

### Mediating Effect of Inflation on the Relationship between Financial Performance and Share Value of Listed Deposit Money Banks in Nigeria

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#### Abstract:

*In recent times, inflation in Nigeria has been on the rise, with the inflation rate reaching 34.80% in December 2024, up from 34.60% in November 2024. This increase of 0.20% can largely be attributed to seasonal demand pressures, particularly during the festive period, which further exacerbates the cost of goods and services in the economy. This study aims to investigate the mediating effect of inflation on the relationship between financial performance and share value of the listed Deposit Money Banks in Nigeria. The study adopts a quantitative research approach based on the positivist research paradigm using panel secondary data from 10 Nigerian banks for the period 2015–2024. Financial performance is proxied by Return on Equity (ROE) and Earnings per Share (EPS), while share value represents the dependent variable. Panel data regression analysis is employed to examine the mediating role of inflation in the relationship between financial performance and share value. The results indicate that inflation significantly mediates the relationship between financial performance and share value. The findings reveal that during periods of inflation, the effect of higher return on equity on share value is strengthened, which is consistent with the adaptive strategic response theory. These results highlight the need for adaptive strategies in Nigerian banking practices. Therefore, policymakers and bank managers should focus on effective inflation management strategies to mitigate its adverse effects on share values, particularly during periods of high inflation.*

**Keywords:** Inflation, Financial Performance, Share Value, Nigerian Banks, Mediating Effect.

#### Abstrak :

*Belakangan ini, inflasi di Nigeria terus mengalami peningkatan, dengan tingkat inflasi mencapai 34,80% pada Desember 2024, naik dari 34,60% pada November 2024. Kenaikan sebesar 0,20% ini sebagian besar disebabkan oleh tekanan permintaan musiman, khususnya selama periode perayaan, yang semakin meningkatkan biaya barang dan jasa dalam perekonomian. Penelitian ini bertujuan untuk mengkaji efek mediasi inflasi terhadap hubungan antara kinerja keuangan dan nilai saham pada Deposit Money Banks (DMBs) yang terdaftar di Nigeria. Penelitian ini menggunakan pendekatan kuantitatif dengan paradigma positivisme serta memanfaatkan data sekunder panel dari 10 bank di Nigeria selama periode 2015–2024. Kinerja keuangan diproksikan dengan Return on Equity (ROE) dan Earnings per Share (EPS), sedangkan nilai saham digunakan sebagai variabel dependen. Analisis regresi data panel digunakan untuk menguji peran mediasi inflasi dalam hubungan antara kinerja keuangan dan nilai saham. Hasil penelitian menunjukkan bahwa inflasi secara signifikan memediasi hubungan antara kinerja keuangan dan nilai saham. Temuan ini menunjukkan bahwa selama periode inflasi, pengaruh Return on Equity yang lebih tinggi terhadap nilai saham menjadi lebih kuat, sejalan dengan teori adaptive strategic response. Hasil ini menegaskan pentingnya penerapan strategi adaptif dalam praktik perbankan di Nigeria. Oleh karena itu, pembuat kebijakan dan manajer bank perlu memfokuskan perhatian pada strategi pengelolaan inflasi yang efektif guna meminimalkan dampak negatifnya terhadap nilai saham, khususnya pada periode inflasi yang tinggi.*

**Kata Kunci:** Inflasi, Kinerja Keuangan, Nilai Saham, Bank Nigeria, Efek Mediasi.

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## INTRODUCTION

The Nigerian banking sector has faced numerous challenges over the years, including inflation, currency volatility, and economic instability. These challenges have significant implications for the financial performance and market valuation of banks. In particular, inflation, a pervasive macroeconomic factor, can directly impact key financial performance indicators such as return on equity (ROE) and earnings per share (EPS), which are commonly used to assess a bank's profitability, efficiency, and overall financial health (Olalekan & Adeoye, 2023). However, inflation, as an external economic force, may also act as a mediating variable that influences how these financial indicators translate into changes in the market value of bank shares.

For investors and other stakeholders in the Nigerian banking sector, understanding the dynamics between financial performance and share value is essential for making informed decisions. Historically, financial performance indicators such as ROE and EPS have been regarded as strong predictors of stock market performance. Nevertheless, these indicators alone may not fully capture the influence of macroeconomic factors, particularly inflation, on bank share values (Abubakar & Owolabi, 2022). In a country like Nigeria, where inflation remains persistently high and volatile, it becomes increasingly important to examine how inflation interacts with financial performance indicators in shaping stock market outcomes.

Recent statistics indicate that inflation in Nigeria continues to rise. The inflation rate reached 34.80% in December 2024, increasing from 34.60% in November 2024 (National Bureau of Statistics, 2024). This increase of 0.20% was largely attributed to seasonal demand pressures during the festive period, which intensified the cost of goods and services in the economy. Compared to December 2023, the inflation rate in December 2024 was 5.87% higher, reflecting an ongoing inflationary trend that poses significant challenges to the Nigerian economy. Persistent inflation can weaken consumer purchasing power, increase operational costs for businesses including banks, and introduce uncertainty into financial markets.

Although a substantial body of literature has examined the relationship between financial performance and stock value, limited attention has been given to the mediating role of inflation in this relationship, particularly within the context of Nigeria's listed Deposit Money Banks (DMBs). Inflation, especially in developing economies, can significantly influence bank profitability and market valuation by affecting cost structures, loan demand, default rates, and investor sentiment (Olalekan & Adeoye, 2023; Ali et al., 2022; Nwogwugwu, 2020). Therefore, understanding the mediating role of inflation is crucial for investors, policymakers, and financial analysts in navigating the complexities of banking sector performance in an inflationary environment.

In light of these issues, this study seeks to examine the mediating effect of inflation on the relationship between financial performance and share value of listed Deposit Money Banks in Nigeria. Specifically, the study investigates how inflation mediates the relationship between return on equity and share value, as well as the relationship between earnings per share and share value of Nigerian listed banks.

Based on these objectives, the study formulates two null hypotheses. First, return on equity has no significant effect on share value through the mediating influence of inflation among listed Deposit Money Banks in Nigeria. Second, earnings per share has no significant effect on share value through the mediating role of inflation among listed Deposit Money Banks in Nigeria.

## RESEARCH METHODOLOGY

### Research Design and Data Source

This study adopts a quantitative research approach based on the positivist research paradigm. The study relies on secondary panel data obtained from listed Deposit Money Banks (DMBs) in

Nigeria. The data were collected from the annual reports of the selected banks and the Nigerian Exchange Group (NGX) database.

The study covers a ten-year period from 2015 to 2024 in order to capture variations in macroeconomic conditions, particularly inflationary trends, and their potential influence on bank financial performance and share value. Panel data are considered appropriate for this study because they allow the analysis of both cross-sectional and time-series variations among banks.

The sample of the study consists of Deposit Money Banks listed on the Nigerian Exchange Group that have complete financial data for the study period. The selected banks represent major participants in the Nigerian banking sector, making them suitable for examining the relationship between financial performance and share value under varying inflationary conditions.

### Variables Measurement

The study examines the mediating role of inflation in the relationship between financial performance and share value. Financial performance is measured using Return on Equity (ROE) and Earnings per Share (EPS), while share value represents the dependent variable. Inflation is introduced as the mediating variable, while bank size and leverage are included as control variables to account for differences in bank characteristics. The operational definition and measurement of the variables used in this study are presented in Table 1.

Table 1. Variables Measurement

Variables	Variable Nature	Proxies	Measurement	Author(s)
Share value	Dependent Variable	SHV	Stock price x number of outstanding shares	Olalekan, & Adeoye (2023)
Return on equity	Independent Variable	ROE	Net income divided by total equity capital multiply by 100	Han, & Suh (2017)
Earnings per share	Independent Variable	EPS	Net income divided per outstanding shares	Adebayo (2021)
Inflation	Mediation variable	INF	Real value of loan/nominal of loan	Ojo (2022)
Bank size	Control Variable	BSZ	Market price per x number of outstanding shares	Okafor (2020)
Leverage	Control Variable	LEV	Total debts split into total assets	Olalekan (2023)

**Source:** Extracted from series of literature, 2025

### Model Specification

The study uses a panel data regression model to test the mediating effect of inflation on the relationship between financial performance and share value. The following model is proposed:

1<sup>st</sup> Mediation Equation

$$SHV_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 EPS_{it} + \beta_3 BSZ_{it} + \beta_4 LEV_{it} + \epsilon_{it} \quad (1)$$

$$INF_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 EPS_{it} + \beta_3 BSZ_{it} + \beta_4 LEV_{it} + \epsilon_{it} \quad (2)$$

$$SHV_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 EPS_{it} + \beta_3 INF_{it} + \beta_4 BSZ_{it} + \beta_5 LEV_{it} + \epsilon_{it} \quad (3)$$

Where:

- $SHV_{it}$  = Share Value of bank i at time t
- $ROE_{it}$  = Return on Equity of bank i at time t
- $EPS_{it}$  = Earnings Per Share of bank i at time t
- $INF_{it}$  = Inflation rate of bank i at time t
- $BSZ_{it}$  = Bank Size of bank I at time t
- $LEV_{it}$  = Leverage of bank I at time t
- $\epsilon_{it}$  = Error term

### Data Analysis Technique

The data collected for this study are analysed using panel data regression techniques with the aid of STATA statistical software. The analysis involves estimating the direct effect of financial performance indicators on share value as well as examining the mediating role of inflation in the relationship.

The mediation analysis follows the procedure suggested by Baron and Kenny (1986), which involves three main steps: first, testing the effect of financial performance variables on share value; second, examining the relationship between financial performance variables and inflation; and third, estimating the joint effect of financial performance and inflation on share value. The significance and changes in the regression coefficients are used to determine whether inflation plays a mediating role in the relationship between financial performance and share value.

## DISCUSSION

### Descriptive Statistics

The descriptive statistics provide a general overview of the distribution and characteristics of the variables used in the study. These statistics include the mean, standard deviation, minimum, and maximum values of each variable across the sampled Deposit Money Banks during the study period.

Table 2. Descriptive Statistics

Variables	Mean	Std. Dev.	Minimum	Maximum	Observation
<b>SHV</b>	13.404	2.2343	3.0180	20.282	140
<b>ROE</b>	3.9567	1.5427	1.0056	7.2000	140
<b>EPS</b>	2.7017	2.3325	0.0407	11.780	140
<b>INF</b>	0.2346	0.9897	0.0010	9.2320	140
<b>BSZ</b>	1.6768	1.8830	2.0012	13.032	140
<b>LEV</b>	25.507	8.9527	0.3001	12.120	140

Source: STATA Output Result, (2025).

Table 2 shows the statistics from descriptive of the fitted model. The data set contains 140 observations for the 14 deposit money banks in NGX over the study period of 10 years. The mediation effect between financial performance indicators on share value measures regressed share value as dependent variable. The model has a mean value of the share value 13.404, with a count standard deviation value of 2.23. The average mean value of the share value is 2.23. The outcome result indicated that a share value of quoted Deposit Money Banks (DMBs) in Nigeria deviates slightly from the mean value. The minimum mean value of the share value of the Deposit money banks is 3.02. The maximum mean value of the return on equity is 20.28. This outcome implies that some banks made less than average income in some financial years, while others performed well.

In the inflation mediation of financial performance indicators measured as return on equity has the mean value of 3.956, with a count standard deviation value of 1.542, which deviates from the mean slightly and has a minimum of 1.000 and a maximum of 7.200. This output attributes to the variation in the return on equity of Deposit money banks in Nigeria. In this study, financial performance measurement, earnings per share, is 2.701 mean value and 2.332 in standard deviation.

The earning per share measure deviation is more significant than the average and may explain the sustainability by some banks. The mean differences for an inflation mediation bank size is 1.676 value with a minimum size of 0.030 and a maximum length of 12.120. The leverage inflation mediation has a mean value of 25.507 and a rate of 8.952 deviation due to total debt split into tangible assets. This output indicates a significant shift in leverage values in Nigeria's banks. The lowest number is 4.00. Similarly, the highest is 43.00. However, normality distributions of the inflation mediation effect of the study analysis is as follow.

### Normality Test

To examine whether the variables used in the study follow a normal distribution, the Shapiro-Wilk test for normality was conducted. The test evaluates the null hypothesis that the data are normally distributed. If the probability value (p-value) is greater than the significance level, the null hypothesis of normality cannot be rejected.

Table 3. Shapiro-Wilk Test for Normality

Variables	W	V	Z	Prob>Z
SHV	0.92467	8.263	4.770	0.00000
ROE	0.97304	2.450	2.450	0.00715
EPS	0.75885	26.45	7.398	0.00000
INF	0.22744	84.74	10.03	0.00000
BSZ	0.72442	30.22	7.700	0.00000
LEV	0.98395	1.760	1.277	0.10079

Source: STATA Output Result, (2025).

Reference to the normality output result the table 3, shows the Shapiro-Wilk (W) test for normal data. The null hypothesis rule is employed to examine variable that occur from normally distributed population; (the null hypothesis of the test stipulate that the data is normally distributed).

### Correlation Results

The Pearson correlation analysis is conducted to examine the degree of association among the variables used in the study and to identify any potential multicollinearity issues among the explanatory variables.

Table 3. Correlation Matrix

Variables	SHV	ROE	EPS	INF	BSZ	LEV
SHV	1.0000					
ROE	0.5128	1.0000				
EPS	0.2969	0.2326	1.0000			
INF	0.2083	0.0687	0.0443	1.0000		
BSZ	0.4496	0.2410	-0.068	-0.074	1.0000	
LEV	0.4997	0.4997	0.1078	-0.001	0.0843	1.0000

Source: STATA version 14 Output, 2025

The results in the above Table 3 illustrate the correlation coefficients among the mediation variable as of inflation where the independent variables as return on equity and earnings per share and control variables of bank size, leverage against dependent variable proxy as share value of the Deposit money banks in Nigeria. The table demonstrates a favourable link between return on equity (ROE) and share value with the 0.5185 correlation value. This connection indicates that inflation mediate share value favourably. Similarly, the table findings show the positive link between the share value (SHV), Return on Equity (ROE) and earnings per share (EPS) with a least correlation coefficient of 0.2083. The output implies that the rise in financial performance leads to an increase in share value. Then it has been demonstrated that the model is suited for the research.

### Mediation Analysis Summary

The analysis of the mediation results in respect of the variables of the study. It reveals the combined summary of the regression results in respect of all the variables of the study prior and after the inclusion of the mediating variable (Inflation). Most important issue about the table is the description of the mediation effect after all the four (4) basic steps of mediation have been followed and tested. This is depicted under table 4 as follows.

Table 4. Summary of Mediation Results

Variables	Outcome Variable = TBL				Status/Remarks
	Before Inclusion of Mediation [Model 1]		After Inclusion of Mediation [Model 3]		
	Coefficients	P-Values	Coefficients	P-Values	
ROE	0.459980	0.000	0.4077376	0.000	Decrease/Full Mediation
EPS	0.161488	0.003	0.488796	0.315	Increase/Partial Mediation
INF	-	-	0.381680	0.001	Played both Partial and full Mediation Effect
BSZ	0.398031	0.000	0.329153	0.000	Decrease/Full Mediation
LEV	0.094334	0.000	-0.0083997	0.763	Decrease/Full Mediation
Wald Chi <sup>2</sup>	154.26	0.0000	211.80	0.0000	Increase/Partial Mediation

Source: Descriptive Analysis, (2025).

The results from table 4 revealed as follows: 1) The independent variables (financial performance indicators) are strongly and significantly influencing the dependent variable (share value); 2) The independent variables (financial performance indicators) are significantly influencing the mediating variable (inflation); and 3) When the independent variables (financial performance indicators) and mediator variable (inflation) are jointly regressed against the dependent variable (share value), the mediating variable (inflation) is statistically significant at 1 percent (1%) level.

### Panel Regression Results

To examine the mediating role of inflation in the relationship between financial performance and share value of listed Deposit Money Banks in Nigeria, a fixed effect panel regression model was employed. The fixed effect model was considered appropriate as it controls for unobserved heterogeneity across banks and captures time-varying dynamics within the panel data. The

regression analysis incorporates Return on Equity (ROE) and Earnings per Share (EPS) as proxies for financial performance, inflation (INF) as the mediating variable, and bank size (BSZ) and leverage (LEV) as control variables. The results of the fixed effect regression estimation are presented in Table 5.

Table 5. Summary of Fixed Effect Regression Result

Variables	Coefficients	T - Values	P - Values
<b>Constant</b>	11.2317	16.3	0.000
<b>ROE</b>	0.40773	4.54	0.000
<b>EPS</b>	0.04887	1.01	0.315
<b>INF</b>	0.38168	3.27	0.001
<b>BSZ</b>	0.32915	4.53	0.000
<b>LEV</b>	-0.0083	-0.3	0.763
<b>Between R<sup>2</sup></b>			0.480
<b>F-Statistic</b>			12.29
<b>Prob&gt;F</b>			0.000

Source: STATA Output Result, (2025).

From the table 5 it shows that the aggregate or cumulative R<sup>2</sup> (0.480), which is the multiple coefficient of determination, reveals the proportion or percentage of the aggregate change in the outcome variable determined by the predictor variables jointly. Therefore, it signifies that 48.08 percent (48.08%) of the aggregate change in share value of listed deposit money banks in Nigeria is mediated by inflation, return on equity, earnings per share, bank size, and leverage. By implication, 51.92 percent (51.92%) of the total changes in share value among the listed deposit money banks in Nigeria were strongly explained by other factors (variables) that have not been captured in the econometric model of the study.

From the model fitness perspective, Table 5 shows the F-statistic Chi<sup>2</sup> value of 12.29 signifying that the model is good, adequate and well-fitted for the study. Indeed, the predictor variables of the study are perfectly chosen, combined and used. The implication of this is that the model has passed the normal criteria rule of thumb of two (2) for a spurious-free model fitness test using F-statistics Chi<sup>2</sup> test criterion. This could be validated by the result of F-statistic Chi<sup>2</sup> of 12.29 with a corresponding prob>Chi<sup>2</sup> value of 0.0000 which implies that it is statistically and strongly significant at 1 percent (1%) significance level.

### Hypotheses Testing

Table 5 shows that the return on equity (ROE) has an inflation mediating value of 0.4077. The t-value of 4.54 has positively influenced bank value through the share value of the quoted deposit money banks in Nigeria. As statistically significant at the 1% level of P-value 0.000. This finding implies that for every 1% rise in the return on equity, financial performance on the share value is enhanced by about 4%. This output revealed that inflation positively mediates the relationship between return on equity and share value. This finding suggest during a period of inflation, the effect of higher return on equity (ROE) on share value is strengthened, as aligned with adaptive strategic response theory. It might reflect that investors expect higher returns in an inflationary environment, driving up the bank's market value. Thus, the study rejects the first null hypothesis (HO1), which states no significant effect between return on equity and share value. This result expands the results of Olalekan & Adeoye (2023) and Abubakar & Owolabi (2022).

However, Table 5 shows that earnings per share positively influence the share value of the deposit money banks in Nigeria. The coefficient of 0.04 and a t-value of 1.01 statistically remain

insignificant at a P-value of 0.315. This study exposed that the effect of return on equity on share value is insignificantly mediated by inflation. This posits that inflation does not significantly impact the relationship between return on equity and share value. In this case, the relationship between return on equity and the bank's market value is largely unaffected by the inflationary pressure theory. Therefore, the study fails to reject the null hypothesis (Ho2), which states that return on equity does not substantially contribute to the share value of deposit money banks in Nigeria.

The findings of this study reveal that inflation plays an important role in the relationship between financial performance and share value in the Nigerian banking sector. Specifically, the results show that return on equity has a significant positive influence on share value, suggesting that investors tend to value banks with higher profitability. This result aligns with financial theory, which suggests that profitability is an important determinant of market valuation.

Furthermore, the findings indicate that inflation significantly influences the relationship between financial performance and share value. In an inflationary environment, banks that maintain strong financial performance tend to attract more investor confidence, which can lead to higher market valuation of their shares.

However, the study found that earnings per share do not significantly influence share value within the study period. This result may suggest that investors in the Nigerian banking sector rely more on broader profitability indicators such as return on equity rather than earnings per share when evaluating bank performance.

The findings of this study are consistent with previous studies such as Olalekan and Adeoye (2023) and Abubakar and Owolabi (2022), which emphasize the importance of financial performance indicators in determining bank valuation in emerging economies.

## CONCLUSION

This study examined the mediating effect of inflation on the relationship between financial performance and share value of listed deposit money banks in Nigeria using panel data from 2015 to 2024. The study found that return on equity has a significant positive effect on the share value of banks, while earnings per share do not significantly influence share value. The results further reveal that inflation plays an important role in shaping the relationship between financial performance and market valuation of banks.

The study contributes to the existing literature by highlighting the importance of macroeconomic factors, particularly inflation, in understanding the financial performance–share value nexus in the Nigerian banking sector. The findings suggest that policymakers and bank managers should consider inflation dynamics when formulating financial and investment strategies.

In addition, investors should take into account macroeconomic conditions such as inflation when evaluating the performance and market value of banking stocks. Future research may extend this study by incorporating additional macroeconomic variables or examining other sectors of the Nigerian economy.

## REFERENCES

- Abubakar, A., & Owolabi, S. (2022). The Impact of Inflation on Financial Performance Indicators in Nigerian Banks. *International Journal of Finance and Economics*, 27(1), 45-61.
- Adebayo, A. A. (2021). The impact of inflation on the profitability of banks in Nigeria. *Journal of Financial Studies*, 12(1), 45-60.
- Akanbi, M. O., & Olatunji, S. (2020). Inflation and the Nigerian banking sector: Evidence from the 2010-2018 data. *African Journal of Business and Economic Research*, 16(4), 201-220.

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Ghosh, A., & Ghosh, D. (2007). Inflation and its Impact on Bank Profitability: Evidence from Indian Commercial Banks. *International Journal of Bank Marketing*, 25(1), 1-19.
- Han, Y., & Suh, Y. (2017). Financial performance and share price: Evidence from the banking sector in Asia. *Journal of Asian Finance*, 9(3), 225-242.
- National Bureau of Statistics (2024). *Inflation Report: December 2024*.
- Ojo, S. O. (2022). Inflationary pressures and bank stock performance in Nigeria: A longitudinal analysis. *Journal of Economic Policy*, 38(3), 501-517.
- Okafor, C. U., & Nwogwugwu, E. O. (2020). Impact of financial performance on the share price of Nigerian banks. *International Journal of Finance and Banking Studies*, 10(2), 68-84.
- Olalekan, A., & Adeoye, B. (2023). Macroeconomic Determinants of Stock Market Performance: A Case Study of Nigeria's Banking Sector. *Journal of Banking and Finance Studies*, 15(2), 123-142.