

DECISION-USEFULNESS OF NON-FINANCIAL INFORMATION OF QUOTED FIRMS IN NIGERIA

^{†*} ABOGUN Segun (Ph.D.)

[†] SALAM Mudathir O. (Ph.D.)

[†] DAUD Abdulrafiu

[†] FAKILE Oluwaseye, G.

[†] Department of Accounting, University of Ilorin, Nigeria

*Corresponding Author, Email: segunstc@yahoo.com

ABSTRACT

One of the major problems encountered by investors in Developing economies is inadequate reliable and relevant information for their investment decisions despite the audited annual financial statements of firms; hence the continuous search for information from other sources. This study examined the usefulness of non-financial information for investors' decision among quoted firms in Nigeria. The explanatory research design was employed because this study examined the changes in investors' decision due to changes in the non-financial information and other explanatory variables. The panel regression model was estimated by the fixed effect (within estimator) technique. The study found that non-financial information is statistically significant in explaining investors' decision with a coefficient of 1.76 and a p-value of 0.000. The study concludes that non-financial information is decision-useful. It is therefore recommended that more efforts be made by officials of quoted firms in Nigeria towards disclosing more non-financial information, particularly information about future growth opportunities of firms; because the study revealed that they are relevant information for investment decision.

Keywords: Decision-usefulness, Non-financial information, Relevant, Reliable, Share price

INTRODUCTION

Investment decisions by both individual and institutional investors are based on relevant and reliable information; otherwise investors would make uninformed decision (Abubakar & Abubakar, 2015). Historically, the purpose of financial report was limited to providing report of stewardship of the management. During the industrial revolution in the developed world, capital became grossly inadequate for firms to operate with; hence firms obtained loan as additional source of capital. At that time, the financial report was capable of providing information needed for both stewardship and contract settlement since the business environment was seemingly stable. However, due to business complexity as it is today, there is continuous demand for relevant and reliable information by capital providers beyond the information provided in the financial statements of firms. Literature reveals that there is wide gap between the information required by investors and the information provided in the financial statements, especially in developing economies ("Nigeria: Risk Assessment," 2017; "Emerging Markets," 2017). This wide gap constitutes a serious problem to both investors and the accounting profession. If the information required by investors is not adequately provided for in the financial statements, then there is a serious threat to the relevance of accounting information systems.

The twin concepts of relevance and faithful representation are emphasized differently depending on the purpose for which the information is required. For the purposes of stewardship and contract settlement, it is documented that financial statements provide useful information (Foster, 1986; Watts & Zimmerman, 1986; Dumontier & Raffournier, 2002; Francis, Lafond, Olsson, & Schipper, 2004;

Gjerde, Knivsfla & Sættem 2011; Ruch & Taylor, 2015; Schöndube-Pirchegger & Schöndube, 2017). However, for the purpose of investment decisions, there is persistent contention over the decision-usefulness of financial statements of firms. The financial statements have been reported to have failed in providing useful information for investment decision (Barth, Landsman, Raval & Wang, 2014; Lev & Zarowin, 1999). The American Institute of Certified Public Accountants [AICPA] 1994's report states that the information needs of users (particularly investors) are not being met by the financial statements information. One of the results of Francis & Schipper (1999) confirmed that the relevance of earnings information declines over the period covered. Lev & Zarowin (1999) also documented that for over twenty (20) years the usefulness of accounting numbers e.g. earnings, cash flow, and equity book value decreases (Mlonzi, Kruger & Nthoesane, 2011; Barth, Landsman, Raval & Wang, 2013; Baffa, Mohammed & Abdulkadir, 2014; Felix & Rebecca, 2015). Ball and Shivakumar (2008) reported that earnings announcement only provides modest additional information to the information already incorporated into security prices (Ball & Brown, 1968; Beaver, 1968). This is why this study examines the impact of non-financial statements information on investors' decision.

Past studies such as Bismark and Kingsley (2018); Camodeca, Almici, and Brivio (2014); Olugbenga and Atanda (2014); Pervan and Bartulovic (2014); Elshandidy (2014); Perera and Thrikawala (2010) have focused all attention on the decision-usefulness of financial statements information with little or no attention on the decision-usefulness of non-financial information. Meanwhile, some of the information that better portrays firms' financial efficiency and financial position, and firms' growth potential are non-financial in nature (Collins, Kothari, Shanken, & Sloan, 1994). Non-financial information as contained in the annual audited reports of publicly owned firms include all other information other than the accounts and the notes. These are qualitative information contained in annual reports of firms other than the information in the financial statements. These information include: firm profile, operating environments (political, economic, and industrial), and performance review, auditors' report, and governance report amongst others.

Since this study is concerned with the decision-usefulness of non-financial information as it affects equity investors' decision, only the quoted firms were considered covering the period 20 years (1996 to 2015). In order to address the problem identified in this study, the valuation theory and quantitative methodological approach were applied. The valuation theory establishes a causal relationship between share price and accounting numbers which includes earnings, book value of equity, dividend and others.

LITERATURE REVIEW

Decisions-Usefulness

Decision involves making a choice among many alternatives to achieve a desired outcome. Organization usually makes decisions about the various aspects of its operations so as to enhance the value of owners' investments and the economy as a whole. Similarly, investors are equally left with making an investment choice among many investment opportunities.

Decision-useful information is defined as that which is capable of influencing the actions of investors. The actions may include buying, holding, or selling shares of a particular firm. The conceptualization of "decision-usefulness" in this study is drawn from the conceptual frameworks of International Accounting Standard Board [IASB] (2010) and Financial Accounting Standard Board [FASB] (2008). According to IASB (2010) and FASB (2008), useful information is that information which possesses the qualities of relevance and faithful representation (reliability). Consequently, relevant financial information is such that is capable of making a difference in users' decision. In the same vein, useful information must not only be relevant, it must also reliably represent what it professes to represent. In the context of this study, information is useful, if it is capable of influencing the decision of existing and potential investors to buy, sell, or hold the shares of the reporting entities. Furthermore, the concept of

decision-usefulness connotes value relevance as used in some other literatures (Dandago & Hassan, 2013; Lev, 1989; Ravenscroft & William, (2015); Vafeas, Tigeorgis, & Georgiou, 1998; Yaghoobi, Moradi, & Nooghabi, 2015; IASB, 2010). Value relevance is the amount of information in the market value of shares that is captured by financial statements information or other information source (Bismark & Kingsley, 2018; Oyerinde, 2011). According to Hellstrom (2006), the assessment of the market value of shares is based on investors' perception about the past, present, and future performance of firms. It means that the perception of investors about the economic value of firm determines how the share of such firm is priced. Therefore, the decision-usefulness or value relevance of any information source is measured by the amount of information in the market value of share that is captured in such information source.

Qualitative Characteristics of Useful Information

According to the conceptual framework of IASB (2018); Gordon et al. (2015), the qualitative characteristics are classified into fundamental characteristics and enhancing characteristics. The fundamental qualitative characteristics are two namely: relevance and faithful representation (faithful representation is also called reliability). The enhancing characteristics are: comparability, verifiability, timeliness and understandability. Similar categorization is made by the Financial Accounting Standard Board of United State of America (FASB, 2008). According to FASB (2008), "relevance and faithful representation are the primary qualities that make accounting information useful for decision making. Enhancing qualitative characteristics according to FASB (2008) are: verifiability; neutrality, comparability and materiality.

Relevance is a key characteristic of useful information. However, useful information must both be relevant and faithfully represents what it purports to represent. According to IASB (2010), IASB (2018), Sutton, Cordery, and Van Zijl (2015), relevant financial information is capable of making a difference in the decision made by users. Information may be capable of making a difference in a decision even if some users choose not to take advantage of it or are already aware of it from other sources. In the same vein, FASB (2008) says "relevant accounting information is capable of making difference in a decision by helping users to form predictions about the outcomes of past, present and future events or to confirm or correct prior expectations." Decision useful information is in part relevant information and in part faithfully represented information. From investors' perspective, relevant information is that which contributes to their investment decision on equity of firms (Hellstrom, 2006). There are many information sets released into the security market, but the market only responds to relevant information. Relevance in the sense that, investors adjust their portfolio accordingly in response to information about the risk associated with expected future cash flow from investing in firm, for example. From investors perspective also, if an information does not lead investors to buy, hold or sell equity, it is not relevant and as such it is not decision useful. Information which does not lead to change in price of equity upward or downward is not relevant (Francis, LaFond, Olsson, & Schipper, 2004).

Relevant information is expected to possess certain features among which are timeliness, predictive value, and feedback value. According to Lev (1989), timeliness is very crucial in the in the theory of information in the sense that untimely information is no news. The moment an information does not have elements of "surprise" or new information (news), it is unlikely to influence any action. It means such information is not relevant for decision making. Accounting information has been criticized over the years for lack of timeliness relative to other information sources (Ball & Brown 1968, 2008; Fagbemi & Uadiale, 2011, Collins, Kothari, Shanken & Sloan, 1994). In developed economies, financial statements information is usually predicted by investors, their advisors, financial analysts with high levels of accuracy. More so, such predicted information is released much earlier than accounting

numbers, rendering accounting number less useful for decision making. Second, relevant information must have predictive value. According to Jonas and Blanchet (2000), predictive value pertains to the usefulness of information to provide support for investors who want to predict the future earnings capability. Investors are interested in the earnings persistence of firm. Therefore, information that is relevant must help investors to predict the persistent earnings. Third, relevant information must have feedback value. Feedback value in this sense means the ability of information to confirm or to correct prior expectation of investors. Feedback value tells investors the effect of past actions of management on the current performance of firms. The past provides basis for predicting the future; therefore, a relevant information should provide information about the past (Jonas & Blanchet, 2000).

Another key characteristic of useful information is that, it should be faithfully represented. According to IASB (2010), “financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only represent relevant phenomena, but it must also faithfully represent the phenomenon that it purports to represent. Useful information must both be relevant and reliable” (Iyoha, 2011). It means, for useful information relevance is necessary but not sufficient; the sufficient condition is that it must also be reliable and vice versa. Investors are also interested in the faithful representation of information presented in the financial statement. By faithful representation, investors want to know if the financial statements information actually represents transactions, events, and phenomena that took place in the period under review. Further, reliable information is expected to possess certain qualities. First, FASB (2008) requires that such information should be complete. No material information that could aid users understanding of economic events underlying the financial statement should be missing. Complete depiction does not however mean all information regarding phenomena should be reported, instead all necessary information that would help users assess the risk and return associated with investments should be disclosed. Second, such information must be neutral. IASB (2010) says “a neutral depiction is without bias in the selection or presentation of financial information. A neutral depiction is not slanted, weighted, emphasized, de-emphasized or otherwise manipulated to increase the probability that financial information will be received favorably or unfavorably by users.” There should be no predetermined result for the preparation and presentation of financial statements information other than decision usefulness. It also means financial statements are not prepared with the intention to influence the opinion of investors (Jonas & Blanchet, 2000).

Third, faithfully represented information must be free from error. It is expected that there are no errors or omissions in the description of events underlying the information (IASB, 2010). However, it does not mean perfectly accurate in all respects instead, when an estimate is made, it must be clearly stated that it is an estimate. In any case, estimates are not actual figures therefore sometimes they deviate. It is common to make estimate in financial reporting. Therefore, when information is said to be error-free, it does not mean accurate depiction but the estimate must well represent the phenomena.

On the other hand, the FASB (2008) requires that reliable information must possess the Qualities of verifiability and faithful representation, and neutrality. Jonas and Blanchet (2000) propose that representational faithfulness stated in the conceptual framework of FASB (2008) should possess the quality of completeness. This is similar to the conceptual framework of IASB (2010). Information that possesses quality of relevance and faithful representation must further possess some other qualities to enhance its usefulness. It means useful information can be enhanced by qualities such as comparability, timeliness and understandability (IASB, 2010). The implication is that if information is both relevant and faithfully represented but not comparable, verifiable, timely, and understandable by users, it may not be useful. Put differently, useful information must also be comparable, verifiable, timely and understandable (Sutton, Cordery, and Van Zijl (2015; Gordon et al., 2015).

Finally, there is a trade-off between relevance and faithful representation. The primary objective of the general purpose external financial reporting is to provide relevant information for users’ decisions. Other objectives are the stewardship function, management compensation, and contracting roles.

Investors have confidence in the audited financial statement information than other information sources because it is perceived reliable. It is usually audited by independent experts, and it is directly from firm. Another reason could be that historical cost which is the basis of most information contained in financial statements is objective, verifiable and consequently reliable. However, historical cost information is perceived by some constituents to be decision irrelevant. It is all together backward looking meanwhile decision relevant information must be forward looking. In summary, it has been argued however that useful information must possess both qualities of relevance and faithful representation (IASB, 2010; FASB, 2008; Jonas & Blanchet 2000). Furthermore, in standard setting, the boards (IASB & FASB) recognize that information may possess the two qualities at different degrees. Therefore, the boards can make trade-off between the two when making decision to set standard on any issue. The conceptual framework provides a guide and theoretical explanation for standard setters' decision on issues. Some constituents have questioned the trade-off made between relevance and faithful representation (Johnson, 2005). They questioned the decision of the boards to favor relevance above faithful representation by favoring fair value over historical cost. Those who argue against the dominance of relevance over faithful representation claim that faithful representation has richer characteristics than its definition in the conceptual framework (Johnson, 2005).

The position of the boards is clear on the twin concepts of relevance and faithful representation. While it is recognized that none of the two characteristics is entirely dispensable, much emphasis is laid on relevance than faithful representation (Stanga, 1980; Sutton, Cordery, and Van Zijl, 2015, IASB, 2018). The decision of the boards to maintain the continued relevance of financial statements for decision making is based on the objective of the general purpose external financial reporting which is relevance for decision making (Stanga, 1980).

Non-Financial Information

Capital market is information-driven; and as a result, share price responds to relevant information which includes both financial and non-financial information. The price of shares drifts towards the intrinsic value of shares (Francis, Lafond, Olsson & Schipper, 2004). Intrinsic value of shares basically reflects firms' business model, operating environment (Francis, Lafond, Olsson & Schipper, 2004), firms' resources, management efficiency, future investments plan, new discoveries, new products, new product design, newly discovered technology, innovations, and firms' ability to generate cash flows amongst others; thus, information about the intrinsic value is not captured wholly by the financial statements. Firms' resources go beyond physical and financial assets to include human assets, information and communication technology, research and development, firms' brand name etc; hence the need to report them adequately in their reports.

The non-financial information consists of: operating environments, industry-related information, and economy-wide information, Business model, directors' information, corporate social responsibility information, corporate governance information and others (Hellstrom, 2006; Amir & Lev, 1996). Therefore, any information in the annual reports of firms capable of influencing the intrinsic value of shares but not captured within the financial statements is classified in this study as non-financial information. It is noted that the financial statement contains a segment called notes to the accounts. Basically, notes to the accounts comprise a summary of significant accounting policies and other explanatory information. The notes are expected to provide further explanation that will enhance users' understanding of figures contained in the financial statements (IASB, 2010). The International Accounting Standard no.1 titled: Presentation of Financial Statements stipulates that notes to the account may also include financial risk management of the reporting entities but there are many risks associated with a business that may not be adequately captured by financial information; hence, the need to examine the non-financial information together with the financial information.

Theoretical Framework and Hypotheses Development

Valuation theory, sometimes referred to as Ohlson's model, residual income valuation model or "clean surplus theory" which establishes relations between market values and accounting numbers (Abogun, Olowookere & Kasum, 2020) was employed in this study. The development of this theory started with the work of Preinreich in 1938 (Dumontier & Raffournier, 2002), later the work of Edward and Bell 1961 (Oyerinde, 2011), and then the works of Ohlson (1995), Felthman and Ohlson (1995).

The work of Ohlson (1995) is an extension of the residual income valuation model proposed by Preinreich (1938). In the residual income valuation model, market value (stock price) is defined as the present value of expected future dividend (Ohlson, 1995; Olaniyi, Abogun & Salam, 2020). Imposing the clean surplus relation, market value (stock price) is defined as book value plus the present value of the future abnormal earnings (Ohlson, 1995; Olaniyi, Abogun & Salam, 2020). Furthermore, the residual income valuation theory (simply valuation theory) rests directly on two fundamental assumptions. First, market value is assumed to be equal the present value of expected future dividend payment (Nilsson, 2003; Ohlson, 1995; Olaniyi, Abogun & Salam, 2020). Second, it assumes that change in book value of equity is equal to reported earnings minus dividend payment (Oyerinde, 2011; Olaniyi, Abogun & Salam, 2020). Furthermore, Ohlson (1995) admits accounting information beyond earnings, dividends, cash flow, and book value of equity as being related to share price (Abogun, Olowookere & Kasum, 2020). The implication is that valuation theory connects share price with earnings, dividends, book value of equity, and other accounting information. In the same vein, non-financial information is decision useful if its coefficient is significant which shows that it contributes to variability in the stock price. Therefore, this study hypothesizes that:

- H₁: Earnings influence share price of Nigerian quoted firms
- H₂: Dividend significantly impacts on share price of Nigerian quoted firms
- H₃: Book value of equity has effect on share price of Nigerian quoted firms
- H₄: Non-financial information explains share price of Nigerian quoted firms

In addition, it is upon this theory that the structure of the empirical model of this study was derived.

METHODOLOGY

This section presents the methodology used for implementing this research which includes: the methodological approach, research design, and population of the study, sampling procedure, data collection, and data analysis technique. The methodological approach employed in this study is the mixed method. This is because the epistemological assumption here is that the data for this study exists both in qualitative and quantitative form. The study employed explanatory research design which is suitable especially when a study attempts to examine variation in a dependent variable due to changes in the independent variables as done in this study.

There were 190 firms whose shares (equities) were quoted on the Nigerian Stock Exchange (Nigerian Stock Exchange FactBook, 2015). The study covered the period from 1996 to 2015 (20 years) and as such the population of the study was made up of eighty-six (86) firms which got listed not later than 1996 and continued to be listed up to 2015. However, due to availability of data, forty-six (46) firms were selected across the eleven (11) sectors namely: Agriculture, Conglomerates, Construction/ Real Estate, Consumers Goods, Financial services, Health Care, Information & Communication Technology, Industrial Goods, Natural Resources, Oil & Gas, and services.

The measurement of non-financial information is such that it includes all other information apart from the ones contained in the accounts. In line with the Integrated Reporting Committee [IRC] of South Africa (2011), non-financial information index for this study as contained in appendix I was designed. The index was designed to extract information about the reporting circle, organization overview,

political environment, economic information, industry-related information, performance review, business/product diversification, new discoveries, investment opportunities, business model, strategic objectives, directors profile, appointment, resignation and retirement of directors, directors' remuneration policies, information on ICT and R&D, corporate social responsibilities and sustainability reporting, corporate governance reporting, financial risk management reporting, assurance reporting, and earnings forecast. The data were generated by assigning scores to each item of the index such that a disclosure of an item of the index attracted 1 score or 0 if there was no disclosure on that item. At the end, the scores were aggregated for each sampled firm and were used to measure the non-financial information disclosure.

In measuring decision-usefulness, it is noted that decision usefulness is related to the pricing of companies' shares and consequently the decision to buy, hold, or sell shares of a particular firm. Therefore, decision-usefulness is measured by a regression of share price on the information set. The statistical significance of the regression coefficients implies decision usefulness of that variable while the extent of decision usefulness is measured by the R-squared that results from the regression (Kargin, 2013; Chebaane and Othman, 2014; Elshandidy, 2014; Badenhorst, Brummer and Johannes, 2015).

Book value of equity is measured as the net asset divided by shares outstanding where net asset is total asset minus total liabilities (Francis & Schipper, 1999) while the profit after tax (earnings) is the profit for the year obtained from the income statement (Oyerinde, 2011). In the same vein, dividend per share was obtained from the annual report under the shareholders information and it calculated as total dividend paid to ordinary shareholder divided by shares outstanding (Adelegan, 2009).

Model Specification

Felthman and Ohlson model of 1995 establishes a link between market values (share price or return) and accounting information as: Share price = f (earnings, dividend, book value of equity, and others). This model has been used in the literature to measure decision usefulness (value relevance) of accounting information (Camodeca, Almici & Brivio, 2017; Bismark, & Kingsley, 2018). This model is adapted to this study in the sense that it was modified to include the non-financial information; hence, the model of this study is specified as:

$$P_{jit} = \alpha_0 + \alpha_1 \text{NonFin}_{j,t} + \alpha_2 \text{PAT}_{j,t} + \alpha_3 \text{DPS}_{j,t} + \alpha_4 \text{Bookvalue}_{j,t} + u_{j,t} \dots\dots\dots (1)$$

The above model is a panel model in the sense that the data used was a combination of cross sectional and time series data (46 firms observed over 20 years). In this model, P is share price, α_0 is the intercept, α_1 and α_2 α_3 α_4 are regression coefficients; NonFin represents non-financial information for security j at period t, PAT is Profit After Tax for security j at period t, DPS is dividend per share for security j at period t, Bookvalue is book value of equity for security j at period t. The model was estimated using the fixed effect panel regression estimation technique. This choice was made because the results of the Hausman test as contained in Table 2 revealed that it is more appropriate than using the random effect. Furthermore, some of the assumptions of the classical linear regression using the ordinary least square method are: normality of the error term, constant variance (homoscedasticity), absence of perfect co-linearity, absence of serial correlation amongst others (Gujarati & Porter, 2009). However, since the model of this study was estimated using the panel fixed effect (within estimator) method, it is not affected by the assumptions of ordinary least square (Gujarati & Porter, 2009).

RESULTS AND DISCUSSION

The data analyzed was obtained from the annual audited reports of the firms with the Nigerian Stock Exchange. The data obtained was valid because it was extracted from the annual audited report prepared by the managements of each firm filled with the Nigerian Stock Exchange.

The descriptive statistics as contained in Table 1 revealed that the overall average mean of non-financial information is 13 out of a total of 23 items. It implies that the level of disclosure of non-financial information by Nigerian quoted firms was low. Furthermore, the regression results contained in Table 2 showed share price was regressed on four (4) explanatory variables; non-financial statement, profit, dividend, and book value of equity. The variable of interest for this study is the non-financial information while profit, dividend, and book value of equity are theoretical variables. The theoretical variables were included so that the study model does not suffer from omitted relevant variable bias. The result shows that non-financial information has significant influence on share price with a coefficient of 1.76 and a probability value of 0.000. The interpretation is that as additional one (1) unit of non-financial information is disclosed, share price of firms increases by ₦1.76k. It implies that non-financial information provides useful information for decision making. This is in line with the findings of Amir and Lev (1996); Beest, Braam and Boelens (2009) who found that non-financial information have significant impact on share price; hence, it is decision-useful. This result is also in line with valuation theory which proposes positive association between relevant information and share price. The result also shows that all the theoretical variables; profit, dividend, and book value were statistically significant with coefficient value of 0.000913, 7.883013, 0.4363 and probability value of 0.000, 0.000, and 0.000 respectively. The coefficient figure of 0.000913 with a probability value of 0.000 implies that as profit increases by 1 million naira, the shares of firms are priced high by 0.000913 naira. This signifies that earnings provide useful information for investors pricing decisions. This result is in line with the findings of Francis and Schipper (1999); Oyerinde (2011); Elshandidy (2014); Bismark and Kingsley (2018) who found that earnings provide useful information for investors decision. The result is also in line with Ohlson (1995) valuation model which establishes positive link between share price and accounting numbers such as earnings. The coefficient figure of 7.883013 with a probability value of 0.000 implies that as dividend per share increases by 1 naira, shares of firms are priced high by 7.883013 naira. This result is in agreement with the findings of Abubakar (2012); Adelegan (2009) who found that dividend information has significant influence on investors' decision. Similarly, the result confirms the Ohlson (1995) model used in this study. The coefficient figure of 0.4363 with a probability value of 0.000 signifies that as the book value increases by 1 naira, the shares of firms are priced high by 0.4363 naira. This finding is in consonant with the findings of Oyerinde (2011); Babalola, (2012); Pervan & Bartulovic (2014); Abogun, Olowookere & Kasum, (2020) who also found that book value of equity influences investors' decision. In the same vein, the significant relationship between share price and book value of equity as found in this study confirms the proposition of the valuation theory used in underpinning this study.

There are usually three different R-squared figures reported in a static panel (fixed and random effect) regression result but the suitable one is the R-squared within because it is the only one among the three that measures the joint influence of the regression line and the independent variables (Gujariti & Porter, 2009). The R-squared (within) of 0.3286 contained in Table 2 implies that about 33% of the variation in share price is jointly explained by the regression line and the explanatory variables. In the literature decision-usefulness (value relevance) is measured by R-squared besides the statistical significance of each explanatory variable in the regression model (Collin et al. ,1994; Francis & Schipper, 1999; Collins et al., 1997; Chen, Chen & Su, 2001; Francis, Schipper & Vincent, 2002; Ball & Shivakumar, 2008; Oyerinde, 2011; Menike & Man, 2013; Kargin, 2013; Chebaane & Othman, 2014; Elshandidy, 2014; Badenhurst, Brummer & Johannes, 2015; Abogun, Olowookere & Kasum, 2020). The R-squared measures the variation in the dependent variable that is explained by independent variables. In this case, variation in share price due to changes in earnings, book value of equity, dividend, and non-financial information means that investors use such information to fix the price of shares. This variation in share price which is an upward or downward movement in the prices of shares is assessed based on earnings, book value, dividend and non-financial information. Therefore, the R-squared value of 0.33 reported in this study shows that earnings, book value of equity, dividend, and non-financial information are useful

in assessing the market value of shares. As contained in Table 2 also, the model was properly fitted with an F-statistic of 73.79 and a probability value of 0.000.

Generally, the findings of this study are in line with the propositions of valuation theory. The valuation theory establishes a link between share price, profit, dividend, and book value, and other relevant information; hence the result of this study provides a support to the theory. The findings are also in line with the works of Oludoyi (2009); Oyerinde (2011); Olugbenga and Atanda (2014); Ejubekpokpo and Edesiri (2014); Modugu and Ohonba (2014); Omokhudu and Ibadin (2015); Ball and Sadka (2015); Abogun, Olowookere, and Kasum (2020).

Table 1: Descriptive Statistics

Variable	Observation	Mean	Std. Deviation	Minimum	Maximum
Shareprice	792	24.16	46.98	0.39	419
NonFin	792	13.34	2.95	3	21
PAT	792	2058.67	10359.74	-102400.4	118016
DPS	792	1.27	3.02	0	27.5
BookValue	792	7.93	16.78	-43.19	307.84

Source: Authors' computation, 2019

Table 2: Regression Result

Fixed Effect Result Share price	Coefficient
NonFin	1.763646 0.000*
PAT	0.000913 0.000*
DPS	7.883013 0.000*
BookValue	0.4363 0.000*
Constant	-10.386 0.098**
Model Stat	
R ² Within	0.3286
F-stat	73.79 0.000*
Hausman Test (Chi ²)	183.10 0.000*

*implies significant @ 1%; **significant @10%

Source: Authors' computation, 2019

CONCLUSION AND RECOMMENDATIONS

This study found that earnings, book value of equity, dividend, and non-financial information have significant influence on investors' decision. As a result, the study concluded that non-financial information was decision-useful. That is, non-financial information influences investors' decisions. The more companies disclose non-financial information, the more useful information investors have for their investment decisions. The study therefore recommended that officials of quoted firms in Nigeria should disclose qualitative (non-financial) information much more than it is presently disclosed which

include: future investments plan, new discoveries, new products, new product design, newly discovered technology, innovations, and firms' ability to generate cash flows amongst others. This study also recommended that companies' officials should disclose more information on earnings, book value, and dividend since they provide useful information for decision making.

REFERENCES

- Abogun, S., Olowookere, J.K., & Kasum, A.S. (2020). Value relevance of accounting information: The moderating effects of accounting conservatism in a frontier market. *Sahel Analyst- African Journal of Management*, 5 (1), 106-119.
- Abubakar, S. (2012). *Value relevance of accounting information of listed new economy firms in Nigeria: An empirical investigation using ohlson model*. Retrieved from <http://www.docfoc.com/value-relevance-of-accounting-information-of-listed-new-economy-firms-in-nigeria-an-empirical-investigation-using-ohlson-model>.
- Abubakar, S., & Abubakar, M. (2015). Intangible assets and value relevance of accounting information of listed high-tech firms in Nigeria. *Research Journal of Finance and Accounting*, 6(11), 60-78.
- Adelegan, O. J. (2009). *Price reactions to dividend announcements on the Nigerian stock market*. Nairobi: The African Economic Research Consortium. Retrieved from <https://aercafricahub.org/wp-content/uploads/2018/07/RP188.pdf>
- American Institute of Certified Public Accountant (AICPA, 1994). *Meeting of the information needs of investors and creditors*. Retrieved from http://3197d6d14b5f19f2f440-5e13d29c4c016cf96cbbfd197c579b45.r81.cf1.rackcdn.com/collection/papers/1990/1994_0101_ReportingJenkins.pdf
- Amir, E. & Lev, B. (1996). Value relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics*, 22, 3-30.
- Babalola, Y. A. (2012). Significance of accounting information on corporate values of firms in Nigeria. *Research Journal in Organizational Psychology and Educational Studies*, 1(2), 105-113.
- Badenhorst, W. M., Brummer, L. M., & Johannes, de W. H. vH. (2015). The value relevance of disclosed summarized financial information of listed associates. *Journal of International Accounting, Auditing and Taxation*, 24, 1-12.
- Baffa, A. M., Mohammed, R. A., & Abdulkadir, R. I. (2014). The value relevance of IFRS adoption: evidence from listed banks in Nigeria. *Ilorin Journal of Accounting*, 1(2), 163-181.
- Ball, R., & Brown, P. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, 159-178.
- Ball, R., & Sadka, G. (2015). Aggregate earnings and why they matter. *Journal of Accounting Literature*, 34, 39-57.
- Ball, R., & Shivakumar, L. (2008). How much new information is there in earnings? *Journal of Accounting Research*, 46 (5), 975-1016
- Barth, M. E., Landsman, W. R., Raval, V., & Wang, S. (2014). *Conservatism and the information content of earnings*. Retrieved July 4, 2015 from <http://www.cerf.cam.ac.uk/funded-projects/completed-projects/completed-projects/financial-accounting-and-corporate-finance-symposium-13-14-march-2015/papers/Mary%20Barth%20paper.pdf>
- Beest, V. F., Braam, G., & Boelens, S. (2009). *Quality of Financial Reporting: Measuring Qualitative Characteristics*. NiCE Working Paper, Institute for Management Research. Retrieved from https://www.dphu.org/uploads/attachements/books/books_3437_0.pdf
- Bismark, B. & Kingsley, O. A. (2018). Value relevance of accounting information: An emerging country perspective. *Journal of Accounting & Organizational Change*, 14 (4), 473-491. Retrieved from <https://doi.org/10.1108/JAOC-07-2017-0064>
- Camodeca, R., Almici, A., & Brivio, A. R. (2014). The value relevance of accounting information in the Italian and UK stock markets. *Problems and Perspectives in Management*, 12(4), 512-518.

- Chebaane, S. & Othman, H. B. (2014). The impact of IFRS adoption on value relevance of earnings and book value of equity: the case of emerging markets in African and Asian region. *Social & Behavioral*, 145, 70-80.
- Chen, C.J.P, Chen, S. & Su, X. (2001). Is accounting information value relevant in the emerging Chinese stock market? *Journal of International Accounting, Auditing and Taxation*, 10, 1-22.
- Collins, D.W., Kothari, S.P., Shanken, J., & Sloan, R. G (1994). Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association. *Journal of Accounting and Economics*, 18, 289-324.
- Collins, D. W., Maydew, E. L., & Weiss, I. S. (1997). Changes in the Value Relevance of Earnings and Book Values over the past forty years. *Journal of Accounting and Economics*, 24, 39-67.
- Dandago, K. I., & Hassan, N. I. (2013). Decision usefulness approach to financial reporting: A case for Malaysian inland revenue board. *Asian Economic and Financial Review*, 3(6), 772-784.
- Dumontier, P., & Raffournier, B. (2002). Accounting and capital markets: A survey of the European evidence. *European Accounting Review*, 11(1), 119-151.
- Ejuvbekpokpo, A. S., & Edesiri, G. O. (2014). Determinants of stock price movement in Nigeria: Evidence from the Nigerian stock exchange. *Journal of Economics and Sustainable Development*, 5(3), 1-7.
- Elshandidy, T. (2014). Value relevance of accounting information: Evidence from an emerging market. *Advances in Accounting, incorporating Advances in International Accounting*, 30(1), 176-186.
- Emerging markets: Opportunities and risk management (March, 2017). *Financial Worldwide*. Retrieved from <https://www.financierworldwide.com/special-report-emerging-markets-opportunities-and-risk-management#.WhzmcNKnHhl>.
- Fagbemi, T. O., & Uadiale, O. M. (2011). An appraisal of the determinants of timeliness of audit report in Nigeria: Evidence from selected quoted companies. *The New Orleans International Academic Conference*, Louisiana USA 2011.
- Felix, U. O., & Rebecca, U. O. (2015). Theory of conservatism and value relevance of accounting information. *Accounting and Marketing*, 4(1), 1-8.
- Feltham, G., & Ohlson, J., (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11(2), 689-731.
- Financial Accounting Standard Board (2008). Statement of financial accounting concepts no. 1&2. Retrieved from <http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175820900526&blobheader=application%2Fpdf>
- Foster, G. (1986). *Financial statement analysis* (2nd ed.). New Jersey: Prentice-Hall International Edition.
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2004). Costs of equity and earnings attributes. *The Accounting Review*, 79(4), 967-1010.
- Francis, J., & Schipper, K. (1999). Have financial statements lost their relevance? *Journal of Accounting Research*, 37(2), 319-352.
- Francis, J., Schipper, K., & Vincent, L. (2002). Earnings announcements and competing information. *Journal of Accounting and Economics*, 33, 313-342.
- Gjerde, O., Knivsfla, K., & Sættem, F. (2011). The value relevance of financial reporting in Norway 1965-2004. *Scandinavian Journal of Management*, 27, 113-128.
- Gordon, E. A., Bischof, J., Daske, H., Munter, P., Saka, C., Smith, K. J., Venter, E. R. (2015). The IASB's discussion paper on the conceptual framework for financial reporting: A commentary and research review. *Journal of International Financial Management & Accounting*, 26 (1), 73-110.
- Gujarati, D. N. & Porter, D. C. (2009). *Basic econometrics* (5th ed.). New York: McGraw Hills.
- Hellstrom, K. H. (2006). The value relevance of financial accounting information in a transition economy: The case of the Czech Republic. *European Accounting Review*, 15 (3), 325-349.

- International Accounting Standard Board (IASB, 2010). *Conceptual framework for financial reporting*. Retrieved from <http://www.ifrs.org/News/Press-Releases/Documents/ConceptualFW2010vb.pdf>.
- International Accounting Standard Board (IASB, 2018). *Conceptual framework for financial reporting*. Retrieved from <https://www.ifrs.org/-/media/project/conceptual-framework/fact-sheet-project-summary-and-feedback-statement/conceptual-framework-feedback-statement.pdf>
- Iyoha, F. O. (2011). Quoted companies' attributes and the reliability of financial reporting in Nigeria. *ICAN Journal of Accounting and Finance*, 1(3), 12-23.
- Johnson, L. T. (2005). *Relevance and reliability*. Article from the FASB Report. Retrieved from http://pds15.egloos.com/pds/200904/21/25/relevance_and_reliability_tfr_feb_2005.pdf.
- Jonas, G., & Blanchet, J. (2000). Assessing quality of financial reporting. *American Accounting Association*, 14(3), 353-363.
- Kargin, S. (2013). The impact of IFRS on the value relevance of accounting information: evidence from Turkish firms. *International Journal of Economics and Finance*, 5(4), 71-80
- Lev, B. (1989). On the usefulness of earnings and earnings research: lessons and directions from two decades of empirical research. *Journal of Accounting Research*, 27, 153-192.
- Lev, B., & Zarowin, P. (1999). The boundaries of financial reporting and how to extend them. *Journal of Accounting Research*, 37(2), 353-385.
- Menike, M. G. P. D., & Man, W. (2013). Stock market reactions to the release of annual financial statements: case of the banking industry in Sri Lanka. *European Journal of Business and Management*, 5(31), 75-86.
- Mlonzi, V. F., Kruger, J., & Nthoesane, M. G. (2011). Share price reaction to earnings announcement on the JSE-ALtX: A test for market efficiency. *Southern African Business Review*, 15(3), 142-166.
- Modugu, K. P., & Ohonba, N. (2014). Impact of price level changes on financial accounting measurement. *Centrepont Journal (Humanities Edition)*, 17(1), 33-34.
- Nigeria: Risk assessment, business climate (January, 2017). *Global Edge*. Retrieved from <https://globaledge.msu.edu/countries/nigeria/risk>.
- Nigerian Stock Exchange Fact Book (2015).
- Nilsson, H. (2003). *Essays on the value relevance of financial statement information*. Retrieved from <http://www.diva-portal.org/smash/get/diva2:142541/FULLTEXT01.pdf>
- Ohlson, J. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11(2), 661-687.
- Olaniyi, T.A, Abogun, S. & Salam, M.O. (2020). Earnings predictability of quoted firms in Nigeria. *Bangladesh Journal of Multidisciplinary Scientific Research*, 2 (1), 23-32.
- Olawepo, R. A., Bello, R. A. & Olaniyi, J. O. (2014). Data collection strategies is social sciences research. In A. Jimoh, (Eds), *Research methods in social sciences* (69-86). Ibadan: College Press.
- Oludoyi, S. B. (2009). An econometric analysis of the information content of earnings announcements in the Nigerian stock market. In A. Adenikinju, D. Busari, & S. Olofin, (Eds.), *Applied econometrics & macro-econometric modelling in Nigeria* (523-541). Ibadan: University Press.
- Olugbenga, A. A., & Atanda, O. A. (2014). Value relevance of financial accounting information of quoted companies in Nigeria: A trend analysis. *Research Journal of Finance and Accounting*, 5(8), 86-93.
- Omokhudu, O. O., & Ibadin, P. O. (2015). The value relevance of accounting information: Evidence from Nigeria. *Accounting and Finance Research*, 4(3), 20-30.
- Oyerinde, D. T. (2011). *Value relevance of accounting information in the Nigerian stock market*. Unpublished Ph.D Thesis, Covenant University, Ota, Nigeria.

- Perera, R. A., & Thrikawala, S. S. (2010). *An Empirical Study of the Relevance of Accounting Information on Investor's Decisions*. Retrieved from <http://www.kln.ac.lk/uokr/ICBI2010/19.pdf>.
- Pervan, I., & Bartulovic, M. (2014). Value relevance of accounting information: Evidence from South Eastern European Countries. *Economic Research*, 27(1), 181-190.
- Ravenscroft, S. & William, P. F. (2015). Rethinking Decision Usefulness. *Contemporary Accounting Research*, 32(2), 763-788.
- Ruch, G. W., & Taylor, G. (2015). Accounting conservatism: A review of the literature. *Journal of Accounting Literature*. Retrieved January 10, 2016 from <http://dx.doi.org/10.1016/j.acclit.2015.02.001>.
- Schöndube-Pirchegger, B. & Schöndube, J. R. (2017). Relevance versus reliability of accounting information with unlimited and limited commitment. *Business Research*, 10(2), 189-213. Retrieved from <https://doi.org/10.1007/s40685-017-0050-2>
- Stanga, K. G. (1980). The relationship between relevance and reliability: some empirical results. *Accounting and Business Research*, 11(41), 29-39.
- The Integrated Reporting Committee [IRC] of South Africa (2011). Framework for integrated reporting and the integrated report. *Discussion Paper*. Retrieved from <http://www.chartsec.co.za/documents/latestNews/IRCOfSAIntergratedReportingGuideJan11.pdf>
- Vafeas, N., Tigeorgis, L., & Georgiou, X. (1998). The usefulness of earnings in explaining stock returns in an emerging market: The case of Cyprus. *European Accounting Review*, 7(1), 105-124.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Upper Saddle River: Prentice-Hall, Inc.
- Yaghoobi, H., Moradi, M., & Nooghabi, M. (2015). Effect of employee expenses on usefulness of accounting information. *International Journal of Accounting and Financial Reporting*, 5(1), 161-172.

APPENDIX I

NON-FINANCIAL INFORMATION DISCLOSURE INDEX CALIBRATED WITH THE INTERNATIONAL INTEGRATED REPORTING FRAMEWORK

THEMES:

- (1). REPORT PROFILE (e.g Period Covered)
- (2). ORGANISATION OVERVIEW
 - i. Name of organization, size, and location of operation
 - ii. Principal activities of firms including products & services
 - iii. Organizational structure
- (3). OPERATING ENVIRONMENT
 - i. Political environment
 - ii. Economic wide information
 - iii. Industry related information
- (4). PERFORMANCE REVIEW
- (5). BUSINESS/PRODUCT DIVERSIFICATION
- (6). NEW PRODUCT/NEW DISCOVERIES
- (7). INVESTMENT OPPORTUNITIES
- (8). BUSINESS MODEL
- (9). STRATEGIC OBJECTIVES
- (10). DIRECTORS/MANAGEMENT INFORMATION
 - i. Directors' Profile
 - ii. Directors' Appointment/Retirement/Resignation
 - iii. Directors' Remuneration Policies
- (11). INFORMATION ON ICT & R&D

- (12). CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY REPORTING
- (13). CORPORATE GOVERNANCE REPORTING
- (14). FINANCIAL RISK MANAGEMENT REPORTING
- (15). AUDITOR'S REPORT (ASSURANCE)
- (16). FUTURE PERFORMANCE OBJECTIVE (e.g. earnings forecast)