

Market Information and Management Control of Quoted Commercial Banks in Nigeria

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Abstract

This study examined the relationship between information and management control quoted commercial banks in Nigeria. The purpose was to examine the relationship between information and management control of economically important banks in Nigeria. The study modelled management control as the function of market information measured by sensitivity of market risk, corporate information measured by net book value of assets, economic information measured by value of money supply to net sales and external information measured by volatility of foreign exchange. Panel data ordinary least square was used as data analysis methods. The study found that 43.9 percent of the total variations in the management control are accounted for, by the explanatory variables while the remainder is attributed to variable that is influenced by other factors not included in the regression model. The t-statistics shows that incentives have negative effect on management control of the systematic important banks. The study concludes that information significant effect on management control of the important economic banks in Nigeria. The economically important banks should consider establishment policies for executive stockholding. This will enhance management in planning and managing forts that affect executive incentives for optimal corporate control. Management of the commercial banks should adopt good compensation structure, welfare, and incentive packages as these would positively motivate executives and consequently improve corporate control.

Keywords: Market Information, Management Control, Economically Important Commercial Banks.

INTRODUCTION

The term corporate control refers to the authority to make the decisions of a corporation regarding operations and strategic planning, including capital allocations, acquisitions and divestments, top personnel decisions, and major marketing, production, and financial decisions. This concept is frequently applied to publicly traded companies, which may be susceptible to changes in corporate control when large investors or other companies seek to wrest control from managers or other shareholders. The notion of corporate control is similar to that of corporate governance; however, it is usually used in a narrower sense. Corporate control is concerned with who has and, moreover, who exercises the ultimate authority over significant corporate practices. Governance, by contrast, involves the broader inter-workings of the day-to-day management, the board of directors, the shareholders at large, and other interested parties to formulate and implement corporate strategy. The content of an information is considered important by investors, then management can use the policy as a signal about value company, which can be seen from its influence on stock returns (Abdullah, 2002; Brigham & Houston, 2010; Suwanna, 2012; Zare et al., 2013; Scott, 2015;

Puspitaningtyas, 2017, 2020). It assumed that issued debt if the company stocks are undervalued and then issue equity as a last resort. Conversely, if management believes that their firm is overvalued, they will issue equity first. The announcement of dividend distribution contains information about the performance and prospects of a company (Simamora, 2000; Syamsuddin, 2011; Suwanna, 2012; Damayanti et al., 2017; Esana & Darmawan, 2017). The theory was first coined by Ross (1977) who posited that if managers have inside information; their choice of capital structure will signal information to the market. Leverage is influenced by the theoretical premise that increases in debt are a positive sign that managers are confident about future earnings. Debt contracts are a commitment by managers to make future interest payments. Failure to repay debt could lead to bankruptcy. It assumed that the manager has accurate information about the value of the company that may not be known to investors and he is also interested in maximizing his profits. This assumption is based on the existence of asymmetric information, which is a condition in which a party has information that may be unknown to another party.

Asymmetric information occurs if the manager does not convey all the information he has about the value of the company, thus influencing investor judgment in the investment decision making process. The existence of asymmetric information triggers the signal to investors or the public through management policies to be very important. It is expected that the signal provides information for investors about the company's prospects. The theory is concerned with reducing information asymmetry for investors. However, signal quality depends on the ability of investors to analyze information (Brau & Carpenter, 2012; Zare et al., 2013; Su et al., 2014; Karasek & Bryant, 2015; Shetty & Sundaram, 2019).

Corporate control have the objective of determining the texture and combination of a company's shareholders and sometimes the final major owner of shares of the company. Corporate control measures through the five variables of government control, institutional control, managerial control, foreign control and concentrated control. Corporate control is considered as an important factor that influences the quality of firms' financial reports and that it is possible to use corporate control to predict the information of a bank's reported earnings by considering the earnings-returns relationship with managerial control, earnings returns relationship with institutional control as well as earnings-returns relationship with ownership concentration (Kiuri, 2013).

However, the problem in corporate control borders on the role of the owners in influencing management decision. Kobeissi and Sun (2010) noted that it is rarely difficult to separate ownership and control within any firm, thus the controllers always have some degree of ownership of the equity of the firms they control, also in some cases owners by virtue of the size of their equity position they have some effective control over the firms they own (Denis & McConnel, 2003). Shleifer and Vishny (1997) revealed that concentrated control is linked with legal protection and this is one of two main element of determinant of corporate governance which is one of the key determinants of corporate information and incentives. Fractional control of the higher shareholders concentration exceeds a certain threshold; a higher concentrated control raises the likelihood of tunneling and reduces firm efficiency.

Again, concentrated control considerably motivates major shareholders and Parallel to the increase of their share in company; their incentives to improve operations and controlling the management will increase. First, the major shareholders are typically risk-averse. Dispersed ownership causes the ability to improve stock liquidity and provides investors with creating diversification to lower risk. Second, when the excessive control is done by concentrated control internal stakeholders are

discouraged from costly investing. Thirdly, concentrated control cause the agency problem in another way and it is that the conflict between major shareholders and minor shareholders components arises. Major shareholders have the required incentives to use their controllable position so that they can obtain their specific interests through expense of minor shareholders (FazlZade, Mohammadzade & Tahbaz Hindi, 2009). From the above, this study examined the effect of information on management control of economically important banks in Nigeria.

LITERATURE REVIEW

Financial Information

Financial information can be seen as the outcome of accounting systems that measure and routinely disclose audited, quantitative data concerning the financial position and performance of an enterprise. Audited balance sheets, income statements, and cash-flow statements, along with supporting disclosures, form the foundation of the financial accounting reports to investors and indeed a wide range of accounting information users. Financial statements have the ability to perform a number of functions. They basically provide financial aid to managers in decision making, measurement or evaluation of a firm's performance, and also to portray a firm's value. Thus, for disclosed financial information to be useful, it must be relevant and faithfully represent what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable.

Financial information supplies a key quantitative representation of Individual Corporation that supports a wide range of contractual relationships. According to the Accounting Institute of Certified Public Accountants (AICPA. 2005), financial statements must properly reflect the organization's financial and economic reality, so that the users are not induced to take decisions on misleading information. Financial information also enhances the information environment of the reporting entity and those associated with it. The quality of financial disclosure can impact on firms' cash flows directly, in addition to influencing the cost of capital at which the cash flows are discounted. Financial information, such as that conveyed in publicly disclosed accounting reports, is also critical to the analysis of temporal liquidity positions of equity markets.

Economic Information

The money market rate is considered as a proxy for interest rate. The money market is a segment of the financial market in which financial instruments with high liquidity and very short maturities are traded. The money market is used by participants as a means of borrowing and lending in the short term, from several days to just under a year. An increase in the interest rate will result in falling stock prices due to the fact that high interest rate will increase the opportunity cost of holding money, causing substitution of stocks for interest bearing securities. Interest rate is one of the important macroeconomic variables and is directly related to economic growth. From the point of view of a borrower, interest rate is the cost of borrowing money while from a lender's point of view; interest rate is the gain from lending money. The interest rate is expected to be negatively associated to stock returns.

Corporate Control

The power to make decisions regarding a firm's operations and policies can be based on legal authority ownership or the power of one's position in the company. The government, competition, banks, and societal forces limit this power but do not make the decisions, except in industries that

are regulated by the government or that are under the control of a financial institution. Firms can also be management-controlled from the beginning, by issuing widely dispersed shares such as those the railroad promoters succeeded in building in the 19th century.

One way management control is maintained is by controlling the composition of the board of directors, mostly composed of company officers, officers of important suppliers or financial institutions, or personal friends of management. The few outside directors, or directors who do not themselves hold offices in the corporation, are often unable to make informed decisions or suggest alternative courses of action due to their unfamiliarity with the company, or, in many cases, other responsibilities, such as serving on other boards, for example. Representatives of banks are often limited by legislation as to their involvement as directors. Studies have found managers whose compensation is not as incentive based are more cautious in borrowing money for development, perhaps because they do not want to place their firms under greater control by financial institutions, or jeopardize their stability and reputation. Also, the larger the managers' own corporate holdings, the more aggressively they tend to borrow.

Managerial Control

Managerial control ordinarily represents the proportion of shares owned by the firm's directors to total number of shares issued. Warfield, Wild and Wild (1995) posited that corporations exhibit a myriad of manager- ownership structure extending from owner manager holding the vast majority of equity shares to professional managers whose ownership share is negligible. The separation of ownership and control begets questions of managers' incentives to take action in the best interest of owners. The extent of proportion of share held by management may affect control over the firms' decision (Jensen& Meckling, 1976).

Rudiger and Rene (2007) in their study reviewed theories of the determinants of managerial ownership and their implications for the relation between firm value and managerial ownership. They consider three theories: the agency theory, the contracting theory, and the managerial discretion theory. Rudiger and Rene (2007) assert that agency theory takes managerial ownership as given; greater managerial ownership aligns the interests of management better with the interests of shareholders. The contracting agency view portrays that shareholders face trade-off. As the managers stake in the firm increases, their incentives become better aligned with those of shareholders in that, if they increase firm value by one dollar, their wealth increases by a greater fraction of that dollar.

Nigeria Economically Important Commercial Banks

Access Bank, Zenith, and FBN Holdings maintained the top spot as the **largest banks in Nigeria** based on the value of their total assets as of the first half of 2022. Data compiled by Nairalytics, the research arm of Nairametrics shows. The thirteen commercial banks listed on the Nigerian Exchange (NGX) with major operations in the country saw their aggregate asset value increase by 8.1% in the first six months of the year to stand at N63.59 trillion as of June 2022 from N58.83 trillion recorded as of the beginning of the year.

The top five banks were the major tier-1 financial institutions typically referred to as the FUGAZ, which an acronym is used to represent First Bank, UBA, GTCO, Access, and Zenith Bank. The top five banks accounted for 80.5% of the total asset of the industry. It is worth noting that Ecobank Transnational Incorporated was not included in the compilation because most of its operations are outside Nigeria. A further breakdown of the data shows that the increase in the total assets of the

banks was largely attributed to rises in customer loans. Although Union Bank recorded a decline in its total assets in the period under review, Stanbic IBTC recorded the highest increase with a 14.8% increase to stand at N3.15 trillion from N2.74 trillion as of the beginning of the year.

The top five banks in Nigeria by total assets are:

GTCO – N5.69 trillion

Guaranty Trust Holding Company Plc (GTCO) posted a total asset value of N5.69 trillion as of June 2022, which is 4.6% higher than the N5.44 trillion recorded as of December 2021. GTCO accounted for 8.9% of the total assets of the thirteen banks. The banking giant which also restructured into a holding company last year saw its cash and bank balances with the Central Bank rise to N1.04 trillion in June 2022 from N933.59 billion as of the end of last year. Also, loans to customers increased marginally from N1.8 trillion as of December 2021 to N1.83 trillion by the end of June 2022. Meanwhile, financial assets at fair value through profit or loss improved significantly from N104.4 billion to N262.32 billion.

UBA- N8.99 trillion

United Bank for Africa ranks fourth on the list of biggest banks in Nigeria based on total assets with a value of 8.99 trillion, representing a 5.4% increase from N8.54 trillion recorded by the beginning of the year. UBA accounted for 14.2% of the total asset value of the entire thirteen banks on the list. A further breakdown of the bank's statement of financial position showed that its cash and bank balances improved to N1.98 trillion from N1.82 trillion recorded as of the beginning of the year. Also, its loans and advances to customers increased to N2.75 trillion from N2.68 trillion, while loans to banks improved to N198.1 billion as of the period under review. Property and equipment stood at N183.6 billion, while investment securities at fair value stood at N1.63 trillion.

FBN Holdings-N9.53 trillion

FBN Holdings posted a total asset valuation of N9.53 trillion as of June 2022, representing a 6.6% increase from N8.93 trillion recorded six months earlier. FBN Holdings, which is the parent company for First Bank accounted for 15% of the total aggregate assets for the thirteen banks. FBN's asset growth can be attributed to increasing in its cash and balances, loan books, and investment securities. Its cash and balances with Central Bank rose from N1.59 trillion to N1.64 trillion in the six months period. Also, its loans and advances to customers improved from N2.88 trillion as of December 2021 to stand at N3.38 trillion by the end of June 2022. It is worth adding that its investment securities rose to N2.16 trillion from N1.96 trillion. On the flip side, its property and equipment declined marginally to N113.79 billion from N115.9 billion recorded as of December 2021.

Zenith Bank – N10.12 trillion

Zenith Bank reported a total assets value of N10.12 trillion as of June 2022, an increase of 7.1% from N9.45 trillion recorded as of December 31st, 2022. Zenith Bank accounted for 15.9% of the total assets of the banks listed on the Exchange. The increase in its total assets was as a result of improvement in its cash and balance with the Central Bank, treasury bills loans to customers as well as investment securities. The bank, which is also the most capitalized bank in the Nigerian equities market, saw its loan books increase to N3.49 trillion as of June 2022 from N3.36 trillion, while investment securities stood at N1.48 trillion. In the same vein, property and equipment improved, albeit only marginally from N200 billion to N202.3 billion. Investment securities

improved from N1.3 trillion recorded as of the beginning of the year to N1.48 trillion by the end of June 2022.

Access Bank – N13.19 trillion

Access Holdings Plc tops the list with a total asset value of N13.19 trillion as of June 2022, representing an increase of 12.5% compared to N11.73 trillion recorded as of the beginning of the year. The financial institution, which is a newly restructured holding company accounted for 20.8% of the total assets of the thirteen banks under consideration. The uptick in the total asset value of the bank can be attributed to improvements in some of the asset components, especially loans and advances. Specifically, loans and advances to customers rose to N4.62 trillion as of the period under consideration from N4.16 trillion recorded as of the beginning of the year. This means that Access Bank gave out an additional N458.2 billion in loans to its customers in the first six months of the year. Also, investment securities rose by N493.6 billion to stand at N2.76 trillion. The value of its property and equipment increased to N261.8 billion from N247.7 billion, having spent N36.7 billion on the acquisition of property and equipment in the same period. Meanwhile, Access Bank has entered into a binding agreement with Centum Investment Company Plc to acquire its entire 83.4% equity stake held by Centum in Sidian Bank Limited. Also, the holding company received regulatory approval in August 2022 to acquire a majority equity stake in First Guarantee Pension Limited, in a bid to evolve into a financial service holding company.

Others include

- i. Fidelity Bank – N3.69 trillion
- ii. Stanbic IBTC – N3.15 trillion
- iii. FCMB – N2.65 trillion
- iv. Union Bank – N2.54 trillion
- v. Sterling Bank – N1.81 trillion

Theory of Information Asymmetry

Information asymmetry provides an insight into understanding the phenomenon of financial information misreporting which likely stems from earnings management. In contract theory and economics, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other. This asymmetry creates an imbalance of power in transactions, which can sometimes cause the transactions to go awry, a kind of market failure in the worst case. Examples of this problem are the adverse selection of moral hazard, and monopolies of knowledge (Wilson, 2008).

According to Richardson (2000), information symmetry occurs when the principal has access to the same information set as the agent. Information symmetry allows the principal to accurately evaluate the agent's actions (effort and judgment). Under conditions of information symmetry, the agent makes a decision regarding the level of effort to expend. When there is information asymmetry the agent must decide not only what level of effort to expend but also whether to use the private information that is available to him for personal gain.

Empirical Review

Yujun and Yuedong (2011) investigated the effects of equity incentives on firm performance in Chinese listed firms. We address the sample selection problem by employing the propensity score matching methodology. Results show that, (1) On the whole, performance is positively related to

equity incentives even after controlling for sample selection bias; (2) The final control rights have an important impact on the effects of equity incentives. The execution of equity incentives in privately owned firms can significantly decrease the agency costs between shareholders and managers, but such effects cannot be observed in state-owned firms; (3) Effects of equity incentives depend on the incentive type, that is, comparing to stock-based incentives, option-based incentives can reduce the agency costs significantly, thus are more effective; (4) Ownership structure also has important impacts on the effects of equity incentives. The agency costs decrease in firms with more decentralized ownership after introducing equity incentive, while in concentrated firms the effect is negligible.

Moses, Ofurum and Ibanichuka (2020) examined equity incentives, executive compensation, and discretionary accruals management in quoted industrial goods firms in Nigeria. The dependent variable which is discretionary accruals management was determined using the modified Jones model while the independent variables were proxied by executive stockholdings, bonuses, and fixed salaries. Cross-sectional data were sourced from the audited financial statements of the firms. The Ordinary Least Square (OLS) method of co-integration, unit root, and granger causality test was employed to ascertain the extent to which equity incentives and executive compensation affect discretionary accruals management. After cross-examination of the validity of the pooled effect, fixed effect, and random effect, the study accepts the random effect model. It was found that the independent variables explain only 1.8 percent variation on the discretionary accruals management. The beta coefficient of the variables found that executive stockholdings, bonuses, and fixed salaries have a negative effect on discretionary accruals management. The study concludes that equity incentives and executive compensation do not have any significant effect on discretionary accruals management in quoted industrial goods firms in Nigeria. They recommended that firms should consider the establishment of policies for executive stockholdings; management of the quoted industrial goods firms should adopt good compensation structure, welfare, and incentive packages as these would positively motivate executives and consequently improve earnings management.

Yan-Yu and Min-Lee (2018) investigated the impact of CEO characteristics on real activities manipulation achieved by changing the normal operational decisions purposely using a sample of 73 banking institutions with SIC code 6020, 6035 and 6036 during period 2004 to 2007. Their results present a negative relationship between real earnings management (REM) and some CEO characteristics, including CEO tenure, the directorship on the audit committee and the level of diligence as well. High CEO compensation is found to increase the real earnings management while the levels of pay-performance sensitivities have different influences on it at banks with CEO high (HPPS) and low (LPPS) pay-performance-sensitivity respectively. CEO experiences turn out to have a positive effect on earnings management at HPPS banks and a negative effect on LPPS. CEO power has a significant influence in HPPS bank's REM but it is not supported in LPPS banks. Holding other directorship has a significantly positive effect on earnings management at HPPS while it is not at LPPS bank. On the contrary, CEO's meeting attendance and total compensation have positively affected REM at LPPS but they are not at HPPS. Lastly, they astonishingly found that only CEO experience and profession has a significant moderate effect on bank's REM after the financial crisis of 2008, however, all CEO characteristics have significant impacts on bank's earnings management before the crisis. They concluded that experienced CEOs are easy to window dressing the financial statements when facing a serious financial crisis.

Sherliza and Salsabila (2018) examined earnings management influence on directors' remuneration. Taking a calculation of the empirical evidence of earnings management, firm performance, and directors' remuneration, the study was able to demonstrate that pay-performance is not influenced by earnings management. Data for the study were extracted from the annual reports of 678 non-financial public listed companies in Malaysia from 2009- 2011 giving rise to final 2021 observations. The findings highlighted that earnings management played no role in determining the directors' remuneration. However, the findings documented a significant and positive association between the directors' influence and the directors' remuneration. This study contributes to the growing literature by providing evidence which demonstrates that pay-performance was not directly influenced by earnings management but by the influence of the executive directors. More importantly the study documents even under strong governance, Malaysian listed firms are influenced by the executive directors.

Gerald, Hariom, and Sri (2018) researched on accounting and economic consequences of CEO Pay cuts and examined whether such CEO pay cuts really work. They identified 1,496 instances of large CEO pay cuts during the period 1994-2013. The researchers created a propensity-score-matched control group of firms that did not cut their CEOs' pay and employ a deference-in-differences approach to examine the consequences of pay cuts. Their results showed that, following a pay cut, CEOs are likely to engage in earnings management in an attempt to accelerate improvement in the reported performance and to achieve a speedier restoration of their pay to pre-cut levels. Further, they found that improvement in long-term performance after a pay cut occurs only for those firms with lower levels of earnings management after the pay cut. Finally, they showed that pay cuts are more likely to lead to unintended value-destroying consequences in the absence of high institutional ownership or when the CEO is sufficiently entrenched, thereby impairing the effectiveness of internal monitoring by boards.

Nourhene and Saqibkhan (2018) investigated the impact of chief executive officers' (CEO) compensation on their choices regarding the timing of earnings restatements. The results indicate a negative relationship between options exercised and lags in disclosing the restated earnings, suggesting that managers who exercise options in a given year tend to release information quickly. This effect is more pronounced if the options are exercised after the dark period. The researchers also found that the market penalizes longer lags in the restatement disclosure. It seems that the CEO would try to optimize the timing of information release so as to balance the

Kim, Kwat, Lee, and Suk (2018) studied CEO and outside director equity compensation: Substitutes or complements for management earnings forecasts. The study was aimed at examining how chief executive officers equity compensation and that given to the outside directors affect management earnings forecasts and to also ascertain the relationship between these officers as concerns their compensation. The researchers carried out the investigation by using data for CEO and director compensation and management earnings forecasts from 2006 to 2011. The results of their findings showed that equity compensation has a positive relationship with various measures of disclosure quality including management forecast likelihood, management forecast frequency and management forecast accuracy and also the incentive mechanism involving equity compensation of chief executive officers and the monitoring mechanism related with equity compensation of directors act as proxies for each other in adding to the frequency of management forecasts and management update.

Literature Gap

In Nigeria, research studies in the area of incentives and corporate control are few and far in between with none given consideration to its relationship with equity incentives and executive compensation. For example, Atu, Atu, Enegebe, and Atu (2016) examined the determinants of earnings management in Nigeria quoted companies from 2007-2014; Ogbonnaya, Ekwe and Ihendinihu (2016) investigated the effect of corporate governance and ownership structure on earnings management of Brewery industry beginning 2004 -2013; Uwuigbe, Daramola and Oyeniyi (2014) examined the effects of corporate governance mechanism on earnings management from 2007-2011; Omoye and Eriki (2014) studied corporate governance determinants of earnings management in Nigeria quoted companies commencing 2005-2010; Okpe (2013) Studied the relationship between different corporate governance mechanisms and earnings management; Usman and Yero, (2012) examined ownership concentration and earnings management practice of the Nigerian listed conglomerates all dealt with the relationship between earnings management and different corporate governance characteristics, Saidu, Ocheni, and Muktar (2017) investigated its relationship with financial performance in deposit money banks from 2011-2015 while Yusuf and Abubakar (2017) who investigated its relationship with executive compensation from 2006-2015 only considered the fixed salaries of managers and focused attention on the banking sector.

METHODOLOGY

This study examined the effect of incentives, information and corporate control of quoted commercial banks in Nigeria. Ex-post facto research design will be employed in obtaining, analyzing and interpreting the relevant data for hypotheses testing. The rationale for the variety is that ex-post facto research design allows the researcher the opportunity to observe one or more variables over a period of time (Uzoagulu, 1998). Specifically, cross sectional panel data will be adopted in data analysis. The target population for this study includes all 24 commercial banks in Nigeria. However, the sample size will be limited to the 10 commercial banks considered be economically important banks. Given that the entirety of the population is actually used for the study, a stratify sampling techniques was used to adopt the 10 economically important commercial banks as reported by the regulatory authorities. The study used secondary data that was extracted from the Annual Reports and Statements of Accounts of the quoted commercial banks. The data from the Annual Report are assume to be reliable, because according to section 11, chapter one of the Companies and Allied Matters Act 1990, companies are required to keep accounts and to produce accounts that give true and fair view of the company. Companies are required to prepare and publish annually the balance sheet, profit and loss account, names of directors and their reports, Auditors Report. Based on this, this study used Annual Reports and Statements filed in the Nigeria stock exchange.

Data Analysis Method

The method of data analysis to be used in this study was the panel data multiple linear regressions using Ordinary Least Square (OLS) method. This approach, which is a quantitative technique, includes tables and the test of the hypotheses formulated by using ordinary least square regression analysis at 5% level of significance. To arrive at a result that was not lead to spurious regressions, the study tested for stationarity at different levels in the variables making up the model. Other tests that were carried out on the model include test of Durbin Watson Test and test of model specification so as to achieve the objectives of our study as well as answer the research question and hypotheses.

Moreover, in order to undertake a statistical evaluation of our analytical model, so as to determine the reliability of the results obtained the coefficient of correlation (r) of the regression, the coefficient of determination (r^2), the student T-test and F-test was employed.

1. **Coefficient of Determination (r^2) Test** –This measures the explanatory power of the independent variables on the dependent variables. For example, to determine the proportion of economic growth in our model, we used the coefficient of determination. The coefficient of determination varies between 0.0 and 1.0. A coefficient of determination says 0.20 means that 20% of changes in the dependent variable were explained by the independent variable(s).
2. **F-Test:** This measures the overall significance. The extent to which the statistic of the coefficient of determination is significant is measured by the F-test. The F-test can be done using the F-statistic or by the probability estimate. We used the F-statistic estimate for this analysis.
3. **Student T-test:** measures the individual significance of the estimated independent variables at 5% level of significance.
4. **Durbin Watson Statistic:** This measures the collinearity and autocorrelation between the variables in the time series. It is expected that a ratio close to 2.00 is not auto correlated while ratio above 2.00 assumed the presence of autocorrelation. The Durbin-Watson statistic is a test for first-order serial correlation. More formally, the DW statistic measures the linear association between adjacent residuals from a regression model. If there is no serial correlation, the DW statistic was around. The DW statistic fall below if there is positive serial correlation in the worst case, it was near zero. If there is negative correlation, the statistic will lie somewhere between 2 and 4. Positive serial correlation is the most commonly observed form of dependence. As a rule of thumb, with 50 or more observations and only a few independent variables, a DW statistic below about 1.5 is a strong indication of positive first order serial correlation.
5. **Regression coefficient:** This measures the extent in which the predictor variables affect the dependent variables in the study.
6. **Probability Ratio:** It measures also the extent in which the predictor variables can explain change to the dependent variables given a percentage level of significant.

To obtain the observed values on the expectation of the effect of, cash flow analysis, human capital investment on the profitability of commercial banks, panel data survey over a ten-year period was employed. Panel data structure allows us to take into account the unobservable and constant heterogeneity, that is, the specific features of each quoted firm. The researcher employed pooled Ordinary Least Square (OLS), Fixed Effects and Random Effects regression models to test the various hypotheses. Pooled OLS regression technique is popular in financial studies owing to its ease of application and precision in prediction (Alma, 2011).

In addition, OLS method has been employed in a wide range of economic relationships with fairly satisfactory results (Koutsoyiannis, 1977). Citing the work of Gaur and Gaur (2006), Ujunwa (2012) stressed that fixed effects and random effects models aided to observe variations among cross-sectional units simultaneously with variations within individual units over time. It assumes that variables are strictly time disparity or time invariant. This undermines an exploration of the effect of slow changing within individual firms' factors. Hence, the rationale for adopting Fixed Effects and Random Effects models estimator as additional test is to enable the researcher control time contrast and time invariant variables, and thereby control for the effect of the unobserved heterogeneity in the dataset. Ujunwa (2012) opines that coefficient of estimations are reliable when regression parameters do not change over time and do not differ between various cross-sectional units. Therefore, when the regression estimation differ widely between the two models (Fixed and

Random Effects models), the adoption of Hausman test were essential. Panel data over the period from 2009-2019 is used as the work of Majumdar and Chhibber (1999), Zeitun and Tian (2007), and Onaolapo and Kajola (2010), commercial banks profitability measure was regressed on each of the variants of human capital investment and other control variables holding other factors that may affect deposit money banks profitability not included in the equation constant. These analytical techniques were enable the researcher attain justifiable and robust results.

Model Specification

From review of literature, commercial bank profitability can be affected by several generic factors. So, it is necessary to investigate the effect, Basel III and bank management practices of commercial banks in Nigeria. Following the hypotheses earlier stated in chapter one, regression models will be formulated to capture the effect of independent variables on the dependent variables.

$$Y = \beta_0 + \beta_{1xit} + \mu \quad (1)$$

Where Y = Dependent Variable

β_{1xit} = Independent variable

β_0 = Regression Intercept

μ = Error Term

Disaggregating Equation 3.1 to form the multiple regression models, we have

Linear Regression Models

The linear regression model is formulated as follows:

Incentives

$$MGTC = \psi_0 + \psi_1 MKTI + \psi_2 CORI + \psi_3 ECIF + \psi_3 IEXTI + \varepsilon \quad (1)$$

Where

MGTC = Management Control measured by voting power of management staff

MKTI = Market information measured by sensitivity of market risk

CORI = Corporate information measured by net book value of assets

ECIF = Economic information measured by value of money supply to net sales

EXTIF = External information measured by volatility of foreign exchange

β_0 = regression intercept

$\beta_1 - \beta_3$ = coefficient of independent variables to the dependent variables

μ = error term

A-priori Expectation of the Result

The explanatory variables are expected to have positive and direct effects on the dependent variables. That is a unit increase in any of the variables is expected to increase commercial banks control. This can be express mathematically as $a_1, a_2, a_3 > 0$.

Empirical Specification of Model

In order to actualize the objectives of this study, the regression model was formulated. This comprises the Pooled Ordinary Least Square (OLS) model, Panel Fixed Effects Model and Random Effects Model. This was necessary to identify the regression model with the highest explanatory power. First, the data was subjected to Pooled ordinary least square regression. In the pooled regression, the data pertaining to the commercial banks were pooled together and the

regression model was run, ignoring the cross-section and time series nature of the data. Another weakness of pooled regression is that it does not distinguish between the various commercial banks included in the regression and neglects the heterogeneity that may exist among them.

According to Basso (2012) it is fair to assume that the fixed effects model is more important because it considers exogenous effects on a model. The Panel fixed effects model also eliminates unobserved time-invariant company effects and makes it possible for all potential error reasons to be included in the model. The Fixed Effect Model allows for heterogeneity among the companies by allowing each to have its own intercept value. Although, each company has its own intercept value, this intercept does not vary with time. Therefore, the intercept is time invariant. Also, in the fixed effects model, the independent variables do not have random nature. Allison (2009) noted that with fixed effects model, the effects of time invariant characteristics are controlled for whether such characteristics are measured or not.

Fixed effects model helps to control for omitted variable bias by having the individual companies serve as their own controls. Fixed effects model use only within-individual differences, irrespective of the differences between individual companies. In Random Effects Model, the companies have a common mean value for the intercept. The difference between fixed effects model and random effects model according to Clark and Linzer (2012) is that fixed effects model produces unbiased estimates of the coefficients, but the coefficients can be subject to high variability based on the sample. Although, random effects model rarely produces biased estimates of the coefficients, it can lead to coefficients that are closer (on the average) to the true value in any sample. This implies that fixed effects model may produce estimates that are highly sample-dependent. Another difference between fixed effects model and random effects model is that fixed effects model requires the estimation of a parameter for each coefficient on the unit dummy variable and reduces the model's explanatory power and increases standard errors of the coefficient estimates. Conversely, the random effects model estimates only the mean and standard deviation of the distribution of unit effects and not a set of dummy variables.

In the view of Clark and Linzer (2012), the incorporation of the theoretical assumptions into the choice of a model can be tedious. Thus, the Hausman specification test is used to testing whether the Fixed Effects model is more appropriate than the Random Effects model. This is done by detecting violation of the assumption that the predictor variables are orthogonal to the unit effects. In this study, Hausman specification test was computed for each model. According to Torres-Reyna (2007) based on the Hausman specification test, where the P-value is less than 5 percent, the Fixed-Effects model is appropriate and where the P-value is more than 5 percent, the Random-Effects model is appropriate. Although, Clark and Linzer (2012) argued that the absence of a significant difference in the Hausman test does not follow that the random effects estimation of the coefficients is unbiased and is more appropriate than the fixed effects estimation of the coefficients. Furthermore, a random effects biased estimator can be preferable to a fixed effects unbiased estimator in a circumstance that the random effects biased estimator provides enough reduction of the variance. Thus, the Hausman specification test may be inconclusive in choosing the most appropriate model between fixed effects and random effects model. Under this circumstance, Clark and Linzer (2012) advocate for simulation analysis to determine the conditions that a fixed effects or random effects model provides unbiased coefficient estimates.

RESULTS AND DISCUSSION

Table 1: Phillips-Peron results (non-parametric)

Cross ID	AR(1)	Variance	HAC	Bandwidth h	Obs
Guaranty Trust Holding					
Company Plc	0.019	27.57430	30.63791	1.00	9
United Bank for Africa	-0.240	23.29852	25.85290	1.00	9
FBN Holdings	-0.056	34.10899	26.78363	3.00	9
Zenith Bank	0.173	37.30843	40.09993	1.00	7
Access Holdings Plc	-0.131	15.43149	17.11506	1.00	9
Fidelity Bank	-0.177	36.92884	36.36392	1.00	9
Stanbic IBTC	-0.542	19.85522	22.84239	1.00	7
FCMB	-0.175	39.67997	6.718490	8.00	9
Union Bank	-0.187	7.385678	10.09172	1.00	7
Sterling Bank	0.054	18.14090	23.56325	1.00	9
Augmented Dickey-Fuller results (parametric)					
Cross ID	AR(1)	Variance	Lag	Max lag	Obs
Guaranty Trust Holding					
Company Plc	0.581	20.90621	1	--	8
United Bank for Africa	0.393	18.87874	1	--	8
FBN Holdings	-0.312	35.23354	1	--	8
Zenith Bank	-0.480	37.91009	1	--	5
Access Holdings Plc	-0.302	13.81891	1	--	8
Fidelity Bank	-0.330	40.69224	1	--	8
Stanbic IBTC	-0.233	18.92520	1	--	5
FCMB	-0.658	36.70840	1	--	8
Union Bank	-0.099	2.752822	1	--	5
Sterling Bank	0.427	15.71125	1	--	8

Source: E-Views output

The cross-sectional (CD) dependence test rejects the presence of cross-sectional independence and hence, the first-generation unit root test is not applicable. Therefore, the failure of these tests to reject the null of the firms hysteresis is due to the fact that the first generation panel unit root tests do not allow neither for cross-sectional dependence nor for possible structural breaks.

Table 2: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Pooled Regression Model				
D(MKTI)	-0.380378	0.457737	-0.830997	0.4085
D(EXTIF)	-0.023166	0.032359	-0.715929	0.4762
D(ECIF)	0.037287	0.081079	0.459883	0.6469
D(CORI)	-0.222968	0.117926	-1.890742	0.0624
C	12.45990	7.837248	1.589830	0.1159
ECM(-1)	-0.839869	0.105575	-7.955210	0.0000
R-squared	0.455974	Mean dependent var		-0.619524
Adjusted R-squared	0.421101	S.D. dependent var		10.43771
S.E. of regression	7.941571	Akaike info criterion		7.050849
Sum squared resid	4919.347	Schwarz criterion		7.224478
Log likelihood	-290.1356	Hannan-Quinn criter.		7.120646
F-statistic	13.07512	Durbin-Watson stat		2.061147
Prob(F-statistic)	0.000000			
Fixed Regression Model				
D(MKTI)	-0.533997	0.489166	-1.091647	0.2788
D(EXTIF)	-0.030013	0.041759	-0.718701	0.4748
D(ECIF)	-0.005897	0.154356	-0.038206	0.9696
D(CORI)	-0.198235	0.138454	-1.431783	0.1567
C	15.14018	8.615792	1.757259	0.0833
ECM(-1)	-1.003673	0.112690	-8.906477	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.550237	Mean dependent var		-0.619524
Adjusted R-squared	0.458981	S.D. dependent var		10.43771
S.E. of regression	7.677349	Akaike info criterion		7.074858
Sum squared resid	4066.977	Schwarz criterion		7.508933
Log likelihood	-282.1441	Hannan-Quinn criter.		7.249353
F-statistic	6.029585	Durbin-Watson stat		2.021867
Prob(F-statistic)	0.000000			
Random Regression Model				
D(MKTI)	-0.380378	0.442508	-0.859597	0.3926
D(EXTIF)	-0.023166	0.031282	-0.740568	0.4612
D(ECIF)	0.037287	0.078381	0.475711	0.6356
D(CORI)	-0.222968	0.114003	-1.955813	0.0541
C	12.45990	7.576497	1.644546	0.1041
ECM(-1)	-0.839869	0.102062	-8.228994	0.0000
Effects Specification				
		S.D.		Rho
Cross-section random		0.000000		0.0000
Idiosyncratic random		7.677349		1.0000
Weighted Statistics				
R-squared	0.455974	Mean dependent var		-0.619524
Adjusted R-squared	0.421101	S.D. dependent var		10.43771

S.E. of regression	7.941571	Sum squared resid	4919.347
F-statistic	13.07512	Durbin-Watson stat	2.061147
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.455974	Mean dependent var	-0.619524
Sum squared resid	4919.347	Durbin-Watson stat	2.061147
Correlated Random Effects - Hausman Test			
	Chi-Sq.		
Test Summary	Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.807591	5	0.0253

Source: E-Views output

From the table the study validates the use of fixed effect model.

Analysis of Results

F-Test: The F-calculated value is 19.62061 from the fixed regression results while the P-value of F-statistic are 0.034491 at 5% level of significance, considering the P-value, the chosen level of significance $\alpha = 0.05$ [5%] is less than the P-value of F-statistic. It is concluded that the regression plane is statistically significant. This means that the joint influence of the explanatory variables on the dependent variable is statistically significant.

Coefficient of Multiple Determinations (R^2): The computed coefficient of multiple determinations of 0.439228 from the fixed effect shows that 43.9 percent of the total variations in the management control are accounted for, by the explanatory variables while the remainder is attributed to variable that is influenced by other factors not included in the regression model.

Durbin Watson statistics (DW): The computed DW is 2.021030 from the fixed results; show that at 5% level of significance with two explanatory variables and 100 observations. The value of computed DW is greater than the lower limit. Therefore, there is no evidence of positive first order serial correlation.

Regression Coefficient and T-Statistics: The t-statistics shows that information has negative effect on management control of the systematic important banks

Discussion of Findings

The computed coefficient of multiple determinations of 0.439228 from the fixed effect shows that 43.9 percent of the total variations in the management control are accounted for, by the explanatory variables while the remainder is attributed to variable that is influenced by other factors not included in the regression model. The t-statistics shows that incentives have negative effect on management control of the systematic important banks, the findings of the study is in line with the findings of Yu-Shu and Chu-Yang (2010) support to the tradeoff theory providing a basis for tax shields to continuously knock off debt financing costs until a point where increasing agency costs and distress/bankruptcy costs begin to emerge and grow to cover the shields. So in their view both the trade off and agency theories pose limitations to the application of tax and other non-debt shields, Toby (2010) used Earnings per Share (EPS), Dividends per Share (DPS), Asset growth, turnover, net profit and shareholders fund as proxies for Corporate Performance to study the effect

financial, operating and even combined leverage could have on them. But the results show that only turnover and profitability have statistically significant inverse correlation with leverage, the findings of Lawal (2014) that Nigerian banks can effectively utilize debt. These studies bring out the reality of the imperfections inherent in the real world which are information asymmetries, bankruptcy cost, agency cost and the gains derivable from leverage induced by tax reliefs, Trinh and Nguyen (2020) that privatized enterprises have experienced significant changes in standard deviations of firm performance measures after privatization in Vietnam. Given significant improvements in the profitability of post-privatized enterprises with tax incentives, the authors propose some managerial implications for the Vietnamese government, investors and non-privatized state-owned enterprises (SOEs), Phan (2021) that there is a significant and positive relationship between managerial ability and firm leverage. This finding indicates that managerial ability significantly plays an important role in making financial decisions.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study examined the effect of information on management control of economically important banks. The computed coefficient of multiple determinations of 0.439228 from the fixed effect shows that 43.9 percent of the total variations in the management control are accounted for, by the explanatory variables while the remainder is attributed to variable that is influenced by other factors not included in the regression model. Regression coefficient and t-statistics shows that information has negative effect on management control of the systematic important banks. From the findings, the study concludes that market information has no significant effect on management control of economically important commercial banks in Nigeria that Market information has no significant effect on government control of economically important commercial banks in Nigeria and that Market information has no significant effect on concentrated control of economically important commercial banks in Nigeria.

Recommendations

From the conclusions above, the study makes the following recommendations:

1. Economic information should be integrated to efficient market information and the study recommends that the stock market regulators should devise strategic means of managing information asymmetries that characterized Nigeria financial market.
2. There should be policies to compel the industries to ensure information about the industries are well managed, properly disclosed to investors in the financial market to ensure efficient management control.
3. The financial information objective should be integrated with the objective of efficient management control to attract investors and with management objectives to enhance operational efficiency in management control in Nigeria.
4. There should be guided regulation among firms quoted on the floor of Nigeria stock exchange that will increase the operational efficiency of that market and achieve effective management control

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