-0.1363	0.0180	-0.0013	0.8903
BGD	0.0000	0.9686	0.0049	0.0174	-0.0001	0.7379
BI	0.0006	0.6011	-0.0041	0.0691	-0.0006	0.0939
BS	0.0062	0.1056	0.0104	0.1380	-0.0013	0.2496
BM	-0.0155	0.0003	-0.0179	0.0194	-0.0032	0.0103
C	0.3408	0.0060	0.5027	0.0256	0.1039	0.0047
R-squared		0.1603	0.2316		0.0980	
Adjusted R-squared		0.1199	0.1947		0.0546	
S.E. of regression		0.1063	0.1940		0.0314	
Sum squared resid		1.1742	3.9151		0.1028	
Log likelihood		93.6099	27.3763		227.5612	
F-statistic		3.9712	6.2694		2.2597	
Prob(F-statistic)		0.0025	0.0000		0.0538	

Source: Author's Computation (E-views v9.0), 2023

Table 5 presents Fixed Effect Estimation results on the relationship between corporate governance variables and financial performance (ROE, ROCE, and PBIT). CEO Gender Diversity (CGD) shows a positive association with ROE but a negative impact on ROCE, suggesting a trade-off between profitability and capital efficiency. PBIT is unaffected by CGD. Board Gender Diversity (BGD), Board Independence (BI), and Board Size (BS) show no significant impact on financial performance metrics. Board Meetings (BM) negatively affect ROE, ROCE, and PBIT, indicating potential inefficiencies. The model explains 16.03% to 23.16% of the variation in financial performance, with statistically significant F-statistics.

Table 8:Random Effect Estimation

Sample: 2012 – 2022						
Cross-sections included: 10						
Total panel (balanced) observations: 110						
	ROE		**ROCE**		**PBIT**	
Variable	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
CGD	0.036454	0.2828	0.100943	0.0444	-0.00293	0.7712
BGD	-5.87E-05	0.9616	-0.00095	0.5946	2.72E-05	0.9401
BI	-0.000496	0.7104	-0.0011	0.5726	-0.00017	0.6685
BS	0.00241	0.5431	0.002078	0.7186	-0.00035	0.7771
BM	-0.011756	0.0271	-0.00691	0.3743	-0.00266	0.0759
C	0.447053	0.0013	0.458098	0.024	0.056185	0.1625
R-squared		0.071491	0.065115		0.033293	
Adjusted R-squared		0.026852	0.020169		-0.01318	
S.E. of regression		0.084446	0.125662		0.029206	
F-statistic		1.601518	1.448725		0.716343	
Prob(F-statistic)		0.166192	0.213138		0.612554	

Source: Author's Computation (E-views v9.0), 2023

The Random Effect Estimation study of financial performance (ROE, ROCE, and PBIT) and corporate governance factors is shown in Table 6. Although the CEO Gender Diversity (CGD) coefficients were positive, they were not statistically significant, suggesting that the associations were weak. Board size (BS), board independence (BI), and board gender diversity (BGD) also did not significantly correlate with financial success. Board meetings (BM) had a detrimental influence on ROE, but not on ROCE or PBIT. The low R-squared values of the model indicate that only a minor amount of the variation in financial performance indicators can be explained by the governance factors.

Post Estimation Test

Table 9: Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
The difference in ROE coefficient not systematic	1.237527	5	0.9412
The difference in ROCE coefficient not Systematic	8.403521	5	0.1354
The difference in PBIT coefficient not systematic	6.122293	5	0.2945

Source: Author's Computation (E-views v9.0), 2023

There are no discernible differences between the Random Effect and Fixed Effect models, according to the findings of the Hausman Test for the financial performance measures. The p-value of 0.9412 and the Chi-Square statistic of 1.2375 for ROE indicate that the estimates from the two models are comparable. Comparable outcomes are shown for Return on Capital Employed (ROCE) by the Chi-Square statistic of 8.4035 with a p-value of 0.1354. The p-value of 0.2945 and the Chi-Square statistic of 6.1223 for Profit Before Interest and Tax (PBIT) also indicate consistency. All things considered, both models offer accurate assessments of the connection between financial success and corporate governance.

Discussion and Findings

The analysis highlights the nuanced relationship between corporate governance variables and financial performance in Nigerian Deposit Money Banks (DMBs). The significant positive association between CEO Gender Diversity (CGD) and Return on Equity (ROE) suggests that increasing gender diversity at the CEO level could boost profitability. However, the mixed results with Return on Capital Employed (ROCE) and Profit Before Interest and Taxes (PBIT) point to the varying impacts of CGD across different financial performance indicators.

The consistently negative effect of board meetings on ROE, ROCE, and PBIT suggests that excessive meetings may hinder financial performance, possibly by creating inefficiencies or distractions within the governance structure. This insight can be crucial for optimizing board operations, especially in contexts like your work in financial health modeling, where operational efficiency plays a central role in assessing capital structure.

Interestingly, Board Gender Diversity, Board Independence, and Board Size show limited impact on financial performance, which could inform strategic recommendations for your research in corporate governance and bank performance. These findings provide valuable insights that can be applied to improve governance practices, potentially influencing policies or strategies aimed at enhancing the performance of DMBs in Nigeria.

Conclusion

In conclusion, there are complex correlations between corporate governance factors and financial performance in Nigerian deposit money institutions. Return on Equity (ROE) is favorably impacted by CEO Gender Diversity (CGD), suggesting that diverse leadership can increase shareholder profits. The Return on Capital Employed (ROCE) trade-off associated with this variety, however, indicates that profitability and capital efficiency must be carefully balanced. Financial indicators are consistently negatively impacted by the frequency of Board Meetings (BM), underscoring the need of effective and targeted meetings. Board independence (BI) and gender diversity (BGD) have little impact on financial success, indicating that other criteria could be more important.

Recommendation

The results indicate that in order to improve shareholder returns, Nigerian deposit money institutions should encourage diverse leadership, especially at the CEO level, since CEO gender diversity has an advantageous impact on return on equity (ROE). However, considering the trade-off shown with Return on Capital Employed (ROCE), a balance between capital efficiency and profitability must be achieved. To lessen the detrimental effect of numerous meetings on financial KPIs, effective board meeting procedures should be given priority, emphasizing quality over number. Although the relevance of board independence and gender diversity was low, long-term performance may benefit from initiatives to enhance these areas. Lastly, maintaining the stability and efficacy of the banks requires constant observation and modification of corporate governance procedures in accordance with these findings.

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