



**DOES COMPLIANCE WITH ACCOUNTING STANDARDS DISCLOSURE
REQUIREMENT MATTER ON THE VALUE RELEVANCE OF OTHER
COMPREHENSIVE INCOME ITEMS IN NIGERIA**

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Abstract

Convergence with International Financial Reporting Standards (IFRS) has required Nigerian companies to recognize fair value gains and losses in statements of comprehensive income. The main objective of this study is to investigate the influence of compliance with International Accounting Standards (IAS) 16, IAS 19, and IFRS 7 on the value relevance of the components of other comprehensive income. Using 259 firm-year observations, the results of pooled ordinary least square regression show that compliance with relevant accounting standards are positively priced by investors. In further analysis, the results show that compliance enhances the value relevance of the components of other comprehensive income. One primary recommendation of the study is that reporting entities should pursue compliance of IFRS standards to improve the financial reporting process and consequently increase investors' perceived reliability of accounting information.

Keywords: Compliance, Accounting Standards, Comprehensive Income; Value Relevance; Nigeria

1. Introduction

International Financial Reporting Standards (IFRS) requires companies to prepare a statement of comprehensive income that incorporates the reporting of other comprehensive income. Revaluation of property, plant, and equipment (PPE), fair value gain on investment, and translation reserves are among the holding gains and losses included within other comprehensive income. This new reporting format is a joint project of the Financial Accounting Standards Board (FASB) and the International Accounting Standard Board (IASB) on comprehensive income reporting. These proposals assume that financial statements prepared using an inclusive approach reveals the true underlying earnings power of a company and provide capital markets participants with more relevant financial performance measures (Kanagaretnam Mathieu & Shehata, 2009; Mechelli and Cimini, 2014).

Researchers have cast doubts on whether fair value accounting will lead to transparent financial reporting, particularly when valuation models are used (Kanagaretnam et al., 2009; Lee & Park, 2013; Siekkinen, 2016). The main thrust here is that, when an active market for fair value assets and liabilities does not exist, fair value is derived based on the assumptions and estimations of managers (Lee and Park, 2013; Goh, Li, Ng, & Yong, 2015; Siekkinen, 2016; Song, Thomas & Yi, 2010). As fair value inputs become less observable to investors, they are viewed as being less reliable (Maines & McDaniel, 2000; Song et al., 2010; Lee & Park, 2013; Siekkinen, 2016).



Thus, the potential use of managers' discretion in fair value determination often induces information asymmetry in the financial reporting process, which leads to agency costs that could threaten the reliability of fair value earnings (Maines & McDaniel, 2000; Song et al., 2010; Lee & Park, 2013). Nevertheless, several studies have provided good arguments that the level of compliance effectively mitigates the reliability concern associated with the reporting of other comprehensive income and its components (Bushee & Leuz, 2005; Kang & Pang, 2005; Hodgdon, Tondkar, Harless & Adhikari, 2008; Hassan Romilly, Giorgioni & Power, 2009).

Nigerian Statements of Accounting Standards (SAS), referred to as NG-GAAP (IAS version adopted since 1984), remained the same until 31 December 2011 when they were replaced by IFRS standards (Report on the Observance of Standards and Codes [ROSC], 2011). Prior to 2012, no regulation mandated the presentation of a comprehensive income statement. Thus, presentation of other comprehensive income items such as unrealized gains and losses on available-for-sale marketable securities, gains and losses on non-current assets, and adjustment to pension reserves were not required prior to 2012. Unlike the IFRS framework, non-disclosure of these earnings may suggest an increased propensity for losing vital information and cases of potential earnings management (Nigerian Accounting Standards Board [NASB], 2010; ROSC, 2011). With an effective date of 2012, Nigerian reporting firms were mandated to mark-to-market certain financial assets and liabilities. Such fair value assets and liabilities include present value of non-current assets, available-for-sale marketable securities, and defined benefit plans (Price Waterhouse Coopers, 2011). Presumably, mandatory presentation of comprehensive income in Nigeria apparently represents an increase in disclosure level and could mean enhanced transparency and comparability in the financial reporting process. Using sample of Nigerian companies, Usman, Amran and Shaari (2016) observed that both net income and comprehensive income are value relevant, but net income is more superior. Usman, Amran and Shaari (2017) documented value relevant of other comprehensive income in Nigeria but was more value relevant when conditioned for corporate governance practice.

Studies have examined the information content of a comprehensive income statement using relative and incremental value relevance research design. Dominant in the literature are studies from developed countries such as the US, the UK, Australia, and New Zealand (Dhaliwal, Subramanyam & Trezevant, 1999; Cahan Courtenay, Gronewoller & Upton, 2000; Biddle & Choi, 2006; Kanagaretnam *et al.*, 2009; Lee & Park, 2013; Mechelli & Cimini, 2014; Marchini & D'Este, 2015). These studies have found net income and comprehensive income and its components to be value relevant. Nonetheless, the question of which is more value relevance to investors is still far from being adequately addressed. Again, none of these studies have attempted to steer investigation of how compliance with the disclosure requirement of other comprehensive income items affects their value relevance. Hitherto, assessing the effect of the firm's compliance with the disclosure requirement of fair value assets and liabilities provides a better approach for extending the on-going debate on the value relevance of fair value earnings. Thus, this study aims to investigate the influence of compliance with fair value disclosure requirement on the value relevance of other comprehensive income.

The findings of this study significantly enhance value relevance literature on comprehensive income reporting and respond to recent calls in the literature for more in-depth single-country studies (Habib, 2008; Barth, Landsman, Lang & Williams, 2012; Fasan, Fiori & Tiscini, 2014)



and IFRS adoption (Barth *et al.*, 2008; Kanagaretnam *et al.*, 2009; Rad & Embong, 2013). The findings of this study are of importance for academics because they shed light on the understudied issue of fair value earnings in the Nigerian market. Overall, findings documented in this study will promote benchmarking among companies to align with best practices in financial reporting processes. Practically, this study is also important to policy makers and regulatory agencies as they may be interested in knowing the effect of the adoption of IFRS in 2012 on the relevance and reliability of accounting numbers. Findings on the effects of reliability factors help firms understand the need to align with global best practices.

The remainder of the paper is organized as follows. Section 2 reviews the literature and develops hypotheses. Section 3 describes data and methodology. Section 4 presents the results and discussion. The last section offers the concluding remarks recommendations and suggestion for future research.

2. Literature Review

The value relevance of comprehensive income reporting

Previous literature provides a series of arguments that broader definitions of income are more useful for investment decisions, but such a position may not be the case for components of other comprehensive income (Biddle and Choi, 2006). This position has partly driven several studies on the incremental value relevance of other comprehensive income and its items. For instance, Dhaliwal *et al.* (1999) found no clear evidence that other comprehensive income reflects stock returns better than net income. Misgivings about dirty surplus accounting practices motivated O'Hanlon and Pope (1999) to investigate two main issues for a sample of UK firms. They investigated whether dirty surplus accounting might result in value-relevant items. They provided strong evidence that ordinary profit (net income) and extraordinary items were value-relevant. Little evidence was found that dirty surplus flows such as goodwill write-offs and foreign currency translation differences were value-relevant. Cahan *et al.* (2000) provided two market-based tests on the usefulness of comprehensive income using New Zealand listed firms. They revealed that other comprehensive income provided incremental information better than traditional net income; however, no benefit existed for reporting a separate comprehensive-income-type statement.

Similar to Cahan *et al.* (2000), some studies were driven by the general perception that reporting of comprehensive income and its components provides security markets with incremental value-relevant information over the traditional historical-cost-earnings approach. For instance, Kanagaretnam *et al.* (2009) reveals that yearly other comprehensive income, sample-partitioned up to ten years' interval, was better associated with three-month stock prices and returns than net income for Canadian firms. Wang *et al.* (2006) suggested that accumulated dirty surplus flows for samples partitioned into intervals of two, five, and ten years and yearly other comprehensive income were not value relevant for Australian and Dutch listed firms. Fasan *et al.* (2014) examined how the implementation of revised IAS 1 has affected the extent to which the market took other comprehensive income into account. Using an extensive data set covering firms in 19 countries from 1995 to 2010, they revealed an increase in the value relevance of other comprehensive income in the post-IAS/IFRS in 2005 and IAS 1 Revised in 2009. Using a cross-country research design for European countries, Mechelli and Cimini (2014) documented



an incremental value relevance of other comprehensive income, but that value relevance was continually lower than net income because of the non-recurring nature of its components. However, the incremental value relevance differed across European countries depending on the source of funds and the legal system.

Moreover, diverse results have been presented regarding the incremental value relevance of the components of other comprehensive such as unrealized gains and losses on available-for-sale securities, gains and losses on non-current assets, extraordinary items, pension reserves, and changes in foreign-currency-translation reserves. For instance, Barth and Clinch (1998) documented varying results depending on asset class. The revalued aggregate PPE was strongly associated with share prices for the entire sample of firms. This evidence held true when the sample was partitioned for smaller non-financial and financial firms. Cahan et al. (2000), Wang et al. (2006), Chambers et al. (2007), and Hlaing and Pourjalali (2012) documented evidence that asset revaluations had explanatory power for the market value of equities. Thus, these studies recognised fair value gains and losses on non-current assets as an important input for assessing a firm's market value. Cahan et al. (2000) stressed further that fair value gain and losses on non-current assets provided better incremental information than net income.

However, fair value gains and losses on non-current assets have been regarded as less consistent and less useful in explaining share prices (O'Hanlon and Pope, 1999). Moreover, Kanagaretnam et al. (2009) provided evidence that available-for-sale financial assets and cash flow hedges components were significantly associated with price and market returns for a sample of Canadian firms. Goncharov and Hodgson (2011) documented that unrealised gains and losses on held-for-sale securities provided better incremental information than net income for investors for a sample of continental European firms. These findings were based on the assumption that available-for-sale financial assets are liquid assets that can be quickly converted into financial wealth and are understood by most market participants and can easily be evaluated.

From the above studies, it is equivocal that the incremental value is relevance among other comprehensive income beyond traditional net income. Thus, a clear conclusion cannot be drawn on the incremental value relevance of dirty surplus. This could suggest that the IASB's prediction for the importance of these items to investors, creditors, and other financial-statement users in evaluating firms' economic activities has not been borne out (Chambers et al., 2007; Mechelli and Cimini, 2014). Perhaps the variations in the findings of previous studies can be attributed to differences in the data sets, definitions of other comprehensive income in the various reporting environments, and the transitory nature of other comprehensive income and periods examined (Chambers et al., 2007; Dhaliwal et al., 1999).

Empirical studies on the level of compliance

In 1997, IAS 1 Revised "Presentation of Financial Statements" was issued to reinforce the level of compliance with accounting standards by reporting entities. IAS 1 Revised stipulates that financial statements should not be described as complying with IASs unless they comply with all the requirements of each applicable standard (Hodgdon et al., 2008). Despite this pronouncement, compliance with relevant accounting standard continues to be an issue. Hodgdon et al. (2008), Hussainey and Walker (2009), and Tsalavoutas (2009) claimed that compliance with IFRS disclosure requirements supported the general submission that a high



level of compliance reduces information asymmetry and hence minimizes agency cost. Accordingly, these studies demonstrated a positive impact for higher compliance and an adverse effect for lower compliance. These arguments are essentially relevant given the low levels of compliance with the requirements of various standards reported in previous findings (Tsalavoutas, 2009; Hussainey and Walker, 2009).

Seemingly, the adoption of IFRS has been a great success of the 200 EU companies studied by the ICAEW (2007), 198 disclosed full compliance with IFRS and two disclosed partial compliance. However, the ICAEW's findings indicated that the impact of IFRS adoption on companies varied significantly across countries depending on the initial degree of similarity between national GAAP and IFRS. Hodgdon et al. (2009), in their study of international compliance, it was documented that compliance with disclosure was positively related to auditor size after controlling for size, profitability, gearing, and international diversification.

Further, Al-Akra, Eddie and Ali (2010), in their study of the influence of accounting disclosure regulation, governance reforms, and ownership changes, found that disclosure with the IFRS was statistically greater in 2004 than disclosures provided in 1996. However, regulatory reforms produced the most significant impacts on mandatory disclosure and governance reforms via audit committees were shown to be the most significant determinant of compliance with mandatory disclosure requirements. Mısırlıoğlu et al. (2013) examined the successes of mandatory adoption of IFRS by Turkish listed companies in 2005 with an emphasis on the impact of firm and country level factors. Firm-level characteristics such as auditor reputation, firm size, and the degree of foreign ownership substantially affected the degree of disclosures.

In Nigeria, little literature exists regarding listed firms' compliance with the disclosure requirements of IAS/IFRS standards. To fill this void, this current study examines the level of compliance of firms with disclosure requirements of IAS 16, IAS 19, and IFRS 7 for firms listed on the Nigerian Stock Exchange (NSE), because IAS/IFRS standards have more accounting policy choices, the standards differ in application and interpretation compared to the NG-GAAP. This could also suggest more disclosure requirements than the NG-GAAP as well as the differences. Implementation of IFRS has increased the need within an organization to gather, analyse, and report more information to demonstrate compliance with relevant disclosure. Given that fair value gains and losses on non-current assets, gains and losses on available-for-sale financial securities, and actuarial gains and losses on defined benefit plans are a product of IAS 16, IAS 19, and IFRS 7, their value relevance would probably be influenced by the disclosure of these standards for firms listed in the Nigerian market.

Prior studies have suggested that an increased level of disclosure has a positive valuation implication and reduces the agency cost of information asymmetry (Maines and Wahlen, 2006; Nobes, 2006). In terms of disclosure requirements, a significant difference exists between the NG-GAAP and IFRS frameworks. Many standards such as IAS 16 (revaluation of PPE), IAS 19 (employee benefits), and IFRS 7 (financial instruments: disclosures) require firms to disclose the assumptions used in determining fair value gains and losses on non-current assets, actuarial gains and losses on pension plan, and fair value gains and losses on available-for-sale marketable securities. Detailed disclosure of these assumptions improves transparency and subsequently affects users' perceptions of the financial statements regarding the prospects of the reporting entity (Hope, 2003). Furthermore, greater compliance provides insights on the



assumptions and accounting-policy choices used to determine the recognition and measurement of accounting items. Thus, greater compliance provides more transparent financial statements, which, in turn, reduces the uncertainty of the accounting transactions and could constrain some potentially harmful managerial actions (Hope, 2003).

To the extent that the level of compliance provides relevant information about a company's prospects, levels of disclosures should be associated with market values (Hussainey and Walker, 2009), reduce analysts' forecast errors, and enhance the predictive power of earnings (Goncharov *et al.*, 2006; Hodgdon *et al.*, 2008). So far, evidence in the literature regarding compliance mostly concerns voluntary disclosures (Tsalavoutas, 2009). Thus, the implication of mandatory disclosures is not "theoretically and heavily debated" (Bushee & Leuz, 2005). In both the international arena and in the context of the present study, these arguments are essentially relevant considering the low levels of compliance with the requirements of various standards reported in previous findings (Hodgdon *et al.*, 2008; Hussainey and Walker, 2009). Using sample of Nigerian companies, Usman, Amran and Shaari (2016) and Usman, Amran and Shaari (2017) provides initial insights on the value relevance of total and other comprehensive income. However, these studies did not examined compliance with accounting standards relating to other comprehensive income items.

Accordingly, a higher level of compliance suggests greater levels of disclosure of both proprietary and non-proprietary information and/or both good and bad news (Leuz and Wysocki, 2008; Tsalavoutas, 2009). Reporting firms that wish to reduce agency costs of information asymmetry can communicate their practices in a more transparent manner by providing detailed information. By implication, a positive impact can be assumed for higher compliance, whereas a negative impact may be assumed for low compliance. Because several creative-accounting practices have taken place in Nigeria, some due to the low disclosure requirements (NASB, 2010; ROSC, 2011), it is expected that implementation of IFRS will underscore more a detailed disclosure that will improve the country's financial reporting system, and earnings will be more positively priced. For these reasons, the following hypotheses are proposed:

H_1 : Compliance with IAS 16, IAS 19, and IFRS 7 is value relevant in the Nigerian market.

H_2 : Compliance with IAS 16, IAS 19, and IFRS 7 significantly influence the value relevance of components of other comprehensive income in the Nigerian market.

3. Methodology

Sample selection and data collection

The sample includes 259 firm-year observations from 2012 to 2014. The sample comprises companies that reported at least one item of other comprehensive income in their statement of comprehensive income in these years. Because this study used the price model, which requires share price as a dependent variable, we excluded firm-year observations for firms without data on share prices and dividend. The analysis for this study was conducted at the annual level using financial, market-based, and non-financial data collected from firms that passed the filtering process. All data regarding accounting numbers (except for other comprehensive income items) and measures of firm value were collected from the Thomson Reuters Database. Other comprehensive income items, missing information from the database, and non-financial data



were hand collected from annual reports following Barth and Clinch (1998) and Cahan et al. (2000).

Measurement of variables

Dependent variables: The dependent variables in this study are share prices, which are synonymous with the market value of equity. Value-relevance studies have extensively utilised share prices in investigating the value relevance of firm-specific and economic innovations such as the information content of a set of accounting standards, transition between accounting standards, changes in corporate governance practices, and listing requirements for different motivations. These relationships have been tested for different periods due to contextual factors and regulatory requirements: three months (Kanagaretnam et al., 2009); four months (Tsalavoutas et al., 2012); six months (Wang et al., 2006; Barth et al., 2008; 2012; Karampinis and Hevas, 2009); and financial year-end (Amir et al., 1993; Dhaliwal et al., 1999; Kim, 2013; Mechelli and Cimini, 2014; Mironiuc and Carp, 2014). Wang et al. (2006) used six months because the Dutch Civil Code, article 210, obliged firms to publish financial statements five months after the fiscal year-end with an extension of one month for the release of the financial statements.

Statutorily, all Nigerian reporting entities are mandated to file their annual reports with the Security and Exchange Commission (SEC) on or before the 90th day after the accounting year-end. Given this regulatory requirement, share prices are set four months after the financial year-end as follows [the motivation for this choice is based on the three months required to file their annual reports with the SEC plus a one-month extension for the release of the financial statements, in line with Wang et al. (2006)]:

SP_{it} = Share price four months after the financial year end of firm t at time i .

Setting share prices four months after the financial year-end ensures that market participants have access to all available information for decision-making and have incorporated such information into their portfolios as argued in previous studies (e.g. Tsalavoutas et al., 2012).

Independents Variables: Accounting information variables that represent the independent variables were operationalised in accordance with previous studies:

Book value of equity (BVE): book value of equity per share is measured as the book value of common equity at the end of the fiscal year t deflated by the number of outstanding shares, consistent with Kanagaretnam et al. (2009), Anandarajan and Hasan (2010), and Mechelli and Cimini (2014).

Net income (NI): refers to a company's earnings after tax at the end of the financial year t deflated by the number of outstanding shares, in line with Dhaliwal et al. (1999), Cahan et al. (2000), and Mechelli and Cimini (2014).

Gains and losses on non-current assets (GLN): refers to gains and losses on non-current assets of firm i at end of year t .

Gains and losses on available-for-sale financial securities (GLA): refers to gains and losses on available-for-sale securities of firm i at end of year t .



Actuarial gains and losses on defined benefit plans (GLP): refers to actuarial gains and losses on pension plan of firm i at year t .

Interacting and control variables: Interacting and control variables were operationalised in accordance with previous studies:

Level of compliance with IFRS: the measurement of the level of compliance is based on the disclosure index presented in Table 1, following Street and Gray (2001). Table 1 delineates a breakdown of IAS 16, IAS 19, and IFRS 7 and previous studies that justify their inclusion. In the compliance literature, Cooke's (1989) dichotomous approach for measuring compliance with disclosure requirements is most common. This approach used an unweighted disclosure index where compliance is calculated as the ratio of the total items disclosed to the maximum possible score applicable for that company (Cooke, 1989; Street and Bryant, 2000; Street and Gray, 2001; Glaum and Street, 2003; Hodgdon et al., 2008). Following previous studies, unweighted compliance scores were based on 41 disclosure items, obtained from IAS 16 (10 items), IAS 19 (17 items), and IFRS 7 (14 items), relating to reporting fair value gains and losses in comprehensive statements. The items were coded as disclosed or not disclosed for a sample of 259 firm-year observations reporting under IFRS. The index measures the actual number of mandatory disclosures provided by a firm in year t divided by the number of mandatory disclosures required for each standard in year t , following Street and Gray (2001), Hodgdon et al. (2008), and Hassan et al. (2009).

Company size (FSIZE): refers to the natural log of the market capitalization of a company at the end of the financial year (Chen and Jaggi, 2000; Leventis and Weetman, 2004; Hung and Subramanyam, 2007).

Type of industry (IND): classified according to the NSE industry classification code. Following Barth and Clinch (1998) and Dainelli et al. (2013), this study classified industry effect using the NSE industry classification code.

Firm leverage (DEBT): measured as total long-term debt per total assets of a firm during a financial year, in line with Habib (2008) and Anandarajan and Hasan (2010).

Audit firm (AUDR): refers to auditor's reputation, assigned the value of 1 for Big4 and 0 otherwise.

Table 1: Components of the IAS/IFRS Disclosure Index

<i>Accounting standard</i>	<i>Disclosures</i>	<i>Previous studies</i>
IAS 16 (revaluation of PPE)	All required disclosures for revaluating (fair value gains and losses) PPE.	Street et al. (1999) and Hodgdon et al. (2008).
IAS 19 (retirement benefits)	All required disclosures for actuarial gains and losses on the comprehensive income.	Street et al. (1999), Cairns (1999), Street and Bryant (2000), and Hodgdon et al. (2008).
IFRS 7 (financial instrument: disclosure)	All required disclosures for re-measuring available-for-sale financial assets.	IASB disclosure requirement for IFRS 7.



Model specifications

To test the impact of compliance with relevant accounting standards relating to components of comprehensive income, models 1 and 2 were estimated. The disclosure of accounting procedures followed in determining the value of accounting assets and liabilities can have positive valuation implications that can reduce the agency cost of information asymmetry (Maines and Wahlen, 2006; Nobes, 2006). Being an investor-based standard, IAS/IFRS underscores detailed disclosure of the assumptions used in determining fair value gains and losses relating to IAS 16 (revaluation of PPE), IAS 19 (employee benefits), and IFRS 7 (financial instruments: disclosures). Detailed disclosure of these assumptions could constrain some potentially harmful managerial actions, which may improve the transparency of financial reporting and subsequently affects users' perceptions of the financial statements regarding the prospects of the reporting entity (Hope, 2003). To the extent that disclosures provide relevant information about a company's prospects, disclosures should be associated with market values (Hussainey and Walker, 2009). Nevertheless, discussion regarding the low levels of compliance with the requirements of accounting standards is a common theme in the compliance literature (Hussainey and Walker, 2009; Tsalavoutas, 2009).

Accordingly, based on the premises of agency theory, companies differentiate themselves by trying, and/or incurring the necessary high information costs, to comply and consequently provide higher disclosure (Hodgdon et al., 2008; Hussainey and Walker, 2009). This seems to have "rewarding" implications because the transmission of reliable information plays a crucial role in the setting of market value, especially in an environment with weak enforcement. Arguably, firms with higher compliance are likely to be valued higher than those with low compliance.

Following Cahan et al. (2000) and Mechelli and Cimini (2014), we used a modification of Ohlson's (1995) model to test the impacts of compliance on the value relevance of the components of other comprehensive income. Model 1 tested the value relevance of the compliance-to-disclosure requirement:

$$SP_{it} = \beta_0 + \beta_1 BVE_{it} + \beta_2 NI_{it} + \beta_3 GLN_{it} + \beta_4 GLA_{it} + \beta_5 GLP_{it} + \beta_6 COMPL_{it} + \beta_7 LNI_{it} + \beta_8 NI * LNI_{it} + \beta_9 FSIZE_{it} + \beta_{10} IND_{it} + \beta_{11} DEBT_{it} + \beta_{12} AUDR_{it} + \epsilon_{it} \dots \dots \dots 1$$

where:

- SP_{it} = share price of a company *i* four months after financial year-end *t*.
- BVE_{it} = book value of equity of firm *i* at time *t*, scaled by outstanding shares.
- NI_{it} = net income per share of company *i* at end of year *t*.
- GLN_{it} = gains and losses on non-current assets of firm *i* at end of year *t*.
- GLA_{it} = gains and losses on available-for-sale securities of firm *i* at end of year *t*.
- GLP_{it} = actuarial gains and losses on pension plan of firm *i* at year *t*.
- $COMPL_{it}$ = compliance score of IAS 16, IAS 19, and IFRS 7.
- LNI_{it} = indicator variable, taking the value of 1 for negative net income firms and 0 if otherwise.
- $FSIZE_{it}$ = log of market capitalization.
- IND_{it} = NSE SIC code.
- $DEBT_{it}$ = ratio of total long-term debt per total assets.



AUDR_{it} = auditor’s reputation assigned the value of 1 for Big4 and 0 otherwise.

All independent variables in the above equation are deflated by the outstanding shares, except control variables. The model was tested for the full sample and for the sample of low- and high-compliance firms. To control for factors that may influence firms’ COMPL with relevant accounting disclosures, size, industry, auditor’s reputation, and debt are included as independent variables. Statistically, the regression coefficient of β₆ is expected to be positive and statistically significant, as predicted for H₁. The coefficient for the earnings parameters (β₁ to β₅) and COMP (β₆) are predicted to be higher for high-compliance firms than low-compliance firms. As a measure of perceived reliability, this suggests that investors attach different weights to the level of compliance with the relevant requirements in the determination of fair value earnings in the Nigerian market.

The effect of COMPL on investors’ pricing of the items of other comprehensive income (H₂) is tested using model 2, which interacted COMPL with individual items of other comprehensive income:

$$SP_{it} = \beta_0 + \beta_1 BVE_{it} + \beta_2 NI_{it} + \beta_3 GLN_{it} + \beta_4 GLA_{it} + \beta_5 GLP_{it} + \beta_6 COMPL_{it} + \beta_7 GLN_{it} * COMPL_{it} + \beta_8 GLA_{it} * COMPL_{it} + \beta_9 GLP_{it} * COMPL_{it} + \beta_{10} LNI_{it} + \beta_{11} NI * LNI_{it} + \beta_{12} FSIZE_{it} + \beta_{13} IND_{it} + \beta_{14} DEBT_{it} + \beta_{15} AUDR_{it} + \varepsilon_{it} \dots \dots \dots 2$$

To demonstrate the incremental value relevance of other comprehensive income, given the level of compliance, interaction terms β₇ to β₉ are theoretically predicted to be positive and significant to justify the effect of compliance with relevant fair value accounting standards.

4. Results

Descriptive statistics

Table 2 shows the descriptive statistics for the sample of 259 observations from 2012 to 2014. The mean (median) of SP was ₦9.78 (₦2.68) for the period 2012 to 2014, suggesting that the sample firms exhibited positive share. The pooled three-year mean (median) net income per share was 0.3651 (0.0992). The mean of GLN was 0.0093, GLA was 0.0036, and GLP was 0.0031, with zero median values. The zero medians suggest a low frequency and magnitude of the components of other comprehensive income over the study period.

The mean proportion and standard deviation for COMPL (the unweighted disclosure score) were 57 and 10 percent, respectively. This statistic seems to suggest a low compliance with relevant accounting standards in establishing the fair value relating to the components of other comprehensive income when compared with Street and Gray’s (2001) study that documented a mean and standard deviation of 72 and 19 percent, respectively, and Hodgdon et al.’s (2008) study, which found 68 and 18 percent, respectively, using a similar unweighted compliance score. Thus, the mean COMPL levels documented in this study are somewhat low but are similar to previous statistics from emerging markets (Al-Shiab, 2008; Hassan et al., 2009; Al-Shammari et al., 2008) that have documented a low mean compliance. More specifically, the level of compliance for the sample of these studies ranged from 45 percent to 56 percent, which was about what is documented for the present study. Like in other jurisdictions, this low COMPL level in Nigeria further confirms problems with reporting incentives and weak



enforcement (NASB, 2010; ROSC, 2011). Table 2 also shows that approximately 87 percent of the sample observations were audited by Big4 auditors.

Table 2: Descriptive statistics related to the regression variables for the years 2012–2014

<i>Variable</i>	<i>Mean</i>	<i>Median</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
SP_{it}	9.78	2.68	14.83	0.5	99.5
BVE_{it}	0.53	0.25	0.68	0.01	3.40
NI_{it}	0.36	0.09	0.89	-1.44	5.68
GLN_{it}	0.001	0	0.03	-0.19	0.28
GLA_{it}	0.01	0	0.04	-0.50	0.22
GLP_{it}	0.01	0	0.08	-0.55	0.65
$COMPL_{it}$	0.56	0.59	0.10	0.312	0.83
LNI_{it}	0.02	-0.43	1.018	0	1
$FSIZE_{it}$	23.71	23.43	2.42	16.52	32.58
IND_{it}	0.35	0	0.47	0	1
$DEBT_{it}$	0.14	0.11	0.13	0.001	0.60
$AUDR_{it}$	0.87	1	0.34	0	1

Notes: SP_{it} = four-month share price after the financial year-end; BVE_{it} = per share the book value of common equity; NI_{it} = net income per share; GLN_{it} = per share changes in revaluation surplus; GLA_{it} = per share changes in gains and losses on re-measuring available-for-sale financial assets; GLP_{it} = per share actuarial gains and losses on defined benefit plans; $COMPL$ = compliance scores; LNI_{it} = indicator variables which equals 1 if earnings is negative and 0 if otherwise; $FSIZE_{it}$ = the log of market capitalization; IND_{it} = industry classification code; $DEBT_{it}$ = ratio of total long-term debt per total assets; $AUDR_{it}$ = assigned the value of 1 if Big 4 and 0 if otherwise. i and t refer to firm and year, respectively.

To assess the potential for multicollinearity, variance inflation factors (VIF) were calculated for all individual variables (see sections 4.2 and 4.3); all variables had VIF of less than 10, indicating no serious multicollinearity problems.

The valuation of compliance with accounting standards

The implication of valuation theory and agency theory are tested in this section, based on the assumption that investors priced firm level compliance (valuation theory). To the extent that investors price the level of compliance, companies will take advantage by differentiating themselves through incurring the necessary high information costs to comply with best practice, which, in turn, reduces agency costs of information asymmetry.

Table 3 presents the pooled OLS results. From panel A, the coefficients of BVE, NI, GLN, and GLP for the pooled data were positive and statistically significant and the R^2 of the model was 30.54 percent. However, the inclusion of the overall COMPL score (as presented in panel B) as a proxy for the perceived reliability led to a small increase in the coefficients of the parameters and statistical significance. Consistent with expectations, an increase in the R^2 was achieved (increasing to 34.43 percent). The coefficient of the COMPL score was positive and significant at 5 percent, suggesting that COMPL was positively priced in the Nigerian market. Firm-level characteristics such as auditor reputation, debt ratio, and industry classification substantially affected the degree of disclosures.

This result demonstrated that, beyond accounting numbers, non-financial disclosures accompanying the fundamentals of firms do convey relevant information to investors. This



Table 3: Value relevance of firm-level compliance for the years 2012–2014

Variable	Sign	Panel A: Valuation of fair value			Panel B: Valuation of COMPL		
		Coef.	Robust error	VIF	Coef.	Robust error	VIF
CONS	+/-	1.31 (-1.21)	1.09	-	1.93 (2.01**)	0.96	-
BVE _{it}	+	0.51 (2.46**)	0.21	1.24	0.88 (3.20***)	0.28	1.24
NI _{it}	+	0.26 (3.17***)	0	1.28	0.25 (3.12***)	0.08	1.25
GLN _{it}	+	0.24 (3.31***)	0.07	1.19	0.25 (3.52***)	0.07	1.14
GLA _{it}	+	-0.03 (-0.32)	0.1	1.05	0.02 -0.16	0.11	1.05
GLP _{it}	+	0.19 (1.80*)	0.1	1.22	0.48 -1.18	0.41	1.14
COMPL _{it}	+	-	-	-	0.69 (2.01**)	0.34	1.09
LNI _{it}	-	-0.03 (-0.46)	0.06	1.05	-0.05 (-0.73)	0.06	1.06
LNI*NI _{it}	-	-0.08 (-1.53)	0.06	1.03	-0.11 (-1.87*)	0.06	1.05
FSIZE _{it}	+	0.02 -0.65	0.02	1.05	0.02 -0.74	0.02	1.05
IND _{it}	+	0.0001 (2.35**)	0	1.05	0.01 (2.37**)	0.06	1.06
DEBT _{it}	+	-0.09 (-2.15**)	-0.06	1.03	-0.09 (-2.37**)	0.04	1.03
AUDR _{it}	+	0.71 (4.88***)	0.15	1.54	0.7 (4.76***)	0.15	1.3
F-statistic		9.48***			9.34***		
Observations		259			259		
R ²		30.54%			34.43%		
Mean VIF				1.17			1.12

Notes: Panel A provides the regression result of the components of other comprehensive income. Panel B provides the valuation effect of COMPL_{it}. BVE_{it} = per share the book value of common equity; NI_{it} = net income per share; GLN_{it} = per share changes in revaluation surplus; GLA_{it} = per share changes in gains and losses on re-measuring available-for-sale financial assets; GLP_{it} = per share actuarial gains and losses on defined benefit plans. Control variables include: FSIZE_{it} = the log of market capitalization; IND_{it} = SIC code; DEBT_{it} = ratio of total long-term debt per total assets; AUDR_{it} = auditor's reputation assigned the value of 1 Big4 and 0 if otherwise. *i* and *t* refer to firm and year, respectively. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively).

finding provides strong evidence on valuation implication of COMPL with relevant accounting standards in gauging the reliability of components of other comprehensive income. This position is similar to the conclusions reached in prior studies on the importance of disclosure in determining the quality of accounting information (Hodgdon et al., 2008; Leuz and Wysocki, 2008; Hassan et al., 2009; Tsalavoutas, 2009). Nonetheless, because firms differ with respect to skills or resources to cope with the new set of accounting standards, the valuation difference between low- and high-compliance firms was explored. Following Tsalavoutas (2009) and Hussainey and Walker (2009), the median value of the COMPL score is the point of sample partitioning for low- and high-COMPL firms. This approach is essential to the objective of the present analysis as it implies that substantially different levels of information reach investors.



This could also serve as a basis for distinguishing firms that differentiate themselves by providing quality disclosure to demonstrate compliance with best practice (Maines and Wahlen, 2006). Table 4 presents the results of data partitioning between low- and high-COMPL firms.

Table 4: Valuation differences between high- and low-compliance firms for the years 2012–2014

Variable	Sign	Panel A: Low-COMPL firms			Panel B: High-COMPL firms		
		Coef.	Robust error	VIF	Coef.	Robust error	VIF
CONS	+/-	-3.16 (-2.35**)	1.34	-	2.98 (2.38**)	1.25	-
BVE _{it}	+	0.59 (2.64**)	0.23	1.24	0.9 (1.75*)	0.5	1.24
NI _{it}	+	0.42 (4.68***)	0.09	1.28	0.25 (2.86***)	0.09	1.25
GLN _{it}	+	0.06 -0.61	0.09	1.19	0.37 (4.54***)	0.08	1.14
GLA _{it}	+	0.01 -0.14	0.09	1.05	0.04 -0.41	0.1	1.05
GLP _{it}	+	-0.7 (-0.70)	0.99	1.22	0.42 -1.02	0.41	1.14
COMPL _{it}	+	0.54 -1.43	0.38	1.07	0.93 (2.58***)	0.36	1.09
LNI _{it}	-	0.04 -0.29	0.13	1.05	-0.08 (-1.09)	0.08	1.06
LNI*NI _{it}	-	-0.15 (-1.68*)	0.09	1.03	-0.08 (-1.02)	0.08	1.05
FSIZE _{it}	+	-0.09 (-1.92*)	0.05	1.05	0.05 -1.52	0.03	1.05
IND _{it}	+	0.08 -0.99	0.09	1.05	0.11 -1.46	0.08	1.06
DEBT _{it}	+	-0.03 (-0.44)	-0.07	1.03	-0.13 (-2.86**)	0.05	1.03
AUDR _{it}	+	0.31 -1.58	0.19	1.54	0.64 (4.05***)	0.16	1.3
F-statistics		6.12***			9.49***		
Observations		72			187		
R ²		31.20%			38.79%		
Mean VIF				1.17			1.12
Cramer's Z-test					-1.9 (0.056)		

Notes: Panel A delineates the result for low-COMPL firms whereas panel B presents the results for high-COMPL firms. COMPL_{it} = disclosure score for the two sample firms; BVE_{it} = per share the book value of common equity; NI_{it} = net income per share; GLN_{it} = per share changes in revaluation surplus; GLA_{it} = per share changes in gains and losses on re-measuring available-for-sale financial assets; GLP_{it} = per share actuarial gains and losses on defined benefit plans. Control variables include: FSIZE_{it} = the log of market capitalization; IND_{it} = industry classification code; DEBT_{it} = ratio of total long-term debt per total assets; AUDR_{it} = auditor's reputation is assigned the value of 1 for Big4 firms and 0 if otherwise. *i* and *t* refer to firm and year, respectively. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Similar to the results of the full sample, the coefficients of the book value of equity and net income were positive and significant for the two cases. When the data were analysed for the sample of low- and high-COMPL firms, the components of other comprehensive income were



not significantly priced for the two cases, except for REV of high-COMPL firms, presented in panel B. Interestingly, the coefficient of COMPL for the sample of high-compliance firms was positive and significant at 1 percent, whereas the coefficient for low-COMPL firms was not significant, suggesting low reliability based on compliance.

The differences in regression between the two sub-sample firms indicated differences in the perceived reliability between low- and high-COMPL firms. Cramer's Z-test of difference between the two sub-samples was statistically significant at 10 percent, based on the Z score of -1.59 (0.056). The implication for this result is that the level of compliance with accounting regulation is important in assessing the quality of accounting fundamentals. Theoretically, a case is made that an increased level of disclosure has positive valuation implications and can reduce the agency costs of information asymmetry (Maines and Wahlen, 2006; Hodgdon et al., 2008). Since several creative accounting practices have taken place in Nigerian as a result of the low disclosures (NASB, 2010; ROSC, 2011), this finding is essentially relevant in the Nigerian market. Accordingly, improving the COMPL level will imply a more transparent financial reporting process, reduced agency cost and, hence, lead to more value reliable accounting fundamentals. Thus, H_1 , which hypothesised that compliance with IAS 16, IAS 19, and IFRS 7 would enhance reliability in the Nigerian market, was fully supported.

The effect of compliance on the valuation of other comprehensive income

Table 5 presents the results of three years' pooled regression of components of other comprehensive income. The F-statistic of the model was 9.73 and significant at 1 percent, indicating that the model was well specified. The R^2 of 37.71 percent is satisfactory and similar to previous compliance studies (Street and Bryant, 2000; Street and Gray, 2001). The NI for the period was positive and significant at 1 percent. The regression coefficients on the fair value GLN was positive and significant at 1 percent. The regression coefficient on GLA and GLP were not significant. More interestingly, the results of the interaction term between GLN*COMPL and GLP*COMPL were positive and statistically significant. In absolute terms, the coefficients of GLN*COMPL and GLP*COMPL were greater than without interactions. This result demonstrates that components of other comprehensive income provided value-relevant information in explaining share prices when COMPL with relevant accounting standards was disclosed in the financial statements. To the extent that COMPL with relevant accounting standards relating to other comprehensive income addresses reliability concerns regarding the choice of valuation method for fair value determination, investors are more likely to view components of other comprehensive income as reliable.

As evidenced in Goncharov et al. (2006), when non-compliance costs are negligible, firms that incur high information costs to provide quality information are recognised as "good and responsible" and consequently are rewarded by investors. A similar attribution is likely for Nigeria, given the low level of disclosure in the Nigerian reporting environment and the disparity between the NG-GAAP and IFRS framework (NASB, 2010; ROSC, 2011). The IFRS reporting framework has more accounting policy choices, which are inconsistent with NG-GAAP, such as more disclosure requirements, and differences in application and interpretation are possible reasons that could make investors recognise COMPL with relevant accounting



Table 5: The impact of compliance on the value relevance of other comprehensive income items

Variable	Sign	Coef.	Robust error	T	p-value	VIF
CONS	+/-	0.75	0.64	1.17	0.242	-
BVE _{it}	+	0.88	0.24	3.73***	0.000	1.26
NI _{it}	+	0.22	0.08	2.83***	0.005	1.30
GLN _{it}	+	0.26	0.07	3.77***	0.000	1.19
GLA _{it}	+	0.06	0.10	0.61	0.542	1.06
GLP _{it}	+	0.50	0.39	1.30	0.194	1.22
COMPL _{it}	+	0.73	0.28	2.64***	0.009	1.07
GLN*COMPL _{it}	+	0.58	0.17	3.36***	0.001	1.06
GLA*COMPL _{it}	+	-0.01	0.07	-0.16	0.874	1.04
GLP*COMPL _{it}	+	0.11	0.06	1.96*	0.051	1.04
LNI _{it}	-	-0.06	0.06	-0.98	0.326	1.07
LNI*NI_S _{it}	-	-0.12	0.06	-2.07**	0.040	1.07
FSIZE _{it}	+	0.02	0.02	0.72	0.470	1.04
IND _{it}	+	0.002	0.00	2.49**	0.013	1.28
DEBT _{it}	+	-0.11	-0.04	-2.78***	0.006	1.05
AUDR _{it}	+	0.73	0.15	4.92***	0.000	1.52
F-statistic		9.73			0.000	
Observations		259				
R ²		37.71%				
Mean VIF						1.15

Notes: COMPL_{it} = disclosure score for the sample firms; BVE_{it} = per share the book value of common equity; NI_{it} = net income per share; GLN_{it} = per share gains and loss on non-current asset; GLA_{it} = per share changes in gains and losses on re-measuring available-for-sale financial assets; GLP_{it} = per share actuarial gains and losses on defined benefit plans. GLN*COMPL_{it} = interaction of per share gains and loss on non-current asset and level of COMPL_{it}; GLA*COMPL_{it} = interaction of per share changes in gains and losses on re-measuring available-for-sale financial assets and level of COMPL_{it}; GLP*COMPL_{it} = interaction of per share actuarial gains and losses on defined benefit plans and level of COMPL_{it}. Control variables includes FSIZE_{it} = is the log of market capitalization; IND_{it} = industry classification; DEBT_{it} = ratio of total long-term debt per total assets; AUDR_{it} = auditor's reputation assigned the value of 1 Big4 and 0 if otherwise. i and t refer to firm and year, respectively. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively

standards when assessing the reliability of reported earnings. As such, this study fails to reject H₂, which hypothesised that compliance with IAS 16, IAS 19, and IFRS 7 significantly influenced the value relevance of other components of comprehensive income in the Nigerian market.

Robustness test

In testing H₁ and H₂, pooled data involving different years and unit observations were used (unbalanced panel). Residuals across years and units could be correlated (Petersen, 2009; Wooldridge, 2013). The test for firm fixed effect and time effect indicated an unobserved firm fixed effects for estimation testing H₁ and H₂. A corrective measure for standard errors and related t-statistics on one dimension (OLS standard errors, clustered at the firm level), which provides less-biased standard errors, was used to re-estimate models 1 and 2. This approach is similar to that of Song et al. (2010), Goncharov and Hodgson (2011), and Mechelli and Cimini (2014). The results shows that the direction of coefficients and the significance level of the models clustered at the firm level was qualitatively similar to the basic models of the interacting effect of compliance with relevant accounting requirement (not tabulated).



5 Conclusions and Recommendations

This study examines the value relevance of compliance with accounting standards. Additionally, it examines the effect of compliance with accounting standards on the valuation of other comprehensive income components in Nigerian market. A total of 259 firm-year observations from 2012 to 2014 were used as a sample for this study. Overall, the findings provide evidence that compliance with relevant accounting requirements enhanced the reliability of accounting information for investors. As a test of reliability, the study documented that the fair value of non-current assets and pension liabilities are positively priced for high-compliance firms, but not for low-compliance firms. This result underscores the importance of compliance with the reporting requirements relating to IAS 16, IAS 19, and IFRS 7. It was, therefore, concluded that fair value gains and losses of firms that disclosed relevant information are perceived to be more reliable. The study further explored the influence of disclosure relating to IAS 16, IAS 19, and IFRS 7 on the valuation of components of other comprehensive income. The findings indicate the influence of compliance on the components of other comprehensive income, particularly fair value gains and losses on non-current assets and actuarial gains and losses. To the extent that compliance with accounting standards relating to other comprehensive income addresses reliability concerns regarding fair value determination, investors are more likely to view components of other comprehensive income as reliable. This study provides some initial evidence on the effect of compliance on these fair value earnings. It is documented that fair value gains and losses on non-current assets and actuarial gains and losses seem more reliable when conditioned for level of compliance. Thus, compliance with relevant standards could be a determinant of the reliability of fair value earnings.

This study is subject to some caveats and a fair interpretation of the findings documented herein is better appreciated by understanding these shortcomings. First, the findings documented in this study are limited to the sample firms with non-zero other comprehensive income from 2012 to 2014. Inclusion of more years as data becomes available and the market becomes more vibrant may change the results documented herein over time. Second, evidence presented in this study relates to the value relevance in terms of quality of comprehensive income and its components relative to traditional net income. It is therefore suggested that the importance of components of other comprehensive income can be gauged by investigating other information dimensions such as persistence and predictive relevance. Future research is recommended to explore these issues in Nigeria.

References

- Al-Akra, M., Eddie, I. A. & Ali, M. J. (2010). The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: Evidence from Jordan. *The British Accounting Review*, 42, 170–186.
- Al-Shammari, B., Brown, P. and Tarca, A. (2008). An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states. *The International Journal of Accounting*, 43(4), 425–447.
- Al-Shiab, M. (2008). The effectiveness of International Financial Reporting Standards adoption on cost of equity capital: A vector error correction model', *International Journal of Business*, 13 (3), 271-298.



- Amir, E., Harris, T. S., and Venuti, E. K. (1993) 'A comparison of the value- relevance of US versus non-USGAAP accounting measures using form 20-F reconciliations', *Journal of Accounting Research*, 31 (1), 230–264.
- Anandarajan, A. & Hasan, I. (2010) 'Value relevance of earnings: Evidence from Middle Eastern and North African countries', *Advances in Accounting*, 26 (2), 270–279.
- Barth, M. E. & Clinch, G. (1998) 'Revalued financial, tangible, and intangible assets: Associations with share prices and non-market-based value estimates', *Journal of Accounting Research*, 36 (3), 199-233.
- Barth, M. E., Landsman, W. R. & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46 (3), 467-498.
- Barth, M. E., Landsman, W. R., Lang, M. & Williams, C. (2012) 'Are IFRS-based and US GAAP-based accounting amounts comparable?', *Journal of Accounting and Economics*, 54 (1), 68–93.
- Biddle, G.C. and Choi, J.H. (2006) 'Is comprehensive income useful?', *Journal of Contemporary Accounting & Economics*, 2(1), 1-32.
- Bushee, B. & Leuz, C. (2005). Economic consequences of SEC disclosure regulation: Evidence from the OTCBB. *Journal of Accounting and Economics*, 39(2), 233-264.
- Cahan, S. F., Courtenay, S. M., Gronewoller P. L. & Upton, D. R. (2000). Value relevance of mandated comprehensive income disclosures. *Journal of Business Finance & Accounting*, 27 (9), 1273–1302.
- Cairns, D. (1999). Degrees of compliance. *Accountancy*, 124 (1273), 114-118.
- Chambers, D., Linsmeier, T.J., Shakespeare, C. & Sougiannis, T. (2007). An evaluation of SFAS No. 130 comprehensive income disclosures. *Review of Accounting Studies*, 12, 557–593.
- Chen, C. J. P. & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. , *Journal of Accounting and Public Policy*, 19, 285–310.
- Cooke, T. (1989). Disclosure in the corporate annual reports of Swedish companies. *Accounting and Business Research*, 19 (74), 113-124.
- Dainelli, F., Bini, L. & Giunta, F. (2013) . Signaling strategies in annual reports: Evidence from the disclosure of performance indicators. *Advances in Accounting*, 29(2), 267-277.
- Daske, H., Hail, L., Leuz, C. & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46 (5), 1085-1142.
- Dhaliwal, D., Subramanyam, K.R. & Trezevant, R. (1999). Is comprehensive income superior to net income as a measure of firm performance?. *Journal of Accounting and Economics*, 26, 43–67.
- Fasan, M., Fiori, G. & Tiscini, R. (2014). OCI value relevance in continental Europe: An examination of the adoption of IAS 1 revised. *Academy of Accounting and Financial Studies Journal*, 18 (4), 17-36.
- Glaum, M. & Street, D. L. (2003). Compliance with the disclosure requirements of Germany. s New Market: IAS versus U.S. GAAP. *Journal of International Financial Management and Accounting*, 14(1), 64-74.



- Goh, B., Li, D., Ng, J. & Yong, K. (2015). Market pricing of banks. fair value assets reported under SFAS 157 since the 2008 financial crisis. *Journal of Accounting and Public Policy*, 34(2), 129–145.
- Goncharov, I. and Hodgson, A. (2011). Measuring and reporting income in Europe. *Journal of International Accounting Research*, 10 (1), 27-59.
- Goncharov, I., Werner, J. R. & Zimmermann, J. (2006). Does compliance with the German corporate governance code have an impact on stock valuation? An empirical analysis. *Corporate Governance: An International Review*, 14 (5), 432-445.
- Habib, A. (2008). The role of accruals and cash flows in explaining security returns: Evidence from New Zealand. *Journal of International Accounting, Auditing and Taxation*, 17 (1), 51-66.
- Hassan, O., Romilly, P., Giorgioni, G. & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging capital market of Egypt. *The International Journal of Accounting*, 44 (1), 79-102.
- Hlaing, K. P. & Pourjalali, H. (2012). Economic reasons for reporting property, plant, and equipment at fair market value by foreign cross-listed firms in the United States. *Journal of Accounting, Auditing & Finance*, 27, 557-576.
- Hodgdon, C., Tondkar, R. H., Adhikari, A. & Haress, D. W. (2009). Compliance with International Financial Reporting Standards and auditor choice: New evidence on the importance of the statutory audit. *The International Journal of Accounting*, 44, 33–55.
- Hodgdon, C., Tondkar, R., Harless, D. & Adhikari, W. A. (2008) . Compliance with IFRS disclosure requirements and individual analysts. forecast errors. *Journal of International Accounting, Auditing and Taxation*, 17 (1), 1-13.
- Hope, O. (2003). Disclosure practices, enforcement of accounting standards, and analysts forecast accuracy: An international study. *Journal of Accounting Research*, 41 (2), 235-275.
- Hung, M. & Subramanyam, K. R. (2007). Financial statement effects of adopting international accounting standards: The case of Germany. *Review of Accounting Studies*, 12 (4), 623-657.
- Hussainey, K. & Walker, M. (2009). The effects of voluntary disclosure policy and dividend propensity on prices leading earnings. *Accounting and Business Research*, 39 (1), 37-55.
- ICAEW (2007). EU implementation of IFRS and the fair value directive: A report for the European Commission. Institute of Chartered Accountants in England and Wales (Available at http://ec.europa.eu/internal_market/accounting/docs/studies/2007-eu_implementation_of_ifrs_summary.pdf).
- International Accounting Standards Board [IASB] (2005) *Improving disclosures about financial instruments (IFRS 7)*. www.iasplus.com/en/standards/ifrs/ifrs7. (Accessed 12 August 2014).
- International Accounting Standards Board [IASB] (2010) *The conceptual framework for financial reporting*. eifrs.iasb.org/eifrs/bnstandards/en/framework.pdf. (Accessed 28 June 2014).
- Kanagaretnam, K., Mathieu, R. & Shehata, M. (2009). Usefulness of comprehensive income reporting in Canada. *Journal of Accounting and Public Policy*, 28 (4), 349-365.



- Kang, T. & Pang, Y.H. (2005). Economic development and the value-relevance of accounting information- a disclosure transparency perspective. *Review of Accounting and Finance*, 4 (1), 5-31.
- Karampinis, N. & Hevas, D. (2009). The effect of the mandatory application of IFRS on the value relevance of accounting data: Some evidence from Greece. *European Research Studies*, 12 (1), 73-100.
- Kim, O. (2013). Russian accounting system: Value relevance of reported information and the IFRS adoption perspective. *The International Journal of Accounting*, 48(4), 525-547.
- Lee, C. & Park, M. S. (2013). Subjectivity in fair-value estimates, audit quality, and informativeness of other comprehensive income. *Advances in Accounting*, 29 (2), 218-231.
- Leuz, C. & Wysocki, P. (2008). Economic consequences of financial reporting and disclosure regulation: a review and suggestions for future research. Working Paper, University of Pennsylvania, Massachusetts Institute of Technology (MIT), USA.
- Leventis, S. & Weetman, P. (2004). Timeliness of financial reporting: Applicability of disclosure theories in an emerging capital market. *Accounting and Business Research*, 34 (1), 43-56.
- Maines, L. A. & McDaniel, L. S. (2000) . Effects of comprehensive-income characteristics on nonprofessional investor's judgments: The role of financial-statement presentation format. *The Accounting Review*, 75(2), 179-207.
- Maines, L. A. & Wahlen, J. M. (2006). The nature of accounting information reliability: inferences from archival and experimental research. *Accounting Horizons*, 20(4), 399-425.
- Marchini, P.L. & D. Este, C. (2015). Comprehensive income and financial performance ratios: Which potential effects on RoE and on firm. s performance evaluation?. *Procedia Economics and Finance*, 32(1), 1724-1739.
- Mechelli, A. & Cimini, R. (2014). Is comprehensive income value relevant and does location matter? A European study. *Accounting in Europe*, 11(1), 59-87.
- Mironiuc, M. & Carp, M. (2014). Empirical study on the informative value of the accounting data provided by the companies quoted in the Bucharest Stock Exchange. *Procedia-Social and Behavioral Sciences*, 109, 396-401.
- Mısırlıoğlu, I. U., Tucker, J. & Yükseltürk, O. (2013). Does mandatory adoption of IFRS guarantee compliance?. *The International Journal of Accounting*, 48, 327 – 363.
- Nigerian Accounting Standard Board [NASB] (2010) *Roadmap on the adoption of International Financial Reporting Standards in Nigeria*. <http://financialreportingcouncil.gov.ng/attachments/article/79/RoadmapFinalReportSeptember2010.pdf>. (Accessed 20 July 2014).
- Nobes, C. (2006). The survival of international differences under IFRS: Towards a research agenda. *Accounting and Business Research*, 36 (3), 233-245.
- O. Hanlon, J.F. & Pope, P.F. (1999). The value-relevance of UK dirty surplus accounting flows. *British Accounting Review*, 31, 459- 482.
- Ohlson, J.A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11 (2), pp.661-687.



- Petersen, M. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22 (1), 435-480.
- PricewaterhouseCoopers [PwC] (2011). *Similarities and differences between IFRS and Nigerian GAAP*.
http://www.academia.edu/People/Differences_and_similarities_between_IFRS_and_Nigerian_GAAP. (Accessed 20 April 2014).
- Rad, S. S. E. & Embong, Z. (2013). International financial reporting standards and financial information quality: Principles versus rules-based standards. *Jurnal Pengurusan*, 39, 93-109.
- Siekinen, J. (2016). Value relevance of fair values in different investor protection environments. *Accounting Forum*, 40, 1-15.
- Song, C. J., Thomas, W. B. & Yi, H. (2010). Value relevance of FAS (157 fair value hierarchy information and the impact of corporate governance mechanisms. *The Accounting Review*, 85 (4), 1375-1410.
- Street, D. & Bryant, S. (2000). Disclosure level & compliance with IASs: a comparison of companies with & without U.S. listings & filings. *The International Journal of Accounting*, 35(3), 305-329.
- Street, D. & Gray, S. (2001) *Observance of international accounting standards: Factors explaining non-compliance*. Association of Chartered Certified Accountants (ACCA) Research Report, No. 74, London, UK.
- Street, D. L., Gray, S. J. & Bryant, S. M. (1999). Acceptance & observance of international accounting standards: An empirical study of companies claiming to comply with IASs. *The International Journal of Accounting*, 34 (1), 11-48.
- Tsalavoutas, I. (2009). *The Adoption of IFRS by Greek Listed Companies: Financial Statement Effects, Level of Compliance & Value Relevance*. Unpublished PhD thesis, The University of Edinburgh, Edinburgh, UK.
<https://www.era.lib.ed.ac.uk/handle/1842/4060>. (Accessed 2 April 2014).
- Tsalavoutas, I., & P., & Evans, L. (2012). The transition to IFRS & the value relevance of financial statements in Greece. *The British Accounting Review*, 44(4), 262-277.
- Usman, A. B., Amran, N. A., & Shaari, H. B. (2017). The effect of corporate governance mechanisms on the valuation of comprehensive income reporting in Nigeria *Malaysian Management Journal*, 21(1), 33-47.
- Usman, A. B., Amran, N. A., & Shaari, H. B. (2016). The value relevance of comprehensive income in Nigerian: A pilot test. *International Journal of Economics & Financial Issues*, 6(2), 793-797.
- Wang, Y., Buijink, W. & Eken, R. (2006) . The value relevance of dirty surplus accounting flows in The Netherlands', *The International Journal of Accounting*, 41, 387-405.
- Wooldridge, J. M. (2013). *Introductory Econometrics: A Modern Approach*, South-Western Cengage Learning, Florida, FL
- World Bank (2011). *Nigeria -Report on the observance of standards & codes (ROSC)*. Washington, DC.