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RESEARCH ARTICLE

Effect of Revenue Diversification on the Financial Performance of Deposit Money Banks in Nigeria: A Focus on Non-Interest Income

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Abstract

The study examined the effect of revenue diversification on the financial performance of deposit money banks in Nigeria: a focus on non-interest income. The study sought to determine how rental income and foreign exchange income affect the profit for the year of listed deposit money banks (DMBs) in Nigeria. An ex-post facto research design was employed, using historical financial information obtained from the annual reports and audited financial statements of selected financial services firms quoted on the Nigerian Exchange Group. The data were analysed using panel data regression and Pearson product-moment correlation techniques. The findings indicate that rental income has a positive but statistically insignificant effect on the profit of listed DMBs in Nigeria. Similarly, foreign exchange income was found to have a positive but statistically insignificant effect on profit for the year. Based on these findings, the study concludes that diversification into non-interest income activities, particularly rental and foreign exchange income, is associated with a positive direction of profitability; however, these income sources did not have statistically significant effects on the profit performance of listed DMBs during the period examined. The study recommends, among other measures, that the management of listed DMBs should maintain rental income as a supplementary source of revenue while avoiding excessive allocation of bank capital to property investments solely for income-generation purposes. This can be achieved by setting appropriate limits on property-related investments and periodically assessing their returns relative to the associated risks and alternative investment opportunities.

Keywords: Revenue Diversification, Financial Performance, Revenue Streams. DMBs, Non-Interest Income

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1 | Introduction

The increasing volatility in global financial markets and the cyclical nature of interest income have prompted banks worldwide to diversify their revenue streams to ensure economic sustainability and resilience. In Nigeria, Deposit Money Banks (DMBs) have traditionally relied heavily on interest-based income derived from loans and advances as their primary source of revenue (Ogunleye & Afolabi, 2021). However, shifts in macroeconomic conditions, characterised by persistent inflation, fluctuating interest rates, regulatory reforms, and digital disruption, have exposed the vulnerability of the traditional interest-income-dependent business model. Consequently, diversification into non-interest income (NII) sources, such as fees and commissions, trading income, and other non-traditional banking activities, has become an important strategy for enhancing bank stability and financial performance (Adem, 2023).

Non-interest income represents the spectrum of revenue generated from banking activities other than traditional loan interest, encompassing service charges, foreign exchange profits, investment banking fees, asset management services, and digital transaction fees (CBN, 2022). According to the Central Bank of Nigeria's 2022 Annual Report, non-interest income for Nigerian DMBs grew by approximately 18% amid a relatively stable interest margin, emphasizing its growing importance as a strategic hedge against interest rate shocks. This transition aligns with global banking practices following the 2008 financial crisis, where regulatory tightening, through frameworks such as Basel III, encouraged income diversification to improve liquidity, risk management, and capital adequacy (Klein et al., 2020).

Empirical evidence underscores the argument that greater revenue diversification enhances banks' risk-adjusted returns by minimising dependency on interest income and smoothing earnings volatility (Li et al., 2021; Trivedi, 2015). In the Nigerian context, diversification has been propelled by financial technology adoption, digital transformation, and the Central Bank's policies promoting innovation in payment systems. The surge in electronic banking, digital transfers, and card-based transactions has significantly expanded opportunities for non-interest revenue generation (Iwedi, 2024; Jolaiya, 2023). However, scholars remain

divided on the net effect of diversification on bank performance. While some studies suggest that diversification improves profitability and reduces portfolio risk (Li et al., 2021; Okpoa & Damiana, 2023), others contend that excessive diversification may dilute core banking efficiencies and raise overall risk exposure (Antao & Karnik, 2022; Brunnermeier et al., 2020; Stiroh, 2004).

Moreover, the Nigerian banking landscape is uniquely characterized by structural asymmetries between Tier-1 and Tier-2 DMBs, which influence the extent to which diversification impacts financial performance. Larger banks with advanced technology infrastructure and broad customer bases tend to leverage non-interest income streams more effectively than smaller banks (Onoja & Ibrahim, 2022). This differentiation raises important questions regarding the sustainability of diversification as a strategy for all categories of banks, especially in an economy still recovering from currency depreciation, liquidity pressures, and post-pandemic disruptions (World Bank, 2023).

Given these dynamics, understanding the effect of revenue diversification, specifically non-interest income, on the financial performance of Nigerian DMBs is critical for both practitioners and policymakers. The focus on non-interest income is justified by its increasing contribution to overall bank earnings and its potential to cushion profitability against adverse interest rate movements. This study, therefore, examines the extent to which non-interest income diversification influences the key indicators of financial performance, such as return on assets (ROA), return on equity (ROE), and net interest margin (NIM), among Nigerian Deposit Money Banks.

Statement of the Problem

The financial landscape for Deposit Money Banks (DMBs) in Nigeria has undergone significant transformations, necessitating adaptive strategies to enhance financial performance. One such strategy is the diversification of revenue streams, particularly focusing on non-interest income sources. Non-interest income, which includes fees from services such as account maintenance, foreign exchange transactions, and advisory services, has increasingly become critical as traditional interest income faces pressures from regulatory changes and market dynamics.

Despite its importance, many Nigerian banks struggle to effectively diversify their income streams, leading to an over-reliance on interest income. This situation raises critical questions about the implications of non-interest income on the overall financial performance of these banks. Specifically, it remains unclear how diversification into non-interest income impacts profitability, operational resilience, and competitiveness in a rapidly evolving financial sector.

Furthermore, there is a lack of comprehensive empirical evidence that examines the correlation between revenue diversification and the financial metrics of DMBs in Nigeria. Understanding this relationship is crucial for stakeholders, including bank management, investors, and regulators, as it can inform strategic decisions aimed at enhancing financial stability and growth. This study aims to investigate the effect of diversifying revenue streams on the financial performance of Deposit Money Banks in Nigeria, with a particular emphasis on non-interest income. By addressing this gap, the research seeks to provide valuable insights that can aid banks in developing effective strategies for revenue diversification, ultimately contributing to improved financial health and sustainability in the Nigerian banking sector.

Objectives of the Study

The main objective of this study is to examine the effect of revenue diversification on the financial performance of deposit money banks in Nigeria: a focus on non-interest income. The specific objectives of the study were to:

Appraise the effect of rental income on profit for the year of the listed deposit money banks in Nigeria.

Examine the effect of foreign exchange income on profit for the year of the listed deposit money banks in Nigeria.

Statement of Hypotheses

The following research hypotheses were formulated in line with the research question:

1. Rental income does not significantly affect profit for the year of the listed deposit money banks in Nigeria.
2. Foreign exchange income does not significantly affect profit for the year of the listed deposit money banks in Nigeria.

2 | Review of Related Literature

Conceptual Review

Diversification of Revenue Streams

Diversification can be viewed as a risk-management approach through which banks distribute their investments across different assets and activities rather than concentrating resources in a single area. Ammar and Boughrar (2019) explain that, within the financial context, diversification involves distributing capital across various assets to reduce exposure to the risks associated with any individual investment. By spreading investments across different financial instruments, industries, and asset categories, institutions can reduce their vulnerability to losses arising from the poor performance of a particular investment. Mundi (2019) further notes that a diversified portfolio can potentially provide more stable long-term returns because the adverse performance of one asset may be offset by the performance of others.

Despite the important role played by the banking sector in Nigeria's economy, challenges such as low banking concentration and limited domestic credit provision remain evident. These challenges have been associated with factors including rising non-performing loans, increasing loan repayment defaults, weaknesses in banking practices, regulatory non-compliance, and economic and political uncertainties. These conditions have increased the need for deposit money banks to reconsider their traditional revenue-generation strategies. Consequently, banks may seek to broaden their revenue base by developing alternative sources of income beyond their conventional role of mobilising funds from surplus units and providing credit to deficit units (Okello & Muturi, 2018; Muriuki & Musau, 2024).

Income diversification refers to the deliberate adoption of several income-generating activities rather than relying predominantly on a single source of earnings (Muriuki & Musau, 2024). The underlying objective is to reduce income-related vulnerability and strengthen financial resilience when institutions or individuals encounter economic shocks, market volatility, or other uncertainties (Ogbonna, 2021). In practical terms, income can be diversified across different economic activities, occupations, sectors, or investment assets. At the household level, for instance, income may be derived from a combination of agricultural activities, employment, small-scale enterprises, and remittances (Okello & Muturi, 2018). In the case of businesses and financial institutions, diversification may involve the introduction of additional products and services, expansion into new markets, or investment in alternative financial assets.

Within the banking sector, diversification into non-interest income activities provides an alternative means of strengthening the revenue base. Such income may arise from sources including trading activities, fees, and commissions. The expansion of these revenue streams can reduce banks' dependence on interest-based earnings and may provide an additional buffer against fluctuations in interest rates and broader economic conditions. However, diversification may also expose banks to additional operational and market-related risks if the activities are not appropriately managed. Onourah (2022) therefore emphasises the importance of effective management of non-interest income activities in supporting the financial stability and overall performance of deposit money banks in Nigeria.

Non-interest Income

Non-interest income represents revenue generated by banks from activities that do not primarily involve earning interest on loans and advances. Adedeji and Adedeji (2018) describe it as income derived from various charges and service-related activities, which can provide banks with an additional source of revenue and help strengthen liquidity, particularly when loan repayment defaults increase. In recent years, non-interest income has become an increasingly important component of banks' overall revenue structure.

The growing relevance of non-interest income has also generated interest in its relationship with the characteristics and performance of banking institutions. From this perspective, banks that effectively manage their non-interest income activities may be better positioned to generate additional revenue from fees and other service-related charges. The availability of products and services that attract fees and commissions can therefore contribute to the overall financial performance of commercial banks. By developing and expanding such activities, banks can broaden their revenue base and reduce excessive reliance on income generated from traditional lending operations.

Ogbonna (2021) conceptualises non-interest income as revenue received by financial institutions from charges associated with the provision of banking services to customers. Such income is derived from activities other than the returns generated from loans and other bank advances. In a broader sense, non-interest income encompasses the portion of a bank's total revenue that originates outside its interest-earning activities. Khrawish (2011) similarly explains that it comprises earnings generated from activities beyond conventional lending and the core financial intermediation function of banks. These activities may include income derived from various services, transactions, and investments in alternative business areas. Consequently, non-interest income provides banks with an avenue for broadening their sources of revenue through diversification beyond traditional interest-based operations.

Rental Income

Shah, (2018) defines rental income as "income received from a tenant in exchange for the use of a property, vehicle, or other assets." It includes a variety of sources such as apartments, homes, automobiles, caravans, boats, machinery, and equipment. Furthermore, any additional payments received from the renter, such as donations to water bills or parking spot rent, are considered rental income (Olujimi & Bello, 2009). Rental revenue, on the other hand, often excludes security deposits, which are supposed to be returned to the tenant at the conclusion of the lease. If a part of the security deposit is kept as a result of the tenant's inability to comply with the lease conditions, that amount is included in rental revenue for the year. Rental income is also defined by Ugoani (2016) as the whole sum paid or due by any tenant or obligor in connection with the lease, licence, or other rights of use or possession of a property. It includes all fees related to leasing or licensing a property.

Foreign Exchange Income

Foreign exchange income, as defined by Leigh (2022), is the profit made from exchanging one currency for another. Foreign currency transactions are conducted by a variety of players, including banks, brokers, traders, and internet businesses. These transactions may take place in the foreign exchange market, also known as the forex market. Financial services organisations, particularly banks, often participate in foreign currency trading, with the profits produced contributing to non-interest earnings. Takon et al. (2016) emphasise the significance of foreign currency transactions in the banking industry. Foreign exchange

transactions have become an important aspect of banking operations due to variances in currency rates across countries. Banks set up specific sections to handle these processes, enabling international trade and encouraging economic development. The improvement of a country's balance of payments as a consequence of foreign currency activity adds to its economic growth.

According to Ani et al. (2013), the foreign exchange market is a substantial and vast financial market. It is used to settle international transactions and allows sellers and purchasers of foreign currency to negotiate pricing. Given the importance of banks in financial intermediation, foreign currency market operations have a significant impact on the financial industry. The supply of foreign currency in a nation like Nigeria creates issues that demand financial managers' skills and financial ability to successfully manage foreign exchange and improve economic efficiency. Foreign exchange market reforms often influence a country's broader financial sector reform trends.

Financial Performance

Financial performance, according to Mwangi (2016), is the subjective evaluation of how successfully a corporation uses its assets to create income in its principal method of operation. It comprises calculating the monetary consequences of a company's policies and operations, as well as evaluating strengths and weaknesses by examining the relationships between financial position and income statement items. Financial performance is used to assess a company's overall financial health over a certain time period and may be compared to similar organisations or industries. According to Turyahebwa, (2013), financial performance is a firm's ability to operate efficiently, generate profits, survive, grow, and adapt to environmental opportunities and threats. Financial performance may be used to examine and evaluate firms within the same sector for comparison purposes, and it is a main aim pursued by profit-oriented organisations. According to Verma (2018), performance as a component of financial management assesses the extent to which financial goals are being or have been met. It entails measuring the monetary effects of a company's policies and activities as a measure of overall financial health and permitting comparisons across enterprises or sectors. Financial performance is defined by Yahaya and Lamidi (2015) as the degree to which a firm's financial goals are realised, based on financial results. Return on assets, growth, liquidity, leverage, and profitability are important proxies for gauging financial success.

Profit for the Year

Profit for the year, according to the firm Dictionary (2017), is the net amount made by a firm after subtracting all taxation-related expenditures. It is said to be a more accurate evaluation of a company's real profits and may be employed in operations when compared to total sales. Similarly, James and Iwedi (2020) define profit for the year, also known as profit after tax, as the amount left over after a corporation has paid all operating and non-operating expenditures, obligations, and taxes. This profit might be dispersed as dividends to shareholders or maintained as profits in reserves. When evaluating an investment company, analysts look at a variety of performance metrics, the most frequent of which are sales and net income growth. Sales give a top-line measure of success but do not represent the firm's operational effectiveness. In contrast, net operating profit or profit for the year enables analysts to analyse business performance without the effect of leverage, giving it a more accurate measure of pure operational efficiency (Ani et al, 2012).

Theoretical Framework

Modern Portfolio Theory

Modern Portfolio Theory (MPT) was introduced by Harry Markowitz in 1952 as a framework for understanding how investors can construct portfolios by considering the relationship between expected returns and investment risk. The theory proposes that investment decisions should not be based solely on the expected return of individual assets but should also consider how different assets interact within a portfolio. Thus, investors seek to achieve an appropriate combination of expected return and risk through the selection of assets with different risk and return characteristics (Fabozzi et al., 2002).

A central proposition of MPT is that investors who are concerned about risk can improve the overall characteristics of their portfolios by combining assets whose returns do not move perfectly together. In this way, diversification can reduce the portion of portfolio risk associated with individual assets while maintaining the possibility of achieving the desired level of return. The theory therefore establishes a fundamental relationship between risk and return, recognising that higher expected returns are generally associated with greater exposure to risk. However, the overall risk of a portfolio can be reduced through appropriate diversification across assets.

Two fundamental principles underpin Modern Portfolio Theory. First, investors seek to obtain the highest possible expected return for a given level of risk. Second, portfolio risk can be reduced by combining assets that have relatively low or imperfect correlations with one another. Consequently, the risk associated with an individual investment does not necessarily translate proportionately into the risk of the entire portfolio because diversification can offset the adverse performance of particular assets.

MPT is adopted as the theoretical foundation for this study because its principles provide a useful basis for understanding diversification within the banking sector. In particular, the movement of banks beyond traditional interest-based activities into non-interest income-generating activities can be viewed as a form of revenue diversification. By developing multiple sources of income, banks may reduce their dependence on a single revenue stream and potentially moderate the effect of fluctuations in any one source of earnings. The theory therefore provides a framework for examining the relationship between diversification, risk, and financial performance.

The relevance of MPT to this study is further supported by its emphasis on portfolio composition, diversification, and the risk-return relationship. Although the assumptions of the theory may not fully correspond to the operating environment of commercial banks, its central principle—that diversification can influence the risk and return characteristics of an overall portfolio—provides a useful theoretical explanation for examining banks' diversification from interest-based activities into alternative sources of income, including non-interest income.

Empirical Review

Yunusa et al. (2022) investigated the impact of non-interest income on the performance of Nigerian listed deposit money banks. Panel data approaches were utilised from 2012 to 2019 to examine the impact of non-interest income, capital adequacy ratio, and bank loans on the performance of financial services organisations. According to empirical research, non-interest income, capital adequacy ratio, and bank loans all have a positive and significant influence on the performance of Nigerian financial services organisations. Non-interest income activities, according to the study, should be pursued by banks since they have been shown to improve the performance of financial services organisations. Furthermore, the study recommended that monetary authorities regularly review the laws restricting financial services organisations' non-interest income operations.

Al-Slehat and Altameem (2021) conducted a study on the relationship between non-interest income and the sustainable growth rate of Jordanian commercial banks from 2008 to 2019. The research analyzed the influence of non-interest income, along with the size of the bank, on the sustainable growth rate using Baron and Kenny's technique. Data were collected from thirteen commercial banks, representing the entire study population. The researchers used the Amos program and a regression model to test four hypotheses concerning the partial and total influence of size in the study. The findings revealed that due to the complete influence of bank size on the sustainable growth rate, there was no relationship between non-interest income and sales growth rate. The report suggests that diversifying income sources could enhance financial performance and promote healthy development for banks, while avoiding further financial concerns. This study employed a unique method to investigate the mediating influence of non-interest earnings.

Nguyen (2020) employed generalized moments regression analysis to examine the impact of non-interest income on the performance of twenty-eight Vietnamese commercial banks from 2010 to 2018. The study identified non-linear relationships between non-interest income and bank profitability, as well as a negative association between non-interest revenue and the performance of Vietnamese commercial banks. The report emphasizes that while non-interest revenue plays an important role in boosting bank income and performance in developed nations, in Vietnam, it accounts for a relatively small fraction of total revenue compared to interest revenue. The research suggests that increasing the amount of non-interest revenue, especially when interest revenue is smaller than gross income, can significantly improve profitability. The study also found that larger banks with faster asset growth demonstrated more consistent profit growth and utilized capital more effectively than smaller banks.

3 | Methodology

An ex-post facto research design was adopted for the study. Historical financial data were obtained from annual reports and audited financial statements of the chosen financial services businesses listed on the Nigerian Exchange Group for the study. The information ranged from 2012 to 2025. The population for this research included all publicly traded financial services organisations in Nigeria. The population of the research consisted of twenty-two (22) banks. For the study, two sets of statistical tools would be used: preliminary statistical tools and primary statistical tools of analysis. Descriptive Statistics, F-Statistics, Jaque-Bera Statistics, Kurtosis Statistics, Skewness Test, and the PP-Fisher Chi-Square Unit Root Test were among the early statistical methods used.

Panel Data Regression and Pearson's Product-Moment Correlation research were the primary statistical methods used in the research. The Panel Data Regression analysis was employed specifically to test the null hypotheses developed for the research to determine the influence of the predictive factors on the dependent variable.

Decision Rule: Level of significance (α) = 0.05. Reject the null hypothesis if the significant value in the regression coefficient is less than the level of significance (0.05), otherwise, accept the null hypothesis.

Model Specification

The following model was developed in line with the predictive and dependent variables of the study:

$$LnPFYt = \beta0 + \beta2(LnRTLI)t + \beta3(LnFEXI)t + \varepsilon$$

Where

LnPFYt = Natural Log of Profit for the current year

(LnRTLI)t = Natural Log of Rental Income for the current year.

(LnFEXI)t = Natural Log of Foreign Exchange Income for the current year.

β0, β1, β2, …βn = Beta coefficients representing the relationships between the variables.

ε = Error term, accounting for any unexplained variation in the profit for the year.

4 | Data Analysis

The data collected for this investigation were subjected to a series of preliminary tests and analyses to assess their suitability for subsequent statistical analysis. These preliminary procedures were conducted to examine the characteristics and properties of the data and to minimise the risk of obtaining spurious regression results that could affect the reliability of subsequent analysis and estimation. It is assumed that data used in empirical research should possess certain characteristics that provide reasonable assurance regarding the validity and reliability of the regression estimates. Accordingly, a number of preliminary procedures were undertaken, beginning with log transformation, followed by an examination of the data characteristics using descriptive statistics. These procedures provided an initial assessment of the distribution, scale, and general properties of the variables before the subsequent regression analyses were performed.

Descriptive Statistics

Table 1: Descriptive Statistics of the natural log of the variables

	Log(RTLI)	Log(FEXI)	Log(PFY)
Mean	**4.809017**	**7.746669**	**9.775991**
Median	5.150359	8.414023	9.769736
Maximum	8.166784	11.69743	12.21325
Minimum	0.000000	0.000000	0.000000
Std. Dev.	1.569134	2.425179	1.971800
Skewness	-1.238398	-1.420478	-2.635832
Kurtosis	5.191072	5.424986	14.12204
Jarque-Bera	41.00742	52.31847	568.0883
Probability	0.000000	0.000000	0.000000
Sum	432.8115	697.2002	879.8392
Sum Sq. Dev.	219.1341	523.4527	346.0316

Source: Researcher's computation using E-view 10.0 Statistical Output, 2026

The variable description summary of the panel observations of the time series data of the selected financial services businesses in Nigeria is shown in Table 1 above. The statistics shown above dealt with data characteristics by showing their individual features and queried whether or not the data utilised in the research were regularly distributed. Log(RTLI), Log(FEXI), and Log(PFY) mean values were 4.809017, 7.746669, and 9.775991, respectively, according to the table. The maximum values for Log(RTLI), Log(FEXI), and Log(PFY) are 8.166784, 11.69743, and 12.21325, respectively.

The Jarque-Bera statistics assess whether sampled data exhibit skewness and kurtosis that match a normal distribution. When using Jarque-Bera statistics to test for normalcy in distribution, the p-value of a series should be larger than the critical value of 0.05. In this regard, the p-values of Log(RTLI), Log(FEXI), and Log(PFY) were 0.000000, 0.004391, and 0.000000, respectively, and were less than the crucial threshold of 0.05 (p-value>0.05). As a result, the series demonstrates that only DVDI was routinely supplied throughout the research period.

The series is evaluated using kurtosis statistics, which characterise the peakness or flatness of the series' distribution. If the kurtosis value is more than 3, the distribution is peaked (leptokurtic) in comparison to normal. If the kurtosis is less than 3, the distribution is flat (platykurtic) in comparison to normal. Rental Income (Log RTLI), Foreign Exchange Income (Log FEXI), and Profit for the Year (Log PFY) were all leptokurtic (peaked). As a result, the series distribution implies that several series were either leptokurtic or platykurtic.

Table 2: Summary of Panel Unit Root Test (Phillips–Perron Test)

Variables	At Level: t-Stat	At Level: 5% Critical Value	1st Differences: t-Stat	1st Differences: 5% Critical Value	Order of Integration

Variables	At Level: t-Stat	At Level: 5% Critical Value	1st Differences: t-Stat	1st Differences: 5% Critical Value	Order of Integration
RTLI	76.8610	-5.25636	—	—	I(0)
FEXI	59.4973	-2.23179	—	—	I(0)
PFY	49.8970	-10.0562	—	—	I(0)

Source: Researcher's computation using EViews 10.0 statistical output, 2026.

A priori expectation when using the Philips-Perron Fisher unit root test is that a variable is stationary when the value of the Philips-Perron Fisher test statistics is more than the critical value at 5% level of significance. Subsequently, from table 2, the result depicts that the stationarity of the series was integrated of order 1(0) for Rental Income, Foreign Exchange Income, and Profit for the Year. Generally, the results showing significant numbers of the variables being stationary at levels makes it appropriate for the application of ordinary least square (OLS) regression analysis. However, if the variables in a study are not stationary at levels, it may indicate the presence of non-stationarity or a trend in the data. In such cases, alternative regression models or techniques specifically designed for non-stationary data, such as cointegration analysis, may be more appropriate.

Table 3: Covariance Analysis Result of the Industry-Level Panel Data

Covariance Analysis: Ordinary

Variables	Statistic	PFY	RTLI	FEXI
PFY	Covariance	3.844790	—	—
	Correlation	**1.000000**	**—**	**—**
	t-statistic	—	—	—
	Probability	—	—	—
RTLI	Covariance	0.402908	2.434824	—
	Correlation	0.131685	1.000000	—
	t-statistic	1.246164	—	—
	Probability	0.2160	—	—
FEXI	Covariance	1.662035	0.351411	5.816142
	Correlation	0.351468	0.093382	1.000000
	t-statistic	3.168115	0.879848	—
	Probability	0.0007	0.3813	—

Source: Researcher's computation using EViews 10.0 statistical output, 2026.

Table 3 suggests that there is a strong (62% approx) and positive relationship between Profit for the year and rental income, shares a positive and weak relationship (13% approx) with t-Statistic: 1.246164 and Probability: 0.2160. Profit for the year and foreign exchange income also exert a positive and weak relationship at approximately (35%) with t-Statistic: 3.521752 and Probability: 0.0007. It was vividly observed that profit for the year and rental income have results which are in line with foreign exchange income, which revealed a very strong association with the focal variable.

Table 4: Regression Analysis Result of the Industry Level Panel Data

Dependent Variable: PFY	Dependent Variable: PFY	Dependent Variable: PFY		
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
RTLI	0.095541	0.096837	0.986616	0.3267
FEXI	0.089419	0.066633	1.341959	0.1832
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: Researcher's computation using E-view 10.0 Statistical Output, 2026

Table 4 revealed that rental income had an insignificant and positive effect on profit for the year, with a 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. The adjusted R-squared (R2) indicated that about 49% approximately of the changes in profit for the year were explained by the explanatory variables (rental income and foreign exchange 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

The decision rule for testing the hypotheses is as follows: the null hypothesis (H_o) is rejected when the probability value (p-value) is less than the 5% level of significance ($p < 0.05$), while the null hypothesis is not rejected when the p-value is greater than 0.05 ($p > 0.05$).

Test of Hypothesis One

Restatement of the Hypothesis in Null and Alternative Forms

Ho1: Rental income does not significantly affect profit for the year of the listed deposit money banks in Nigeria.

Ha1: Rental income significantly affects profit for the year of the listed deposit money banks in Nigeria.

The panel regression result from Table 4 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 insignificant and positive. This implied that an increased rental income was likely to have a 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; H0 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 Two

Restatement of the Hypothesis in Null and Alternative Forms

Ho2: Foreign exchange income does not significantly affect profit for the year of the listed deposit money banks in Nigeria.

Ha2: Foreign exchange income significantly affects profit for the year of the listed deposit money banks in Nigeria.

In Table 4, 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 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 the a-value of 0.05; H0 was therefore accepted and the

alternate hypothesis rejected. Hence, the results suggested that foreign exchange income (FEXI) had a non-significant and positive influence on profit for the year of the listed deposit money banks in Nigeria.

5 | Conclusion

In conclusion, this study examined the effect of revenue stream diversification on the financial performance of listed deposit money banks (DMBs) in Nigeria, with particular attention to non-interest income. The findings indicate that non-interest income sources can complement traditional interest-based earnings; however, their contribution to profitability is not uniform. Within the period under review, the examined non-interest income streams did not have statistically significant effects on profit performance.

Specifically, the findings show that rental income had a positive but statistically insignificant effect on profit among listed DMBs in Nigeria. This suggests that, although rental income may provide a modest and relatively stable source of revenue and offer some cushioning against fluctuations in core banking income, its contribution was not sufficient to produce a statistically significant effect on profit during the period under review. Similarly, foreign exchange income had a positive but statistically insignificant effect on profit. This implies that, although foreign exchange-related earnings may enhance profitability in certain periods, factors such as exchange rate movements, market volatility, regulatory conditions, and the risk associated with foreign exchange activities may limit the consistency of their contribution to annual profitability.

Overall, the study concludes that although diversification into non-interest income streams, such as rental income and foreign exchange income, was associated with positive movements in profitability, these income sources did not significantly explain variations in the profit performance of listed DMBs in Nigeria during the period under review. This suggests that the benefits of revenue diversification depend not only on the presence of multiple income sources but also on the materiality, stability, and risk-adjusted quality of those income sources.

Recommendation

Given that rental income and foreign exchange (FX) income both show positive but statistically insignificant effects on profit for the year among listed deposit money banks (DMBs) in Nigeria, the practical implication is that these streams may support profitability, but they are not yet strong or consistent enough to drive meaningful year-on-year performance on their own. The following recommendations are therefore proposed to help banks convert non-interest income diversification into more reliable financial gains.

The management of listed deposit money banks should retain rental income as a supplementary and relatively stable source of non-interest revenue by maintaining existing income-generating property assets while avoiding excessive investment in additional real estate solely for income generation. This should be achieved by setting internal investment limits for property-related assets and periodically evaluating the return and risk associated with such investments against alternative revenue-generating activities. This approach would enable banks to benefit from rental income without exposing excessive capital to relatively illiquid property assets.

The management of listed deposit money banks should strengthen foreign exchange risk management by establishing clear limits on open foreign currency positions, conducting regular stress tests and scenario analyses, and monitoring foreign exchange exposures on a continuous basis. These measures should be implemented through the bank's treasury and risk management units to identify potential losses arising from exchange-rate movements and to ensure that foreign currency exposures remain within approved limits. By controlling excessive foreign exchange positions and responding promptly to adverse exchange-rate movements, banks can reduce foreign exchange-related losses and improve the stability of their financial performance.

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