CAPITAL FORMATION DECISIONS AND THE PERFORMANCE OF LISTED BANKS IN NIGERIA

Aiyesan, O. O.[1] and Alade, M.E. [2]

[1,2] Department of Accounting, Faculty of Administration and Management Science, Adekunle Ajasin University, Nigeria

[1] olabode.aiyesan@aaua.edu.ng, [2] muyiwa.alade@aaua.edu.ng

ORCID: 0000-0003-4736-2829,   0000- 0002-6189-9318

ABSTRACT

This study examines the connection linking capital formation and firm accomplishment in the Nigerian banking sector. The study explores the various components of capital formation decisions such as debt-to-equity ratio, debt to asset ratio, short term to asset ratio, and short-term equity to asset ratio while earnings per share and market capitalization were control variables. The finding revealed that capital formation variables, particularly debt to asset and debt to equity exhibit negative aftermath on the financial accomplishment of commercial banks in Nigeria. This suggests that higher levels of debt, especially in relation to equity and assets, are linked to lower returns on both assets and equity. The study further uncovered that short-term debt has a particularly detrimental effect on accomplishment, likely due to its liquidity challenges and potential impact on operational flexibility. The key takeaway from this study is the significance of carefully managing capital formation to achieve optimal firm performance. While debt financing can support growth, excessive reliance on debt, particularly short-term debt, can be harmful. The study provides insights for policymakers, banking executives, and investors on the importance of managing capital structure to enhance the financial performance of banks, especially amidst macroeconomic challenges.

Keywords: *Capital Formation, Firm Performance, Debt/Equity, Return-on-Asset, Return-on-Equity*

1.   INTRODUCTION

The ability of firms to be stable, profitable and maintain a high level of efficiency through which the business is maintained is key to their growth and existence. Firms are more interested on how to increase shareholders' wealth and firm performance therefore; it is imperative they generate revenue that will increase market value and the earnings-per-share of stakeholders. Firm accomplishment according to Akintoye (2016) is a sketch of a firms' financial standing that tells how successful and profitable business is. Kim, Duvernay and Le Thanh (2021) asserted that high financial achievement draws attention from every manager, because it plays a vital position within the structure and development of a firm. However, that aim is often challenged by many factors, including financing options that could lead to low firm

performance globally. By carefully balancing debt-and-equity, firms can enhance cost of capital and increase shareholders' wealth.

Understanding the dynamics of banking institutions in developing countries such as Nigeria is crucial, particularly regarding how capital formation influences their financial composition. The interplay between debt and equity (DETE) financing determines not only the risk profile of these banks but also their capacity to absorb shocks and maintain stability in volatile economic conditions, high levels of non-performing loans, limited access to long-term funding source, regulatory and compliance issues on capital adequacy ratio, and exposure to foreign exchange risks (Sebastain and Onuegbu, 2019; Aliyu and Elipus, 2022). Fluctuations in interest rates and economic conditions can further exacerbate these economic challenges highlighting the substance of effective risk, management strategy and capital planning for Deposit Money Banks (DMB) operating in Nigeria (CBN, 2024). This interplay becomes increasingly pertinent as developing countries grapple with unique financial challenges, including limited access to capital vend and higher economic uncertainty. By focusing on the capital composition decision of banks, we can glean intuition into the progress strategies employed to enhance profitability and growth considering the market value and earnings-per share of the banks. Moreover, examining the unique circumstances and regulatory frameworks provides a broader perspective on how financial achievement is sustained or hindered. Different scholars in the global space have divergent views about how capital formation influenced financial accomplishment.

Studies on the impact of capital formation on financial performance yield mixed findings. On the negative side, Merve (2018) in Turkiye, Khalaf et al. (2023) in Jordan, Ali and Faisal (2020) in Saudi Arabia, Mwanji et al. (2014) in Kenya, Ajanthan (2014) in Sri Lanka, Vaidean (2014) in Romania, and Dele et al. (2023) in Nigeria all report that capital formation has a negative—or "gloomy"—impact on financial outcomes. Conversely, other researchers report more positive results. Mwafag (2022) in Saudi Arabia, Mohammad et al. (2019) in Malaysia, Nataliya et al. (2022) in Ukraine, Mazanec (2023) in Europe, Arhinful et al. (2023), and Shireen (2017) in Jordan all conclude that achieving an optimal mix of debt and equity can enhance profitability, bolster market valuation, improve efficiency, and strengthen overall financial performance. These mixed findings underscore the complexity surrounding the role of capital formation and highlight the importance of context when determining the most effective capital structure. Despite the breadth of research on the impact of capital formation, several empirical issues persist across these studies. First, variations in sample sizes and the industries analyzed can lead to inconsistent or context-specific results, as seen in diverse geographic settings like Türkiye (Merve, 2018), Jordan (Khalaf et al., 2023; Shireen, 2017), Saudi Arabia (Ali and Faisal, 2020; Mwafag, 2022), Kenya (Mwanji et al., 2014), Sri Lanka (Ajanthan, 2014), Romania (Vaidean, 2014), Nigeria (Dele et al., 2023), Ukraine (Nataliya et al., 2022), Malaysia (Mohammad et al., 2019), and Europe (Mazanec, 2023). Second, differences in measurement approaches, such as how capital formation and financial accomplishment are operationalized, complicate cross-study comparisons. Third, the reliance on varying data sources and time frames often introduces biases or overlooks

broader macroeconomic factors, limiting the generalizability of findings. Finally, while some scholars highlight an optimal mix of debt and equity, the lack of consensus on what constitutes "optimal" reflects both methodological discrepancies and context-dependent outcomes.

These issues can influence the firmness and profitability of deposit money banks' leading to potential liquidity problems and hinder their ability to support economic growth in the country especially as the country is facing economic hardship and high cost of funds because of inflation. The varying cost include (DETE) ratio, short term debt to total asset ratio, long term debt to equity ratio, total debt to total asset, ratio of inventory to plus the gross plant and equipment to total asset. Ultimately, this investigation highlights the significance of strategic capital management in fostering robust financial systems that can support broader economic development of DMBs' in Nigeria using the trade-off theory which states that while debt can enhance firm value, excessive debt can have negative consequences.

According to the trade-off theory, firms aim to achieve an "optimal" capital structure by balancing the tax benefits gained from debt financing against the potential costs of financial distress. This perspective holds that some level of debt may enhance returns and firm value due to tax deductibility of interest payments; however, excessive leverage increases the risk of bankruptcy and related agency costs, ultimately eroding financial performance. As a result, neither an all-equity nor an overwhelmingly debt-laden capital structure is deemed ideal. Instead, the trade-off theory posits that companies should carefully calibrate their mix of debt and equity, accounting for specific market conditions, regulatory environments, and internal firm characteristics to maximize overall value while mitigating risk.

2.   LITERATURE REVIEW

2.1 Financial Accomplishment

Financial achievement refers to how well a company can use assets and mode of generating revenue. It measures a firm's financial health over a given period. It is a measure of strength and achievement of banks and is critical to the capacity to manage assets, liabilities, revenues, and expenses efficiently. Financial accomplishment shows health and a firm's capacity to manage its resources (Didin, Jusni and Mochamad, 2018). According to Ashok (2019), financial accomplishment is the process of quantifying the outcomes of a company's operation and policies in terms of money. It analyzes Return-on-Equity, Return-on-Assets, net-profit margin, gross-profit margin, return-on -capital used, and other metrics.

2.2 Capital Formation

Capital formation stipulates that businesses use blends of DETE to finance its operation (Ajibola et al, 2018). It is the technique used by firms to finance itself using a blend of long-term capital (ordinary and preference share, debentures, loans, loan stock, etc.), according to Nirajini and Priya (2013). In addition to immediate commitments such as other payables and overdrafts. Additionally, according to Lambe (2014), Akinyomi and Olagunju (2013), and Salawu (2009), a company's

capital composition is the assortment of different securities it uses to fund its successful endeavors. All of the aforementioned definitions agree that a companys' capital formation represents every form of raising capital employed to fund its activities, from DETE. Many businesses struggle to decide between D/E.

2.3 Capital Formation and Firm Accomplishment

The connection linking capital formation and firm accomplishment is particularly significant in the context of banks in developing countries. Strong capital formation, characterized by a balanced mix of debt and equity, can promote stability and enhance profitability. Banks that operate with higher equity can not only withstand market fluctuations more effectively but also attract customers' trust, leading to sustained growth. Conversely, a heavy reliance on debt may increase financial risk, putting pressure on profit margins, especially in volatile economic environments. Furthermore, the development of financial markets plays a crucial role in this dynamic. As noted, the greater the development of a country's banks, the tougher is the competition, the greater is the efficiency, and the lower are the bank margins, and profits (Demirguc-Kunt and Huizinga, 2024). Additionally, the rise of institutional investors, particularly pension funds, can influence financial achievement by providing avenues for funding, thus impacting the capital strategies of banks (Lambe, 2014).

2.4 Empirical Review

Grounded in the Trade-off Theory, the relationship between capital formation and financial performance is predicated on balancing the potential benefits of leveraging—such as tax shields and enhanced returns—against the risks of financial distress, especially when debt levels become excessive. The theory posits that firms seek an optimal debt-to-equity mix to maximize value and minimize capital costs. Empirical studies across different regions and timeframes have tested this theoretical proposition, unveiling both supportive and contradicting evidence. Studies abound in terms of the relationship between capital formation and financial performance.

In terms of those that reported positive findings, in Africa, several works underscore the beneficial effects of leveraging when efficiently managed. For example, Bawa (2022), investigating capital formation in Nigerian firms over a 15-year period, revealed that total debt-to-total-assets and total-debt-to-total-equity positively influence profitability and confer stability. These findings mirror those of Ajibola, Wisdom, and Qudus (2018) in Nigeria, who observed that Long-Term Debt (LTD) and Total Debt (TD) exhibit positive influences on performance among listed firms, emphasizing the advantageous role of appropriately structured debt. In Asia, Ramachandran and Madhumathy (2016) found that certain Indian textile firms effectively harnessed debt—complemented by strong operational efficiencies—to bolster returns. Their GMM-based analysis indicated that some sampled companies efficiently utilized capital formation to spur revenue growth, although not all achieved similar results. Similarly, Hawaldar et al. (2017), also in India, demonstrated that higher Debt-To-Total-Assets (DETA) ratios align with significant improvements in Return On Capital Employed (ROCE) and Net Profit ratio (NP). The authors

concluded that well-balanced capital formation strategies, especially the right mix of debt and equity, strengthen the financial standing of banks, thereby enhancing revenue streams.

While some studies highlight predominantly positive outcomes, others report conditional or mixed findings. For instance, Ajibola et al. (2018) simultaneously showed that long-term debt and total debt positively affect corporate achievement in Nigeria, whereas short-term debt has minimal or even negative utility. Their work underscores the importance of debt maturity in shaping the net effect of capital structure. Further, Aliyu and Elipus (2022), focusing on Nigerian deposit money banks from 2010 to 2019, revealed that equity-to-capital ratio and debt-to-capital ratio boost returns on total assets (RETA). However, Total-Debt-To-Total-Equity (TDTE) failed to produce significant improvements, suggesting that not all leverage configurations are equally advantageous. Fakunle, OmoleI, and Adewumi (2024) reported a similarly favorable linkage between DETE and returns on total assets among listed non-financial firms, though the statistical significance was mixed. Their study posits that leveraging can reduce financing costs and enhance capital availability—subject to prudent risk management and strategic alignment.

Conversely, some scholars reveal negative correlations, frequently attributing them to high borrowing costs, weak corporate governance, or macroeconomic volatility. For example, Ramil et al. (2019), in their study of Bangladeshi manufacturing firms, found that an elevated debt-to-equity ratio undermined both ROA and ROE. Here, the debt burden seemingly outweighed any tax-shield benefits. In Africa, Usman (2019) observed that short-term and long-term debt had no significant influence on financial achievement among Nigerian firms, suggesting that external financing channels may not always bolster corporate growth. A similar concern arose from Mugisha et al. (2020) in Uganda, where short-term debt impeded SMEs' profitability, reflecting the liquidity pressures created by immediate repayment obligations. Moreover, Sivalingam and Kengatharan (2018) in Sri Lanka and Atta et al. (2020) in Pakistan both indicated that excessive debt could retard performance in the face of poor corporate governance or elevated borrowing costs, reinforcing the Trade-off Theory's assertion that imprudent leveraging propels firms toward financial distress.

Taken together, these studies reveal an intricate tapestry of outcomes, suggesting that the efficacy of capital formation strategies is far from uniform. While evidence from countries like Nigeria and India often highlights the potential gains tied to a well-managed debt profile, contrasting observations in Bangladesh, Uganda, and Sri Lanka indicate that socio-economic and governance factors can tip the balance unfavorably. Variations in sample sizes, industries, and methodological approaches (ranging from multiple regression to GMM estimation) frequently lead to heterogeneous findings, complicating direct comparisons. Still, overarching themes persist: when capital formation—especially debt financing, is managed prudently and aligned with firm-specific conditions, financial performance tends to improve; conversely, under high borrowing costs or weak managerial oversight, excessive leverage can stifle profitability and threaten long-term sustainability. Overall, these cross-regional findings coalesce around the Trade-off Theory's central proposition: the relationship

between capital formation and financial performance hinges on striking an optimal balance. Firms with robust internal structures and favorable external environments may harness leverage to propel growth, while others may find that less debt preserves financial stability and minimizes distress risks.

3.   METHODOLOGY

The longitudinal design was more appropriate for this study because data on the variables were based within a selected period The study will obtain data to be analysed from published reports of DMB's from 2014-2023. (11) DMB's were selected from the population of 23 listed on the Nigerian exchange group. The banking sector was chosen because their services are vital for economic growth. The objective of this study will be achieved using panel regression method to determine the control of capital composition on financial achievement. This was done using Stata software.

Model Specifications

This study adopted and modified the model of Shoaib, Onaolapo and Kajola (2010) modified to suit the objective of the study. The model is:

$$CF = f(DETA, DETE, STDE, SDTA) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

$$PERF \ = \ f\ (CS)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. \ (2)$$

$$PERF \ = \ f\ (DETA, DETE, STDE, SDTA)$$

Using multiple regression analysis, the model was modified as follows

$$RETEi, t = \ \beta0 + \ \beta1DETAit + \ \beta2DETE + \ \beta3STDE \ + \ \beta4SDTA \ + MCAP \ + \ EAPS + \varepsilon it \ 1$$

$$RETAi, t = \ \ \beta0 + \ \beta1DETAit + \ \beta2DETE \ + \ \beta3STDE \ + \ \beta4SDTA + \varepsilon it \ 1 \ + \ MCAP \ + EAPS \ + \ \varepsilon it \ 1$$

Where,

$PERF = \ performance\ measured\ by\ RETE, RETA$

$CF = \ Capital\ Formation$

$SDTA, = \ Short - Term\ Debt\ to\ Total - Asset\ for\ Firm\ i\ in\ Year\ t$

$STDE \ = \ Short - Term\ Debt\ to\ Equity\ for\ Firm\ i\ in\ Year\ t$

$DETA \ = \ Debt\ to\ Total - Asset\ for\ Firm\ i\ in\ Year\ t$

$DETE \ = \ Debt\ to\ Equity$

$Market\ value \ = MCAP$

$Earnings - per - share \ = EAPS$

$\varepsilon it = \ Error\ Term$

$RETE \ = \ Returns\ on\ Equity$

$RETA = \ Returns\ on\ Asset$

$T = time$

$\beta1, \beta2, \beta3, \beta4, \beta5 = Co\ efficient\ of\ associated\ variables.$

The priori signs of the coefficients are indicated to be positive, which implies that capital formation is supposed to have a positive influence on financial accomplishment of DMBs' in Nigeria i.e. β1-β5>0

4   RESULT AND DISCUSSION

4.1   *Descriptive Statistics*

Table 1 shows that RETA as a means of 1.611 and a standard deviation of 1.598. This indicates that, on average, the banks in the sample have relatively low returns on their assets, though there is considerable variability, as evidenced by the high standard deviation. The minimum value of -9.530 suggests that some banks may be facing significant financial distress, while the maximum value of 5.620 shows that a few banks are able to generate relatively high returns on their assets, possibly due to more efficient operations or asset management strategies. RETE has a mean of 13.481, which is considerably higher than ROA, and a standard deviation of 7.549, indicating that there is substantial variation in the banks' profitability relative to their equity base. This suggests that some banks are able to achieve high profits, while others are not performing as well. The minimum value of -1.210 and maximum value of 32.080 indicate that the range of performance is quite broad, with some banks even experiencing negative returns on equity, which may be a sign of operational inefficiencies or financial difficulties.

For capital formation, DETA) ratio has a mean of 93.712, indicating that, on average, the banks are highly leveraged, relying on debt to finance a significant portion of their assets. Standard deviation of 24.406 reflects considerable variation across the DMBs' leverage. The minimum value of 81.370 and maximum value of 254.750 demonstrate that some banks have much higher levels of debt relative to their assets, which may expose them to greater financial risk, while others have lower debt levels, possibly reflecting a more conservative approach to financing. The DETE has a mean of 7.553, suggesting that, on average, the banks in the sample have a relatively high level of debt compared to their equity. The standard deviation of 3.262 indicates that the DETE ratios vary across the banks. The range from -2.980 to 16.160 is notable, as the negative value implies that some DMBs' in the sample may have negative equity, potentially due to significant financial difficulties or accumulated losses.

STDA has a mean of 68.954 and standard deviation of 16.364, showing that the banks in the sample tend to rely heavily on short-term debt relative to their total assets. The minimum value of 31.130 and the maximum value of 161.210 indicate a wide range of reliance on short-term financing, which may have implications for the banks' liquidity and risk management practices. Banks with high short-term debt levels could face liquidity challenges if they cannot refinance their obligations or generate sufficient short-term cash flows. The STDE has a mean of 5.896 and a standard deviation of 2.918, suggesting that, on average, the banks use a moderate amount of short-term debt in relation to their equity. The minimum value of -1.390 and

maximum value of 14.180 reflect significant variation, with negative values indicating potential financial instability, such as negative equity or severe short-term financial pressures for some banks.

The control variables MCAP has a mean of 8.082, with a relatively low standard deviation of 0.623. This suggests that the market values of the banks are consistent across the sample, with only slight variation in their market capitalization values. The minimum value of 6.660 and maximum value of 9.060 indicate a moderate range of market values, with the banks being similarly valued in the market. Lastly, EAPS mean of 2.445 and standard-deviation of 2.527, indicating that the banks generate moderate earnings per share, but with substantial variability. The minimum value of -1.780 and maximum value of 8.690 show that some banks are struggling to generate positive earnings, while others are more successful in their profitability, which could be tied to differences in management, business models, or operational efficiencies.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
RETA	110	1.611	1.598	-9.530	5.620
RETE	110	13.481	7.549	-1.210	32.080
DETA	110	93.712	24.406	81.370	254.750
DETE	110	7.553	3.262	-2.980	16.160
STDA	110	68.954	16.364	31.130	161.210
STDE	110	5.896	2.918	-1.390	14.180
Mcap	110	8.082	0.623	6.660	9.060
EAPS	110	2.445	2.527	-1.780	8.690

Source: Authors (2024)

Next, we present the result of the correlation analysis in Table 2. The results show that there is a positive connection linking the dependent variables of RETA and RETE (0.914). This indicates that as return-on-assets increases, return-on-equity also tends to increase, suggesting that firms with higher asset returns generally experience better returns on equity during the period under study. In terms of capital formation, the results show a moderate negative connection between the debt to asset ratio (DETA) and both linking RETA (-0.550) and RETE (-0.323). This suggests that higher debt relative to assets is connected with lower returns on both assets and equity. However, the connection is not very strong, implying that other factors may also play a role in determining accomplishment. The (DETE) ratio is moderately negatively correlated with RETA (-0.340) but weakly associated with RETE (-0.061). This indicates that a higher debt to equity ratio is more strongly associated with lower RETE but has a very weak or negligible connection with RETE.

For short-term debt-related variables, the (STDA) ratio shows a weak negative correlation with RETA (-0.175) and very weak positive association with RETE (0.032), suggesting that short-term debt relative to assets does not have strong association with either return on asset or return-on-equity. On the other hand, (STDE) has moderate negative correlation with RETA (-0.281) and a negligible negative

association with RETE (-0.004), indicating that higher reliance on short-term debt relative to equity may be associated with slightly lower returns on assets but not much effect on return-on-equity. The market capitalization (MCAP) has a strong positive correlation with both RETA (0.802) and RETE (0.775), indicating that larger firms by market value tend to perform better both in terms of asset returns and equity returns. These suggest that market value may play a significant role in determining firm performance. Finally, Earnings-Per-Share (EAPS) also shows a strong positive association with both RETA (0.840) and RETE (0.824). This indicates that higher earnings per share are strongly correlated with better performance in both asset returns, and equity returns, suggesting that profitability, as measured by EAPS, play a significant role in firm achievement.

Table 2: Correlation Analysis

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) RETA	1.000							
(2) RETE	0.914	1.000						
(3) DETA	-0.550	-0.323	1.000					
(4) DETE	-0.340	-0.061	0.733	1.000				
(5) STDA	-0.175	0.032	0.379	0.356	1.000			
(6) STDE	-0.281	-0.004	0.617	0.900	0.658	1.000		
(7) MCAP	0.802	0.775	-0.490	-0.230	0.041	-0.084	1.000	
(8) EAPS	0.840	0.824	-0.369	-0.146	-0.014	-0.065	0.883	1.000

Source: Authors (2024)

We also present the regression result in Table 3. The result show that the dependent variable of Return on Asset (RETA) has an R-squared value of 0.759. This implies that the independent and control variables could explain 76% of the systematic change in the dependent variable return-on-asset. However, the unexplained part of the changes in RETA has been captured by the error term. For the RETE model, the overall R-squared value is 0.679, indicating that the independent and control variables of the study could explain 68% of the systematic change in return-on-equity. The unexplained part of the changes in RETE is similarly captured by the error term. To further validate the estimates of the pool OLS result, this study also tests multicollinearity and heteroscedasticity. Multicollinearity can primarily be identified using tolerance and its inverse, known as the variance inflation factor (VIF). The mean variance inflation factor (VIF) of the regression models is 5.15. The analysis reveals that the average VIF for all the models is below the threshold of 10, which aligns with Bawa (2022). This suggest that there is no multicollinearity present and indicates that none of the independent variables should be excluded from the models. The assumption of homoscedasticity specifically indicates that if the errors exhibit heteroscedasticity, it becomes challenging to rely on the standard errors of the least square estimates. Therefore, the confidence intervals will either be very narrow or excessively large. The heteroscedasticity test (Hettest) results show significant p-values for both models (RETA and RETE), indicating the presence of heteroscedasticity in the regression models. As a result, the study uses panel

regression models to account for this issue. The Hausman test result show that for both models, the random effects model (RE) is preferred over the fixed effects model (FE) with an insignificant p-value, suggesting that the random effects model provides more reliable estimates.

Table 3: Regression Results

Variables	RE	RE
DETA	-0.008	0.015
	(0.151)	(0.634)
DETE	-0.384***	0.759
	(0.000)	(0.100)
STDA	-0.071***	0.002
	(0.000)	(0.969)
STDE	0.530***	-0.403
	(0.000)	(0.502)
MCAP	0.768***	5.286***
	(0.009)	(0.002)
EAPS	0.191***	1.480***
	(0.000)	(0.000)
Intercept	0.345	-37.752***
	(0.889)	(0.008)
Observations	110.000	110.000
Overall R^2	0.769	0.683
Hausman	6.79{0.341}	1.30{0.972}

Notes: p-values are in parentheses. *** p<.01, ** p<.05

Table 3 reveals some insightful findings regarding the connection linking capital formation and firm accomplishment. For the RETA model, the random effects model suggest that DETA has negative and statistically non-significant effect on asset performance. This indicates that higher level of debt relative to assets lead to a decrease in the efficiency of asset utilization. The negative aftermath is consistent with previous studies, such as Mugisha et al. (2020), who found that higher leverage in SMEs tends to reduce the ability to efficiently deploy assets, leading to lower asset returns. Similarly, the DETE also exhibits a significant negative association with RETA, suggesting that increased reliance on debt over equity reduces asset performance. This finding supports the pecking order theory, which posits that firms prefer using internal funds before resorting to debt financing, as excessive debt can strain firm operations and asset efficiency (Amanj, Deni and István, 2023). Moreover, the STDA has a statistically significant negative effect on asset performance, implying that firms relying on short-term debt face liquidity challenges that hinder efficient asset management. This aligns with Ramil et al. (2019), who argued that

short-term debt pressures firms to focus on immediate repayments, which reduces the flexibility needed to optimize asset utilization.

For RETE, the random effect model shows that the DETA and DETE ratio both negatively affect RETE, with the connection being stronger for DETE. The insignificant positive impact of DETA and DETE on RETE suggests that higher debt levels increase the profit available to equity holders, which can lead to a decrease in equity returns. This result supports the view that debt financing increases financial risk, reducing the returns for shareholders, especially when the firm is highly leverage (Mazanec, 2023). The STDE also has a positive effect on RETE, further highlighting the risks associated with using short-term debt, which can prioritize debt repayments over returns-to-equity holders. This finding resonates with the studies of Usman (2019), who observed that excessive short-term debt pressures reduce equity profitability, as firms struggle to meet short-term financial obligations.

5   CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This study addressed the critical issue of understanding how capital formation influences the firm achievement of Nigerian commercial banks. The central problem of the study revolved around the lack of consensus on the connection linking various components of capital composition, such as DETA, DETE, STDA, and STDE, and firm accomplishment metrics such as RETA and RETE. The finding revealed that capital formation variables, particularly DETA and DETE, exhibit a negative aftermath on the financial accomplishment of Nigerian deposit money banks. This suggests that higher levels of debt, especially in relation to equity and assets, are linked to lower returns on both assets and equity. The study further uncovered that short-term debt has a particularly detrimental effect on accomplishment, likely due to its liquidity challenges and potential impact on operational flexibility. These results underscore the risks of over-leveraging and the importance of maintaining a balanced capital formation to avoid the negative consequences associated with excessive debt. The key takeaway from this study is the significance of carefully managing capital formation to achieve optimal firm performance. While debt financing can support growth, excessive reliance on debt, particularly short-term debt, can be harmful. Corporate managers, directors, and investors must be vigilant in assessing their capital formation decisions to ensure financial stability and long-term profitability. The finding also suggests that policymakers and regulators need to consider the potential risks of excessive debt in the banking sector and promote sustainable debt practices that do not undermine financial achievement.

This study makes a significant contribution to the literature on capital formation and firm accomplishment by providing evidence from the banking sector in Nigeria, an emerging market economy. The study's context, focusing on Nigeria DMBs', adds new insights into how capital formation decisions can affect the financial accomplishment of firms in developing economies. In terms of variables, this study explores key capital ratios offering a more nuanced understanding of how different forms of debt financing influence firm outcomes. Methodologically, the study employs a random effects model to account for both firm-specific and unobserved

heterogeneity, ensuring that the findings are robust. Empirically, this study provides critical insights for policymakers, regulators, and investors in understanding the complex debt financing and firm achievement in the context of a emerging market. Future research could explore the role of corporate governance in moderating the connection linking capital formation and firm accomplishment, particularly in financial institutions. Additionally, studies could examine how macroeconomic factors, such as inflation rates, interest rates, and exchange rate fluctuations, impact capital formation decisions and firm accomplishment in emerging markets. Expanding the research to include other sectors or cross-country comparisons would further enhance understanding of how capital structure influences performance in different economic environments, providing broader insights for global markets.

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