CAPITAL MARKET INSTRUMENTS AND THE PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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Abstract: The relationship between capital market instruments and deposit money banks is multifaceted and symbiotic, contributing significantly to the dynamics of the financial system. This study empirically investigated the relationship between capital market instruments and the performance of deposit money banks in Nigeria between 1992 and 2022. Annual data on the various variables of capital market instruments for Nigeria were collected and analyzed using ordinary least square (OLS) method. From the analyzed data, government bond has a very positive and significant effect on the performance of deposit money banks in Nigeria as measured by total asset of deposit money banks in Nigeria, while corporate bond has a positive but not significant impact on the performance of deposit money banks in Nigeria. Also, it was observed from the study that there is negative and not significant impact of monetary policy rate on the performance of deposit money banks in Nigeria. Therefore, the study concludes that capital market and its instruments are veritable investment portfolio outlets for deposit money banks in Nigeria in their choice of portfolio investments. The study therefore, recommends that governments at all levels in Nigeria should further cultivate the habit of patronizing the capital market by floating bonds in the domestic market in their borrowing decisions. This would not only encourage the development of the Nigerian capital market but would encourage deposit money banks especially in the light of recent bank recapitalization as announced by the central bank of Nigeria, and other entities to patronize the market for their portfolio investment decisions. Also, the Securities and Exchange Commission (SEC) as the sole regulator of the capital market in Nigeria should formulate policies that would attract the floating of corporate bonds by corporate entities in the market in order to be able to raise funds for their operations.

Keywords: Capital Market Instruments, Deposit Money Banks, Corporate Bonds

INTRODUCTION

The financial system of every country plays a major role in fostering economic expansion and development. Money is successfully distributed to various economic agents that need it for beneficial objectives. This is because it builds and establishes a connection between an economy's surplus and deficit units, this function is crucial for economic growth and development. This is primarily provided by the financial system through activity on the financial market. The capital market, a segment of the financial market, offers a route for the effective distribution of long-term (idle) money from fund savers to fund users for investment purposes (Stoian, & Iorgulescu, 2019).

Capital market functions optimally by moving savings into investments which is essential in establishing the connection between financial development and economic progression (Hossain, 2020). The capital market is a marketplace where stocks are traded and may also be referred to as a stock market, it provides an avenue for savings to be mobilised and used as long-term investments (Grbic, 2020). It is a collection of financial institutions set up for granting medium and long-term loans through instruments such as government securities, corporate bonds, corporate shares and mortgage loans (Nwamuo, 2018). The main purpose of establishing a capital market in any economy is to promote economic activities that eventually lead to economic growth (Ugbogbo & Aisien, 2019).

Capital market is a collection of financial institutions set up for the granting of medium and long term loans. It is a market for both government and private sector. In this market, lenders (investors) provide long term funds in exchange for long term financial assets offered by borrowers. The market consists of two arms; the primary market which creates a medium for long-term fresh funds to be raised through the issuance of new financial securities, and, secondary market which provide opportunities for the sale and purchase of existing financial securities that have already been traded in the primary market, among investors thereby encouraging investment in financial securities and boosting economic growth (Osisanwo, & Atanda, 2012).

Generally, deposit money banks are expected to make profit and to absorb loss from their normal earnings. Without profits, no firm can survive and attract outside capital to meet its investment needs. Thus, an increase in the financial performance of deposit money banks plays an essential role in persuading depositors to supply funding as well as deposits cash on good terms. Profit is the essential element to the survival of financial institutions (In & Eze,

2018). Capital adequacy can be noted as an engine for effective running of the banking business. Adequate capital is therefore considered a sine qua non to profitability operations in the financial sector. It involves setting minimum requirements for market risk in the books of deposit money banks.

Deposit money banks must hold adequate capital against these risks to absorb any shocks and reduce the likelihood of failures. The holding of adequate capital accentuates the ability of the banks to attract more customers and make better investment opportunities (Aymen, 2013). Equally, the deposit money banks are responsible for ensuring that they are adequately compensated for risks incurred.

Thus, deposit money banks could exercise market power by increasing prices of their products and services with a view to maximizing profit, hence attempt to create barriers or gap between surplus units and deficit units and this would either stabilize or destabilize the economy. Most finance literatures have often maintained that Deposit Money Banks are saddled with the responsibility of taking depositories of private and public funds in an economy (George, & Manyo, 2022). The services provided by these banks are compensated by way of interest charges, fees, and commission's etc. by bank customers/ depositors.

Before the advent of the capital market, banks and other money market institutions in Nigeria provided short term funds to businesses. Money market institutions traditionally lend short term funds which are not suitable for the funding of long term projects with long gestation periods, such as industries, infrastructures, power generation and telecommunication. Power generation is known to require huge and long term fund which only the capital market is in a more convenient position to provide. A capital market thus, constitutes the hub and the accelerator of a rapidly industrializing economy. It affords an enterprise the opportunity to broaden economies of scale and skill and high fly international profile.

Most studies examined the significance of bank monitoring and screening in capital market development and indicated a positive relationship. If banks effectively assess credit quality, then granting and renewing bank loans, this should provide positive signals to outside investors, especially in the case of newly-established borrowers (Ngo, & Le, 2019). Banks firstly determine credit quality of borrowing firms and then the capital market finances the borrowers, thus mitigating financing frictions. In turn, capital market development reduces the cost of bank equity capital that enables banks to raise the extra capital needed to expand loan activities and riskier investments (Ngo & Le, 2019).

Consequently, researchers should be aware of a 'two-way nexus" between the banking system and the capital market (Bossone, 2010).

Although, the capital market is neither a private nor public sector institution, it assists in the transmission of government policy to all the sectors of the economy, especially in economies, where the authorities consciously influence the direction of the economy.

The purpose of this study therefore, is to examine the impact of capital market instruments and the performance deposit money banks in Nigeria using the value of Government Bonds yields (GDY), Corporate Bonds yields (CDY) and Monetary Policy as proxy for capital market instruments and deposit money banks (DMBs) Total Assets as proxy for measure of performance of deposit money banks.

CONCEPTUAL REVIEW

Performance of Deposit Money Banks in Nigeria

Deposit Money Banks (DMBs) are financial institutions that primarily accept deposits from the public and create credit. They are active players of the money market and a crucial part of the banking system which play a fundamental role in the economy (Aliyu, 2022). DMBs are also known as commercial banks and are involved in a wide range of financial activities, including accepting deposits, providing loans, facilitating electronic fund transfers, issuing debit and credit cards, and offering various other banking and financial services.

The term "Deposit Money Banks" signifies their primary function: accepting deposits from individuals, businesses, and other entities. These deposits can be in the form of savings accounts, current accounts, fixed deposits, and other types of accounts (Paulinus, & Jones, 2017). Customers deposit their money into these accounts, and in return, DMBs offer them interest on their savings and various banking services.

One of the key features of DMBs is their ability to create credit. When individuals or businesses deposit money in their accounts, DMBs can lend a portion of these funds to borrowers in the form of loans and credit Soyemi, Ogunleye, & Ashogbon, (2014). This process of lending allows banks to support economic activities, such as business expansions, home purchases, and infrastructure development. By providing loans, DMBs contribute to stimulating economic growth and development.

DMBs are regulated and supervised by central banks or regulatory authorities in their respective countries. These regulations are in place to ensure

the stability and integrity of the banking system. Regulatory measures often include minimum capital requirements, prudential norms, and guidelines for risk management to safeguard depositors' funds and maintain the overall stability of the financial sector (Oni, 2012).

Capital Market and Capital Market Instruments

The capital market is an organized financial market where medium to long-term financial instruments or securities such as bonds, shares and debentures, mortgages, insurance products, etc., are traded (Onwe, 2015). Capital market operation is the essential part of financial system that is concerned with raising capital by dealing in shares, bonds and other long-term financial instruments or investments. It's a market in which long term debt (over a year) or equity backed securities are bought and sold, it help to channel the wealth of savers to those who can put it to long term productive use, such as company or government making long term investments. Capital market consist the Primary Market where New Securities are issued and sold, while the Secondary Market is where already issued Securities are traded between investors (Solomon, 2013).

According to Imobighe, (2015) the capital market is a market for the mobilization and utilization of long term funds for development. It is a market for long term instrument. In a capitalist society like Nigeria, the existence of such financial market can greatly ease the process of exchanging loanable funds for financial claims. The instrument traded in the market includes: government securities, corporate bonds and shares (stocks) and Mortgage loans. The market is for channeling funds for development.

Capital market products are financial instruments that are bought and sold in the capital markets, where individuals, institutions, and governments raise long-term funds. These products are essential components of a country's financial infrastructure, facilitating the flow of capital from investors to entities in need of funding. The capital market products play a pivotal role in the overall economic development of a nation by ensuring efficient allocation of resources and encouraging investment (Yadav, 2017).

Types of Capital Market Instruments

Stocks (Equities)

Stocks represent ownership in a company and give shareholders a claim on a portion of the company's assets and earnings. Investors can earn through

dividends and capital appreciation. Stocks are traded on stock exchanges (Alam, Akbar, Shahriar, & Elahi, 2017).

Bonds

Bonds are debt securities where investors lend money to an issuer (government or corporation) in exchange for periodic interest payments and the return of the principal amount at maturity. Bonds have fixed or variable interest rates and varying maturity periods. They are relatively safer investments compared to stocks (Tuckman, & Serrat, 2022).

Derivatives

Derivatives are financial contracts whose value are derived from an underlying asset, index, rate, or event and include options, futures, swaps, and forwards. Derivatives can be used for hedging, speculation, or arbitrage. They are complex instruments and require a deep understanding of the market (Malkawi, 2014).

Mutual Funds

Mutual funds pool money from multiple investors to invest in a diversified portfolio of stocks, bonds, or other securities. Managed by professional fund managers, investors buy shares in the mutual fund, which represents their proportional ownership of the fund's holdings (Panigrahi, Mistry, Shukla, & Gupta, 2020).

Exchange-Traded Funds (ETFs)

ETFs are investment funds that are traded on stock exchanges, similar to individual stocks. ETFs provide diversification like mutual funds but trade like a stock. They often track specific indices, sectors, or commodities (Sushko, & Turner, 2018).

Real Estate Investment Trusts (REITs)

REITs are companies that own, operate, or finance income-generating real estate in various sectors. REITs allow investors to invest in large-scale, income-producing real estate without having to buy or manage properties directly. They provide regular income and potential appreciation.

Capital market instruments are vital components of a robust financial system. They provide avenues for investors to grow their wealth, assist businesses and governments in raising necessary funds, and contribute significantly to the

overall economic progress of a nation (Mishra, Mishra, Mishra, & Mishra, 2010). Understanding these instrumentss and their dynamics is essential for investors, policymakers, and financial professionals in making informed decisions.

Relationship between Capital Market Products and Banks

The relationship between capital market products and banks is multifaceted and symbiotic, contributing significantly to the dynamics of the financial system. Capital market products encompass a wide array of financial instruments, including stocks, bonds, derivatives, and other securities traded in organized exchanges or over-the-counter markets. Banks, on the other hand, play a pivotal role in intermediating funds between savers and borrowers, facilitating economic growth and development (Drigă & Dura, 2014). Understanding the interplay between capital market products and banks elucidates their complementary functions and the broader implications for financial stability and efficiency.

Banks often serve as key participants in the capital markets, both as investors and issuers. Banks frequently invest in capital market products such as corporate bonds, government securities, and equities to diversify their asset portfolios and enhance returns. By allocating funds to capital market instruments, banks can optimize their risk-return profiles and generate additional income streams beyond traditional lending activities (Stewart, Despalins, Remizova, & Stewart, 2017). Moreover, banks may issue their own securities, such as bonds or equity shares, to raise capital for expansion, regulatory compliance, or liquidity management. This issuance activity enhances banks' access to funding sources and deepens their integration with the broader capital markets.

Capital market products serve as important sources of funding for banks, especially during periods of liquidity stress or when traditional funding channels are constrained. Banks can access capital markets to raise funds through debt issuance, securitization, or equity offerings. By tapping into capital market financing, banks can bolster their capital adequacy, support lending activities, and strengthen their overall financial resilience. Additionally, securitization a process whereby banks pool and sell assets to investors in the form of securities enables banks to monetize illiquid assets and replenish their liquidity buffers, enhancing their capacity to absorb shocks and sustain operations during adverse market conditions (Shenker, & Colletta, 1990).

The relationship between banks and capital market products influences the pricing and availability of credit within the economy. Changes in capital

market conditions, such as fluctuations in interest rates, credit spreads, or investor sentiment, can reverberate across the banking sector, shaping lending behavior and credit supply dynamics. For instance, movements in bond yields and equity valuations may impact banks' cost of funds, loan pricing decisions, and credit risk assessment frameworks. Furthermore, banks' exposure to capital market risks, including market volatility, counterparty credit risk, and asset price fluctuations, underscores the interconnectedness between banking and capital market activities.

The development and innovation of capital market products can foster financial deepening and broaden access to financing opportunities for businesses and individuals. Banks play a pivotal role in distributing capital market products to retail and institutional investors, leveraging their distribution networks, market expertise, and client relationships. Through mutual funds, exchange-traded funds (ETFs), and structured products, banks facilitate investor participation in capital markets, enabling savers to diversify their investment portfolios and harness the benefits of long-term wealth accumulation. Moreover, the securitization of assets, such as mortgages, auto loans, and credit card receivables, enhances market liquidity and expands the pool of investable assets, promoting capital formation and economic growth (Ndungu, 2020).

Finally, the relationship between capital market products and banks underscores the importance of regulatory oversight, risk management, and corporate governance frameworks to safeguard financial stability and investor protection. Regulators play a crucial role in ensuring the integrity and efficiency of capital markets, mitigating systemic risks, and promoting market transparency and disclosure standards. Banks are subject to prudential regulations and supervisory requirements that govern their participation in capital market activities, capital adequacy levels, and risk-taking behavior (Alabdullah, 2023). Effective risk management practices, robust internal controls, and adherence to ethical standards are essential for banks to navigate the complexities of capital market operations and uphold stakeholder trust and confidence.

THEORETICAL REVIEW

Financial Intermediation Theory

The Financial Intermediation Theory traces its roots back to the work of economists like John Hicks and John Gurley in the mid-20th century. However, it was further developed and popularized by economists such as James Tobin

and Eugene Fama in the 1960s and 1970s. The theory gained prominence as it explained the vital role banks play as intermediaries between savers and investors in the financial system.

The theory operates on several assumptions, including the assumption that financial markets are not perfectly efficient, implying that there are transaction costs associated with moving funds between savers and investors. It also assumes that individuals and businesses prefer to delegate the management of their funds to financial intermediaries like banks due to expertise, reducing information asymmetry.

In the context of studying capital market products and the performance of Deposit Money Banks (DMBs), the Financial Intermediation Theory is crucial. It helps explain how banks gather funds from depositors (savers) and allocate these resources by investing in various assets, including capital market products. By understanding the intermediation process, researchers can assess how DMBs manage their portfolios, balance risk, and optimize returns through investments in capital market instruments.

The Financial Intermediation Theory provides a comprehensive framework to understand the role of banks in the economy. It highlights how banks facilitate economic growth by efficiently channeling funds from surplus units (savers) to deficit units (investors). Moreover, it considers the importance of trust and reputation in financial transactions, factors critical in the context of capital market investments and DMB performance analysis. The theory's emphasis on intermediaries' expertise in managing risks and information advantages is especially relevant in today's complex financial markets.

One of the notable weaknesses of this theory is its simplification of the role of financial intermediaries, ignoring various complexities and innovations in modern financial markets. It also assumes rational behavior, which might not always hold true, especially during financial crises or market bubbles. Additionally, the theory does not delve deeply into the impact of regulatory policies or external shocks, factors that significantly influence the behavior and performance of DMBs in the context of capital market products.

In conclusion, while the Financial Intermediation Theory provides a foundational understanding of the intermediary role of banks in the financial system, it should be complemented with insights from behavioral economics, regulatory studies, and real-world market dynamics to comprehensively analyze the complexities of capital market products and their relationship with the performance of Deposit Money Banks in diverse economic scenarios.

Modern Portfolio Theory

Developed by Harry Markowitz in the 1950s, Portfolio Theory revolutionized investment management. Markowitz's pioneering work earned him a Nobel Prize in Economics in 1990. Later contributions by William Sharpe, Merton Miller, and others refined the theory, making it a fundamental framework for modern finance.

At its core, Portfolio Theory assumes that investors are risk-averse and seek to maximize returns while minimizing risks. It assumes that investors make decisions based on the expected return and standard deviation of their portfolios, treating diversification as a means to mitigate risk. The theory also assumes that investors have access to all necessary information and make rational decisions.

Portfolio Theory is highly relevant to the study of capital market instruments and the performance of Deposit Money Banks (DMBs). Banks, acting as investors, use Portfolio Theory to optimize their investment portfolios. By diversifying their investments across various assets, including capital market products, banks aim to maximize returns for a given level of risk. This diversification strategy is crucial for DMBs as they manage their liquidity, balance risk, and generate profits, which significantly impacts their overall performance.

One of the key strengths of Portfolio Theory is its emphasis on diversification. By spreading investments across different assets, Portfolio Theory helps reduce the overall risk of a portfolio. It provides a quantitative framework for investors and DMBs to make informed decisions, balancing potential returns with acceptable levels of risk. Additionally, the theory's mathematical foundation allows for precise calculations of risk and return, enabling sophisticated investment strategies.

Despite its strengths, Portfolio Theory has limitations. It assumes that future returns can be predicted based on historical data, which might not hold true in rapidly changing markets or during unprecedented events. The assumption of rationality also falls short in explaining market behavior during market bubbles or crashes, where emotions often drive investor decisions. Additionally, the theory assumes that all investors have the same information and investment goals, disregarding the reality of varying investor knowledge and objectives.

In conclusion, Portfolio Theory provides a valuable framework for understanding investment decisions made by DMBs in the realm of capital

market products. However, its limitations remind us that a holistic analysis of banking and investment activities must consider real-world complexities, including behavioral factors, market dynamics, and regulatory influences, to comprehensively evaluate the performance and decision-making processes of Deposit Money Banks.

Market Discipline Theory

Market Discipline Theory emerged in the wake of financial crises during the late 20th century. It gained momentum in the early 2000s as a response to concerns about the stability of the banking system. Economists like George Benston and Paul M. Horvitz contributed to the development of this theory, emphasizing the role of market forces in ensuring responsible banking practices.

Market Discipline Theory assumes that well-informed investors actively participate in financial markets. It suggests that these investors assess and respond to the risk-taking behavior of banks. The theory operates on the belief that market participants, through their actions, can influence the risk behavior of banks. It assumes that investors have access to relevant information and possess the ability to evaluate a bank's risk profile accurately. Market Discipline Theory is highly relevant in the context of capital market products and the performance of Deposit Money Banks (DMBs). The theory asserts that the behavior of banks, including their investments in capital market products, is influenced by the actions and reactions of market participants. If a bank takes excessive risks, investors may respond by devaluing its stocks or bonds. Therefore, DMBs, when investing in capital market products, are incentivized to maintain prudent practices to sustain investor confidence and prevent negative market reactions.

One of the key strengths of Market Discipline Theory is its emphasis on real-time feedback from the market. Unlike regulatory measures that might be retrospective or slow to adapt, market discipline operates in real-time. It can quickly reflect investor sentiment, encouraging banks to maintain transparent and prudent operations. The theory also promotes market efficiency, ensuring that banks are held accountable for their risk-taking behaviors by informed investors.

Despite its strengths, Market Discipline Theory has limitations. It assumes that investors are rational and always act in the best interest of their investments, which may not always hold true, especially during market panics or bubbles. The theory also relies heavily on the availability and accuracy of information.

If investors lack access to essential data or if information is manipulated, the disciplining effect might be compromised. Moreover, the theory assumes that market responses always align with the long-term stability and health of the banking system, which might not be the case during short-term market fluctuations. In conclusion, Market Discipline Theory provides valuable insights into the relationship between market participants, such as investors, and the behavior of banks, including their investments in capital market products. It underscores the importance of transparency and responsible risk management for DMBs. However, a comprehensive understanding of banking practices requires considering a variety of factors, including regulatory frameworks, market complexities, and behavioral influences, to evaluate the performance and decision-making processes of Deposit Money Banks effectively.

EMPIRICAL REVIEW

There are several studies carried out interrogating the relationship between capital market instruments and performance of deposit money banks with mixed findings. This study therefore reviews some of the most recent studies below.

Mamoud (2017) examines the impact of capital adequacy on the performance of Nigerian banks using the Basel accord framework. Data from nine deposit money banks with significant foreign operations were used in the study. The ordinary least square (OLS) regression results show that a positive relationship exists between capital adequacy and profitability. Furthermore, the results indicate that all the sampled banks were far more stable and diversified than deposit money banks with national authorisation only in Nigeria. It was clear that deposit money banks with foreign operations tend to attract large deposits and high customer confidence than those with domestic operations only. It was concluded that capital adequacy has a significant impact on the performance of banks with international authorisation in Nigeria.

Ewah, Essang and Bassey (2017) appraised the impact of capital market efficiency on economic growth in Nigeria, using Auto regressive distributive lag (ARDL) and time series data on Capitalization, Money Supply, Interest Rate, Total Transaction and Government Development Stock that ranges between 2000 and 2018. The result of the study shows that the capital market in Nigeria has the potential of growth inducing; but it has not contributed meaningfully to the economic growth of Nigeria. The study attributed the findings to the low market capitalization, low absorptive capitalization,

liquidity, misappropriation of funds among others, short term loans or credits Financing long-term projects and corruption in the highest order.

David, Isaac and Koye (2017) investigated the performance of deposit money banks in Nigeria for the period of three years before, during and after the 2004–2005 consolidation. Using DEA and found that small banks have the tendency to be more cost efficient than average and large banks. Meanwhile, medium banks have the tendency to be more cost efficient than large banks, while large banks usually lead in cost efficiency score in post consolidation period. Cost efficiency of the banks was the highest all through consolidation, accompanied with the aid of pre-consolidation and least in 3 years after consolidation.

Osayi and Bako (2024) examined fixed income securities and the financial performance of deposit money banks in Nigeria from 1991 to 2021. Fixed income securities which were the independent variables were measured as government bond, corporate bond, treasury bill and commercial paper while financial performance which is the dependent variable was measured as total asset of deposit money banks in Nigeria. Employing the Ordinary Least Square (OLS) regression estimation technique as embedded in Eview 8.0 econometric software to analyse the time series data which are secondary in nature as obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin with the period ranging from 1991 to 2021, the study found the following: Government bond does have positive and significant effect on the financial performance of deposit money banks in Nigeria. There is positive but not significant relationship between corporate bond and the financial performance of deposit money banks in Nigeria. Treasury bill does positively and significantly affect the financial performance of deposit money banks in Nigeria. There is positive and significant effect of commercial paper on the performance of deposit money banks in Nigeria.

METHODOLOGY

The study employs a longitudinal and causal research design. This is because the subject of investigation has already occurred and is not subject to manipulation by the researcher. It also entails measuring the cause and effect relationship between the dependent and independent variables over a long period of time. The periods covered by the study are from 1992 to 2022. The choice of this period is because it is the period that precedes major economic reforms-Structural Adjustment Programs (SAP) of the Federal government of Nigeria

and political transition from military to civilian administration in Nigeria. The data for this study were collected from the Central Bank of Nigeria (CBN) statistical bulletin for various years, statements of the financial position of deposit money banks in Nigeria, and the Nigerian Exchange Limited Data base.

MODEL SPECIFICATION

The study adopted Osayi and Bako (2024) model with slight modifications to suit the purpose of this study. The model is thus specified below:

$$TA = f(GBY, CBY, MPR) \qquad (1)$$

Where

TA   = Total Assets

GBY   = Government Bond Yield

CBY   = Corporate Bond Yield

MPR   = Monetary Policy Rate

The econometric form of the model is presented as:

$$TA_t = \beta_0 + \beta_1 GBY_t + \beta_2 CBY_t + \beta_3 MPR_t + {}_t\mu_\delta \qquad (2)$$

Where;

t = Time series property,

u_t = Error term

β_0 = Intercept

β_1 to β_4 = Coefficients

The *a priori* expectation of the models are:

$$\beta_0 > 0, \beta_1 \text{ to } \beta_3 > 0$$

Analytical Technique: The study used descriptive statistics, Augmented Dickey Fuller (ADF) unit root test for normality and stationarity of the series and the Least Square Method (LSM) of linear regression to analyze the data.

DESCRIPTIVE STATISTICS

Table 1 below shows the individual descriptive statistic for Total Asset (TA) of deposit money banks in Nigeria, Government Bond Yield (GBY), Corporate Bond Yield (CBY) and Monetary Policy Rate (MPR) from 1992–2022.

Table 1: Descriptive Statistics

	TA	GBY	CBY	MPR
Mean	17919.88	3830.731	250.5187	14.54677
Median	10847.12	1948.090	10.05000	13.00000
Maximum	78037.98	19026.10	1400.430	53.76000
Minimum	159.1900	2.100000	1.800000	6.000000
Std. Dev.	20618.22	5272.729	426.8348	8.977812
Skewness	1.271950	1.498446	1.858418	3.105505
Kurtosis	3.962778	4.362944	5.230810	13.49442
Jarque-Bera	9.556223	14.00035	24.27220	192.0831
Probability	0.008412	0.000912	0.000005	0.000000
Sum	555516.4	118752.7	7766.080	450.9500
Sum Sq. Dev.	1.28E+10	8.34E+08	5465638.	2418.033
Observations	31	31	31	31

Source: Author's Computation, (2024) from Eviews 8.0

The results of the descriptive statistics as presented in table 4.2 revealed that only TA and GBY have considerable high mean values in the distribution of the series. The other variables CBY and MPR have mean values that are averagely distributed. Of all the variables MPR has the lowest mean value of 14.54677. The median values as shown in the table reveal that the variables are distant from the mean except MPR. This means that there is high degree of disparity among the data within the period. The standard deviation also confirmed this as low values in relation to the mean suggest low degree of variation of the data over the period, while high values mean high variation of the data within the period. As for the skewness of the distribution, all the variables are positively, indicating that values for the respective variable lie to the left of their respective means. The kurtosis of the distribution shows that all the variables are leptokurtic (Fat tail) as their values are more than three (3). The J-B values for the variables are low and their probabilities showed that they all failed the test of normality at 5 percent level of statistical significance. (TA $0.0064 < 0.05$; GBY $0.0009 < 0.05$; CBY $0.0000 <> 0.05$; MPR $0.0000 < 0.05$).

Since the Jarque-Bera statistics revealed that the series are not normally distributed, there is need for stationarity test for data suitability in order that accurate inferences are made.

Unit Root Test

The unit root test was conducted using the Augmented Dickey-Fuller (ADF) test to find out whether the variables exhibit unit roots property. The table below shows this:

Table 2: Summary of Unit Root Test Results

Variables	ADF Test Statistic	95% Critical ADF Value	Order of Integration	**Remarks**
TA*	8.601013	-2.963972	1(0)	Stationary
GBY*	4.567882	-2.967767	1(0)	Stationary
CBY*	-5.042541	-2.967767	1(0)	Stationary
MPR*	-8.546026	-2.963972	1(0)	Stationary

Source: Author's computation, 2024 using Eview 8.0* indicates significant at 5% levels.

From table 2, it is seen that all of the variables are stationary at levels. This is confirmed from the ADF test statistic which is greater than the 95% critical ADF values for all the variables. This shows that the time series properties of the data were relatively stable as there is no biasedness of information, indicating that the result is reliable.

Table 3: Least Squares Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4857.713	1815.345	2.675917	0.0125
GBY	3.632123	0.178432	20.35578	0.0000
CBY	3.736363	2.189567	1.706439	0.0994
MPR	-122.8826	93.87658	-1.308980	0.2016
R-squared	0.956457	Mean dependent var		17919.88
Adjusted R-squared	0.951619	S.D. dependent var		20618.22
S.E. of regression	4535.124	Akaike info criterion		19.79701
Sum squared resid	5.55E+08	Schwarz criterion		19.98204
Log likelihood	-302.8536	Hannan-Quinn criter.		19.85732
F-statistic	197.6920	Durbin-Watson stat		2.341527
Prob(F-statistic)	0.000000			

Source: Author's Estimation, 2024 from Eview 8.0

The regression result in table 4.4 shows that the independent variables are able to explain the systematic variation in the dependent variable to the tune of 95.6% while only 4.4% is variation that could not be explained by the independent variables. In other words, 95.6% of the systematic variation of the impact of capital market products on the performance of deposit money banks in Nigeria is explained by the independent variables. The Adjusted R-squared value of 95.16% shows that the model is well specified to provide explanation for intended objectives of the study.

On the significance of the individual variables, GBY is found to have significant and positive effect on TA (GBY Prob. 0.0000 < 0.05), CBY has no significant effect on TA (CBY Prob. 0.0994 > 0.05), MPR has no significant and positive effect on TA (MPR Prob. 0.2016 > 0.05).

On the direction of the effect of the independent variables on the dependent variable, GBY has positive significant effect on TA. A unit increase in GBY will result in 363.21% increase in TA. CBY has no significant effect on TA. A unit increase in CBY has a positive impact of 373.63% on TA. A unit increase in MPR will result in -12228.8% direct and consequential decreases in TA. This can be mathematically expressed as:

TA = 4857.713*C + 3.632123*GBY + 3.736363*CBY - 122.8826*MPR

Empirical Validation of Hypothesis using t-statistic

H01: There is no significant impact of capital instruments on the performance of deposit money banks in Nigeria.

From the estimated regression, result in table 3, the calculated t-statistic of 20.355 is far greater than the critical t-tabulated value of 2. Meanwhile, the t-statistic decision rule on test of hypothesis is to reject the null hypothesis and accept the alternate hypothesis when the computed t-value is greater than the tabulated t-value or decide otherwise when the computed t-value is less than the tabulated t-value. Hence, the study rejects the null hypothesis and concludes that there is significant and positive impact of government bond on the performance of deposit money banks in Nigeria.

DISCUSSION OF FINDINGS

It can be seen from the result of the study that government bond has a very positive and significant effect on the performance of deposit money banks in Nigeria as measured by total asset of deposit money banks in Nigeria. The result goes to confirm the theory that many deposit money banks in Nigeria derive a lot of revenues from their investment in government bond which goes to boost their total asset as revealed by the study. This result is similar to the findings of Osayi and Bako (2014), who examined the effect of fixed income securities on the performance of deposit money banks in Nigeria from 1991 to 2021.

In addition, as can be observed from the result of the estimation, corporate bond has a positive but not significant impact on the performance of deposit money banks in Nigeria. The not significant impact is consistent with economic

theory that corporate bodies depend heavily on government patronage to succeed and also that investment in gilt edge securities is risk free with stable returns.

Also, it was observed from the study that there is negative and not significant impact of monetary policy rate on the performance of deposit money banks in Nigeria. The finding is however consistent with economic theory of interest rate which says that the higher the rate of interest, the lower the level of patronage that deposit money receive from businessmen and women for lending and also the lower ability of deposit money banks to lend. This will of course reduce their earning ability as loans and advances represent the higher earning assets of deposit money banks portfolio in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study was set out to examine the impact of capital market instruments on the performance of deposit money banks in Nigeria. Based on the findings of the study, the study concludes that capital market instruments are veritable investment portfolio outlets for deposit money banks in Nigeria in their choice of portfolio investments. Capital market instruments play significant role in determining the portfolio performance of deposit money banks in Nigeria. The earnings from their investment in capital market instruments provide stable liquidity for the banks which ultimately contribute to the value of their total assets. And the larger the total assets of deposit money banks in Nigeria, the more equipped they are to finance huge and critical infrastructure that would impact the entire economy.

Based on the findings of the study, the following recommendations were made;

(i)   Governments at all levels in Nigeria should cultivate the habit of patronizing the capital market in their borrowing decisions by floating bonds in the domestic market. This would not only encourage the development of the Nigerian Capital market but would encourage deposit money banks and other entities to patronise the market for their portfolio investment decisions.

(ii)   The Securities and Exchange Commission (SEC), as the sole regulator of the capital market in Nigeria should further formulate policies that would attract the floating of corporate bonds by corporate entities in the market in order to be able to raise funds for their operations.

(iii) The Monetary Policy Committee (MPC) of the Central Bank of Nigeria (CBN) should review the monetary policy rate downward in

order to encourage borrowing for investment that would ultimately stimulate growth in the economy.

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