Accounting & Taxation
Vol. 9, No. 1, 2017, pp. 1-11
ISSN: 1944-592X (print)
ISSN: 2157-0175 (online)

IBFR
www.theIBFR.com

THE VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME AND ITS COMPONENTS

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ABSTRACT

The value relevance of comprehensive income, other comprehensive income, and its components were investigated in this paper. Using data of S&P 500 for 2014 and utilizing the pricing model developed by Ohlson, the results suggest that both comprehensive income and other comprehensive income have no value relevance as measured by the coefficient of determination (R^2). However, the components of other comprehensive income, such as derivatives, hedging and gains and losses from available for sale securities do have value relevance. The results of this research support the Financial Accounting Standard Board position on disclosure of other comprehensive income and its components.

JEL: G10, M41

KEYWORDS: Value Relevance, Comprehensive Income, Other Comprehensive Income, Firm Value, Book Value

INTRODUCTION

Some revenues, expenses, gains, and losses under both Generally Accepted Accounting Principles, and International Financial Reporting Standards are excluded from the computation of net income on the income statement. These items have not been realized, but they are listed after net income on the income statement. These items such as foreign currency translation gains or losses, gains and losses on derivatives, unrealized holding gains or losses on available for sale securities, pension plan gains or losses, and pension prior service costs or credits, are called components of other comprehensive income. The purpose of reporting it as stated by Financial Accounting Standard Board (FASB) is "to report a measure of all changes on an entity that result from recognized transactions and other economic events of the period other than transactions with the owners in their capacity as owners." Prior to June 2011, FASB allowed companies to present the components of other comprehensive income in two separate statements, in a single continuous statement of comprehensive income or disclosed in the statement of changes in stockholder's equity. However, the FASB in its update in June 2011 eliminated the last option to improve the consistency, comparability, and transparency.

The FASB, in its update, pointed out that reporting comprehensive income coupled with appropriate disclosure and other information in the financial statements may assist readers in assessing a company's performance, and its future cash flows. The FASB cautioned that although the comprehensive income amount is a useful number, the disclosure of information about the components of other comprehensive income is needed in order to better understand an entity's performance and its future cash flows. Information, thus, about the components of comprehensive income provides more useful information than total comprehensive income. For example, the literature on value relevance U.S.A and U.K suggests that

other comprehensive is not value-relevance especially when it is not separately disclosed in financial statement (Cheng et al. 1993, Pope and O, Hanlon 1999).

The purpose of this research is to investigate whether comprehensive income, as well as other comprehensive income and its components, have the value relevance. The rest of the paper is organized as follows: Section two covers prior literature review. Section three covers the hypotheses, data collection, and the models. The results are discussed in section four, and the conclusion is in the last section.

LITERATURE REVIEW

Research on value relevance is motivated by the fact that investors and other financial users rely on financial statements to make informative decisions. The financial information must be relevant and reliable in order to be useful. The financial information is relevant if it influences the user's decision and reliable if, users depend on representing the economic event faithfully. The firm value is reflected by what the market perceived about the company's present and future performance. Accounting information contributes significantly to that perception.

Breif and Zarowin (1999) compared valuation models that include price to book value and earnings, and price to book value and dividends using USA data from 1978 to 1997. Their results suggest that the variables, book value, and dividends have almost the same explanatory power as book value and earnings. Moreover, for firms with transitory earnings, dividends have greater explanatory power than earnings and book value and earnings have the same explanatory power as book value and dividends. When earnings are transitory, and book value is a poor indicator of value, dividends have the greatest explanatory power of the three variables. The latter result is confirmed again in statistical tests using holdout samples.

Since many firms do not distribute dividends, many studies investigated the value relevance of earnings per share, the book value per share, and cash flows. Many researchers found that the most important pieces of financial information are earnings per share (EPS) and book value (e.g., Dechow, 1994; Cheng *et al.*, 1996; Holthousen and Watts, 2001; Choi *et al.*, 2006; Kwon, 2009). Although cash flows is an important piece of information, it fails to contribute significantly to the firm value due to the inherent problem of matching and timing problems (Barth *et al.*, 1998; Collins *et al.*, 1999). They documented that the explanatory power of earnings per share and book value variables systematically varies across industries. Ferraro and Veltri (2012) indicated that marketable security adjustment is the only other comprehensive income component that improves the association between income and returns. Biddle and Choi (2006) found that comprehensive income dominates the informational purpose of income and should be disclosed separately from other income components. In a study conducted by Khan, Bradbury, and Courtenay (2014), the results suggest that there is a positive association between stock price and market returns, as well as assets revaluation reserves, and available-for-sale securities. Rees and Shane (2012) indicate that the reporting of comprehensive income by valuation models requires clean surplus.

At the international level, studies vary in their degree in considering whether comprehensive income is relevant and the strength of the relativeness. In New Zealand, Cahan, Courtenay, Gronewoller, and Upton (2000) argue that comprehensive income contained a relevant value when determining the currency translation reserve for companies. Caha et al. (2000), Isidro et al. (2006) report no incremental information content for comprehensive income components. Researchers did not consider relevant value in all aspects of the comprehensive income and the firms. For example, Brimble and Hodgson (2004) did not find evidence of value relevance for a sample of companies in Australia. Kanagaretnam, Mathieu, and Shehata (2009) found that comprehensive income is more value relevant than net income for Canadian corporations and available-for-sale and cash flow hedge components are associated with price and market returns. In Japan, the result of Kubota, Suda, and Takehara (2009) suggests that net income is the most

dominant income, but other comprehensive income is more informative. Abayadeera (2010) examined the value relevance of financial and non-financial information in high-tech firms. The results showed that book value was the most significant factor and those earnings were the least significant factor in deciding firm value in high-tech industries in Australia. Duran et al. (2007) tested the value relevance of Ohlson model (1995) using Mexican data. Their sample consisted of 145 companies listed in the Mexican stock market from 1991 to 2003 (1,046 firm-year observations). They found that the model with operating cash flow per share provides extra information and better statistics than the original Ohlson model. Brimble and Hodgson (2007) investigated the value-relevance of earnings and book value information on the Australian Stock Exchange from 1974 to 2001. They found the value relevance of earnings, book value, and combined variables were low being 0.10, 0.09 and 0.16 percent respectively. Moreover, they documented that explanatory power for small firms is much higher than for large companies.

Bartov *et al.* (2005) investigated the effect of adoption of International Accounting Standards (IASs) for a sample of 37 German firms using a linear pricing model. They employed a pre-post design and found an increase in the value relevance of earnings on switching from the German GAAP to IASs. Hung and Subramanyam (2007) examined the value relevance of re-statement differences for 80 firms adopted IASs early in Germany. They found that both the value relevance of EPS and book value per share decreased after the switch to the IASs. Filip (2010) also tested the impact of the mandatory IFRS adoption in Romania, and the results showed an increase in the value relevance of earnings post-IFRS implementation.

Other researchers tested the value relevance of environmental and corporate social responsibility using different valuation models in different developing countries, such as Sweden (Hassel et. al. 2005), Spain (Moneva and Cueller 2009), and Finland (Schadewitz and Niskala, 2010). The results of their research were mixed. Schadewitz and Niskala (2010) and Hassel et al. (2005) provided evidence that corporate social responsibility has value relevance. Moreover, Dhaliwal et al. (2011) found a positive effect of corporate social responsibility on the cost of capital under certain conditions. On the contrary, Moneva and Ortas (2008); and Murray et al. (2006) found no such evidence. Jones et al. (2007) examined the relation between abnormal return and sustainability disclosure by large Australian firms. Their result showed that corporate social responsibility is relevant but weakly associated with abnormal returns.Based on the viewpoints of FASB on its update of other comprehensive income and its components, we hypothesize the following:

Hypothesis-1 Disclosure of comprehensive income has value relevance.
Hypothesis- 2 Disclosure of Other comprehensive income has value relevance.
Hypothesis-3 Disclosure of components of other comprehensive income has value relevance.

DATA AND METHODOLOGY

Data for S&P 500 for 2014 are obtained from Compustat for financial statements variables such as share prices, book value per share net income, other comprehensive income, derivatives, hedging, gains, and losses from available for sale securities and comprehensive income. Share prices are obtained three months after financial year-end. Data from financial and insurance companies are excluded due to their unique characteristics as regulated industries. The final number of firms in the sample is 446. The research hypotheses in the study are whether comprehensive income, other comprehensive income, and the components of comprehensive income have value relevance. The pricing model developed by Ohlson (1995) and decomposition model derived by Theil (1971) were used to investigate changes in the value relevance of earnings, book value, and the components of other comprehensive income. The relationship between the independent variables and the dependent variables (book value and earnings) can be expressed in a linear regression (Olson 1995) as follows:

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 IN_{it} + \varepsilon_{it} \quad (1)$$

Where:

P_{it} = the share price of firm *i* three months after the end of fiscal year t.
BV_{it} = the book value per share of firm *i* at the end of fiscal year t.
IN_{it} = the net income of firm *i* at the end of fiscal year t.
ε_{it} = other value relevant information of firm *i* at the end of fiscal year t.

Since we investigate the value relevance of the comprehensive income, the net income is replaced with comprehensive income in the following function.

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 Comototal_{it} + \varepsilon_{it} \quad (2)$$

Where Comototal = total comprehensive income of firm *i* at end of fiscal year t. Since the earning per share is one of the most important pieces of information that the investment community is interested in, we included earnings per share in Eq. (3) as follows:

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 EPS_{it} + \alpha_4 Other\ comm_{it} + \varepsilon_{it} \quad (3)$$

The FASB indicated that "the information about components that make up the comprehensive income is needed to understand better an entity's activities and future cash flows."

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 EPS_{it} + \alpha_4 Derivatives_{it} + \varepsilon_{it} \quad (4)$$

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 EPS_{it} + \alpha_4 Hedging_{it} + \varepsilon_{it} \quad (5)$$

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 EPS_{it} + \alpha_4 SecuritiesGL_{it} + \varepsilon_{it} \quad (6)$$

$$P_{it} = \alpha_1 + \alpha_2 BV_{it} + \alpha_3 EPS_{it} + \alpha_4 Hedging_{it} + \alpha_5 Derivatives_{it} + \alpha_6 SecuritiesGL_{it} + \varepsilon_{it} \quad (7)$$

Where:

$Hedging_{it}$: Hedging variable of the firm *I* three months after the end of fiscal year t.

$Derivatives_{it}$: Derivatives variable of the firm *I* at the end of fiscal year t.

$SecuritiesGL_{it}$: "Gains and losses from available for sales Securities" variable of the firm I at the end of fiscal year t.

RESULTS AND DISCUSSIONS

The purpose of this research is to test whether comprehensive income or its components have value relevance. Table 1 provides descriptive statistics for the variables: market value, book value, net income, earnings per share, comprehensive income derivatives, hedging, other comprehensive income, and gains and losses of available for sale securities. The standard deviation for market value and book value are 1.31 and 0.98 times the mean values respectively, while for net income, comprehensive income, and other comprehensive income the standard deviation is approximately two time the mean.

Table 1: Descriptive Statistics for Variables Used in the Analysis

Variables	Number	Maximum	Minimum	Mean	Std. Deviation
MV	446	5.62	1192.01	81.3722	106.48
BV	445	-49.20	259.98	23.0078	22.625
ESP	445	-6.16	40.03	3.6576	4.3566
Comptotal	445	-3,387.00	36067	2130.5	4296.7
Derivatives	422	-3,529.00	445.00	-12.802	184.13
Hedging	162	-1,604.00	713.00	-11.991	158.60
OtherCom	446	-40,4663	2373.8	-31473	49652
NI	442	-2462.00	37037	1874.9	3737.5
SecuritiesGL	427	-6312.00	1155.0	-54.617	447.85

This table shows each variable included in the study, the maximum, the minimum, the mean, and the standard deviation of each variable.

Panel A in Tables 2, shows the model summary in equation 1. The coefficient of determination (R^2) is 0.295 and F-test for the regression is 0.925, which is significant indicating that the model is valid. (Table 2, panel B) shows the parameters for the regression and the results of the t-test.

Table 2: Value Relevance of Book Value and Net Income

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df1**
0.554	0.295	0.292	89.953	0.295	92.048	2
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	
	B	**Std Error**	**Beta**			
Constant	20.590	6.318		3.316	.001*	
BV	2.528	0.190	0.537	13.319	000*	
NI	0.001	0.001	0.043	1.072	0.284	

*Table (2) shows the regression estimates of the equation (1) Panel A shows the results of the model summary. Panel B shows the regression coefficients of both book value and net income. ***, ** and * indicate significance at 1, 5 and 10 percent levels respectively.*

The coefficient of book value is significant while the coefficient of net income is insignificant suggesting that disclosure of net income does not contribute to company value. Net income is not a good indicator of company performance as it ignores the company size. When net income is replaced with comprehensive income (equation 2), the change in (R^2) value is insignificant suggesting that the value relevance for both comprehensive income and net income are the same while F-test is approximately 0.92 which is significant (Table 3, panel A). Panel B in Table 3 shows that the t-test of the coefficient of the variables in the model. The result of t-test for comprehensive income is insignificant being 0.59, and the R^2 equals 0.293 which is the same as net income suggesting that the comprehensive income has no value relevance.

Table 3: Value Relevance of Book Value and Comprehensive Income

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df1**
0.541	0.293	0.290	89.76	0.293	91.679	2
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	
	B	**Std Error**	**Beta**			
Constant	22.19	6.20		3.578*	000	
BV	2.525	0.191	0.547	13.19*	000	
Comptotal	0.001	0.001	0.022	0.541	0.590	

*Table (3) shows the regression estimates of the equation (2) Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, ** and * indicate significance at 1, 5 and 10 percent levels respectively.*

Perhaps, the reason is that companies disclose net income and comprehensive income at the same time. Therefore, the first hypothesis that the comprehensive income has value relevance is rejected.

Table 4: Value Relevance of Book Value, Earnings Per Share, and Other Comprehensive Income

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df1**
0.710	0.504	0.500	75.36	0.504	149.1	3
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std Error**	**Beta**			
Constant	1.273	5.676			0.224	0.823
BV	0.934	0.201	0.198		4.655*	0.000
EPS	13.67	1.042	0.559		13,12*	0.000
OtherCom	0.000	0.000	-0.127		-3.793*	0.000

*Table (4) shows the regression estimates of the equation (3) Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, ** and * indicate significance at 1, 5 and 10 percent levels respectively.*

When net income is replaced with earnings per share and other comprehensive income, the model improves significantly (Table 4, panel A). The R^2's value increases from 0.29 to 0.504. The results of t-test for book value, earnings per share and other comprehensive income are significant at 0.01 (Table 4, panel B). The test results indicate that both the earnings per share and other comprehensive income have incremental value. Comparing the results of t-test of net income in Panel B in Table 2, and t-test of earnings per share in regression shows that the earnings per share have incremental value more than net income as the computation of earnings per share control for firm size.

Table 5: Value Relevance of Book Value, Earnings Per Share, and Derivatives

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df1**
0.800	0.641	0.638	58.37	0.641	248.3	3
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std Error**	**Beta**			
Constant	7.320	4.100			1.785**	.075***
BV	0.830	0.158	0.197		5.264*	0.000
EPS	14.57	0.823	0.653		17.70*	0.000
Derivatives	-0.003	0.015	0.006		-0.201	0.841

*Table (5) shows the regression estimates of the equation (4) Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, ** and * indicate significance at 1, 5 and 10 percent levels respectively.*

Three components of other comprehensive income separately included in the model to replace other comprehensive income: derivative, hedging, and gains and losses from available for sale securities. Data on the components of other comprehensive income other than those are not available. Therefore we exclude them from our analysis. Panel A in Table 5 shows the regression results of adding derivatives to the model. R^2 is 0.64 compared with 0.504 in Table 4 for other comprehensive income, indicating that disclosure of derivatives has value relevance although t-test for derivatives is insignificant in panel B Table 5 . However, the t-test is not meant to test a large sample. F-test for the whole regression is 248. When derivatives variable is replaced with hedging variable, the R^2 is 0.64 suggesting that hedging gains and losses have value relevance, (Table 6 panel A). The t-test for hedging is 0.526, which is not significant on Table 7 panel B. However, the result of F-test for the whole regression is significant being 92.68.

Table 6: Value Relevance of Book Value, Earnings Per Share, and Hedging

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df1**
0.799	0.638	0.631	40.31	0.638	92.68	3
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std Error**	**Beta**			
Constant	25.71	4.645			5.534*	0.000
BV	0.932	0.175	0.311		5.340*	0.000
EPS	8.691	0.872	0.583		9.868*	0.000
Hedging	0.011	0.020	0.025		0.526	0.600

*Table (6) shows the regression estimates of the equation (5) Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, ** and * indicate significance at 1, 5 and 10 percent levels respectively.*

Table 7: Value Relevance of Book Value, Earnings Per Share, and Gains and Loss From Sale of Available Securities

Panel A: Model Summary						
R.	**R-Square**	**Adjusted R Square**	**Std Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df.1**
0.700	0.490	0.487	75.93	0.490	135.6	3
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std. Error**	**Beta**			
Constant	25.04	4.941			5.067*	0.000
BV	0.963	0.182	0.319		5.282*	0.000
EPS	8.534	0.907	0.573		9.406*	0.000
SecuritiesGL	0.300	0.008	0.013		0.370	0.711

*Table (7) shows the regression estimates of the equation (6). Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, **, and * indicate significance at the 1, 5, and 10 percent respectively.*

Table 8: Value Relevance of Book Value, Earnings Per Share, and the Components of other Comprehensive Income

Panel A: Model Summary						
R	**R-Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**		
				R Square Change	**F Change**	**Df.1**
0.800	0.639	0.630	41.33	0.639	65.61	4
Panel B: Regression Coefficients						
Variables	**Unstandardized Coefficients**		**Standardized Coefficients**		**t**	**Sig.**
	B	**Std. Error**	**Beta**			
Constant	25.04	4.941			5.067*	0.000
BV	0.963	0.182	0.319		5.282*	0.000
EPS	8.534	0.907	0.573		9.4068	0.000
Derivatives	-0.031	0.045	-0.034		-0.684	0.495
Hedging	0.012	0.021	0.028		0.564	0.573
SecuritiesGL	-0.066	0.009	-0.490		-7.139*	0.000

*Table (8) shows the regression estimates of the equation (7) Panel A shows the results of the model summary of the regression. Panel B shows the regression coefficients of both book value and comprehensive income. ***, **, and * indicate significance at the 1, 5, and 10 percent levels respectively.*

In equation (6) we replaced hedging with gains and loss from available for sale securities. The R^2 value decreases to 0.49, (Table 8 panel A). The result of t-test is insignificant, but F-test is significant Table 7, panel B). This is due to the fact that the data points for this variable are limited. Based on the test result, the third hypothesis that the components of other comprehensive income have value relevance is accepted. Therefore, the components of other comprehensive income provide useful information to investors that affect the company value.

When hedging, derivatives, and securities GL variables are added to the equation (7), the R^2 value does increase to 0.639 Table 8 panel A. F-test for the whole regression is approximately 0.66 which significant. Therefore, disclosing more than one component of the other comprehensive income has no incremental value. Moreover, the Panel B in Table 8 shows that the t-test results of both of derivatives and hedging are insignificant.

CONCLUSION

The purpose of the study is to test the value relevance of other comprehensive income, and its components and comprehensive income. Data of S&P 500 for 2014 are obtained from Compustat for financial statement variables such as net income, book value per share, comprehensive income, other comprehensive income and its components, hedging, derivatives, and gains and losses from available for sale securities. Based on Ohlson model (1995) and decomposition model derived by Theil (1971), seven functions were derived for testing the hypotheses. The results suggest the other comprehensive income and its components have value relevance, but comprehensive income has no value relevance. The findings of this research support the FASB position on the subject and provide empirical evidence. The limitation of this research is that it focused on S&P 500 only and therefore, results may not apply to other companies. Future research may investigate the value relevance of goodwill impairment, and other intangible assets with unlimited useful lives.

REFERENCES

Abayadeera N., (2010). Value Relevance of Information in Hi-tech Industries in Australia: Accounting Information and Intangible Asset Disclosures, *Global Review of Accounting and Finance*, Vol. 1, No. 1, pp. 77-99.

Barth, M. E., Beaver, H. W., & Landsman, R. W. (1998). Relative valuation rules of equity, book value and net income as a function of financial health. Journal of Accounting and Economics, 25(3), 1-34.

Bartov, E., Goldberg, S. R., & Kim, M. (2005). Comparative value relevance among German, U.S., and International Accounting Standards: A German stock market perspective. Journal of Accounting, Auditing & Finance, 21(3), 95-119.

Biddle, G.C. & Choi, J. (2006). Is comprehensive income useful? *Journal of Contemporary Accounting & Economics, 2*, 1, June 2006. 1-32.

Brimble, M. & Hodgson, A. (2004). The value relevance of comprehensive income components for industrial firms. Working Paper Griffith University, Brisbane, Australia.

Brimble, M., & Hodgson, A. (2007). On the intertemporal value relevance of conventional financial accounting in Australia. Accounting and Finance, 47(4), 599–622. http://dx.doi. org/10.1111/j.1467-629X.2007.00241.x

Brief, Richard P. and Zarowin, Paul. (1999), The Value Relevance of Dividends, Book Value, and Earnings. New York University, Dept. of Accounting, Working Paper No. 99-3, August 5. Available at SSRN:http://ssrn.com/abstract=173629 or http://dx.doi.org/10.2139/ssrn.173629

Cahan, S.F., Courtenay, S.M., Gronewoller, P.L., & Upton, D.R. (2000). Value relevance of mandated comprehensive income disclosure. *Journal of Business Finance and Accounting, 27* (910). 1273-1301.

Cheng, C. S. A., J. K. Cheung, and V. Gopalakrishnan. (1993). On the usefulness of operating income, net income and comprehensive income in explaining security returns. Accounting and Business Research 23 (91):195-203.

Cheng, C. S., Liu, C., & Schaefer, T. F. (1996). Earnings performance and the incremental information content of cash flows from operations. Journal of Accounting Research, 34(1), 173-181.

Choi, H. S., Jang, I. J. & S. C. S. (2006). The relative value relevance of earnings and cash flows measures in each life-cycle stage. Korean Management Review, 35(1), 1339-1360.

Collins, D., Pincus, M., & Xie, H. (1999). Equity valuation and negative earnings: The role of book value of equity. The Accounting Review, 74(1), 29-61.

Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. Journal of Accounting and Economics, 18(2), 3-42.

Dhaliwal, D.S., Li, O.Z., Tsang, A. and Yang, Y.G. (2011), "Voluntary non-Financial disclosure and the cost of equity capital: the initiation of corporate social responsibility reporting," The Accounting Review, Vol. 86 No. 1, pp. 59-100.

Duran R., Lorenzo A. and Valencia H. (2007). Value Relevance of the Ohlson Model with Mexican Data, *Contaduría y Administración*, No. 223, pp. 33-52.

Ferraro, O., & Veltri, S. (2012). A critical analysis of the empirical researches on comprehensive income value relevance. *European Journal of Scientific Research 76*, 4. 587-594.

Filip, A. (2010). IFRS and the value relevance of earnings: Evidence from the emerging market of Romania. International Journal of Account Audit Performance Evaluation. 6(6), 191-223.

Hellstrom, K. (2006). The value relevance of financial information in a transition economy: The case of the Czech Republic. European Accounting Review, 15(1), 325-349.

Hassel, L., Nilsson, H. and Nyquist, S. (2005), "The value relevance of environmental performance," European Accounting Review, Vol. 14 No. 1, pp. 41-61.

Holthausen, R.W. and Watts, R.L. (2001) The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting. Journal of Accounting and Economics, 31, 3-75.

Hung, M. Y., & Subramanyam. K. R. (2007). Financial statement effects of adopting International Accounting Standards: The case of Germany. Review of Accounting Studies, 12(1), 623-657.

Isidro, H., J. F. O'Hanlon, and S. Young. (2004). Dirty surplus accounting flows: international evidence. Accounting and Business Research 34 (4):383-410.

Jones, S., Frost, G., Loftus, J., and van der Laan, S. (2007), "An empirical examination of the market returns and financial performance of entities engaged in sustainability reporting," Australian Accounting Review, Vol. 17 No. 1, pp. 78-87.

Khan, Shahwali, and Bradbury, Michael E. and Courtenay, Stephen M., (2014).Value Relevance of Comprehensive Income. Financial Markets & Corporate Governance Conference. Available at SSRN:http://ssrn.com/abstract=2375508

Kubota, Keiichi, and Suda, Kazuyuki, and Takehara, Hitoshi, (2009) Information Content of Other Comprehensive Income and Net Income: Evidence for Japanese Firms. Available at SSRN:http://ssrn.com/abstract=1393746

Kwon, J. G. (2009). The value relevance of book values, earnings, and cash flows: Evidence from Korea. International Journal of Business and Management, 4(10), 28-42.

Moneva, J.M. and Cuellar, B. (2009), "The value relevance of financial and non-financial environmental reporting", Environmental and Resource Economics, Vol. 44, pp. 441-56.

Moneva, J.M., and Ortas, E. (2008), "Are stock markets influenced by sustainability matter? Evidence from European companies", International Journal of Sustainable Economy, Vol. 1 No. 1, pp. 1-16.

Murray, A., Sinclair, D., Power, D. and Gray, R. (2006), "Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK", Accounting, Auditing & Accountability Journal, Vol. 19 No. 2, pp. 228-55.

O'Hanlon, J. F., and P. F. Pope. (1999), The value-relevance of UK dirty surplus accounting flows. British Accounting Review 31 (4):459-482.

Ohlson, J. (1995), Earnings, book values, and dividends in security valuation. Contemporary Accounting Research 11 (Spring), 661-688.

Rees, L. Lynn and Philip B. Shane (*2012*) Academic Research and Standard-Setting: The Case of Other Comprehensive Income. Accounting Horizons: December 2012, Vol. 26, No. 4, pp. 789-815.

Schadewitz, H. and Niskala, M. (2010), "Communication via responsibility reporting and its effect on firm value in Finland," Corporate Social Responsibility and Environmental Management, Vol. 17, pp. 96-106.

Theil, H. *Principles of Econometrics* (1971). Wiley, New York, NY.

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