Comparative Comparison of Selected Bank and Non-Bank Listed Companies on the Nigerian Stock Exchange Based on Book Values, Earnings Per Share, and Share Prices

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Abstract— This study looked at how the share prices, book value, and earnings per share of a few selected bank and non-bank stocks traded on the Nigeria Stock Exchange related to one another. For stocks quoted in the banking and non-banking subsectors, this relationship is contrasted. The period from 2008 to 2017 was used to sample seven banks and six non-bank enterprises listed on the Nigerian Stock Exchange. The R2 of 0.46 for the non-bank and 0.57 for the banking subsectors, respectively, show that accounting information is more valuable relevant in the non-bank subsector than in the banking subsector when using the Ohlson Model. While earnings per share and market price per share are favourably correlated in the non-bank subsector, they are inversely correlated in the bank subsector. However, in the non-bank sub sector, the book value per share has a positive correlation with the market price per share and a negative correlation with it. The findings show that the majority of businesses, both banking and non-banking, recognise the contribution that accounting makes to the development and dissemination of wealth. To enhance the standard of financial reporting in Nigeria, regulatory bodies like the Securities and Exchange Commission must continuously monitor the creation and presentation of financial statements and update legislation.

Keywords— Ohlson Model, accounting data, Nigerian Stock Exchange, Share prices and earnings per share.

I. INTRODUCTION

Accounting software generates data that helps users make wise decisions. The publicly available financial statements are all-purpose statements that provide quantitative data regarding the company's profitability and its position with regard to equity, liabilities, and assets. Various stakeholders, including shareholders, management, loan providers, creditors, financial experts, and the government, are served by these reports. The reports, however, are primarily created for use by shareholders. Managers can play and demonstrate their custodial function with the aid of financial reporting. These financial reports are necessary for both current and potential shareholders to decide whether to purchase, hold, or sell their shares. When the stock market is functioning well, share prices reflect information revealed by financial statements of mentioned companies. Value relevance is a term used to describe the connection between share prices, book value, and earnings per share. A body of accounting study called "value relevance of accounting information" aims to determine the relationship between accounting data and stock prices (Lo and Lys, 2000).

Accounting information is linked to stock returns, according to research from the established stock markets by Ball and Brown (1968) and Ohlson (1995). However, research has been done to determine the applicability of accounting information in non-US markets (Lui and Liu, 2007; Haw, Qi & Wu, 2009; Chen, Chen, & Su, 2001 and Samia & Zhou, 2004). The importance of accounting data in emerging markets has been studied by Aharony, Lee, and Wang (2000). According to Rask, R., Chu, and Gottschang (2018) and Fox (2018), shoddy accounting, crony capitalism, and inadequate regulation increase the likelihood of noisy accounting information in developing economies.

Furthermore, Luo, Zhu, and Li (2009) noted that various laws and lagging are two additional issues that limit the usefulness of accounting information in developing stock markets. An emerging stock market is one that is still in its early stages of development but has the potential to grow and become more effective. One may describe the Nigerian Stock Market as emerging.

In this study, we evaluated samples of banks and non-bank enterprises listed on the Nigerian Stock Exchange in terms of the value relevance of accounting information. More precisely, this study employs samples from both bank and non-bank quoted companies to test whether there is any correlation between accounting data and market value of shares quoted on the Nigerian stock exchange using the Feltham-Ohlson Framework (1995) as used by Collins, Maydew, and Weiss (2017). Regression of stock price on accounting variables is a common method used in studies to assess the value relevance of accounting numbers (Feltham & Ohlson, 1995 and Ball & Brown, 1968).

To ascertain if accounting information is helpful for investment decisions, market efficiency (testing the information content of earnings) has been emphasised throughout the nearly four decades of capital market-based accounting research. According to the International Accounting Standards Committee (IASC), the main objective of accounting is to satisfy the demands of the capital market. Determining the value relevance of accounting information in the Nigerian stock market is the goal of this study. We specifically want to respond

to the following queries: (A) Does the value relevance depend more on book values or earnings? (B) Is accounting data more applicable in the banking industry compared to the non-bank sector?

Using published financial statements as a starting point, one can assess financial performance and then use that information to decide whether to purchase, hold, or sell shares. Particularly, stated earnings and equity movements of organisations have demonstrated value that is essential to shareholders for investment decisions (See Bao & Chow, 2017 and Hu, 2002).

Prior research on value relevance had, according to Alford, Leftwish, and Zmijewski (2008), focused exclusively on US markets. Due to the availability of research techniques from US studies and the growing emphasis on the importance of accounting information in global markets, notwithstanding its drawbacks, the literature has lately expanded to include non-US markets.

To establish the value relevance of accounting information, this study uses the Feltham-Ohlson Framework, (1995), to ascertain the link between accounting data and market value. Furthermore, utilising both bank and non-bank enterprises listed on the stock exchange, a comparison is conducted between these partnerships.

The development and improvement of the economy depend on investment choices. The quality of the information that investors have access to determines these judgments. If those who are responsible for making investment decisions are poorly informed, incorrectly informed, or uninformed, they will inevitably make choices that equate to the inefficient use of limited economic resources. This would consequently have an impact on the development of the economy.

We could assess how much financial information is required by those who utilise accounting information by looking into the value relevance of accounting information in the Nigerian stock market. If stocks are not valued correctly, resources will be improperly allocated. The report would also provide any basis for strengthening Nigerian accounting regulations. To set rules and regulations that would increase the value of financial statements, those who create accounting regulations would need to determine whether accounting information is value relevant. By contrasting the value relevance of listed banks and non-bank enterprises, the study adds to the body of knowledge on value relevance. This will strengthen the case for sector-based regulation of listed corporations.

The following hypothesis are made to guide this study:
1. H0: Earnings have no bearing on the Nigerian stock market.
2. H0: The Nigerian capital market does not take book values into account.
3. H0: The bank sector of the Nigerian stock exchange values accounting information more than the non-bank sector.

The rest of this paper is set up in advance as follows: A survey of related research' literature is included in section two. In Section 3, the research technique is presented. The empirical conclusions are covered in section four. Section five concludes with a summary of the findings, conclusions, and suggestions.

II. LITERATURE REVIEW

Earnings and book values have been demonstrated to be significant elements in accounting literature dating back to Ball and Brown (1968) and as recently as Ohlson's study in 1995. Collins et al (2017) 's research revealed that over the past 40 years, the joint value relevance of profits and book values has somewhat increased while the outcomes have remained objectively unchanged. Equity value, according to Burgstahler and Dichev (2007), is a convex function of both earnings and book value.

The equity book value and net income were established and examined as a function of financial fitness by Barth, Bearer, and Landsman (2018) using a sample of 396 bankrupt companies. They discovered that the incremental power of the equity book value (net profit) increases (decreases) financial fitness. Data acquired from quotes on the New York Stock Exchange was used by these academics. However, a number of researchers, including Aharony et al. (2000) and Haw et al. (2009), have questioned the usefulness of accounting information in developing markets. They argued that there is an outright lack of regulation, inadequate regulation, regulation that is motivated by corruption, and ineffective enforcement of legislation in emerging countries. In China, Liu and Liu (2007) investigated the value relevance of accounting information. They found that the A-, B-, and H-share markets all value accounting information.

Hossian and Marks (2005) and other scholars have looked at the value relevance of various types of accounting information, including book value and earnings. Hossain (2008) examined the value relevance of U.S. multinational businesses' quarterly overseas sales data following the adoption of SFAS 131, the Statement of Financial accounting standard. The study shows that after the firms adopt Statement of Financial Accounting Standard (SFAS) 131, the value relevance of quarterly international sales data increases for all sampled firms. Kallapur and Kwan (2004) also investigated the stock price response to the declaration of brand capitalization as well as the value relevance and consistency of brand assets as reported by 33 UK companies.

The value relevance of non-financial statement information and financial statement data was investigated by Hand (2005) within and across the pre-IPO venture capital and post-IPO public stock markets. In order to evaluate a model that addresses the incremental value relevance of segment data beyond firm level accounting data, Chen and Zhang (2003) conducted a study. Accounting information is discovered to be value relevant in each of these circumstances.

Anandarajan et al (2005) argued that the United States and other developed countries researches found out that both earnings and book value are important predictors of equity valuation. However, this is not same in Turkey because earnings content information itself but it appears to be declining in importance over time. They emphasized that they are strong relationship between the book value adjusted for inflation and equity values. In an economy with high inflation coupled with risk environment will make the future value of earnings uncertain and emphasized investors focus more on book values compared to less attention on earnings.

There are conflicting explanations for how book value functions. While some studies (Barth and Kallapur 1996) believe it is only significant as a scale difference control, others believe it is significant as a proxy for normal wages (Ohlson 1995). Others concluded that it only matters when valuing loss-making and generally failing businesses (Berger, Ofek and Swary 1997; Burgstahler and Dichev 1997). The study's additional contribution is that it demonstrates the significance of book value as a value proxy for businesses functioning in conditions with high inflation. Additionally, according to Anandarajan et al (2005) paper, earnings and inflation-adjusted book values account for almost 75% of the volatility in equity prices.

Generally speaking, a lot of the research conducted over the past thirty years has looked at the relationship between particular variables and equity prices. In a landmark study, Ball and Brown (1968) discovered a favourable and statistically significant correlation between earnings and stock value. Similar conclusions were made by Beaver, Clark, and Wright (1979), who supported the earlier findings of Ball and Brown (1968). Later research (Barth et al. 1992; Collins and Kothari 1989) also came to similar conclusions. According to Lipe (1990), the persistence of earnings affects the link between earnings and equity value. By breaking down profits into components and experimentally examining the relationship between these components and stock values, subsequent studies improved the earlier results (Lipe 1986; Wilson 1986).

The metrics of assets and liabilities on the balance sheet are the subject of many studies. According to these researches, there is a statistically significant correlation between a company's book values and equity value (Penman 1992; Barth and Kallapur 1996; Ohlson 1995; Berger, Ofek and Swary 1996; Burgstahler and Dichev 1997). These studies make the assumption that measures of assets and liabilities reflect the anticipated outcomes of future operations by using the book values of the firm's assets and liabilities. The research reaches various results about the significance of book value, nevertheless. Book value, according to Barth and Kallapur (1996), is only significant because it serves as a check on scale discrepancies.

According to Penman (1992) and Ohlson (1995), book value is significant because it serves as a stand-in for earnings. Others still provide a conflicting interpretation. When a company is struggling and losing money, book value has a considerably stronger correlation with stock prices, according to Berger et al. (1996) and Burgstahler and Dichev (1997). They contend that this is because book value substitutes for the "abandonment option" in this situation.

Some studies look at the connection between stock values and a combination of earnings and book values. Several valuation models were empirically evaluated by Bernard (1995). He discovered that book value per share, rank of return on equity, and estimated earnings all contributed to the explanation of 68 percent of the variation in equity prices. Book value per share, rank of return on equity, and book value per share all contributed to the explanation of 55 percent of the cross-sectional variability in price per share.

According to his concept, a company's value is a linearly additive function of its book value and earnings. Despite the fact that present dividends are more predictive than future earnings, he came to the conclusion that current earnings might be more closely related to stock values. The theoretical groundwork for more empirical investigations was laid by Ohlson (1995).

In a development of Ohlson (1995), Burgstahler & Dichev (1997) demonstrated that earnings and book values are considerably and positively correlated with equity values. However, they discovered that, contrary to Ohlson's prediction, the relationship was non-linear (i.e., affected by factors like a firm's success) and not additive (1995).

They specifically created two hypotheses for the correlation between market value and the recursion (proxied by earnings) and adaptation value (proxied by book value of equity) components:

For a given adaption value, (1) market value is an increasing, convex function of expected profits; (2) market value is an increasing, convex function of expected earnings.

As was already indicated, Burgstahler & Dichev (1997) discovered that the degree of the correlation between stock values and earnings and book value depended on the firm's level of success. Earnings are a more significant predictor of stock value when a company is "successful," but book value is a more significant determinant of equity value when a company is less successful. Collins, Pincus, and Xie (1999) have further supported this conclusion. Collins et al. (1999) came to the specific conclusion that book value is a crucial factor in determining the price of 10 stocks, particularly for businesses that are losing money.

Book value serves as a stand-in for what they referred to as the "abandonment option" for businesses that have a high likelihood of going out of business due to their financial losses.

By stating that book value is also significant for businesses functioning in high inflation contexts, this research contributes to the body of literature.

The effects of book value per share, profits per share, dividends per share, dividend yield, and price-earnings ratio on the company's stock price listed on the NSE 100 were examined by Malhotra and Tandon in 2013. The results of the study for the years 2007 to 2012 showed that while dividend yield has a substantial inverse link with market stock prices, BPS, EPS, and P/E ratio have a significant positive relationship with stock prices.

The market prices (MPS), EPS, and DPS of the stock market of three sectors were examined by Glezakos et al. in 2014. The research findings showed that there was a statistically significant positive association between EPS and stock market prices in three of India's sectors: the primary sector, manufacturing, and services.

Arslan and Zaman (2016) studied at how EPS and BPS affected stock price. Regression analysis was employed in 19 banks from 2008 to 2012 for this investigation. The results indicated that EPS and DPS had a significant impact on MPS. BPS has a detrimental effect on market stock prices as well as earnings per share. EPS is more significant than book value.

In their 2015 study, Kheradyar and Ibrahim looked at how EPS affected the prices of banking stocks traded on the Indonesia Stock Exchange between 2010 and 2014. According to this study's findings, EPS affected stock prices. EPS influences the stock price positively and significantly, but only in part.

Pradhan (2017) looked into NEPSE's stock market activity on the impact of dividend bubbles on Nepalese commercial banks' stock prices. Depending on the dividend per share and the earnings per share, the market price per share may change. According to the study, larger stocks have a higher price-earnings ratio, a higher book-to-market ratio, less liquidity, weaker profitability, and a smaller dividend.

From 2008 to 2014, Jordanian banks' stock values were studied by Warrad (2017). To test its hypotheses, the study used correlation and multi-regression techniques. Earnings per share (EPS), dividends per share (DPS), book value per share (BPS), price-to-earnings ratio (P/E ratio), and market stock price are the study's independent variables. The findings demonstrated that market pricing measures had a considerable impact on bank stock prices. While EPS and P/E ratio did not have a major impact on stock price, dividends (DPS), the book value of the share, and dividend yield did.

Analysis of the effects of EPS, DPS, BPS, and P/E ratio on the stock price of manufacturing companies listed on the NEPSE from 2072 to 2076 is the primary goal of Neupane (2020) study. The statistics of four manufacturing companies listed on NEPSE have been examined in this study. The effects of EPS, DPS, BPS, and P/E ratio on MPS were studied using the descriptive and causal-comparative research methodologies. Because the EPS and P/E ratios are insignificant and the DPS and BPS have a negative impact on the market's stock price, they are unable to forecast it. According to the analysis of manufacturing companies listed on the NEPSE, UNI-Lever has the most valuable stock and SHIVM Cement has the highest level of risk.

III. Research Design and Model Specification

For this study, a comparative comparison of research designs has been used. We make use of information from businesses that are listed on the Nigeria Stock Exchange in both the banking and non-banking sectors. An exploratory research strategy is prioritised in comparative study research. By using this approach, the researcher may find and address problems as they emerge during the course of the study. The goal of the study is to learn as much as possible about one particular set of participants and how they differ from others. Thus, a comparative study focuses on in-depth data analysis based on a context that leads in a more insightful conclusion.

In order to accomplish the goals of this study, a sample of companies listed on the Nigerian Stock Exchange from 2008 to 2017 was chosen. As our purpose is experimental, our decision is arbitrary. The Corporate Affairs Commission (CAC) and Nigerian Stock Exchange (NSE) databases were used to get the information. The primary source of data for the study was the financial reports of the sampled companies. Six companies from the non-banking subsector and seven from the banking subsector were chosen. The value relevance literatures distinguish between two basic categories of valuation models. The correlations between stock price responses to novel information contained in earnings surprises during a constrained window of earnings announcements are described by a return model.

Research Variables

The purpose of this study was to examine the relevance of the variable consisting of the independent and dependent variables. The dependent variable is the stock price, while the independent variables are EPS and BPS.

Independent Variables

Earnings per share (EPS) is determined by dividing a company's earnings by the total number of outstanding shares.

The resultant figure is used to gauge a company's profitability. It is typical for businesses to publish EPS that has been adjusted for unusual expenses and possible share dilution. The more profitable a corporation is deemed to be, the greater its EPS. This explains how profitable the company is, which is reflected in the stock price.

A way to determine a company's per-share book value based on its common shareholders is called book value per share (BPS). The difference between a company's total assets and entire liabilities is known as book value.

Dependent Variable

The value of the company in which the stock is exchanged on the secondary market is known as the market price of stock (MPS). Every publicly traded company issues shares to the public, which are then sold on the secondary market. Demand for and supply of shares affect the stock price. The price of a stock will fluctuate due to a number of various variables, including as shifts in the overall economy, shifts in specific industries, political events, and environmental changes.

Model Specification

A model that expresses the worth of the firm as a function of the book value of shareholder ownership and its current level of earnings has been established based on the idea of Ohlson (1995). Market value and book value are used by Harris, Lang, and Moller (2004), Collins et al. (2017), King and Langli (1997), and other authors to assess the relevance of value. This research paper defines the study's model as follows:

$$MPS_{jt} = K_1 + K_2\,BVPS_{ij} + K_3 EPS_{jt} + E_{jt} \quad (1)$$

Where;
MPS_{jt} - Stock price as the year end and
$BVPS_{jt}$ - Book value per share for the period ended at time t.
EPS_{jt} - Earnings per share for the period ended at time i.
E_{jt} - Error term as time t.
K_1, K_2 and K_3 are coefficients

In order to assess for value relevance of book values and profits isolated as indicated by Collins et al. (2017), this research further decomposed the aforementioned model.

$$MPS_{jt} = a_1 + a_2\,BVPS_{jt} + E_{jt} \quad (2)$$
$$MPS_{jt} = b_1 + b_2\,EPS_{jt} + E_{jt} \quad (3)$$

Sample Selections

The Nigerian Economy is the largest on the Africa continent with the largest GDP and very thriving manufacturing sector. The Nigerian Banking system is divided into 3 tiers which are first, second and the third tiers banks. The first-tier banks are commercial deposit money banks with international authorization. The second-tier banks are commercial deposit money bank with National authorization and the third-tier banks regional banks in nature operating in specific regions in Nigeria. This paper focussed on the first-tiers banks in Nigeria. The names of the Banks are: First Bank of Nigeria (FBN), Union Bank, United Bank for Africa (UBA), Zenith Bank, ECOBANK, Guaranty Trust Bank (GTB) and First City Monument Bank (FCMB). The combination of the assets and transactions of the commercial banks represents over 80 % of the total bank wide assets and transactions.

This paper focussed on the period between 2008 to 2017 covering post bank consolidation exercise of 2006. During the period, Nigeria experienced well capitalized banking system with banks having over 25 billion, economy booms from the oil industry, high level of poverty, unemployment, and social violent from Boko Haram, recessions. This paper did not include pre-election period years 2018 -2019 and 2020 – 2021 which were periods of double recessions and Covid 19 pandemic.

The non-banking sectors in this research are companies that engage in production, manufacturing, pharmaceutical, construction, hospitality sectors. These companies covered the first-tier non-banking sectors and the overall important sectors of the Economy apart from Oil and gas and Agriculture.

IV. DATA PRESENTATION AND ANALYSIS

This section deals with the analysis and presentation of estimated results. The table below, which depicts the behaviour of the variables used in the study, introduces the descriptive statistics section.

TABLE 1A DESCRIPTIVES: Earnings per share for banks from 2008-2017 (See appendix 1)

The descriptive statistics of earnings per share (EPS) for the chosen banks from 2008 to 2017 are shown in Table 1A, which is a subset of Table 1B in Appendix 1. For the time frame of the study, FBN had the highest EPS (2.33), while ECOBANK had the lowest (0.12). UBA had the lowest average EPS of 0.2362 and GTB had the highest average EPS of 1.21 throughout the time period. Risk is gauged by the degree of return variability. The standard deviation captures this. For the duration of this study, the UBA share carries the most risk. About 1.54 is the standard deviation.

TABLE 2A DESCRIPTIVES: Book value per share for selected banks from 2008-2017 (See appendix 2)

The descriptive statistics for the seven companies in the banking subsector's book value per share for the years 2008 to 2017 are shown in Table 2. According to Table 2B in appendix 1, the information was taken from annual reports. In terms of book value per share (BVPS) for the time period examined, ZENITH leads the group. For the time period under consideration, ZENITH's maximum BVPS is 11.44. In a similar vein, GTB has the lowest BVPS of the firms analysed at 0.23. The company with the greatest mean BVPS, almost 9.15, is

ZENITH. Again, UBA has the largest standard deviation for the time period and among the companies examined, at about 2.07.

TABLE 3A DESCRIPTIVES: Share Prices for selected banks from 2008-2017 (See appendix 3)

The share prices of the sample banks are displayed in Table 3A. For the same for the time period under consideration, GTB had the highest share price of 18.90. Additionally, the company's 15.22 mean average share price set a record. The standard deviation for share price at ECOBANK is roughly 9.82, while FCMB recorded the lowest share price of 0.50.

TABLE 4A DESCRIPTIVES: Earning Per Share for Companies in non-banking subsector 2008-2017 (in Naira) (See appendix 4)

The EPS descriptive statistics for businesses in the non-banking sub sector are shown in Table 4A. Glaxosmithkline has the lowest EPS for the sample for the period at 0.63, while Unilever has the highest EPS for the sample for the period at 7.52. With a mean EPS of 4.11 and a standard deviation of 2.63, Unilever had the highest average EPS.

TABLE 5A DESCRIPTIVES: Book Values per share for non-banking Companies from 2008-2017 (in Naira) (See appendix 5)

Book values per share for the non-banking enterprises chosen for the study are displayed in Table 5A. Glaxosmithkline's book value per share is 20.13, whereas Berger Paints' is 1.74. The highest mean book value per share and highest standard deviation are both possessed by Glaxosmithkline.

TABLE 6A DESCRIPTIVES: Share Prices for non-banking Companies from 2008-2017 (in Naira) (See appendix 6)

The share prices of the companies chosen from the non-banking subsector are displayed in Table 6A. Cadbury had the highest price per share. 51.01 for each share. Capital Hotel had the lowest share price, 2.12, on record. Unilever recorded the greatest mean share price and standard deviation, which are 27.52 and 45.26, respectively.

Data Analysis and Discussions

The model given in Section 3 was used to examine the data described in the previous section. We examined the value significance of earning and book values in the Collins et al. (1997) and Ohlson (2017) model. Tables 7 and 8 present the findings using cross sectional and pooled time series data from the banking and non-banking subsectors.

TABLE 7: RESULTS OF REGRESSION FOR BANKS FROM 2007 TO 2018 (See Appendix 7)

Regression results for the banking industry are shown in Tables 7a and b. The initial outcome of the regression is displayed in Table 7a. After four iterations, as indicated in table 7b, the outcome is improved utilising the Cochrane Orcutt. EPS and MPS have a negative correlation in table 7b. Our previous expectation was not met by this. However, as expected, it is demonstrated that BVPS has a favourable and significant relationship with MPS. When EPS is 10%, it is not important. The R^2 of 57% suggests that EPS and BVPS account for 57% of systemic variance in MPS. R^2 was modified, and the final R^2 value was 51%. After modifying R^2, the model can account for 51% of the changes in MPS.

The whole model is significant, according to the F and R2 test's significance test. In this study's situation for the banking subsector, the hypothesis that the overall slope coefficient is not statistically different from zero is erroneous. The high standard error of estimate (SEE) score of 5.14 suggests that the fit is poor and, more critically, that the model's predictive power is not entirely accurate. The regression fit is deemed to be poor at 0.92 when the SEE to mean dependent variable (MDV) ratio is used. The absence of serial correlation is indicated by the DW-statistics of 2.00.

TABLE 8: RESULTS OF REGRESSION FOR NON-BANKING SUBSECTOR FROM 2008 TO 2017 (See Appendix 8)

The regression results for the non-banking subsector are displayed in Tables 8A and 8B. Table 8B displays the enhancement of the Cochrane Orcutt result from 8A after two repetitions. Book value per share (BVPS) and earnings per share (EPS) are functions that are used to represent share price (MPS) (EPS). Analysing the outcome reveals that the regression result suited the data fairly. The R2 value of 0.73 indicates that with two regressors and an intercept term, 73% of the systemic variation in share price is accounted for, leaving out 27%, which can be attributed to the stochastic error term. Looking at the goodness of fit statistics, it can be seen that both the R2 and adjusted R2 are able to account for about 73% and 68%, respectively, of the systemic variation in share prices in the non-banking subsector.

The model is highly significant at both the 5% and 10% levels of significance, according to an analysis of the significance of R2 using the F-test. Because the measured f-value of 13.67 is higher above the thresholds for significance at the 5% and 10% levels, this indicates that the independent variables (EPS and BVPS) and the dependent variable (share price) have a significant linear relationship. Thus, the non-banking subsector of this investigation validates the premise that the total slope coefficient is significantly different from zero.

According to a priori specification, EPS and MPS have a positive relationship. BVPS, however, deviated from our preconceived notions. However, applying the general principle, EPS passed the t-test on the parameter estimate at the 5% level of significance. As a result, the coefficient of EPS is statistically distinct from zero, whereas the coefficient of BVPS is not. The model's poor overall fit and, more significantly, its unreliable prediction performance are both indicated by the high value of SEE. An acceptable regression fit is shown by the SEE to MDV ratio of 0.80. There is no serial correlation in the model, as indicated by the DW - statistics value of 2.00.

V. A SUMMARY OF THE RESEARCH'S FINDINGS, ANALYSIS, AND ADVICE

This paper examined the value and applicability of accounting data on the Nigerian Stock Exchange. We assess the degree to which earnings and book values explained share prices using a sample of companies from the banking and non-banking subsectors that were listed on the floor of the stock exchange.

The model and data lead the paper to the following conclusions:

(a) In the banking industry, share prices are positively correlated with book value per share (BVPS) and negatively correlated with earnings per share (EPS). On the other side, MPS is favourably correlated with EPS and negatively correlated with BVPS for non-banking subsectors.

(b) In the banking industry, independent variables account for 57% of the systematic fluctuation in share price (BVPS and EPS). However, the independent variables account for around 73% of the systematic volatility in share price for the non-banking subsectors. In other words, based on our R2, we deduce that the value relevance of accounting information is higher in the non-banking sector than in the banking subsector.

(c) In both sectors, the dependent (MPS) and independent variables have a linear relationship (BVPS and EPS).

(d) When using R2, the non-banking subsector's R2 value of 0.73 demonstrates a strong linear positive association between share price and EPS and a modest negative relationship between MPS and BVPS. For the banking industry, an R2 of 0.57 indicates a weakly positive association between MPS and BVPS and a weakly negative relationship between MPS and EPS.

(e) While none of the independent variables are significant in the banking subsector, EPS is very significant in the non-banking subsector in affecting share price.

This paper draws the conclusion that accounting information is somewhat relevant to share price appraisal in light of the aforementioned. As previously said, audited financial statements are the best source of information currently accessible regarding the operation, development, and position of the company. The study demonstrated that businesses value accounting's contribution to wealth development and communication. This informational role makes it possible to conduct ongoing reviews to maintain investors' confidence in the accuracy of financial accounts.

Regulatory bodies like the Financial Reporting Council of Nigeria, Institute of Chartered Accountants of Nigeria, Nigerian Stock Exchange, and the Securities and Exchange Commission must constantly monitor the preparation and presentation of financial statements and update regulations to improve the quality of financial reporting in Nigeria in order to improve the value relevance accounting information in Nigeria.

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Appendices

Appendix 1

TABLE 1A DESCRIPTIVES: Earnings per share for banks from 2008-2017
VARIABLES= FBN UNION BANK UBA ZENITH ECOBANK GTB FCMB
/STATISTICS=MEAN STDDEV MIN MAX.

	N	Minimum	Maximum	Mean	Std. Deviation
FBN	10	.21	2.33	1.1482	.09724
UNION BANK	10	.33	1.43	.8114	.40334
UBA	10	.11	.60	.2362	1.5392
ZENITH	10	.76	1.19	.9860	.28025
ECOBANK	10	.12	1.36	1.1280	.89579
GTB	10	.16	2.20	1.2110	1.1046
FCMB	10	.11	1.79	.6310	.52303
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

Table 1B: Earnings per share (EPS) of banks (2008-2017) in naira

YEAR	FBN	UNION BANK	UBA	ZENITH	ECOBANK	GTB	FCMB
2008	2.33	0.42	0.11	0.76	0.69	1.71	1.16
2009	1.56	0.51	0.09	0.87	0.88	1.94	0.17
2010	0.98	0.71	0.07	1.03	1.36	2.20	0.13
2011	0.60	0.77	0.17	0.97	0.31	1.33	0.11
2012	0.53	0.33	0.56	0.59	0.12	1.62	0.36
2013	0.61	0.60	0.20	0.83	0.12	0.40	0.71
2014	0.74	1.54	0.34	0.87	1.10	0.40	1.79
2015	0.45	1.43	0.45	1.60	1.28	0.16	0.52
2016	0.26	0.96	0.56	1.15	0.40	0.16	0.62
2017	0.21	0.74	0.60	1.19	0.62	0.19	0.74

Source: Annual reports of banks

Appendix 2

TABLE 2A DESCRIPTIVES: Book value per share for selected banks from 2008-2017
VARIABLES=FBN UNION BANK UBA ZENITH ECOBANK GTB FCMB
/STATISTICS=MEAN STDDEV MIN MAX

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FBN	10	2.47	5.18	3.3760	.93926
UNION BANK	10	3.14	7.01	5.0930	1.48833
UBA	10	.58	5.48	2.3330	2.07414
ZENITH	10	7.06	11.44	9.1470	1.37049
ECOBANK	10	1.26	1.68	1.5300	.11614
GTB	10	.23	1.03	.6570	.19816
FCMB	10	1.29	3.42	2.4350	.84321
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

TABLE 2B: Book Value Per Share (Bvps) Of Selected Companies In The Banking Subsector 2008-2017
(IN NAIRA).

YEAR	FBN	UNION BANK	UBA	ZENITH	ECOBANK	GTB	FCMB
2008	2.68	3.14	0.79	7.06	1.26	0.54	1.93
2009	3.92	3.17	0.58	7.49	1.54	0.61	2.21
2010	4.17	3.52	0.67	8.21	1.63	0.66	3.42
2011	3.62	4.16	0.71	8.89	1.48	0.71	3.11
2012	4.01	5.72	0.94	9.75	1.52	0.74	3.12
2013	5.18	5.16	1.24	9.29	1.57	0.63	2.88
2014	2.48	6.53	2.86	9.88	1.68	0.23	3.39
2015	2.49	5.93	5.01	8.73	1.47	0.71	1.38
2016	2.47	6.59	5.05	10.73	1.53	0.71	1.29
2017	2.74	7.01	5.48	11.44	1.62	1.03	1.62

Source: Annual reports of banks

Appendix 3
TABLE 3A DESCRIPTIVES: Share Prices for banks from 2008 to 2017
VARIABLES=FBN UNION BANK UBA ZENITH ECOBANK GTB FCMB
/STATISTICS=MEAN STDDEV MIN MAX

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FBN	10	4.51	5.70	4.3020	.59790
UNION BANK	10	2.91	6.45	5.8160	1.00072
UBA	10	3.10	5.70	4.5280	1.97071
ZENITH	10	7.87	18.50	11.6500	2.27668
ECOBANK	10	5.21	9.00	7.4180	9.81564
GTB	10	12.00	18.90	15.2260	.38976
FCMB	10	0.50	1.60	1.8150	7.01440
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

TABLE 3B: Share Prices Of Selected Banks (2008-2017) (IN NAIRA)

YEAR	FBN	UNION BANK	UBA	ZENITH	ECOBANK	GTB	FCMB
2008	4.51	3.17	3.89	7.87	5.21	17.36	0.59
2009	4.83	2.91	4.72	8.81	7.44	12.40	0.62
2010	5.22	3.48	3.10	9.44	6.33	12.16	0.78
2011	4.52	3.70	5.62	10.21	8.00	15.04	0.83
2012	4.72	4.96	6.80	10.47	7.80	12.00	0.68
2013	4.19	2.74	5.72	10.32	7.75	13.44	0.76
2014	4.18	3.76	6.61	11.24	9.30	19.60	1.57

2015	5.91	4.98	4.29	16.48	9.70	14.24	2.76
2016	5.65	5.47	5.67	14.48	8.98	17.20	1.76
2017	5.70	6.45	5.70	18.50	9.00	18.80	1.60

Source: Nigeria Stock Exchange fact book

Appendix 4

TABLE 4A DESCRIPTIVES: Earning Per Share for Companies in non-banking subsector 2008-2017 (in Naira)

VARIABLES=BERGER PAINTS CAPITAL HOTELS UNILEVER GLAXOSMITHKLINE CADBURY UACN /STATISTICS=MEAN STDDEV MIN MAX

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BERGER	10	3.16	6.37	3.5840	1.16744
CAPITAL HOTELS	10	2.04	3.82	2.6890	.69955
UNILEVER	10	1.32	7.52	4.1150	2.63082
GLAXOSMITHKLINE	10	.63	4.77	2.3690	1.62302
CADBURY	10	1.13	3.88	2.1890	.99966
UACN	10	1.19	2.59	1.7780	.45252
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

TABLE 4B: Earning Per Share (EPS) Of Selected Non-Banking Companies
(2008-2017) (IN NAIRA)

YEAR	Berger paints	Capial Hotels	Uni-lever	Glaxo- smithkline	Cadbury	UACN
2008	4.28	2.04	1.32	1.71	1.13	1.87
2009	4.97	2.93	1.44	1.43	1.68	2.59
2010	4.23	2.12	1.68	1.31	1.34	2.24
2011	4.16	3.23	1.90	1.17	1.41	2.14
2012	5.79	3.10	2.96	0.63	1.34	1.28
2013	5.45	3.10	3.80	0.83	2.04	1.61
2014	5.63	3.72	5.98	3.06	2.49	1.90
2015	5.53	3.82	7.52	4.27	3.00	1.57
2016	6.11	3.35	7.20	4.51	3.58	1.19
2017	6.37	3.25	7.35	4.77	3.88	1.39

Source: Annual reports

Appendix 5

TABLE 5A DESCRIPTIVES: Book Values per share for non-banking Companies from 2008-2017 (in Naira)

VARIABLES= BERGER PAINTS CAPITAL HOTELS UNILEVER GLAXOSMITHKLINE CADBURY UACN
/STATISTICS=MEAN STDDEV MIN MAX

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BERGER PAINTS	10	1.74	9.68	4.6380	2.56714
CAPITAL HOTELS	10	4.72	9.35	7.0160	1.38902
UNILEVER	10	2.03	3.53	2.8330	.56085
GLAXOSMITHKLINE	10	8.33	20.13	13.2330	3.68552
CADBURY	10	2.91	12.41	6.0890	3.44376
UACN	10	5.45	10.13	7.6650	1.42717
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

TABLE 5B: Book Values Per Share (BVPS) For Non-Banking Companies (2008-2017) (IN NAIRA)

YEAR	Berger paints	Capial Hotels	Unilever	Glaxo-smith kline	Cadbury	UACN
2008	1.74	4.72	2.03	8.33	2.91	5.45
2009	2.38	5.31	2.16	9.79	3.03	6.93
2010	2.88	6.56	2.31	10.62	3.64	7.47
2011	3.52	6.14	2.55	11.88	4.15	8.91
2012	4.14	7.74	2.75	12.74	4.72	9.12
2013	3.75	7.94	3.05	12.78	4.92	10.13
2014	3.82	7.28	3.52	12.53	5.00	7.95
2015	6.58	9.35	3.53	15.31	9.14	6.44
2016	7.89	6.96	3.02	18.22	10.97	6.44
2017	9.68	8.16	3.41	20.13	12.41	7.81

Source: Annual reports

Appendix 6

TABLE 6A DESCRIPTIVES: Share Prices for non-banking Companies from 2008-2017 (in Naira)

VARIABLES= BERGER PAINTS CAPITAL HOTELS UNILEVER GLAXOSMITHKLINE CADBURY UACN
/STATISTICS=MEAN STDDEV MIN MAX

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BERGER PAINTS	10	4.62	6.30	5.9110	7.53702
CAPITAL HOTELS	10	2.12	3.25	2.5910	5.37190

100

UNILEVER	10	24.01	32.00	27.5220	45.26237
GLAXOSMITHKLINE	10	7.10	8.00	7.2830	4.86123
CADBURY	10	6.24	51.01	34.8810	17.95473
UACN	10	4.02	5.95	9.6040	6.50954
Valid N (listwise)	10				

(SOURCE: Author's computation, 2022)

TABLE 6B: Share Prices Of Non-Banking Companies (2008-2017) IN NAIRA

YEAR	Berger paints	Capial Hotels	Unilever	GLAXOSM-ITHKLINE	Cadbury	UACN
2008	4.62	2.21	24.01	7.45	6.24	4.68
2009	4.67	2.51	27.22	7.10	8.51	4.23
2010	4.75	2.42	28.84	7.25	7.34	4.02
2011	5.20	2.50	30.90	7.80	9.50	5.02
2012	5.45	2.91	30.42	8.40	51.00	5.19
2013	5.21	2.91	30.79	8.00	16.00	5.85
2014	5.66	3.00	30.72	7.36	26.16	5.12
2015	6.00	3.00	32.00	7.99	32.99	5.10
2016	6.24	3.24	32.32	8.00	40.06	5.81
2017	6.30	3.25	32.00	8.00	51.01	5.95

Source: Annual reports

Appendix 7

TABLE 7: Results of Regression for Banks From 2008-2017 (in Naira)

(A)

Ordinary Least Squares Estimation
Dependent variable is MPS

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
A	4.79997	1.2352	3.9093[.000]
EPS	.99740	.78392	1.2682[.209]
BVPS	.023460	.25756	.09062[.928]

R-Squared   0.024280 R-Bar-Squared   -0.0048456
S.E. of Regression   6.1079 F-stat. F(2, 67)   .83363[.439]
Mean of Dependent Variable 5.5364 S.D. of Dependent Variable   6.0932
Residual Sum of Squares   2499.6 Equation Log-likelihood   -224.4638
Akaike Info. Criterion   -227.4638 Schwarz Bayesian Criterion -230.8365
DW-statistic   0.89471

Diagnostic Tests

Test Statistics   LM Version   F Version

A:Serial Correlation CHSQ(1)= 20.8275[.000] F(1, 66)= 27.9550[.000]
B:Functional Form CHSQ(1)= 1.0580[.304] F(1, 66)= 1.0129[.318]
C:Normality   CHSQ(2)= 383.9765[.000]   Not applicable
D:Heteroscedasticity CHSQ(1)= .45831[.498] F(1, 68)= .44815[.505]

 A:Lagrange multiplier test of residual serial correlation
 B:Ramsey's RESET test using the square of the fitted values
 C:Based on a test of skewness and kurtosis of residuals
 D:Based on the regression of squared residuals on squared fitted values

(B) Cochrane-Orcutt Method AR(4) converged after 3 iterations

Dependent variable is MPS

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
A	5.8219	2.3201	2.5094[.015]
EPS	-.31160	.76912	-.40514[.687]
BVPS	.21676	.36939	2.5868[.039]

R-Squared   0.57072 R-Bar-Squared   0.50673
S.E. of Regression   5.1375 F-stat. F(6, 59) 5.7930[.000]
Mean of Dependent Variable 5.5364 S.D. of Dependent Variable   6.0932
Residual Sum of Squares   1557.2 Equation Log-likelihood   -197.9634
Akaike Info. Criterion   -204.9634 Schwarz Bayesian Criterion -212.8331
                  DW-statistic   2.0197

Parameters of the Autoregressive Error Specification
U=   .54163*U(-1)+   .21183*U(-2)+   -.26078*U(-3)+   .17194*U(-4)+E
 (4.1859)[.000] (1.4724)[.146] (-1.6803)[.098] (1.1595)[.251]
 T-ratio(s) based on asymptotic standard errors in brackets

(SOURCE: Author's computation, 2022)

Appendix 8
TABLE 8: Results of Regression for Non-Banking Subsector From 2008 to 2017

(A) Ordinary Least Squares Estimation

Dependent variable is MPS

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
A	1.6585	4.6027	.36033[.720]
EPS	11.1004	1.2243	9.0670[.000]
BVPS	-.92157	.51028	-1.8060[.076]

R-Squared	.59149	R-Bar-Squared	.57716
S.E. of Regression	15.6366	F-stat. F(2, 57)	41.2662[.000]
Mean of Dependent Variable	19.7535	S.D. of Dependent Variable	24.0466
Residual Sum of Squares	13936.6	Equation Log-likelihood	-248.5742
Akaike Info. Criterion	-251.5742	Schwarz Bayesian Criterion	-254.7158
DW-statistic	1.3558		

Diagnostic Tests		
Test Statistics	LM Version	F Version
A:Serial Correlation	CHSQ(1)= 6.5428[.011]	F(1, 56)= 6.8540[.011]
B:Functional Form	CHSQ(1)= 16.8130[.000]	F(1, 56)= 21.8012[.000]
C:Normality	CHSQ(2)= 114.6745[.000]	Not applicable
D:Heteroscedasticity	CHSQ(1)= 19.7723[.000]	F(1, 58)= 28.5075[.000]

A:Lagrange multiplier test of residual serial correlation
B:Ramsey's RESET test using the square of the fitted values
C:Based on a test of skewness and kurtosis of residuals
D:Based on the regression of squared residuals on squared fitted values

(B) Cochrane-Orcutt Method AR(4) converged after 2 iterations

Dependent variable is MPS

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
A	4.1375	6.7008	.61746[.539]
EPS	11.1858	1.7033	6.5671[.000]
BVPS	-1.2455	.76345	-1.6314[.108]

R-Squared	.72609	R-Bar-Squared	.68030
S.E. of Regression	15.8198	F-stat. F(6, 49)	13.6743[.000]
Mean of Dependent Variable	19.7535	S.D. of Dependent Variable	24.0466
Residual Sum of Squares	12263.1	Equation Log-likelihood	-230.3524
Akaike Info. Criterion	-237.3524	Schwarz Bayesian Criterion	-244.6826
DW-statistic	1.9997		

Parameters of the Autoregressive Error Specification
U= .34426*U(-1)+ -.033160*U(-2)+ -.053958*U(-3)+ .0037998*U(-4)+E
(2.3185)[.024] (-.21423)[.831] (-.34747)[.730] (.025595)[.980]
T-ratio(s) based on asymptotic standard errors in brackets

(SOURCE: Author's computation, 2022)