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Employee Salary Expenditure as a Drain on Operating Cash Flow of Listed Banks in Nigeria

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Abstract

This study examined the influence of employee salary expenditure on the operating cash flow of listed deposit money banks in Nigeria, with the specific objective of assessing the effect of salaries while controlling for firm asset base and revenue. The research adopted an ex-post facto design, relying on historical financial data that could not be directly manipulated by the researcher. The population comprised thirteen listed deposit money banks, of which twelve banks were included in the sample due to the availability of audited financial statements. Secondary data were collected from the banks' audited annual reports covering the period 2015 to 2024, including total employee salaries, total assets, gross revenue, and net operating cash flow. Panel Estimated Generalized Least Squares (EGLS) was used to test the hypothesis, correcting for cross-sectional dependence and heteroskedasticity. The findings revealed that employee salary expenditure significantly drained operating cash flow, indicating that higher salary payments reduced funds available for other operational activities (β = -0.958251, p = 0.0141), and the study concluded that banks should carefully manage salary costs to maintain sufficient liquidity for sustainable operations. Thus, bank management should implement structured salary planning and cash allocation strategies to ensure sufficient liquidity for day-to-day operations. Management should regularly review payroll schedules and explore staggered or phased salary disbursements to reduce the immediate impact on operating cash flow.

Keywords: Employee Salary Expenditure, Operating Cash flow, Nigerian Banks

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1.0 Introduction

The banking sector in Nigeria plays a critical role in the growth and stability of the national economy. Deposit money banks are central to financial intermediation, facilitating the movement of funds between surplus and deficit units in the economy. Over the years, these banks have expanded operations, introduced innovative products, and increasingly invested in human capital to ensure high-quality service delivery and operational efficiency. Employees in the banking sector are recognized as valuable assets whose skills, knowledge, and commitment directly influence bank performance. As competition among banks intensified and regulatory frameworks became more complex, management was compelled to ensure that employee compensation aligned with industry standards to attract and retain talent. Consequently, the proportion of operating resources allocated to employee salaries has grown significantly (Amahalu et al, 2025). While investing in human capital is essential for sustaining performance, rising expenditure on salaries has introduced challenges in managing other aspects of bank operations, particularly liquidity and cash flow (Ndulue et al., 2025). In a dynamic financial environment characterized by market shifts, policy changes, and technological developments, banks must balance the need to reward employees with the imperative to maintain sufficient cash flow for daily operations. Research has shown that staff remuneration positively affects financial performance, while training and other human resource costs may not always yield proportional returns (Obumneme et al., 2026).

Operating cash flow represents the cash generated from a bank's core business activities (King et al., 2025). In today's business environment, operating cash flow serves as a key indicator of financial health because it demonstrates whether a bank can maintain liquidity, manage working capital efficiently, and respond to unforeseen financial demands. For listed banks, effective cash flow management is essential for regulatory compliance, sustaining investor confidence, and achieving long-term profitability (Omonigho et al., 2025). Employee salary expenditure constitutes one of the largest recurring costs for banks, covering salaries, allowances, bonuses, and other benefits. These payments are essential to attract skilled employees, motivate performance, and reduce turnover (Uduehe et a., 2024). However, salary expenditure represents a cash outflow that reduces funds available for operational and strategic activities, which can affect a bank's ability to respond to market opportunities (Sylvanus, et al, 2024). Studies in the Nigerian and international contexts have demonstrated that high salary costs can influence profitability and cash management differently depending on how they are structured and aligned with performance outcomes (Aderobaki, et al 2024). Balancing adequate compensation with cash flow stability is increasingly relevant as banks strive to remain profitable while meeting the expectations of their workforce (Aliu, 2023; Isicheli, et al., 2024). Consequently, salary expenditure and operating cash flow are closely linked, with remuneration policies capable of either supporting performance or straining liquidity if not managed prudently.

Employee salary expenditure influences operating cash flow through both direct and indirect mechanisms. High salary obligations require banks to allocate a substantial portion of available cash to meet payroll, which can limit funds for other operational activities such as loan disbursement, investment, and infrastructure development (Nwankwo, et al., 2024). When salary payments consume a significant share of operating resources, banks may experience cash shortages, delaying essential processes and reducing efficiency. During periods of reduced revenue, fixed salary commitments can exacerbate cash flow challenges, potentially forcing management to seek alternative financing that increases costs (Ndu, et al., 2024). On the other hand, effective salary expenditure can enhance productivity and operational outcomes when aligned with performance incentives (Ezennia & Amahalu,

2024). Well-compensated employees are more likely to deliver higher quality services, process transactions efficiently, and contribute to revenue generation through increased customer satisfaction and retention. Nevertheless, if salary levels grow disproportionately relative to a bank's revenue, the positive effects may be outweighed by the strain on cash flow, affecting the bank's ability to fund daily operations, invest in technology, and respond to market changes (Amahalu, et al 2025). In Nigerian listed banks, managing this balance is particularly critical due to scrutiny from shareholders, regulators, and the public. Understanding the extent to which employee salary expenditure impacts operating cash flow can guide management in formulating payroll policies, determining staffing levels, and implementing cost control measures while supporting both employee welfare and institutional liquidity (Eneh, et al., 2023; Ndubuisi, et al., 2023).

Employee remuneration, when appropriately managed, encourages motivation, productivity, and loyalty, which contributes to higher profitability and strengthens the bank's ability to respond to market demands. Operating cash flow, in this context, serves as a measure of a bank's financial flexibility, reflecting the capacity to sustain day-to-day operations while supporting strategic initiatives (Okafor, et al, 2026).In practice, however, many listed banks in Nigeria allocate a significant portion of their resources to salary expenditure, sometimes without corresponding increases in revenue or efficiency. Studies have shown that while employee compensation is necessary to retain talent, excessive or poorly structured salary payments can limit the cash available for other essential operational needs (Amahalu, et al., 2023; Ndubuisi, et al., 2023). Some banks have faced situations where high recurring salary commitments reduce liquidity, delay investment activities, and constrain the ability to meet short-term obligations. Research has indicated that salary costs in some cases negatively influence operating cash flow, and this pressure can become more pronounced during periods of lower income or economic instability (Adibeli & Amahalu, 2023). This scenario suggests that banks may struggle to maintain a balance between rewarding employees and ensuring sufficient cash flow for other business functions.

The consequences of this situation are significant for both banks and the wider economy. Reduced operating cash flow can hinder banks' ability to fund loans, support customer services, and invest in technological improvements or expansion. It may also lead to reliance on external financing, which increases operational costs and financial risk. When banks are unable to manage salary expenditure effectively, it can affect profitability, undermine shareholder confidence, and limit their capacity to respond to market opportunities.

In spite of extensive research on human resource costs and financial performance in various sectors, a clear gap exists regarding the specific impact of employee salary expenditure on the operating cash flow of listed deposit money banks in Nigeria. Previous studies, such as, Kings et al (2025); Amahalu and Osonwa (2023); Mbonu, & Amahalu (2023) have examined human resource costs and financial performance, focusing primarily on profitability or return on assets. Similarly, Okudo and Ndubuisi (2023), Okudo, et al., (2023) analyzed salaries, directors' remuneration, and pension costs with earnings per share as the dependent variable, while Amahalu & Okudo (2023); Ndubuisi, et al (2023) assessed compensation management and employee performance without directly linking salary outflows to liquidity measures. Amahalu et al. (2021) investigated the effects of wage, retirement, and fringe benefits on service quality, punctuality, and transparency, whereas Modozie & Amahalu, (2022) emphasized training and pension in relation to EPS. None of these studies explicitly addressed the relationship between salary expenditure and the operating cash flow of banks, which is a critical measure of liquidity and the capacity to fund daily operations. This study therefore fills the gap by focusing on how employee salary expenditure influences operating

cash flow, while accounting for bank size and revenue, providing hints on sustainable cash flow management within Nigeria's banking sector.

2.0 Literature Review

2.1 Synthesis of Existing Empirical Studies

Research on employee salary expenditure and financial performance across different sectors reveals a nuanced relationship between employee-related expenditures and firm outcomes. Ejembi, et al., (2022) found that staff remuneration positively influenced financial performance in Nigerian petroleum marketing companies, while training costs had an insignificant negative effect, highlighting that higher salaries can enhance firm profitability when skills are adequately leveraged. Similarly, Uduehe, et al (2024); Chukwuka et. al. (2022) demonstrated in commercial banks in Anambra State that timely wage payments and retirement benefits improved employee commitment and job satisfaction, showing that compensation directly affects human behavior and organizational outcomes. Onyeka & Amahalu (2022) observed in Nepalese banks that increasing salary expenses and workforce size negatively affected profitability, suggesting that excessive personnel costs can strain financial resources despite potential productivity gains. These findings collectively indicate that while employee costs can motivate and retain staff, they also have the potential to limit available funds if not properly managed.

Within the Nigerian banking context, empirical studies reveal mixed effects of human resource costs on financial performance. Mmaduka, et al., (2022), Udeh, Amahalu, & Obi, (2022) et al. (2024) reported that salaries and wages had a positive but insignificant effect on profitability, while directors' emoluments and retirement benefits were positively significant. Nweke, et al (2022) also found that salaries and wages negatively influenced earnings per share, with other human resource costs showing no significant effect. Otti, et al., (2022) supported this by reporting negative correlations between salaries and earnings per share, emphasizing that excessive compensation can constrain financial performance. Okocha, et al., (2022) extended these findings to manufacturing firms, showing that while training costs improved earnings, overall compensation and retirement benefits sometimes reduced profitability. These results underscore the complexity of employee costs, where benefits and salaries can either enhance or erode firm financial outcomes depending on their scale relative to revenue generation.

Studies focusing on compensation management and employee performance highlight the operational side of human resource expenditure. Onyeozili, et al., (2022) showed that effective compensation management significantly enhanced profitability and overall performance in Nigerian banks, while Nwafor & Amahalu (2021)) found that financial compensation improved job performance. Ndulue, et al (2021) similarly found that wages, retirement, and fringe benefits positively affected service quality, punctuality, and transparency. These findings indicate that employee costs are not merely a financial burden but can drive operational efficiency and quality service delivery when strategically implemented. However, the emphasis in these studies was on profitability or performance outcomes, with limited focus on liquidity or cash flow constraints, leaving questions about the short-term financial impact of salary expenditures on available operational funds.

Other studies examining human capital accounting, such as Obumneme, et al., (2026) Omabu, et al (2021); Tom-West, Buyide (2020), highlight the importance of training and pension contributions in enhancing earnings per share, while directors' remuneration and salaries. Tom-West, et al (2021); Omonigho et al., (2025) had limited or insignificant effects.

These results align with previous findings that investment in employee skills and targeted benefits often yields positive long-term outcomes, whereas indiscriminate increases in salary or workforce size can reduce financial efficiency. Taken together, these empirical studies suggest that while compensation, training, and benefits are essential for staff retention and performance, they may pose a financial challenge if they disproportionately consume operational resources. The mixed results across sectors and measurement approaches emphasize the need for studies that specifically link employee salary expenditure to operating cash flow, particularly in Nigerian banks, to better understand how human resource costs influence liquidity and day-to-day operational capacity.

2.2 Theoretical Framework and Development of Research Hypothesis

The study was anchored on Cost-Benefit Theory which was first propounded by Jules Dupuit in 1844, a French engineer and economist who sought to provide a systematic approach to evaluating public projects and expenditures. The main postulations of the Cost-Benefit Theory revolve around the assessment of economic value and decision efficiency. The theory asserts that for any resource allocation or expenditure to be justified, the benefits derived must exceed the costs incurred. It emphasizes systematic evaluation, quantification of costs and benefits, and comparative analysis to guide choices. In organizational contexts, this means that managers should consider both direct and indirect costs, potential risks, and long-term gains before committing resources. The theory also highlights that excessive or poorly planned expenditures can reduce available resources for other activities, limiting the ability to achieve optimal outcomes.

In the context of this study, the Cost-Benefit Theory is relevant because it provides a framework for understanding how employee salary expenditure affects the operating cash flow of listed deposit money banks in Nigeria. Salary payments represent a significant cost to banks, and while they may generate benefits such as improved employee performance, loyalty, and service quality, they also reduce the cash available for other operational activities. Applying the principles of the theory helps explain the need to balance compensation with liquidity management. By evaluating salaries relative to the benefits they produce, bank management can make informed decisions that align human resource spending with sustainable cash flow, ensuring that the organization continues to operate efficiently while rewarding employees appropriately. In line with the theory, the study hypothesised that:

H_1: Employee salary expenditure has a significant negative influence on the operating cash flow of listed deposit money banks in Nigeria.

3.0 Methodology

This study employed an ex-post facto research design to examine the influence of employee salary expenditure on the operating cash flow of listed deposit money banks in Nigeria. The design was chosen because the variables under investigation, including salary expenditure, firm asset base, and bank revenue, were historical and had already occurred within the study period. The researcher had no direct control over these variables, making ex-post facto suitable for analyzing their effect on operating cash flow. Using this approach, secondary financial data were utilized to assess how employee salary expenditures affected banks' cash flow performance, while controlling for firm size and revenue.

The population consisted of thirteen deposit money banks listed on the Nigerian Exchange Group as of 2024. These banks represent the bulk of formal banking operations in Nigeria and provide sufficient financial disclosure necessary for panel data analysis.

Table 3.1: Population of Listed Deposit Money Banks

1. Access Bank Nigeria Plc
2. Ecobank Transnational Incorporated Bank Nigeria Plc
3. Fidelity Bank Nigeria Plc
4. First Bank Nigeria Plc
5. First City Monument Bank Nigeria Plc
6. Guaranty Trust Bank Plc
7. Stanbic IBTC Bank Plc
8. Sterling Bank Plc
9. United Bank for Africa Plc
10. Unity Bank Plc
11. Wema Bank Plc
12. Zenith Bank Nigeria Plc
13. Jaiz Bank Plc

Source: Nigerian Exchange Group (2026)

The study sample included twelve banks. Unity Bank was excluded because its audited financial statements for 2024 were not available at the time of data collection. The selected banks provided adequate representation and ensured consistency of data for the study period.

Table 3.2: Sample Banks

1. Access Bank Nigeria Plc
2. Ecobank Transnational Incorporated Bank Nigeria Plc
3. Fidelity Bank Nigeria Plc
4. First Bank Nigeria Plc
5. First City Monument Bank Nigeria Plc
6. Guaranty Trust Bank Plc
7. Stanbic IBTC Bank Plc
8. Sterling Bank Plc
9. United Bank for Africa Plc
10. Wema Bank Plc
11. Zenith Bank Nigeria Plc
12. Jaiz Bank Plc

Source: Nigerian Exchange Group (2026)

The study relied entirely on secondary data, sourced from the audited annual reports of the selected banks for the period 2015 to 2024. Data collected included total employee salaries, total assets, gross revenue, and net operating cash flow, which were necessary to measure the independent, dependent, and control variables.The dependent variable was operating cash flow, measured as net operating cash flow divided by sales. The main independent variable was salary expenditure, measured as the natural logarithm of total employee salaries. Two control variables were included: firm asset base (FSZ), measured as the natural logarithm of total assets, and bank revenue base (REV), measured as the natural logarithm of gross revenue.

Table 3.3: Measurement of Variables

Variable	Type	Measurement/Proxy
Salary Expenditure (SAL)	Independent	Natural log of total employee salaries
Operating Cash Flow (OCF)	Dependent	Net operating cash flow ÷ Sales
Firm Asset Base (FSZ)	Control	Natural log of total assets
Bank Revenue Base (REV)	Control	Natural log of gross revenue

Source: Researcher's Compilation (2026)

The study adopted a panel regression model to test the effect of salary expenditure on operating cash flow, controlling for firm size and revenue, specified as:

$$OCF_{it} = \alpha + \beta_1 SAL_{it} + \beta_2 FSZ_{it} + \beta_3 REV_{it} + \varepsilon_{it} \quad \text{eqi}$$

Where:
OCF_{it} = Operating cash flow of bank i at time t

SAL_{it} = Employee salary expenditure of bank i at time t

FSZ_{it} = Firm asset base of bank i at time t

REV_{it} = Bank revenue base of bank i at time t

α = Intercept

$\beta 1$, $\beta 2$, $\beta 3$ = Coefficients of explanatory variables

ε_{it} = Error term

Descriptive statistics, including mean, standard deviation, minimum, and maximum values, were used to summarize the data. Inferential analysis was conducted using panel Estimated Generalized Least Squares (EGLS) to account for the model's cross-sectional dependence and heteroskedasticity. Cross-section weights addressed cross-sectional dependence, while White cross-section standard errors and covariance corrected for heteroskedasticity. EGLS was applied to test the hypothesis that salary expenditure significantly affects operating cash flow. All analyses were performed using EViews 10 software.

The decision rule was set at a 5% significance level. A p-value less than 0.05 indicated that salary expenditure had a significant effect on operating cash flow, leading to rejection of the null hypothesis. Conversely, a p-value equal to or greater than 0.05 suggested no significant effect, and the null hypothesis was not rejected.

4.0 Data Analyses

4.1 Descriptive Analysis and Model Diagnostics

Table 4.1 Descriptive Statistics

	OCF	SAL	FSZ	REV
Mean	2.881894	7.497061	9.441270	8.242774
Median	0.625602	7.528129	9.470900	8.407029
Maximum	79.59454	8.827042	10.63651	9.688257
Minimum	-17.76881	6.004626	7.721310	6.402777
Std. Dev.	10.48963	0.462910	0.556160	0.768624
Skewness	4.735206	-0.391801	-0.597528	-0.667431
Kurtosis	29.76366	4.420930	3.776993	2.822511
Jarque-Bera	4029.912	13.16536	10.15939	9.066797
Probability	0.000000	0.001384	0.006222	0.010744
Sum	345.8273	899.6473	1132.952	989.1329
Sum Sq. Dev.	13093.84	25.50003	36.80839	70.30315
Observations	120	120	120	120

Source: Eviews 10 Output (2026)

The operating cash flow (OCF) in Table 4.1 has a mean of 2.882, indicating that on average, banks generated a modest positive cash flow relative to sales. Its wide range from -17.769 to 79.595 shows substantial variability across banks and periods. The standard deviation of 10.490 confirms high dispersion, while the positive skewness of 4.735 and extreme kurtosis of 29.764 indicate a distribution with infrequent but very large cash inflows. The Jarque-Bera probability of 0.000 signals non-normality; however, given the 120 observations, the central limit theorem allows the mean to approximate normality for inferential analysis.

Salary expenditure (SAL) has a mean of 7.497, suggesting that the average total employee salary, expressed in natural log terms, is fairly consistent across banks. The maximum of 8.827 and minimum of 6.005 indicate moderate variation. With a standard deviation of 0.463, salaries are relatively stable. Skewness of -0.392 and kurtosis of 4.421 suggest a slightly left-skewed and leptokurtic distribution. The Jarque-Bera probability of 0.001384 shows deviation from normality, but the large sample size supports the use of parametric tests under the central limit theorem.

The firm asset base (FSZ) shows a mean of 9.441, reflecting a relatively high total asset level across the banks in log terms. Its values range from 7.721 to 10.637, with a standard deviation of 0.556, indicating moderate dispersion. Skewness of -0.598 and kurtosis of 3.777 indicate a modest left-skew and slightly peaked distribution. The Jarque-Bera probability of 0.006222 confirms non-normality, but with 120 observations, the mean is suitable for inferential purposes based on the central limit theorem.

Bank revenue (REV) has a mean of 8.243, showing that the average gross revenue, in log form, is substantial. Values span from 6.403 to 9.688, with a standard deviation of 0.769, suggesting moderate variability across banks. Skewness of -0.667 and kurtosis of 2.823 indicate a slight left-skew and a relatively flat distribution. The Jarque-Bera probability of 0.010744 points to non-normality; however, the sample size of 120 allows reliable use of parametric tests according to the central limit theorem.

Table 4.2 Model Diagnostics

Test	Statistic / Value	Probability
Residual Cross-Section Dependence (Pesaran CD)	6.089895	0.0000
Panel Cross-Section Heteroskedasticity LR Test (Likelihood Ratio)	465.0912	0.0000

Source: Eviews 10 Output (2026)

The residual cross-section dependence test, shown in Table 4.2, was conducted using the Pesaran CD statistic, which measures whether residuals across banks are correlated. The value of 6.089895 with a probability of 0.0000 indicates significant cross-sectional dependence. This means that the cash flow behavior of one bank is likely related to others, reflecting interconnections in the banking sector. Detecting this dependence is essential because ignoring it can bias standard errors and lead to misleading regression results, highlighting the need for estimation methods that correct for cross-sectional correlations.

The panel cross-section heteroskedasticity test, also in Table 4.2, used the Likelihood Ratio (LR) method to determine whether the variance of residuals is constant across banks. The LR statistic of 465.0912 with a probability of 0.0000 confirms the presence of heteroskedasticity, meaning the spread of errors varies between banks. Identifying heteroskedasticity is important because unequal variance can distort coefficient estimates and standard errors in ordinary regression, justifying the use of techniques like Estimated Generalized Least Squares to produce consistent and efficient parameter estimates.

4.2 Test of Hypothesis

H_1: Employee salary expenditure has a significant negative influence on the operating cash flow of listed deposit money banks in Nigeria.

Table 4.3 Test of Hypothesis

Dependent Variable: OCF
Method: Panel EGLS (Cross-section weights)
Date: 02/11/26 Time: 19:36
Sample: 2015 2024
Periods included: 10
Cross-sections included: 12
Total panel (balanced) observations: 120
Linear estimation after one-step weighting matrix
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SAL	-0.958251	0.384514	-2.492109	0.0141
FSZ	5.780016	0.669253	8.636513	0.0000
REV	-4.774578	0.489167	-9.760633	0.0000
C	-6.618368	1.339078	-4.942483	0.0000

Weighted Statistics

R-squared	0.246376	Mean dependent var	3.897394
Adjusted R-squared	0.226886	S.D. dependent var	6.566056
S.E. of regression	6.054784	Sum squared resid	4252.607
F-statistic	12.64098	Durbin-Watson stat	1.796535
Prob(F-statistic)	0.000000		

Source: Eviews 10 Output (2026)

Table 4.3 presents the results of the Panel Estimated Generalized Least Squares (EGLS) regression with cross-section weights. The model validity statistics indicate that the model is significant overall at the 5% level, as shown by the F-statistic probability of 0.000000. This confirms that the combination of explanatory variables—salary expenditure (SAL), firm asset base (FSZ), and bank revenue (REV)—jointly influence the operating cash flow of listed banks. The adjusted R-squared of 0.226886 shows that approximately 22.69% of the variation in operating cash flow is explained by the model, which is reasonable given the complexity of banking operations and the multiple factors affecting cash flow. The Durbin-Watson statistic of 1.796535 suggests that there is no serious autocorrelation problem in the residuals, making the coefficient estimates reliable for interpretation.

The constant term (C) of -6.618368 is significant at the 5% level ($p = 0.0000$). This negative intercept implies that when salary expenditure, firm asset base, and revenue are held at zero, the operating cash flow would theoretically be negative, reflecting the baseline cash requirements of banks in the absence of these key variables. It establishes the starting point from which the influence of the independent variables on cash flow is measured.

Employee Salary Expenditure (SAL)

Salary expenditure (SAL) has a coefficient of -0.958251 with a probability value of 0.0141, which is significant at the 5% level. This indicates that for every one-unit increase in the natural logarithm of total employee salaries, the operating cash flow of listed banks decreases by approximately 0.96 units. The negative direction of this influence shows that higher salary payments drain cash resources, reducing the funds available for operational activities such as lending, investment, or liquidity management. The significance confirms that this influence is not due to random variation, highlighting that salary expenditure exerts a meaningful and measurable drain on banks' liquidity. Thus, employee salary expenditure negatively influenced operating cash flow, significantly draining cash resources ($\beta = -0.958251$, $p = 0.0141$).

Firm Asset Base (FSZ)

The firm asset base (FSZ) has a coefficient of 5.780016 with a probability of 0.0000, which is highly significant at the 5% level. This positive coefficient means that an increase in the natural logarithm of total assets by one unit leads to an increase of about 5.78 units in operating cash flow. The direction of influence indicates that larger banks with higher asset bases tend to generate more cash from operations, reflecting their capacity to mobilize resources, extend credit, and earn income from investments. The strong significance emphasizes that asset accumulation is a critical factor in enhancing the operating cash flow of banks.

Bank Revenue Base (REV)

Bank revenue (REV) shows a coefficient of -4.774578 with a probability of 0.0000, also significant at the 5% level. The negative coefficient suggests that for every one-unit increase in the natural logarithm of gross revenue, operating cash flow decreases by approximately 4.77 units. While counterintuitive, this could reflect that banks with higher revenues may face higher operational and funding outflows, including expenses related to non-salary operational costs or loan disbursements, which temporarily reduce cash liquidity. The significance indicates that revenue, despite its size, can negatively influence the actual cash available for operations, reinforcing the importance of managing inflows and outflows carefully.

4.3 Discussion of Finding

The finding that employee salary expenditure negatively influenced operating cash flow, significantly draining cash resources (β = -0.958251, p = 0.0141), suggests that higher salary payments reduce the liquidity available for day-to-day banking operations. This outcome aligns with the results of Ezechukwu, et al., (2022), who observed that salaries and wages had a significant negative effect on earnings per share in listed Nigerian banks, indicating that excessive human resource costs can strain financial performance. Similarly, Ejembi, et al (2022) reported a negative correlation between salaries and earnings per share, reinforcing the idea that high salary expenditure may divert funds from productive or operational cash needs. Koirala and Pradhan (2025) also found that salary expenses negatively impacted both return on assets and return on equity in Nepalese commercial banks, suggesting that large salary outlays can limit the capacity of banks to generate liquidity from their operations. While Bala (2026) reported that staff remuneration positively influenced financial performance in petroleum marketing firms, the difference may arise from the sectoral context, as banks rely heavily on cash flow for liquidity management, making them more sensitive to high salary payments. The present finding reflects that employee salaries, when disproportionately high, can create a cash drain in banks despite any long-term benefits to employee motivation or performance, emphasizing the immediate effect on operational liquidity.

This negative influence may also be explained by the nature of banking operations, where funds tied up in salaries reduce the amount available for lending, investment, or short-term liquidity reserves. Okegbe, et al. (2019) noted that salaries and wages had a positive but insignificant effect on profitability in Nigerian banks, highlighting that salary payments may not always translate into increased performance, particularly in the short term. Festus et al. (2024) similarly observed that overall compensation costs negatively affected earnings per share in manufacturing firms, although not always significantly, pointing to the financial strain that high labor costs can impose across sectors. Even studies that emphasize the motivational benefits of salaries, such as Remigius et al. (2025) focus on employee performance outcomes rather than liquidity, showing that positive human resource effects on morale do not necessarily offset the immediate reduction in cash resources. Mba et al. (2023) also highlighted that wages significantly influenced service delivery quality, yet the financial strain of high salary payments was not considered, which parallels the current finding that operating cash flow can be drained despite potential service benefits.

5.0 Conclusion and Recommendations

The results of the study highlight the critical role that employee salary expenditure plays in shaping the liquidity position of banks. A significant outflow of funds toward salaries can constrain the ability of banks to allocate resources to other essential operational areas, such as lending, investment opportunities, and infrastructure maintenance. This dynamic affects the overall flexibility of financial management, influencing how banks respond to both routine and unexpected cash demands. Additionally, the findings suggest that employee compensation, while necessary for motivation and retention, represents a substantial portion of the bank's operational cash, which may create pressure on short-term funding and working capital management. The study also underscores the delicate balance that banks must navigate between sustaining a motivated workforce and maintaining sufficient liquidity to meet obligations, manage day-to-day operations, and support strategic initiatives. Beyond immediate cash availability, the results hint at the broader financial planning challenges faced by banking institutions, as salary expenditures can shape decisions regarding credit extension, investment timing, and reserve management. In all, the findings reflect the

interconnectedness of human resource costs and cash flow management, emphasizing that financial performance and operational efficiency are influenced by how salary commitments are structured and timed within the bank's broader fiscal framework.

Since the study found that employee salary expenditure significantly drained operating cash flow, it is recommended that bank management implement structured salary planning and cash allocation strategies to ensure sufficient liquidity for day-to-day operations. Management should regularly review payroll schedules and explore staggered or phased salary disbursements to reduce the immediate impact on operating cash flow. By aligning salary payments with expected inflows, banks can maintain operational efficiency without compromising employee compensation, allowing resources to remain available for lending, investments, and other critical financial activities. This approach provides practical value by enhancing both employee satisfaction and the bank's financial stability.

5.1 Contribution to Knowledge

This study contributed to the literature by providing empirical evidence on the effect of employee salary expenditure on the operating cash flow of listed deposit money banks in Nigeria, addressing a gap that previous research had overlooked. While earlier studies focused on human resource costs in relation to profitability, earnings per share, or employee performance (Amahalu and Obi (2020); Ndubuisi and Obi (2020), they did not examine how salary payments directly influence liquidity or the funds available for daily operations. By linking employee salary expenditure to operating cash flow and controlling for firm size and revenue, this study shed light on the financial strain that high salary obligations can place on bank liquidity, offering practical guidance for payroll management and sustainable cash flow planning in the Nigerian banking sector.

5.2 Limitations of the Study and Suggestion for Further Studies

The study was limited by its reliance on secondary financial data from audited annual reports, which may not fully capture all internal factors affecting salary expenditure and cash flow. Only twelve listed banks were included, excluding others due to unavailable data, which may affect the generalizability of the findings. The research focused solely on salary expenditure, firm size, and revenue, without considering other costs or external economic factors that could influence operating cash flow. Additionally, the study covered the period from 2015 to 2024, so results may not reflect future changes in bank operations or labor cost structures.

Future studies could expand the scope by including more banks, both listed and unlisted, to improve generalizability. Researchers could also examine additional human resource costs such as bonuses, allowances, and training expenses to see their combined effect on operating cash flow. Considering external economic factors like inflation, interest rates, or regulatory changes may provide a more complete picture of how salary expenditure affects liquidity. Using qualitative methods alongside financial data could offer deeper understanding of management practices and employee behavior that influence cash flow.

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