International Journal of Accounting and Financial Risk Management (IJAFRM)
DOI: 10.5281/zenodo.22050674

Research Article

Effect of Non-Interest Revenue on Financial Performance of Listed Deposit Money Banks in Nigeria

Ugwu, Emmanuel Chukwubunna[1]; Ugbor, Raphael Oluchukwu[2]

[1] Department of Accountancy, Ignatius Ajuru University of Education Rivers State, Port-Harcourt, Nigeria
[2] Department of Accountancy, Enugu State College of Education (Technical) Enugu in Affiliation with University of Nigeria Nsukka

Cite as:
Ugwu, E. C. and Ugbor, R. O. (2026). Effect of Non-Interest Revenue on Financial Performance of Listed Deposit Money Banks in Nigeria. *International Journal of Accounting and Financial Risk Management*, 7(3), 16-27. 10.5281/zenodo.22050674

Abstract

This study examined the "Effect of Non-Interest Revenue on the Financial Performance of Listed Deposit Money Banks in Nigeria". It examined how non-interest income components contribute to the financial performance of Nigerian Deposit Money Banks (DMBs). The study specifically assessed the effects of dividend income, rental income, foreign exchange income, fixed income securities, and foreign currency revaluation income on financial performance for the year. An ex-post facto research design was adopted, using secondary data obtained from the annual reports and audited financial statements of nine selected Deposit Money Banks listed on the Nigerian Exchange Group for the period 2015–2024. The Panel Least Squares regression technique was employed for data analysis, complemented by descriptive and diagnostic statistical tests. The findings revealed that dividend income, fixed income securities, and foreign currency revaluation income had positive and significant effects on profit for the year of listed DMBs, with coefficients of 0.689884 ($p = 0.0000$), 0.162996 ($p = 0.0005$), and 0.092439 ($p = 0.0122$), respectively. Conversely, rental income (0.095541; $p = 0.3267$) and foreign exchange income (0.089419; $p = 0.1832$) exerted positive but non-significant effects on financial performance for the year. The study concluded that non-interest revenue plays a crucial role in enhancing bank profitability and financial stability, serving as a vital income diversification strategy amid declining interest margins and growing competition in the banking sector. The study recommended that bank managers should strategically invest in dividend-yielding equities, real estate, fixed income securities, and foreign exchange operations to improve profitability and sustain growth. Furthermore, banks should leverage foreign currency revaluation opportunities to optimize returns. The study contributes to existing knowledge by bridging the literature gap on non-interest income and its direct impact on profit for the year, providing empirical insights for policymakers, financial analysts, and bank executives on income diversification and financial performance enhancement in Nigeria's banking industry.

Keywords: Non-interest Revenue; Financial Performance; Deposit Money Banks; Nigeria

Introduction

As the main channel for capital accumulation, resource allocation, and liquidity generation across national economies, the financial services sector is the engine room of contemporary economic development. Deposit Money Banks (DMBs), which mobilize excess funds from depositors and direct them toward deficit units in the form of loans and advances, play a crucial role in this industry through financial intermediation. In the past, interest income from lending activities and treasury assets was the main source of income for commercial banks all over the world. Over the past three decades, however, there have been substantial structural, technical, and regulatory changes to the global banking industry. Net interest margins have been severely constricted by macroeconomic volatility, ongoing inflation, interest rate swings, fierce competition from non-bank fintech entrepreneurs, and rising non-performing loan (NPL) ratios. Due to the high default and credit risks associated with traditional lending intermediation, banks are compelled to create sizable loan loss provisions, which have a direct negative impact on net interest income and overall profitability (Dadang et al., 2021). Financial institutions have increasingly switched their strategy focus on revenue diversification by growing into non-interest revenue (NIR) producing activities in order to survive and sustain long-term profitability (DeYoung & Roland, 2001; Stiroh, 2004).

Earnings from services and activities outside than basic deposit-taking and lending activities are included in non-interest income. Service fees, commissions, asset management fees, electronic banking charges, rental income from bank properties, dividend income from equity holdings, profits from foreign exchange trading, yields on fixed income securities, and gains from foreign currency revaluation are typical examples (Haubrich & Young, 2019; Chandon, 2018). Persistent macroeconomic challenges in Nigeria increase the necessity of non-interest revenue expansion. Traditional interest-earning assets are under tremendous pressure due to macroeconomic instability, severe naira devaluations, foreign cash scarcity, the Central Bank of Nigeria's (CBN) strict Cash Reserve Ratio (CRR) rules, and fluctuations in benchmark crude oil prices. In order to increase their revenue base, listed Deposit Money Banks on the Nigerian Exchange Group (NGX) have actively adopted internet channels, treasury trading, equity investments, real estate leasing, and foreign money transfer operations.

Although revenue diversification into non-interest sources is frequently hailed in developed economies as a crucial safeguard against interest rate shocks and credit default risks, there is still much disagreement over its actual effectiveness and particular operational effects in developing nations like Nigeria. Non-interest income has generally been regarded as an aggregated, monolithic variable in earlier empirical investigations in Nigeria (e.g., aggregate fee and commission income vs. interest income). The various empirical effects of disaggregated non-interest revenue streams are not isolated by this aggregate approach. In particular, there is a clear lack of research on how different non-interest income line items—like dividend income, rental income, foreign exchange income, fixed income securities, and foreign currency revaluation income—affect net profitability (Profit for the Year, or PAT) of Nigerian listed deposit money banks both separately and collectively. Furthermore, corporate managers, financial regulators, and investors need an updated empirical assessment that captures these processes given the recent severe macroeconomic developments, exchange rate unifications, and fast devaluations of the naira that occurred between 2015 and 2024.

This study's main goal was to evaluate how non-interest revenue affected the listed deposit money banks' financial performance in Nigeria. The following is the structure of the specific aims and related research questions:

i. Ascertain the effect of dividend income on profit for the year of listed DMBs in Nigeria.
ii. Appraise the effect of rental income on profit for the year of listed DMBs in Nigeria.
iii. Examine the effect of foreign exchange income on profit for the year of listed DMBs in Nigeria.
iv. Ascertain the effect of fixed income securities on profit for the year of listed DMBs in Nigeria.
v. Evaluate the effect of foreign currency revaluation income on profit for the year of listed DMBs in Nigeria.

Review of Related Literature

Conceptual Framework

Concept of Non-Interest Revenue (NIR)

According to Yudha et al. (2017), non-interest revenue is money that banks make from non-traditional lending and borrowing activities. Non-interest activities enable banks to stabilize earnings, cross-sell products, and improve operational efficiency as interest margins contract due to competitive pressures. Despite introducing market, operational, and trading risks, non-interest revenue is typically less reliant on conventional credit default risks (Demirgüç-Kunt & Huizinga, 2010; Chandon, 2018).

Concept of Dividend Income (DIVINC)

Cash or stock payments that a bank receives from its equity interests in affiliated businesses, subsidiaries, or strategic corporate assets are referred to as dividend income (Kisaka et al., 2015; Pandey, 2010). It represents the bank's capacity to produce returns on long-term capital investments, supplying an extra stream of liquid cash that raises net profit after taxes.

Rental Income Concept (RENTINC)

Earnings from leasing or renting bank-owned real estate assets, offices, specialized equipment, or facilities to outside tenants are included in rental income (Shetty, 2022; Kagan, 2021). Physical asset diversification, the ability to hedge against inflation, and consistent cash flows independent of fundamental banking credit cycles are all provided by property assets.

Foreign Exchange Income (FXINC) Concept

Realized operational fees, commissions, foreign exchange trading spreads, and net gains from assisting commercial clients with currency exchange transactions, international trade finance, and treasury arbitrage activities are all considered forms of foreign exchange income (Leigh, 2022; Ani et al., 2013).

Fixed Income Securities (FIXINC) Concept

Returns, coupon payments, and trading gains from investments in government Treasury bills, sovereign bonds, state bonds, and high-grade corporate debt instruments are all included in fixed income securities (Murphy, 2020; CFI Team, 2021). As a fundamental foundation of liquidity and income, these products offer a steady, predictable, and low-credit-risk revenue stream.

Foreign Currency Revaluation Income (FCREV) Concept

Accounting net gains from the periodic re-measurement of bank assets and liabilities denominated in foreign currencies at current end-of-period official exchange rates are represented by revaluation income (Hayes, 2022; Mitchell, 2022). Institutions with net long foreign currency asset positions experience large paper and operational accounting profits during times of considerable local currency devaluation.

The idea of annual profit and financial performance

The final indicator of net operational effectiveness and financial performance is profit for the year (also known as profit after tax, or PAT), which is calculated by deducting all operating expenses, interest, depreciation, asset impairments, and statutory income taxes from total revenue (James, 2021; Ani et al., 2012). Retained earnings, capital adequacy accumulation, and dividend payout potential are all directly determined by PAT.

Theoretical Framework

Markowitz's Portfolio Theory (1952) serves as the main foundation for the research paradigm, which is supplemented by the Resource-Based View (RBV), Financial Intermediation Theory, and Risk Management Theory.

Markowitz's 1952 Portfolio Theory

According to portfolio theory, by spreading assets across uncorrelated or negatively correlated revenue streams, prudent investors and businesses can maximize expected returns for a given degree of risk. When it comes to banking, revenue diversification into non-interest activities such as dividends, real estate, foreign exchange, fixed income, and revaluation gains lowers total earnings volatility, lessens credit risk shocks, and increases long-term profitability (Elsas et al., 2010; Sanya & Wolfe, 2011). 2. Bernoulli's 1938 Risk Management Theory

Non-interest diversification raised overall bank risk in developing countries, according to Antao and Karnik's (2022) System GMM analysis of 24 Asian banking sectors. On the other hand, Uddin et al. (2021) found that asset and revenue diversification greatly increased bank profitability in Bangladesh. While Chinnaiah (2020) showed that dividend distribution significantly boosted firm value (Tobin's Q) in India, James and Iwedi (2020) discovered a positive but moderate co-integrating link between dividend payout measures and return on investment in manufacturing firms in Nigeria.

According to Yunusa et al. (2022), between 2012 and 2019, non-interest revenue and capital adequacy significantly improved Nigerian bank performance. In a comparison of Nigerian and Malaysian banks, Olalere et al. (2021) discovered that non-interest revenue-to-gross revenue ratios greatly increased bank firm value and stability in Nigeria, whereas liquidity and administrative overheads in Malaysia reduced the benefit. Ogbonna (2021) showed that Nigerian DMB profitability was positively impacted by fees, digital banking, and international transaction income.

Offiong et al. (2020) used Vector Error Correction Models (VECM) to show that exchange rate volatility significantly improved Nigeria's banking sector performance over the long term. On the other hand, Takon et al. (2016) used Dynamic OLS (DOLS) and discovered that high operational transaction risks caused foreign currency revenue to have a marginally negative long-term impact on bank return measures. In Kenya, Ahmed (2015) noted that unhedged foreign exchange exposure led to volatility that hurt the profits of commercial banks.

According to Sanyaolu et al.'s (2019) investigation of the revenue mix and liquidity of Nigerian banks, fixed income investment returns significantly improved bank liquidity and earnings stability. Fixed-income treasury diversification greatly increased risk-adjusted returns in developing market banks, as shown by Mehmood et al. (2019) and Githaiga & Yegon (2019).

Methodology

An ex-post facto longitudinal panel research design was used in this study. Because it is based on audited, historical financial data that the researcher cannot alter, this design is suitable. All Deposit Money Banks listed on the Nigerian Exchange Group (NGX) between 2015 and 2024 made up the target demographic. Based on stringent data availability criteria—that is, banks that regularly released audited financial statement breakdowns for all five study variables during the course of the 2015–2024 window—a purposive sampling technique was used. These requirements were satisfied by nine (9) listed Deposit Money Banks, resulting in ninety firm-year panel observations (N = 9, T = 10, N times T = 90).

To test the relationship between non-interest income components and financial performance, an econometric linear panel regression model was formulated as follows:

$$PAT_{it} = \beta_0 + \beta_1 DIVINC_{it} + \beta_2 RENTINC_{it} + \beta_3 FXINC_{it} + \beta_4 FIXINC_{it} + \beta_5 FCREV_{it} + \varepsilon_{it}$$

Where:
PAT_{it} = Profit for the year of bank i in year t
β_0 = Intercept parameter (constant)
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression slope coefficients for each non-interest income proxy
$DIVINC_{it}$ = Dividend Income of bank i in year t
$RENTINC_{it}$ = Rental Income of bank i in year t
$FXINC_{it}$ = Foreign Exchange Income of bank i in year t
$FIXINC_{it}$ = Fixed Income Securities revenue of bank i in year t
$FCREV_{it}$ = Foreign Currency Revaluation Income of bank i in year t
ε_{it} = Stochastic error term assuming zero mean and constant variance

Data Analysis

To test the null hypotheses created for the study and ascertain the impact of the predictive factors on the dependent variable, panel data regression analysis was utilized. The researcher was able to make inferences about the study's population based on the sample data. The dependent variable and indicator of financial performance was profit for the year; the predictive factors and measures of non-interest revenue were dividend income, rental income, foreign exchange income, fixed income securities, and foreign currency revaluation income.

Decision Rule: 0.05 is the level of significance (α). If the regression coefficient's significant value was below the significance level (0.05), reject the null hypothesis; otherwise, accept it.

Table 1. Regression Analysis Result of the Industry Level Panel Data

Dependent Variable: PFY
Method: Panel Least Squares
Date: 09/10/25 Time: 02:30
Sample: 2014 2024
Periods included: 10
Cross-sections included: 9
Total panel (balanced) observations: 90

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DVDI	0.689884	0.103335	6.676182	0.0000
RTLI	0.095541	0.096837	0.986616	0.3267
FEXI	0.089419	0.066633	1.341959	0.1832
FINS	0.162996	0.044850	3.634210	0.0005
FCRI	0.092439	0.036080	2.562067	0.0122
C	3.054988	0.813473	3.755490	0.0003

R-squared	0.519305	Mean dependent var	9.775991
Adjusted R-squared	0.490692	S.D. dependent var	1.971800
S.E. of regression	1.407191	Akaike info criterion	3.585409
Sum squared resid	166.3358	Schwarz criterion	3.752063
Log likelihood	-155.3434	Hannan-Quinn criter.	3.652614
F-statistic	18.14937	Durbin-Watson stat	0.978507
Prob(F-statistic)	0.000000		

Source: E-view 10.0 Statistical Output, 2025

Table 1 revealed that dividend income exerts a significant (p-value 0.0000) and positive effect on profit for the year of the sampled listed deposit money banks in Nigeria. On the other hand, the result shows that rental income had insignificant positive effect on profit for the year with probability value of 0.3267 and a t-Statistic of 0.986616. Foreign exchange income was found to have a positive (Coefficient 0.089419) and non-significant effect (p-value 0.1832) on profit for the year. In the case of fixed income securities and profit for the year, the result revealed a positive (Coefficient 0.162996, t-stat. 3.634210), and significant effect (p-value 0.0005) on profit for the year. From the output above, it was observed that foreign currency revaluation income exerted a positive significant effect on profit for the year with probability value of 0.0122 and a t-Statistic of 2.562067. The adjusted R-squared (R2) indicated that about 49% approximately of the changes in profit for the year were explained by the explanatory variables (dividend income, rental income, foreign exchange income, fixed income securities and foreign currency revaluation income). The remaining 51% could be explained by other factors capable of influencing profit for the year of the sampled listed deposit money banks in Nigeria and other remote factors captured by the error term. The probability of the F-statistic was significant (0.00000) which showed the statistical fitness of the multiple regression model and the results, by extension. There was an absence of serial autocorrelation in the panel data extracted from annual reports and accounts of the Banks in Nigeria as suggested by Durbin-Watson statistics of 0.978507 which is relatively normal.

Test of Hypotheses

In chapter one of the study, the researcher formulated five principal testable hypotheses to evaluate the effect of non-interest revenue on financial performance of listed deposit money banks in Nigeria. These propositions were subjected to empirical testing drawing from the results of our inferential statistical analyses. The decision rule was based on the significance of the t-statistics which were represented by the p- values.

Test of Hypothesis One

Restatement of the Hypothesis in Null and Alternate forms:

H_{o1}: Dividend income does not significantly affect profit for the year of listed deposit money banks in Nigeria.

H_{a1}: Dividend income significantly affects profit for the year of listed deposit money banks in Nigeria.

In Table 1, the panel regression result indicated that profit for the year was influenced by dividend income. The extent of the influence exerted on profit for the year by dividend income was statistically significant and positive. This implied that an increased non-interest revenue in terms of dividend income was highly probable to enhancing profit for the year of the sampled listed deposit money banks in Nigeria. The P-Value of 0.0000 for dividend income was less than a-value of 0.05; H0 was therefore rejected and the alternate hypothesis accepted. However, the study suggested that dividend income had significant and positive influence on profit for the year of selected listed deposit money banks in Nigeria.

Test of Hypothesis Two

Restatement of the Hypothesis in Null and Alternate forms:

Ho_2: Rental income does not significantly affect profit for the year of listed deposit money banks in Nigeria.

Ha_2: Rental income significantly affects profit for the year of listed deposit money banks in Nigeria.

The panel regression results from Table 1 indicated that profit for the year was influenced by rental income (RTLI). The extent of the influence exerted on profit for the year by rental income was statistically insignificant and positive. This implied that an increased rental income was likely to have a less than corresponding incremental effect on profit for the year of the sampled listed deposit money banks in Nigeria. The P-Value of 0.3267 for rental income was greater than the threshold value of 0.05; H_0 was therefore accepted and the alternate hypothesis rejected. However, the study stipulated that rental income had no significant influence on profit for the year of the selected listed deposit money banks in Nigeria.

Test of Hypothesis Three

Restatement of the Hypothesis in Null and Alternate forms:

H_{o3}: Foreign exchange income does not significantly affect profit for the year of listed deposit money banks in Nigeria.

H_{a3}: Foreign exchange income significantly affects profit for the year of listed deposit money banks in Nigeria.

In Table 1, the panel regression result indicated that profit for the year was influenced by foreign exchange income (FEXI). The extent of the influence exerted on profit for the year by foreign exchange income was statistically insignificant and positive. This implied that an increased foreign exchange income exerted a corresponding effect on profit for the year of the sampled listed deposit money banks in Nigeria. The P-Value of 0.1832 for 0.1832 was greater than a-value of 0.05; H_0 was therefore accepted and the alternate hypothesis rejected. Hence, the results suggested that foreign exchange income (FEXI) had non-significant and positive influence on profit for the year of the listed deposit money banks in Nigeria.

Test of Hypothesis Four

Restatement of the Hypothesis in Null and Alternate forms:

Ho$_4$: Fixed income securities do not significantly affect profit for the year of listed deposit money banks s in Nigeria.
Ha$_4$: Fixed income securities significantly affect profit for the year of listed deposit money banks in Nigeria.

In Table 1, the panel regression result indicated that profit for year was influenced by fixed income securities (FINS). The extent of the influence exerted on profit for the year by fixed income securities was significant and positive. This implied that an increased fixed income securities was likely to have favorable effect on profit for the year of the sampled listed deposit money banks in Nigeria. The P-Value of 0.0005 for fixed income securities was less than a threshold value of 0.05; H_0 was therefore rejected and the alternate hypothesis accepted. The result therefore suggested that fixed income securities exerted significant and positive influence on profit for the year of selected Money Deposit Banks in Nigeria.

Test of Hypothesis Five

Restatement of the Hypothesis in Null and Alternate forms:

H_{o5}: Foreign currency revaluation income does not significantly affect profit for the year of listed deposit money banks in Nigeria.
H_{a5}: Foreign currency revaluation income significantly affect profit for the year of listed deposit money banks in Nigeria.

In Table 1, the panel regression result indicated that foreign currency revaluation income (FCRI) was influenced by profit for the year of listed deposit money banks in Nigeria The extent of the influence exerted on profit for the year by foreign currency revaluation income was significant and positive. This implied that an increased non-interest revenue in terms of foreign currency revaluation income (FCRI) was highly probable to enhancing profit for the year of the sampled listed deposit money banks cooperate firms in Nigeria. The P-Value of 0.0003 for foreign currency revaluation income (FCRI) was less than a-value of 0.05; H_0 was therefore rejected and the alternate hypothesis accepted. However, the study suggested that foreign currency revaluation income (FCRI) exerted significant and positive influence on profit for the year of the sampled listed deposit money banks in Nigeria.

Discussion of Results

Dividend Income and Financial Performance: The result of the test of hypothesis one revealed that dividend income had a significant and positive influence on profit for the year of selected Deposit Money Banks in Nigeria. The implication of this finding was that an increased non-interest income in terms of dividend income was highly probable in enhancing profit for the year of the sampled Deposit Money Banks in Nigeria. This was evidenced in the p-Value of 0.0000 for dividend income which was less than a-value of 0.05. The finding was in tandem with the expectations of the researchers because an increase dividend income enhanced profit for the year of the sampled Deposit Money Banks. The result was in consonance with the findings of Shah, Agarwal & Phuyal (2018) who examined impact of non-interest income on financial performance of Joint Venture Banks in Nepal and also the study of Antao and Karnik (2022) who examined bank performance and non-interest income from countries in the Asian Region during the period from 1996 to 2018.

Rental Income and Financial performance: In the test of hypothesis two, the regression analysis result revealed that profit for the year was influenced by rental income (RTLI). The extent of the influence exerted on profit for the year by rental income was non-significant and positive. This implied that an increased rental income was likely to have a corresponding incremental effect though at a lesser pace on profit for the year of the sampled Deposit Money Banks in Nigeria. This was because the P-Value of 0.3267 for rental income was greater than the threshold value of 0.05. This result was in line with the findings of Yunusa, et al (2022) who examined the effect of non-interest income and Deposit Money Banks performance in Nigeria.

Foreign Exchange Income and Financial Performance: In the test of hypotheses three, the regression analysis result revealed that profit for the year was influenced by foreign exchange income (FEXI). The extent of the influence exerted on profit for the year by foreign exchange income was non-significant and positive. This implied that an increased foreign exchange income exerted a corresponding effect on profit for the year of the sampled Deposit Money Banks in Nigeria. The result was in agreement with the findings of Githaiga, et al (2019) who investigated the effect of income diversification on performance of Kenyan commercial banks.

Fixed Income Securities and Financial Performance: In the test of hypotheses four, the regression analysis result profit for the year was influenced by fixed income securities (FINS). The extent of the influence exerted on profit for the year by fixed income securities was significant and positive. This implied that an increased fixed income securities was likely to have favorable effect on profit for the year of the sampled Deposit Money Banks in Nigeria. The P-Value of 0.0005 for fixed income securities was less than a threshold value of 0.05. This result was in agreement with Portfolio Theory developed by Harry Markowitz in 1952. The theory suggested that the investors should diversify their funds among those securities (or activities) which gave maximum anticipated return and minimum variance (risk). This result was also consistent and aligned with the findings of Alshadadi and Deshmukh (2021) in their research study on the determinants of profitability in Saudi insurance companies.

Foreign Currency Revaluation and Financial Performance: The result of test of hypothesis five showed that foreign currency revaluation income (FCRI) influenced profit for the year of Deposit Money Banks in Nigeria. The extent of the influence exerted on profit for the year by foreign currency revaluation income was significant and positive. This implied that an increased non-interest income in terms of foreign currency revaluation income (FCRI) was highly probable to enhancing profit for the year of the sampled Deposit Money Banks in Nigeria. The P-Value of 0.0003 for foreign currency revaluation income (FCRI) less than a threshold value of 0.05. The study was consistent with the findings of Brunnermeier, et al (2019) who investigated non-interest income and systemic risk in US banks.

Summary of Findings

Findings arising from this research were summarized as follows:

i. Dividend income had positive and significant effect on profit for the year of Deposit Money Banks in Nigeria during the period under review. (Coefficient: 0.689884; P-Value: 0.0000)

ii. Rental income exerted positive and non-significant effect on profit for the year of Deposit Money Banks in Nigeria during the period under review. (Coefficient: 0.095541; P-Value: 0.3267)

iii. Foreign exchange income had positive and non-significant effect on profit for the year of Deposit Money Banks in Nigeria during the period under review. (Coefficient: 0.089419; P-Value: 0.1832)

iv. Fixed income securities had positive and significant effect on profit for the year of Deposit Money Banks in Nigeria during the period under review. (Coefficient: 0.162996; P-Value: 0.0005)

v. Foreign Currency Revaluation Income depicted positive and significant effect on profit for the year of Deposit Money Banks in Nigeria during the period under review. (Coefficient: 0.092439; P-Value: 0.0122)

Conclusion

The study analyzed the effect of non-interest income on performance of Deposit Money Banks in Nigeria during 2015 to 2024 period. The sample consisted of nine Deposit Money Banks listed on Nigeria Exchange Group during the period. Secondary data were obtained from the annual reports and financial statements of the selected Deposit Money Banks in Nigeria. These data were examined using Panel Least Square Model. In line with the findings, the study concluded that the predictive variables (Dividend Income, Rental Income, Foreign Exchange Income, Fixed Income Securities and Foreign Currency Revaluation Income) significantly explained the variations in Profit for the Year of Deposit Money Banks in Nigeria during the period under review. The study further concluded that dividend income, fixed income securities and foreign currency revaluation income positively and significantly influenced Profit for the Year of the Deposit Money Banks whereas rental income and foreign exchange income positively, but non-significantly affected Profit for the Year of the firms.

Recommendations

Based on the findings from the study, the discussions and the conclusion, the following recommendations were suggested to the corporate managers of Deposit Money Banks in Nigeria:

i. The managers of Deposit Money Banks in Nigeria should increase profitability of their firms by investing in shares of other quoted firms. The dividends from such investments would go a long way to significantly augment the interest income of their firms as was observed from the findings of the study.
ii. The managers of Deposit Money Banks should also boast their firms' profitability by investing in real estate's business for rental incomes. There was no doubt that real estate business was a viable investment in Nigeria. Therefore, such investment would provide alternative source of income for the Deposit Money Banks which would boast the profitability of the firms.
iii. The managers of Deposit Money Banks should increase their firms' profitability by trading in foreign exchange. Nigerians were known for travelling and for importation of goods and services, motor vehicles, motor spare parts, electronics, food items and building materials. Thus, foreign exchange transaction was no doubt a profitable business for firms that engage in it. As observed from the results of analysis, foreign exchange transaction positively affected profit for the year of Deposit Money Banks in the country.
iv. The managers of Deposit Money Banks should also invest in fixed income securities such as bonds, commercial papers, treasury bills and so on to argument their interest income from loans and advances. It is pertinent to state Banks can earn interest income from holding government bonds, which is considered interest income. However, if banks actively trade government bonds for gains or participate in underwriting new government bond issuances, it contributes to non-interest income. As observed from the findings of the study, fixed income securities provided alternative source of income and also served as risk mitigation that will enable the firms withstand unexpected business shocks.
v. In view of the fact that the trend of foreign currency value in the country was flexible upwards and rigid downwards, the firms should increase the stock of their foreign currencies, which would be revalued from time to time. The revaluation would bring the purchasing price of the currencies in tandem with the current market prices. This revaluation in most cases resulted in positive value thereby increasing the income and profitability of the firms.

References

Adedeji, A. O., & Adedeji, O. A. (2018). Effect of non-interest income on banks' profitability in Nigeria. *Journal of Economics, Management and Trade, 21(9), 1-10.*

Ahmed, I. H., Qasim, Z., Tahar, T., & Rashid, M. (2020). Impact of non-interest income and revenue concentration on bank risk in South Asia. Banks and Bank Systems, 5(4), 15-25.

Ahmed, L. (2015). The effect of foreign exchange exposure on the financial performance of commercial banks in Kenya. *International Journal of Scientific and Research Publications, 5(11), 115-120.*

Akhmadi, A., Nurohman, N., & Robiyanto, R. (2020). The mediating role of debt and dividend policy on the effect profitability toward stock price. *Journal of Management Dan Kewirausahaan, 22(1), 1-10.*

Alshadadi, M. A., & Deshmukh, P. V. (2021). Determinants of the Profitability of Insurance Companies in Saudi Arabia. *Saudi Journal of Economics and Finance, 5(11), 476-481.*

Al-Slehat, Z.A.F. & Altameemi, A. F. (2021). The relationship between non-interest revenue and sustainable growth rate: A Case Study of Commercial Banks in Jordan. *Journal of Asian Finance, Economics and Business, 8(5),* 99-108.

Ani, U., W., Ugwunta, D. O., Ezeudu, I. J. & Ugwuanyi, G. O. (2012). An empirical assessment of the determinants of bank profitability in Nigeria: Bank characteristics panel evidence. *Journal of Accounting and Taxation*, *4*(3), 38–43. https://doi.org/10.5897/jat11.034

Ani, W., Ugwunta, D. & Okanya, O. (2013). The effect of foreign exchange reforms on financial deepening: Evidence from Nigeria. *American Journal of Business and Management 2(3), 204-209.*

Anike, E. A. (2017). The impact of dividend policy and earnings on stock prices of Nigeria Banks (Doctoral dissertation).

Antao, S. & Karnik, A. (2022). Bank Performance and Noninterest Income: Evidence from Countries in the Asian Region. *Asia-Pacific Financial Markets, 29(1),477–505.*

Baskaran, M., Yusofa, R. M. & Mazlana, A. R. (2019). Moving toward non-interest income for banking sustainability: A case study on determinants of non-interest income of CIMB Bank and RBB Bank. *International. Journal of Economics, Management and Accounting, 27(1), 105-122.*

Brahmana, R., Kontesa, M. & Elfra, R. G. (2019). Income diversification and bank performance: Evidence from Malaysian banks. *Economics Bulletin 4(1), 1-11.*

Brunnermeier, M. K., Dong, B. G. & Palia. D. (2019). Banks' Non-Interest Income and Systemic Risk*. US Financial Crisis Inquiry Commission. (1), 1-33.*

CFI Team (2021). What are fixed income securities? https://corporatefinanceinstitute. com/ resources/knowledge/trading-investing/fixed-income-securities/

CFI Team (2022). Foreign exchange gain/Loss. https://corporatefinanceinstitute. com/ resources/knowledge/accounting/foreign-exchange-gain-loss/

Chandon, K. P. (2018). Non-interest income, profitability and risk of commercial banks in Bangladesh. *The Comilla University Journal of Business Studies, 5(1), 05-10.*

Chinnaiah, P.M (2020). Impact of dividend payout on the firm value: A study of firms listed on national stock exchange. *International Journal of Environmental Economics, Commerce and Educational Management Journal, 7(2), 14-19.*

Cuandra, F. & Setiawan, I. (2020). Factors that Affect the Probability of Conventional Banks of Batam City. *International Journal of Economics, Business and Accounting Research, 4(4),1105-1110.*

Dadang, A., Suryanto, Disman, N., Waspada, I. P. & Sugiyanto (2021). The effect of bank liquidity and efficiency on non-interest income with national income as variables moderator. *Budapest International Research and Critics Institute-Journal, 4(1), 797-805*

Deepu, M, & Girish, S. (2020). Study on interest income and non-interest income of selected banks in India. *MuktShabd Journal, 9(8), 749-758.*

Demirgüç-Kunt, A., & Huizinga, H. (2010). Bank activity and funding strategies: The impact on risk and returns. *Journal of Financial Economics, 98(1), 626-650*

DeYoung, R. & Roland, K. (2001). Product mix and earnings volatility at commercial banks: *Evidence from a degree of leverage model. Journal of Financial Intermediation, 10(1), 54-84.*

Dhungel, R. (2020). Relationship among non-interest income, profitability and risk in Nepalese commercial banks. *SSM.COM 1-13.*

Elsas, R., Hackethal, A. & Holzhäuser, M. (2010). The anatomy of bank diversification. *Journal of Banking and Finance, 34(6), 1274-1287.*

Eryomin, I, Likhacheva, O & Chernikova,L (2021). Impact of dividend policy on the market value of the company. *SHS Web of Conferences Journal 91(1), 1-13.*

Githaiga, P.N., Yegon, J.C & Komen, K (2019). Income diversification and performance: Should banks trade? *Journal of Business Management and Economic Research, 3(11) 15-28.*

Hansda, S., Sinha, A. & Bandopadhyay, K. (2020). Impact of dividend policy on firm value with special reference to financial crisis. *SIT Journal of Management, 10(2)158-175.*

Haubrich, J. G. & Young, T. (2019). Trends in the noninterest income of Banks, Economic Commentary, Research Department of the Federal Reserve Bank of Cleveland.

Hoanga, C. V., Nguyena, L.Q.T., Trana, M. D. & Hoanga, T. D. (2020). The impact of income diversification on liquidity creation and financial performance of Vietnamese Commercial Banks. *Accounting Journal 6(1), 553-568.*

Hunjra, A. I. Zureigat, Q. Tayachi, T. & Mehmood, R. (2020). Impact of non-interest income and revenue concentration on bank risk in South Asia. *Banks and Bank Systems, 15(4), 16-25.*

Iroham, C. O., Misra, S., Onyeka Emebo, & Okagbue, H. I. (2021). Predictive rental values model for low-income earners in slums: the case of Ijora, Nigeria. *The International Journal of Construction Management*, *23*(8), 1426–1435. https://doi.org/10.1080/15623599.2021.1975021

James, E. D & Iwedi, M. (2020). Dividend policy and return on investment of quoted manufacturing firms in Nigeria. *International Journal of Business and Law Research 8(2), 47-57.*

James, M. (2021). Net operating profit after tax (NOPAT). https:// www.investopedia. com/ terms/n/nopat.asp

Jang, S. & Park, K. (2011). Inter-relationship between firm growth and profitability. *International Journal of Hospitality Management, 30(1), 1027-1035.*

Kanto, D. S. (2017). Corporate reputation: Empirical tests of the measurement and link to prior financial performance in the Malaysian banking industry. *International Journal of Business, Economics and Law, 13(3), 11-18.*

Kisaka, S.E, Kitur, H.K & Mbithi, A. (2015). The relationship between profits and dividend payout of commercial banks in Kenya. *Research Journal of Finance and Accounting, 6(10), 173-186.*

Koleosho, A. O., Akintoye, I. R., & Ajibade, A. T. (2022). The Effect of Dividend Policy on Share Price Volatility of Some Selected Companies on the Nigerian Exchange. *Journal of Accounting, Business and Finance Research*, *15*(1), 10–20. https://doi.org/10.55217/102.v15i1.525

Kumar, S., Chaudhuri, S. & Sharma, P. (2019). Income diversification and its impact on profitability of banks. *International Journal of Recent Technology and Engineering, 8(4), 366-373.*

Kurniawan, D. T. & Siswanto, E. (2019). The impact of income diversification and non-interest income diversification on Indonesian Bank Performance. *Advances in Social Science, Education and Humanities Research, 558 (1), 540-546.*

Leigh, J. (2022). What Are Foreign Exchange Earnings? https://www.smartcapitalmind.com/what-are-foreign-exchange-earnings.htm

Mahmood, O. A., Abubakar, S. & Moshood, A. A. (2020). Dividend payout effects on firm performance in Nigerian Oil and Gas Sector. *Open Journal of Social Sciences, 8(1), 370-385.*

Markowitz, H. (1952). Portfolio Selection Theory. *The Journal of Finance, 7(1), 77-91.*

Mehmood, R., Hunjra, A.I. & Chani, M.I. (2019). The impact of corporate diversification and financial structure on firm performance: Evidence from South Asian Countries. *Journal of Risk Financial Management, 12(49). 1-17.*

Mehzabin, S., Shahriar, A., Hoque, M.N., Wanke, P. & Azad, M.A.K. (2022). The effect of capital structure, operating efficiency and non-interest income on bank profitability: new evidence from Asia. *Asian Journal of Economics and Banking, 1-20.*

Minha, S.N. & Thanh, T.T.T. (2020). Analysis of the impact from non-interest income to the operational efficiency of commercial banks in Vietnam. *Management Science Letters 10(1) 455–462.*

Mitchell, C. (2022). Revaluation Rates. https://www.investopedia. com/terms/r/ revaluationrates.asp

Mulchandani, K., Mulchandani, K. & Rajore, S. (2021). Impact of non-interest income on financial performance of select banks operating in India. *UNNAYAN, 13(1), 52-64.*

Murphy, C. C. (2020). Fixed-income security. https://www.investopedia.com/terms/f/fixe-incomesecurity.asp

Ndum, N. B. (2022). Effect of monetary policy on profitability of insurance companies in Nigeria. *International Journal of Research in Education and Sustainable Development, 2(4), 22-31.*

Nguyen, K. N. (2020). The impact of noninterest income on the performance of Vietnamese Commercial Banks. *International Journal of Sciences: Basic and Applied Research, 54(4), 214-232.*

Nguyena, A.P., Phana, H.T, Ngoa, P.T & Vua, T.T.T (2021). Income diversification and firm's performance of companies listed in Vietnam. *Macroeconomics and Finance in Emerging Market Economies. 1(1),1-16.*

Offiong, A.I, Etim, G. S., Enuoh, R.O., Bessong, P. K. & Omang. A.B, (2020). Exchange rate volatility and insurance sector performance in Nigeria: A long-run investigation. Academy of Accounting and Financial Studies Journal, 24(3), 1-9.

Ogbonna, U.G. (2021). The effect of non-interest income on the performance of selected deposit money banks in Nigeria. *Journal of Economics, Finance and Management Studies, 4(10), 1981-1990.*

Olalere, O. (2021). The effect of revenue diversification on the firm value and stability of banks: A comparative study of Nigerian and Malaysian banks. *Banks and Bank Systems, 16(3),141-151.*

Olowolaju, P. S. (2018). Effect of Non-Interest Income on Profitability of Deposit Money Banks in Nigeria. *Journal of Banking and Financial Dynamics, (1), 2, 1-8.*

Osakwe, A.C, Ezeabasili, V.N & Chukwunulu, J.I. (2019). Effect of dividend policy on stock prices: Evidence from Nigeria. International Journal of Economics and Financial Management, 4(1), 33-45.

Sanya, S. & Wolfe, S. (2011). Can banks in emerging economies benefit from revenue Diversification?*Journal of Financial Services Research. 40, 79- 101.*

Sanyaolua, W.A., Akintaro, A.O., Adebayo, A.T. & Adefolud, I.T. (2019). Income mix and liquidity of Nigerian Deposit Money Banks: Evidence from Dynamic Panel Models. *Journal of Accounting, Finance and Auditing Studies 5(2), 88-105.*

Shah, A.K., Agarwal, N. & Phuyal, R.K. (2018). Impact of non-interest income on financial performance of joint venture banks in Nepal. *Journal of Business and Social Sciences Research, 3(2), 107-124.*

Shetty, A (2022). Rental Income: Tax benefits available for landlords. https://www.financialexpress.com/money/income-tax/rental-income-tax-benefits-available-for-landlords/2483331/

Stiroh, K. (2004). Diversification in banking: Is noninterest income the answer? Staff reports No. 154, Federal Research Bank of New York.

Surwanti, A. & Pamungkas. W, S. (2020). Dividend policy, firms' characteristics and the impact on the Southeast Asian firm value. *Advances in Economics, Business and Management Research, 1769(1), 150-156.*

Takon, S.M., Nsofor, E.S. & Ugwuegbe, S.U. (2016). The effect of foreign exchange transaction on the performance of Nigerian Banks. *Journal of Business Management, 2(11), 139-154*

Uddin, M.J. M., Majumder, T.H. Akter. A. & Zaman, R. (2021). Do the diversification of income and assets spur bank profitability in Bangladesh? A dynamic panel data analysis. *Journal of Management Emerald Publishing Limited, 10(1), 121-136.*

Uniamikogbo, E., Okoye, E.I. & Akonye C. (2020). Non-interest income and financial performance of selected Deposit Money Banksin Nigeria. *International Journal of Business Strategy and Automation, 1(3), 52-66.*

Wahyuddin, A. & Mauliyana, H. (2021). The effect of premium revenue, underwriting results, investment results and risk based capital on income of insurance company: Study of Corporate Insurance Listed on Indonesia Stock Exchange. *Quantitative Economics and Management Studies, 2(6), 387-399.*

Yudha, A., Chabachi, M., Pangestuti, I.R.D. (2017). Analysis of the effect of non-performing loans, net interest margin, non-interest income, and loan to deposit ratio toward return on assets with size as control variables: Differences study on domestic and foreign banks listed on Indonesia. *Journal of Business Strategy 26(2), 100-113.*

Yunusa, L.A., Arikewuyo, K.A., Olowofela, O.E. & Sanyaolu, W.A. (2022). Non-interest income and Deposit Money Banks performance in Nigeria. *JurnalIlmu Ekonomi, 11 (1),31-42.*