

RELATIVE AND INCREMENTAL VALUE RELEVANCE OF COMPREHENSIVE INCOME REPORTING IN NIGERIAN EXCHANGE GROUP

ALIYU Baba Usman
ubabaali3131@gmail.com
+2348065808572

Department of Accounting, Ibrahim Badamasi Babangida University, Niger State. Nigeria

SALIHU Ndagi
ndagisaliu@gmail.com
+2348036935658

Department of Accounting, Ibrahim Badamasi Babangida University, Niger State. Nigeria

MASUD Abdullahi
talk2masud2008@gmail.com
+2348032170149

Department of Business Administration, Ibrahim Badamasi Babangida University, Niger State-
Nigeria

FATIMA Uthman Zahra
Umminsalma16@gmail.com
+2347035622108

Department of Accounting, Ibrahim Badamasi Babangida University, Niger State. Nigeria.

ABSTRACT

The adoption of International Financial Reporting Standards (IFRS) presents a new perspective of reporting earnings in the Nigerian capital market. Two objectives were set to investigate these earnings. First, the study investigates the relative value relevance of the Net Income (NI) and Comprehensive Income (CI). The second objective investigates the incremental value relevance of Other Comprehensive Income (OCI) relative to the NI in the Nigerian capital market. A sample of 137 financial firm-year observations covering 2018 to 2022 was examined. Results suggest that both NI and CI were value relevant on an individual basis, but NI was superior. The result of the incremental value relevance test showed that OCI provides incremental value relevant information, but with a coefficient lower than that of net income. One primary recommendation of the study is to pursue enforcement of presentation of Statement of Comprehensive Income (SCI) to enhance the level of disclosure and transparency of financial statement for companies listed on the Nigeria Exchange Group.

Keywords: Relative Value Relevance, Net Income, Comprehensive Income Incremental Value Relevance

INTRODUCTION

In the international arena, the benefits or otherwise of comprehensive income reporting have generated an interesting debate among scholars. A considerable number of studies have examined the relative value relevance of Net Income (NI) and Comprehensive Income (CI) (Jones & Smith, 2011; Kanagaretnam, Mathieu, & Shehata, 2009; Lee and Park, 2013; Mechelli & Cimini, 2014; Firescu, 2015; Marchinia & Este, 2015; Schaberl & Victoravich, 2015, Usman, Amran and Shaari, 2017; Anderson. Et al., 2022; Firmansyah et al., 2022; Mihael et al., 2022). A resounding conception in the above studies is, when value relevant information eluded disclosure on the face of primary financial statement, such may hinder the investors' ability to find and integrate significant events in a precise and timely manner. Such concept has intensified debate on the incremental value relevance of Other Comprehensive Income (OCI).

The transition to IFRS in 2012 provided the Nigerian reporting entities with different accounting requirements. This is particularly important for the presentation of a SCI, which was not a requirement under the NG-GAAP. Reporting under the IFRS framework requires firms to mark-to-market or models certain financial assets and liabilities known as OCI items (PricewaterhouseCoopers [PwC], 2011). The NG-GAAP principles relating to OCI items are based on historical costs or revaluation as compared to IFRS that emphasise mark-to-market or mark-to-model approach. Thus, the transition could mean more disclosure and enhanced quality of accounting as against previous low disclosure of accounting information identified by the World Bank Report on the Observance of Standards and Codes [ROSC] (2011). Thus, to the extent that the IFRSs increases disclosure of accounting information, the claim might be made that CI and OCI would be positively priced in the Nigerian capital market. To investigate this phenomenon, two objectives were set for this study. The first objective was to compare the relative value relevance of NI and CI. The second objective was to investigate whether OCI provides incremental information given the book value of equity and NI for sample of firms listed on the Nigerian Exchange group.

Based on these objectives, the study contributes to and extends the value relevance literature on CI by adding Nigerian perspective to the ongoing debate. Consistent with previous studies, the dominance of NI over the CI and incremental information content of OCI was documented. In line with Khan and Bradbury (2014), Schaberl and Victoravich, (2015), Usman, Amran and Shaari (2017) and Anderson et al. (2022), Firmansyah et al., (2022) and Mihael et al. (2022), the overall results reinforce the view that CI and OCI do not surpass the traditional NI. As a caveat, given the transitory nature of OCI items, the imposed condition of non-zero OCI item suggest a sample limitation. The remainder of this paper is organised as follows: Section two presents the review of related works and hypothesis development. The research method is presented in Section three. The findings are contained in Sections four and five respectively, and Section six is the conclusion of the study.

LITERATURE REVIEW

To gauge valuation theory, global practices required that accounting earnings be disaggregated into various components to facilitate understanding of how market prices subclass of earnings with different degrees of persistence (Wang, Buijink, & Eken, 2006; Lu & Mande, 2014;

Anderson et al., 2022). Thus, CI for the period is determined after NI is adjusted for fair value gains and losses on OCI items. The rationale for this innovation by the IASB as well as FASB is to improve the transparency of financial statements and to provide users of accounting information with more financial performance measures (Kanagaretnam et al., 2009; Mechelli & Cimini, 2014; Firescu et al., 2015; Anderson et al., 2022). A good number of the literatures has examined whether NI, CI and OCI exhibit different aptitudes for explaining the market value of equities. For instance, Cheng et al. (1993) showed that NI was more useful than CI based on the R^2 of the regression equations estimating the relative value relevance of NI and CI. Using a similar methodology with Cheng et al. (1993), Dhaliwal et al. (1999) and O'Hanlon and Pope (1999) and Anderson et al. (2022) documented mixed results. They found NI to be more strongly associated with market value, but found no clear evidence if CI was more strongly associated with returns for a sample of firms in the United States and the United Kingdom.

Similar to the above studies, other evidence demonstrates that NI tends to represent more relevant information than CI (Goncharov and Hodgson, 2011; Jones and Smith, 2011; Turen and Hussiny, 2012; Mechellia & Cimini, 2014; Firescu, 2015; Marchinia and Este, 2015 Usman et al., 2016; Firmansyah et al., 2022; Mihael et al., 2022). When the two performance indicators are explored for different users based such as informativeness, prediction and valuation purposes, NI was superior to CI (Goncharov and Hodgson, 2011) and considered to be a better measure in explaining stock price, stock return and operating cash flow (Turen & Hussiny, 2012). In general, CI leads to a configuration of relevant earnings information, however, lower than NI (Mechelli & Cimini, 2014; Firescu et al., 2015). Marchinia and Este (2015), Firmansyah et al. (2022) and Mihael et al. (2022) documented that first-time adoption of CI reporting significantly affected Italian reporting firms. Usman, Amran and Shaari (2016) in their pilot test observed a price and return reactions to the magnitude of both the NI and CI, but concluded on the supremacy of NI over CI. Consequently, the dominance of NI is not surprising because it is permanent and generated from core operations of an entity unlike CI that is uncertain given the infrequent occurrence of OCI items.

Few authors have also reported opposite result, suggesting that CI has higher value relevance than NI. Cahan et al. (2000) and Biddle and Choi (2006) provide some market-based test of CI reporting in the United States and New Zealand firms. Both documented that CI is more strongly associated with stock prices and returns compared to the traditional net income for information usefulness. Despite the differences between the two accounting frameworks, relative value relevance of CI and incremental value relevance of OCI had not been tested in Nigeria for financial firms. Prior value relevance studies that used Nigerian market data are based on the summary measures of the book value of equity, earnings per share and cash flow from operation (Mgbame & Ikhatua, 2013; Olugbenga & Atanda, 2014; Enofe et al., 2014; Ernest & Oscar, 2014). Exception was Usman et al. (2016) and Usman et al. (2017) that provided a pioneering insight on the value relevance of CI covering only three years into post SCI regime. Given the uncertainty of cash flows on OCI items that differentiate NI from CI and following Usman et al. (2016) and Usman et al. (2017), it is arguable that investors may place more weight on the traditional NI, at least being permanent earnings that results only from core-business activities. Thus, the following hypothesis is posited:

Prior literature has also highlighted the valuation implications of OCI. Wang et al. (2006) suggested that accumulated OCI of up to 10 years were found not be associated with stock

returns. Jones and Smith (2011) found OCI to be value relevant, but display negative persistence and have a weaker predictive power. Using measurement approach, the results indicate that incremental information of OCI was only driven by unrealised available-for-sale securities (Goncharov and Hodgson, 2011). Fasan et al. (2014) were motivated to examine how the implementation of revised IAS 1 has affected the extent to which the market takes OCI into account. Using an extensive data set covering firms in 19 countries from 1995 to 2010, they documented value relevance of OCI for continental Europe. Mechelli and Cimini (2014) documented an incremental value relevance of OCI, but this was continuously lower as compared to traditional NI. Firmansyah et al., 2022; Mihael et al., 2022

The above review suggests a conflicting conclusion on the incremental value relevance of OCI. This mixed result is probably due to the differences in the data set, model specifications, industry factor, sample period and differences in specific items of comprehensive income among countries. Prior to 2012, the NG-GAAP does not require disclosure of OCI and its items in a separate component of a financial statement. Given the difference that exists between the NG-GAAP and IFRS in terms of measurements and recognition of OCI items makes NSE market a good setting to test the incremental value relevance of OCI. Principally, the innovation could mean greater earnings quality and increase level of disclosure to market participants in the NSE market.

METHODOLOGY

Sample Selection and Research Design

The target population of this study was a maximum of 35 financial firms listed on the Nigerian Exchange Group during the financial year-end 2022. However, considering the infrequent nature of OCI items, not all firms were expected to report such earnings on a yearly basis. Because of this limitation, adopting the entire population might be impossible and this informed the decision to use the availability-sampling technique because. This sampling technique allows the study to focus on companies with available information from 2018 to 2022. Data on the share price, dividend and all accounting data were hand collected from the annual reports. Given a zero expectancy of OCI items, an additional condition of non-zero item of OCI was assumed following Kanagaretnam et al. (2009), Kubota et al. (2011), and Mechelli and Cimini (2014) and Usman et al. (2017). Based on this criterion, a sample of 137 financial firms' observations was drawn to test all predicted hypotheses.

To provide evidence on the relative value relevance of NI and CI, two modified Ohlson's (1995) price models were estimated whereby all accounting variables are deflated using outstanding shares. The models are as specified:

$$SP_{it} = \beta_0 + \beta_1 BVE_{-}S_{it} + \beta_2 NI_{-}S_{it} + \beta_3 LNI_{it} + \beta_4 LNI_{it}^* NI_{-}S_{it} + \varepsilon_{it} \tag{1}$$

$$SP_{it} = \alpha_0 + \alpha_1 BVE_{-}S_{it} + \alpha_2 CI_{-}S_{it} + \alpha_3 LCI_{it} + \alpha_4 LCI_{it}^* CI_{-}S_{it} + \varepsilon_{it} \tag{2}$$

Where SP_{it} = share prices of a company i four months after the end of the financial year t ; Because Nigerian companies are mandated to file their annual reports with the Security and Exchange Commission (SEC) 90 days after the accounting year-end, share prices of four months after the financial year end was used. $BVE_{S_{it}}$ = the book value of common equity at the end of the financial year t . $NI_{S_{it}}$ = net income per share for the financial year t ; $CI_{S_{it}}$ = comprehensive income per share for the financial year t ; LNI_{it} and $LOCI_{it}$ are indicator variables, taking the values of 1 for negative $NI_{S_{it}}$ and $CI_{S_{it}}$ and 0 if otherwise and ε_{it} is the disturbance term.

We used three benchmarks to determine superiority of NI or CI. First, the regression coefficients between the variables were compared. Superiority was recognized based higher regression coefficient and interpreted in reversed order. In the second benchmark, the magnitude of the coefficient of determination (R^2) between the two competing variable was assessed. Third, Vuong's (1989) Z-statistic test of the difference between R^2 values was employed to establish if they are statistically significant similar to Goncharov and Hodgson (2011) and Mechelli and Cimini (2014). The second hypothesis focuses on the incremental value relevance of OCI. To test H2, which states that OCI provides incremental information, but with a coefficient lower than the NI, CI was decomposed into NI and OCI as mathematically expressed below.

$$CI_{it} = NI_{it} + OCI_{it} \tag{3}$$

Where OCI is the sum of OCI items of firm i for the financial year t . Substituting Equation 3 into 4 permits separate estimations for examining the coefficients of the NI and OCI to test H2.

$$SP_{it} = \beta_0 + \beta_1 BVE_{S_{it}} + \beta_2 NI_{S_{it}} + \beta_3 OCI_{S_{it}} + \beta_4 LNI_{it} + \beta_5 LOCI_{it} + \beta_6 LNI_{it} * NI_{S_{it}} + \beta_7 LOCI_{it} * OCI_{S_{it}} + \varepsilon_{it} \tag{4}$$

All parameters in model 4 are defined previously. An exception was LOCI, which is an indicator variable taking the values of 1 for negative OCI and 0 if otherwise. Previous studies of this nature are based on the assumption that, the R^2 will increase once OCI is added to the book value of equity and NI or by analysing whether the coefficients of OCI are different from zero (Cahan et al., 2000; Kanagaretnam et al., 2009; Mechelli and Cimin, 2014; Usaman et al., 2017; Usman et.al., 2017, Anderson et al., 2022; Mihael et al., 2022). β_3 was expected to be lower than β_2 in Equation 4.

RESULTS

Table 1: Descriptive Statistics Related to the Regression Variables for 2018-2022

	Mean	Median	SD	Min	Max	Skew	Kurtos
SP _{it}	34.00	11.00	0.71	0.50	50.00	0.11	1.71
BVE_S _{it}	41.00	16.00	0.56	0.20	4.31	0.67	1.22
NI_S _{it}	39.00	1.12	0.43	-1.79	2.83	0.89	3.26
CI_S _{it}	32.00	3.01	0.71	-1.22	3.42	0.12	3.87
OCI_S _{it}	0.85	0.41	0.35	-0.38	1.22	-1.00	3.86
LNI _{it}	0.04	0.00	1.91	0.00	1.00	0.30	3.58
LCI _{it}	0.01	0.00	1.36	0.00	1.00	0.69	4.21
LOCI _{it}	0.47	0.00	1.26	0.00	1.00	1.34	1.11

Due to the likelihood of differences in the frequency and magnitude of CI and OCI across industries, separate findings are presented for firms in the financial and nonfinancial firms. Table 1 presents the descriptive statistics of the variables used in regression analysis and all are reported in the Nigerian Naira (₦). Descriptive statistics on share prices and when earnings components are deflated by the outstanding share (SP) suggest a mean (median) SP of ₦34 (₦11) for the sample firms. These statistics suggest that the sample firms, on average, experienced positive SP. In line with expectations, the mean (median) values on BVE_S and NI_S were ₦39 (₦16) and ₦2 (₦1.12) in billions. This indicates high book of equity and health firm performance given overall positive NI. The CI_S yields an average (median) value of ₦32 (₦3) billion. The average (median) OCI_S were ₦0.85 (₦0.41) billion for firms examine. The minimum values of the three income measures indicate the presence of firms with negative earnings, which suggests a corrective measure that leads to the introduction of dummy variables (LNI and LCI) for negative firm-years observations to have both different intercepts and slope.

It is worthy of note that, when using financial data, normally distributed data is almost impossible because values are unsystematically randomly distributed between and within firms (Wooldridge, 2013). Nevertheless, the result of the skewness and the kurtosis of SP for sample firms was 0.11 and 1.71 respectively. These statistics and those of all independent's variables presented in Table 1 satisfied normality assumption because the Z-values of the variables fell between ± 3 and ± 10 for skewness and kurtosis suggested by Kline (2016). Table 2 presents a summary of the correlation matrix for the variables used in testing the relative and incremental value relevance of earnings.

Table 2: Pearson Correlation Coefficients.

	1	2	3	4	5
1 SP _{it}	1				
2 BVE_S _{it}	0.53*	1			
3 NI_S _{it}	0.31*	0.27	1		
4 CI_S _{it}	-0.17*	0.33	0.18*	1	
5 OCI_S _{it}	-0.26	-0.25	0.14	-0.15*	1

The coefficients of most accounting numbers were positively correlated with SP. This is not a surprise because both are measures of firm value. In general, the table demonstrates that the strength of the relationship between the predictor variables was reasonably within the acceptable threshold of not more than 0.8, except for the NI and CI. The high correlation between the two primary financial performance indicators is consistent with Mechelli and Cimini (2014), Usman et al (2016). However, it does not signal multicollinearity because the variables were tested in different models. Overall, the explanatory variables were moderately correlated with each other. The next sub-section report the pooled Ordinary Least Square (OLS) regression based on robust standard error.

A link test for Equations 1 and 2 were performed and presented in the lower part of Table 3. As expected, the predicted values of the models (\hat{y}) were significant. Likewise, \hat{y}^2 were insignificant suggesting that the models were correctly specified. Thus, specifying SP as a function of BVE_S, NI_S, LNI and LNI*NI_S (Equations 1); and SP as a function of BVE_S, CI_S, LCI and LCI*CI_S (Equations 2) provided parsimonious estimations and inclusion of additional explanatory variable, except by chance should not make any difference.

The coefficients of BVE_S for NI model was positive given the values of 0.8110. Likewise, the coefficients of BVE_S in Equation 2 for estimating relative value relevance of CI_S was also positive (0.751). Interestingly both are statistically significant at 1 percent. This indicates investors heavy reliance on the information content of the book value of equity. A possible explanation could be that, decreasing of creative accounting practices via balance sheet amounts, which is the focus of the IFRS on the use of fair values and more timely recognition of assets and liabilities leads to a greater ability of the book value of equity in explaining share prices. This evidence seems to support the argument of Barth et al. (1998) and Usman et al. (2017), Firmansyah et al. (2022), Mihael et al. (2022) who documented investors heavy reliance on the book value of equity for valuation purposes due to uncertainty in earnings

Table 3: Relative Value Relevance of NI and OCI (Price Model)

Variables	Sign	Coef. (t)	Robust Std Error	VIF
<i>Panel A: Net Income Model</i>				
CONS	+/-	0.2341** (2.61)	0.4130	-
BVE_S _{it}	+	0.8110*** (3.63)	0.3596	1.12
NI_S _{it}	+	0.4981** (2.38)	0.1114	1.11
LNI _{it}	-	-0.0419 (-0.09)	0.3966	1.03
LNI*NI_S _{it}	-	-0.0111 (-0.46)	0.8711	1.03
Observations		137		
F-Statistics		9.13***		
Mean VIF				1.03
R- Square		30.21%		
Model Specification Test Equation 1		_hat 0.071	_hatsq 0.905	
<i>Panel B: Comprehensive Income Model</i>				
CONS	+/-	0.9134* (1.73)	0.4161	-
BVE_S _{it}	+	0.7512*** (3.89)	0.2193	1.03
CI_S _{it}	+	0.3451** (2.49)	0.1966	1.01
LCI _{it}	-	-0.1504 (-0.23)	0.1271	1.01
LCI*CI_S _{it}	-	-0.0493 (-0.32)	0.0903	1.03
Observations		189		
F-statistics		5.91***		
Mean VIF				1.01
R-Square		28.74%		
Vuong Z-statistics		2.1908 (0.0436)		
Model Specification Test Equation 2		_hat 0.000	_hatsq 0.814	

More so, the coefficients of NI_S and CI_S were positive based on the values of 0.4981 and 0.3451 and statistically significant at 5 and 1 respectively. What is apparent in the above analysis is the larger coefficient of NI_S when compared to CI_S for the sample of financial and nonfinancial firms. Furthermore, the sign for the indicator variables (LNI and LCI) and their interactions terms were negative as expected, which is consistent with Barth et al. (2012), Mechelli and Cimini (2014), Usman et al. (2016) and Usman et al. (2017). Thus, based on the first benchmark of the magnitude of regression coefficients, it is obvious that the NI was more value relevant than CI for the sample examined consistent with Usman et al. (2016) that used financial and non-financial firms in Nigeria three years into post CI reporting (2012 to 2014).

The second benchmark is the coefficient of determination (R^2). As presented in Table 3, the R^2 of NI models 30.61 higher than 28.74 percent recorded for CI. Again, the second benchmark for interpreting relative value relevance suggests dominance of NI over the CI for our sample. It is important to note that the differences in R^2 's between Equations estimating NI and CI is not large. This is not unconnected with the fact CI is the NI adjusted for fair value gains and losses. Hence, the explanatory power of the two financial performance indicators should be close as observed by Mechelli and Cimini (2014), Usman et al. (2016) and Usman et al. (2017).

The third benchmark is the Vuong Z-statistic test of differences of R^2 between NI and CI estimations. The Vuong Z-statistic for sample firms produced positive Z-statistics using price-earnings relation, but was only statistically significant at 5 percent (Vuong V-statistic 2.19). A positive Vuong Z-statistic value indicates that the NI model was a better predictor of SP than the CI. Thus, the null hypothesis of no difference in the information content of NI and the CI was rejected. The fact that net income falls into the permanent category and CI falls into the transitory category makes the findings that CI is less strongly associated with share prices in the Nigerian market not surprising. The unfavourable market situation of NSE market during the study period, combined with the fair value adjustments of peripheral earnings could leads to less value relevance of CI in explaining share prices. Even though CI is less value relevant, it certainly increases disclosure of several financial performance indicators for different users' application. Therefore, the implication of the finding suggests that when analyzing firm value, investors in the Nigeria Exchange Group market considered both NI and CI in equity valuation.

Another hypothesis for testing the implication of valuation theory is the incremental value relevance of aggregate OCI_S when integrated with the BVE_S and NI_S as estimated in Equations 4. The result of model demonstrates that the models was well specified. Table 4 shows that the coefficient of BVE_S and NI_S were positive given regression coefficient of 0.3019 and 0.3925 and both statistically significant at 1 percent. Interestingly, the regression coefficient on OCI_S was positive given the values of 0.3618 and significant at 1 percent. As predicted, the coefficient was lower than that of NI_S. Therefore, it is imperative to note that OCI reflected value relevant information used by investors in the Nigerian market. Based on the findings presented above, OCI was continuously positive with coefficient greater than zero, but lower than that of the traditional NI. Exploring the third benchmark, it was observed that once OCI was added to the book value of equity and the NI, increased explanatory power of the share price model.

Table 4: Incremental Value Relevance of Other Comprehensive Income

Variables	Predicted. Sign	Coef.	Robust Std Error	VIF
CONS	+/-	0.1011*** (3.64)	0.1070	
BVE_S _{it}	+	0.3019** (2.39)	0.0981	1.04
NI_S _{it}	+	0.3923*** (3.51)	0.2941	1.03
OCI_S _{it}	+	0.3618*** (3.57)	0.3763	1.01
LNI _{it}	-	-0.0003 (-1.23)	0.4571	1.14
LOCI _{it}	-	0.1956 (1.32)	0.3417	1.01
LNI*NI_S _{it}	-	-1.1252 (-1.44)	0.7011	1.00
LOCI*OC L_S _{it}	-	0.2149 (1.36)	0.1252	1.01
Observations		137		
F-statistics/ Mean VIF		5.66***		1.16
R-square		39.12%		
Model Specification Test		_hat	_hatsq	
Equation 4 P-value		0.053	0.881	

Overall, this finding provides a strong indication that OCI per share provides incremental value relevant information in the Nigerian market, but with a coefficient lower than the traditional net income. Thus, this study finds no evidence to reject H2, which hypothesised that OCI provides incremental value relevant information, but with a coefficient lower than that of the traditional NI in the Nigerian Exchange Group.

CONCLUSION AND RECOMMENDATION

This finding demonstrates that, even if NI were more value relevant, CI also represents useful information for investors in the valuation process. By implication, conclusion can be made that both are relevant as valuation input. Second, evidence was provided that OCI provides incremental information, but with a coefficient lower than NI. Using the price-earnings regressions, was documented that OCI per share provides incremental value relevant information, though not as important as the traditional NI for the sample firms examined. A possible extension of this study is to examine CI reporting in the light of corporate governance and firm characteristics variables. Moreover, a research design that incorporates specific components of other comprehensive income is desired in Nigeria capital market to gain a better understanding of the usefulness of CI reporting in the Nigerian capital market.

REFERENCES

- Anderson, J, et al (2022), Other comprehensive income, its components, and analysts forecast, *Review of Account Studies*, 4, 19-39..
- Barth, M. E., and Clinch, G. (1998), Revalued financial, tangible, and intangible assets: associations with share prices and non-market-based value estimates, *Journal of Accounting Research*,. 36, 199-233.
- Biddle, G. C., and Choi, J. H. (2006), Is comprehensive income useful? *Journal of Contemporary Accounting & Economics*, 29(1), 1–32..
- Cahan, S. F, et al (2000), “Value relevance of mandated comprehensive income disclosures”, *Journal of Business Finance & Accounting*, 27(9),, 1273–1302.
- Chambers, D, et al (2007), An evaluation of SFAS No. 130 comprehensive income disclosures, *Review of Accounting Studies*,12, 557–593.
- Cheng, C. S. A, et al (1993), On the usefulness of operating income, net income and comprehensive income in explaining security returns, *Journal of Accounting and Business Research*,23(91),191-203.
- Dhaliwal, D, et al. (1999). Is comprehensive income superior to net income as a measure of firm performance *Journal of Accounting and Economics*, 26,. 43–67.
- Enofe, A. O, et al (2014), Value relevance of accounting information in the banking subsector of the Nigeria Stock Exchange (NSE), *British Journal of Accounting, Auditing and Finance Research*, 1(1),42–55.
- Ernest, O., and Oscar, M. C. (2014). The comparative study of value relevance of financial information in the Nigeria banking and petroleum sectors *Journal of Business Studies Quarterly*,. 6(1), 42–54.
- Fairfield, P. M, et al (1996), Accounting classification and the predictive content of earnings,” *The Accounting Review*, 71, 337–356
- Firescu, V. (2015), Comprehensive income, a new dimension in performance measurement and reporting *Procedia Economics and Finance*. 20, 218 – 223.
- Firmansyah, A., Fadlil, A., Wijaya. S., Irawan. F., Wibowo. P., Maburur, A, (2022). Value relevance of comprehensive income: tax avoidance and derivative instruments, *Corporate & Business Strategy Review*, 3, 85-96.
- Goncharov, I., and Hodgson, A. (2011), Measuring and reporting income in Europe. *Journal of International Accounting Research*,. 10(1),. 27-59.
- Jones, D. A., and Smith, K. J. (2011), Comparing the value relevance, predictive value, and persistence of other comprehensive income and special items, *Accounting Review*, 86,. 2047–2073..
- Kanagaretnam, Km et al (2009), Usefulness of comprehensive income reporting in Canada, *Journal Accounting Public Policy*, 28, 349–365.
- Khan, S., and Bradbury, M. E. (2014), “Volatility and risk relevance of comprehensive income, *Journal of Contemporary Accounting & Economics*,. 10,. 76–85.
- Kline, R. B. (2016), *Principles and practice of structural equation modelling*,. London: The Guilford Press.
- Kubota, K., et al (2011), Information content of other comprehensive income and net income: Evidence for Japanese Firms, *Asia-Pacific Journal of Accounting & Economics*,. 18,. 145–168.
- Lee, C., and Park, M. S. (2013), Subjectivity in fair-value estimates, audit quality, and informativeness of other comprehensive income”, *Advances in Accounting, incorporating Advances in International Accounting*,. 29(2),. 218-231.
- Lu, H. Y., and Mande, V. (2014), "Does disaggregation of fair value information increase the value relevance of the fair value hierarchy? *Research in Accounting Regulation*, . 26(1), pp. 90-97.

- Marchinia, P. L., and Esteb C. (2015), Comprehensive income and financial performance ratios: which potential effects on ROE and on firm's performance evaluation?" *Procedia Economics and Finance*, 32, pp. 1724 – 1739.
- Mechelli, A. and Cimini, R. (2014), "Is comprehensive income value relevant and does location matter? A European study, *Accounting in Europe*,. 11,. 59-87.
- Mgbame, C. O., and Ikhatua, O. J. (2013), "Accounting information and stock volatility in the Nigerian capital market: A garch analysis approach", *International Review of Management and Business Research*, 2(1),. 265–281.
- Mihael, R. C, et al (2022), "Value relevance of other comprehensive income and fair value measurement", *Economy series* 2, 293-297
- O'Hanlon, J. F., and 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*, Vol. 11 (2), 661–687.
- Olugbenga, A. A., and Atanda, O. A. (2014), "The relationship between financial accounting information and market values of quoted firms in Nigeria", *Global Journal of Contemporary in Accounting Auditing and Business Ethics*, 1(1), pp. 22–39.
- PricewaterhouseCoopers [PwC]. (2011), "Similarities and differences between IFRS and Nigerian GAAP" PricewaterhouseCoopers review produced by Nigeria Country Office, February, 2011.
- Schaberl, P. D., and Victoravich, L. M. (2015), Reporting location and the value relevance of accounting information: The case of other comprehensive income,. *Advances in Accounting*, 31 (2) 239–246.
- Tsalavoutas, I., André, P., and Evans, L. (2012), "The transition to IFRS and the value relevance of financial statements in Greece, *The British Accounting Review*,. 44. (4). 262-277.
- Turen, S. and Hussiny, F. (2012), "Comprehensive or net income in performance evaluation of insurance firms: Evidence from GCC Countries", *International Research Journal of Finance and Economics*,. 98,. 97-105.
- Usman, A. B, et al (2017), "Effect of corporate governance mechanisms on the valuation of comprehensive income reporting in Nigeria", *Malaysian Management Journal*,. (2), 33-47.
- Usman, A. B, et al (2016), The Value Relevance of Comprehensive Income in Nigerian: A Pilot Test, *International Journal of Economics and Financial Issues*,. 6(2),. 793-797.
- Vuong, Q. (1989), Likelihood ratio tests for model selection and non-nested hypothesis, *Econometrica*, 307–333.
- Wang, Y, et al. (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,SW: Cengage Learning.