

VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME AFTER ACCOUNTING STANDARDS UPDATE 2011-05

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ABSTRACT

Using S&P 500 firms, this study finds that the value relevance of other comprehensive income differs by reporting formats after ASU 2011-05. Specifically, other comprehensive income is only value relevant after ASU 2011-05 when reported in a two separate but consecutive statements (i.e., “two statement format”), regardless of reporting formats before ASU 2011-05. Therefore, it should be worthwhile to re-evaluate the effectiveness of permitting two reporting formats as investors appear to utilize other comprehensive income substantially more when reported in a “two statement format” after ASU 2011-05. This study also documents that negative other comprehensive income is incrementally value relevant after ASU 2011-05 when reported in a “two statement format”. This implies that investors seem to process information in other comprehensive income considerably more than normally assumed. Findings of this study should be of interest to policy makers, analysts and investors.

Keywords: ASU 2011-05; Other Comprehensive Income; Reporting Formats; Value Relevance.

JEL Classification: M41

INTRODUCTION

In June, 2011, the Financial Accounting Standards Board (“FASB” hereafter) issued Accounting Standards Update (“ASU” hereafter) 2011-05, *Presentation of Comprehensive Income*, which became effective after December 15, 2011 for public entities. Under ASU 2011-05, firms report other comprehensive income in one of two reporting formats—(1) single continuous statement of comprehensive income that includes both net income and other comprehensive income (“single statement format” hereafter), and (2) two separate but consecutive traditional income statement and statement of comprehensive income (“two statement format” hereafter).

Prior research (e.g., Chambers et al. 2007) provides evidence that reporting formats influence the value relevance of other comprehensive income under Statement of Financial Accounting Standards (“SFAS” hereafter) 130 (i.e., before ASU 2011-05) by showing that other comprehensive income is only value relevant when reported in a statement of changes in shareholders’ equity (“equity statement format” hereafter). Extending prior research, this study investigates whether the value relevance of other comprehensive income also differs by reporting formats after ASU 2011-05. This research topic is also important in evaluating the FASB’s position that permits a “two statement format”, although the FASB initially planned to allow only a “single statement format”. If investors’ reaction to other comprehensive income differs by reporting formats, the effectiveness of allowing both reporting formats should be re-assessed. In relation to this, Rees and Shane (2012) call for research that investigates whether reporting formats affect the pricing of other comprehensive income after ASU 2011-05.

Using manually-collected other comprehensive income reporting formats of S&P 500 firms, empirical analyses provide the following key findings. First, the value relevance of other comprehensive income generally declines after ASU 2011-05 (Schaberl and Victoravich 2015). Second, other comprehensive income is only value relevant after ASU 2011-05 when reported in a “two statement format”, regardless of reporting formats before ASU 2011-05. Finally, negative other comprehensive income is incrementally value relevant after ASU 2011-05 when reported in a “two statement format”.

Findings of this study have implications for both academics and policy makers. First, the finding that other comprehensive income is only value relevant when reported in a “two statement format” after ASU 2011-05 may well imply that investors process information better when reported in an expected format since over 90 percent of firms use a “two statement format” after ASU 2011-05 (Chambers et al. 2007). Alternatively, it could also suggest that when reported separately in a “two statement format”, information about other comprehensive income is more easily extracted by investors and, thus, more strongly impounded in stock price (Bloomfield 2002). Second, evidence that the value relevance of other comprehensive income after ASU 2011-05 does not depend on reporting formats before ASU 2011-05 (when reported in a “two statement format” after ASU 2011-05), may indicate that investors quickly adapt to the most frequently used reporting format after ASU 2011-05. Third, it should be worthwhile to re-evaluate the FASB’s position that both reporting formats under ASU 2011-05 achieve the objective of reporting other comprehensive income to a similar degree since the value relevance of other comprehensive income differs substantially by reporting formats after ASU 2011-05. Finally, the finding that negative other comprehensive income is incrementally value relevant when reported in a “two statement format” implies that investors seem to utilize information in other comprehensive income considerably more than normally assumed.

This study is organized as follows. Section 2 describes background on reporting formats of other comprehensive income. Section 3 summarizes prior research and develops research questions. Section 4 describes sample and data. Empirical findings are discussed in Section 5. Section 6 concludes this study.

BACKGROUND

Other comprehensive income is defined as “the change in equity of a business enterprise during a period from transactions and other events and circumstances from nonowner sources” (FASB Concepts Statement 6, *Elements of Financial Statements*, 1985). In other words, other comprehensive income is part of total comprehensive income but generally excluded from net income (SFAS 130, 1997). As the definition of other comprehensive income is vague, reporting formats of other comprehensive income have been a focus of much debate for decades.

Before SFAS 130, foreign currency translation adjustments, minimum pension liability adjustments, and unrealized gains and losses on available-for-sale securities were disclosed as separate components of shareholders’ equity on the balance sheet, bypassing income statement. Some financial statement users expressed concerns about financial reporting abuse that can arise from bypassing income statement and lack of consistency in other comprehensive income reporting. To respond to these concerns, the FASB issued SFAS 130 in June 1997. Under SFAS 130, firms reported above three items and unrealized gains or losses on derivatives (i.e., cash flow hedge) as other comprehensive income in one of three reporting formats—(1) “single statement format”, (2) “two statement format”, and (3) “equity statement format”. Although firms were given three options, the FASB encouraged reporting of other comprehensive income

using one of first two formats, as the FASB believed higher quality financial reporting can be achieved through income statement-type reporting formats (i.e., “single statement format” or “two statement format”).

However, majority of firms used an “equity statement format” under SFAS 130 according to prior studies (Bhamornsiri and Wiggins 2001; Jordan and Clark 2001; Pandit and Phillips 2004; Chambers et al. 2007; Bamber et al. 2010). Some firms even choose an “equity statement format” for self-interest (Lee et al. 2006; Bamber et al. 2010). Thus, to improve the quality of financial reporting and increase the prominence of other comprehensive, the FASB issued ASU 2011-05 in June 2011, which only allows a “single statement format” and “two statement format”, prohibiting an “equity statement format”.

PRIOR RESEARCH AND RESEARCH QUESTIONS

Based on experiments conducted before SFAS 130, prior research documents that transparency and usefulness of other comprehensive income are greater when reported in income statement-type reporting formats than an “equity statement format” (Hirst and Hopkins 1998; Maines and McDaniel 2000).

Other research documents that managers choose reporting formats of other comprehensive income under SFAS 130 for self-serving purpose. Lee et al. (2006) present evidence that insurance firms tend to report other comprehensive income in an “equity statement format” when they engage in earnings management or are known for poor financial performance. Bamber et al. (2010) document that firms are inclined to choose an “equity statement format” when managers have equity based incentives and earnings management is more likely.

More directly related to this study, Chambers et al. (2007) use archival data to examine the value relevance of other comprehensive income by reporting formats under SFAS 130, and find that other comprehensive income is only value relevant when reported in an “equity statement format”. They interpret their results as investors processing information about other comprehensive income effectively when reported in an expected format as majority of firms use an “equity statement format” under SFAS 130.

Two recent studies examine the effect of ASU 2011-05 on the informativeness of other comprehensive income. Schaberl and Victoravich (2015) present evidence that the value relevance of other comprehensive income declines after ASU 2011-05 possibly because investors have difficulties processing information reported in new reporting formats (i.e., income statement-type reporting formats). In an experimental setting, Du et al. (2015) document that financial statement users are more likely to incorporate other comprehensive income in evaluation of firm performance only when reported in a “single statement format”.

Evidence presented in prior studies clearly suggests that the value relevance of other comprehensive differs by reporting formats. However, none of the prior studies compares the value relevance of other comprehensive income between a “single statement format” and “two statement format”. The finding of Du et al. (2015) indicates that informativeness of other comprehensive income may also differ by reporting formats after ASU 2011-05. Thus, this study examines whether the value relevance of other comprehensive income differs by reporting formats after ASU 2011-05.

Research Question 1: Does value relevance of other comprehensive income differ by reporting formats after ASU 2011-05?

As noted in Chamber et al. (2007), other comprehensive income is only value relevant before ASU 2011-05 when reported in an “equity statement format”. Thus, this study examines whether the value relevance of other comprehensive income after ASU 2011-05 also depends on reporting formats before ASU 2011-05.

Research Question 2: Does difference in value relevance of other comprehensive income by reporting formats after ASU 2011-05 depend on reporting formats before ASU 2011-05?

SAMPLE AND DATA

This study relies on manually-collected other comprehensive income reporting formats before and after the adoption of ASU 2011-05 for the firms that belong to S&P 500 as of December 2011.⁶ Then, two years before and after the adoption of ASU 2011-05 are employed as the test periods for each firm. For the period before ASU 2011-05, the second and third years before the adoption of ASU 2011-05 are used, and for the period after ASU 2011-05, the first and second years after the adoption of ASU 2011-05 are used.⁷ This study does not choose specific years for the test periods before and after ASU 2011-05 because timing of the implementation of ASU 2011-05 differs by firms.

Financial data are collected from the Compustat dataset. The main variables are other comprehensive income and net income. These variables are deflated by market value at the beginning of the eighth month before fiscal year end (Chambers et al. 2007). Another main variable is 12 month buy and hold returns from the CRSP dataset, which are accumulated from the beginning of the eighth month before fiscal year end until the fourth month after fiscal year end (Chambers et al. 2007). Definitions of other variables are provided in Appendix.

EMPIRICAL RESULTS

Value Relevance of Other Comprehensive Income before and After ASU 2011-05

To confirm the prior finding, the value relevance of other comprehensive income is compared between before and after ASU 2011-05 using the following regression model.

$$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI_{it} + \epsilon_{it} \quad (1)$$

RET is 12 month buy and hold returns accumulated from the beginning of the eighth month before fiscal year end until the fourth month after fiscal year end. *NI* is net income deflated by market value. *OCI* is other comprehensive income deflated by market value. *NEG* is an indicator variable for firms with negative net income, which is included to control for potentially differential pricing of negative net income (Hayn 1995). Panel A of Table 1 presents results. Other comprehensive income is more value relevant before ASU 2011-05 as significance of the coefficient on *OCI* is greater before ASU 2011-05 (p -value < 0.0001), although other comprehensive income seems value relevant for both before and after ASU 2011-05 since the coefficients on *OCI* are significantly positive in both columns. This is consistent with Schaberl and Victoravich (2015) in that the value relevance of other comprehensive income declines after ASU 2011-05.

Table 1 A		
VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME BEFORE AND AFTER ASU 2011-05.		
Panel A: Overall value relevance of other comprehensive income before and after ASU 2011-05		
Equation (1): $RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI_{it} + \epsilon_{it}$		
	Before ASU 2011-05	After ASU 2011-05
Intercept	0.244***	0.120***
	(< 0.0001)	(< 0.0001)
<i>NEG</i>	0.314***	-0.004
	(< 0.0001)	-0.9302
<i>NI</i>	1.383***	1.061***
	-0.0005	(< 0.0001)
<i>NI·NEG</i>	-1.373***	-0.841**
	-0.0013	-0.0123
<i>OCI</i>	0.405***	0.363*
	(< 0.0001)	-0.0877
Adjusted R ²	6.25%	5.47%

*, **, *** denotes significance at 10%, 5% and 1% level respectively.
Numbers in parenthesis are p-values.

Table 1 B	
Panel B: Value relevance of other comprehensive income by reporting formats before ASU 2011-05	
Equation (2):	
$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1PRE_{it} + \alpha_5 OCI \cdot 2PRE_{it} + \alpha_6 OCI \cdot EPRE_{it} + \epsilon_{it}$	
Intercept	0.238***
	(< 0.0001)
<i>NEG</i>	0.148**
	-0.0213
<i>NI</i>	1.126***
	-0.0024
<i>NI·NEG</i>	-1.633***
	(< 0.0001)
<i>OCI·1PRE</i>	-0.266
	-0.8915
<i>OCI·2PRE</i>	-0.18
	-0.1932
<i>OCI·EPRE</i>	2.498***
	(< 0.0001)
Adjusted R ²	20.00%

*, **, *** denotes significance at 10%, 5% and 1% level respectively.
Numbers in parenthesis are p-values.

Table 1 provides results of testing the value relevance of other comprehensive income before and after ASU 2011-05. Panel A provides results that compare the value relevance of other comprehensive income between before and after ASU 2011-05. Panel B provides results that examine the value relevance of other comprehensive income by reporting formats before ASU 2011-05. Definitions of variables are provided in Appendix.

To add validity to results of this study, the value relevance of other comprehensive income before ASU 2011-05 is examined by reporting formats based on the following regression model taken from Chamber et al. (2007).

$$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1PRE_{it} + \alpha_5 OCI \cdot 2PRE_{it} + \alpha_6 OCI \cdot EPRE_{it} + \epsilon_{it} \quad (2)$$

1PRE is an indicator variable for firms reporting in a “single statement format” before ASU 2011-05. *2PRE* is an indicator variable for firms reporting in a “two statement format” before ASU 2011-05. *EPRE* is an indicator variable for firms reporting in an “equity statement format” before ASU 2011-05. Other variables are defined in the same way as Equation (1). Results are presented in Panel B of Table 1. The coefficient on *OCI·EPRE* is only significantly positive. This implies that other comprehensive income is only value relevant before ASU 2011-05 when reported in an “equity statement format”, which is consistent with Chambers et al. (2007).

Value Relevance of Other Comprehensive Income by Reporting Formats After ASU 2011-05

Table 2 A VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME BY REPORTING FORMATS AFTER ASU 2011-05				
Panel A: Descriptive statistics in year of ASU 2011-05 adoption by other comprehensive income reporting formats				
	Single Statement		Two Statements	
	Mean	Median	Mean	Median
<i>NI</i>	0.047	0.058	0.061	0.062
<i>OCI</i>	0.002	0	0	0
<i>CI</i>	0.049	0.057	0.061	0.062
<i>TA</i>	22,261.50	8,229.31	61,053.28	14,541.70
(in millions US\$)				
<i>MV</i>	12,280.40	9,844.79	28,054.89	13,103.83
(in millions US\$)				
<i>SALE</i>	10,008.15	4,387.67	21,828.69	8,603.86
(in millions US\$)				
Total		41		457

Next, this study investigates the value relevance of other comprehensive income by reporting formats after ASU 2011-05. In Panel A of Table 2, descriptive statistics by reporting format are presented in the year each firm first adopts ASU 2011-05. Only 41 firms use a “single statement format”, while 457 firms choose a “two statement format”. This is consistent with the practitioners’ preference for a “two statement format”, while inconsistent with the FASB’s initial

proposal in the Exposure Draft where only a “single statement format” is allowed. Results in Panel A of Table 2 also suggest that larger and more profitable firms tend to report other comprehensive income in a “two statement format” after ASU 2011-05.

Table 2 B		
VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME BY REPORTING FORMATS AFTER ASU 2011-05		
Panel B: Value relevance of other comprehensive income by reporting formats after ASU 2011-05		
Equation (3): $RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1POST_{it} + \alpha_5 OCI \cdot 2POST_{it} + \epsilon_{it}$		
Equation (4): $RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1POST_{it} + \alpha_5 OCI \cdot 2POST_{it} + \beta_1 OCINEG_{it} + \beta_2 OCI \cdot 1POST \cdot OCINEG_{it} + \beta_3 OCI \cdot 2POST \cdot OCINEG_{it} + \epsilon_{it}$		
	Equation (3)	Equation (4)
<i>Intercept</i>	0.121*** (< 0.0001)	0.101*** (< 0.0001)
<i>NEG</i>	-0.005 -0.9156	0.007 -0.8844
<i>NI</i>	1.039*** (< 0.0001)	0.865*** (< 0.0001)
<i>NI·NEG</i>	-0.793** -0.019	-0.088 -0.8059
<i>OCI·1POST</i>	-0.583 -0.457	1.845 -0.3048
<i>OCI·2POST</i>	0.439** -0.047	1.632*** (< 0.0001)
<i>OCINEG</i>		0.036* -0.0704
<i>OCI·1POST·OCINEG</i>		-2.829 -0.1562
<i>OCI·2POST·OCINEG</i>		-2.306*** (< 0.0001)
Adjusted R ²	5.55%	9.03%

*, **, *** denotes significance at 10%, 5% and 1% level respectively.

Numbers in parenthesis are *p*-values.

Table 2 provides results of testing the value relevance of other comprehensive income by reporting formats after ASU 2011-05. Panel A provides descriptive statistics by reporting formats after ASU 2011-05. Panel B provides results that examine the value relevance of other comprehensive income by reporting formats after ASU 2011-05. Definitions of variables are provided in Appendix.

$$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1POST_{it} + \alpha_5 OCI \cdot 2POST_{it} + \epsilon_{it} \quad (3)$$

$$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 1POST_{it} + \alpha_5 OCI \cdot 2POST_{it} + \beta_1 OCINEG_{it} + \beta_2 OCI \cdot 1POST \cdot OCINEG_{it} + \beta_3 OCI \cdot 2POST \cdot OCINEG_{it} + \epsilon_{it} \quad (4)$$

To answer Research Question 1, the value relevance of other comprehensive income by reporting formats after ASU 2011-05 is investigated using the following regression models extended from Chamber et al. (2007).

IPOST is an indicator variable for firms reporting in a “single statement format” after ASU 2011-05. *2POST* is an indicator variable for firms reporting in a “two statement format” after ASU 2011-05. In Equation (4), *OCINEG* is an indicator variable for firms with negative other comprehensive income, which is included to control for potentially differential pricing of negative other comprehensive income. Other variables are defined in the same way as Equation (1).

Results are provided in Panel B of Table 2. In Equation (3), the coefficient on *OCI-2POST* is only significantly positive (0.439). This implies that other comprehensive income is only value relevant when reported in a “two statement format” after ASU 2011-05. Further note that the coefficients on *OCI-2POST* (1.632) and *OCI-2POST-NEG* (-2.036) are both significant in Equation (4). This implies that negative other comprehensive income is incrementally value relevant to positive other comprehensive income after ASU 2011-05 if reported in a “two statement format”. Thus, investors seem to price negative other comprehensive income differentially from positive other comprehensive income. However, other comprehensive income does not seem to be value relevant after ASU 2011-05 when reported in a “single statement format”. In sum, results in Table 3 indicate that the value relevance of other comprehensive income differs by reporting formats after ASU 2011-05.

Value Relevance of Other Comprehensive Income by Change in Reporting Formats After ASU 2011-05

Table 3 A VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME BY CHANGE IN REPORTING FORMATS AFTER ASU 2011-05												
Panel A: Descriptive statistics in year of ASU 2011-05 adoption by change in other comprehensive income reporting formats												
Before ASU 2011- 05	Single Statement				Two Statements				Equity Statement			
After ASU 2011- 05	Single Statement		Two Statements		Single Statement		Two Statements		Single Statement		Two Statements	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<i>NI</i>	0.047	0.044	N/A	N/A	0.132	0.132	0.065	0.061	0.044	0.062	0.06	0.062
<i>OCI</i>	-0.006	-0.001	N/A	N/A	-0.005	-0.005	-0.001	-0.004	0.006	0	0.001	0
<i>CI</i>	0.041	0.045	N/A	N/A	0.127	0.127	0.064	0.055	0.05	0.061	0.061	0.064
<i>TA</i> (in millions US\$)	18,643.42	8,482.39	N/A	N/A	41117.00	41,117.00	59,677.04	16,659.30	23,678.13	6,807.06	61,404.90	14,123.03
<i>MV</i> (in millions US\$)	12,960.35	5,860.32	N/A	N/A	25054.20	25,054.20	26,616.16	11,755.82	11,361.48	9,844.79	28,418.53	13,366.77
<i>SALE</i> (in millions US\$)	7,570.48	4,387.67	N/A	N/A	11454.00	11,454.00	25,646.37	9,081.00	11,412.92	4,111.00	20,853.30	8,462.05
Total	15		0		1		93		25		364	

Table 3B		
VALUE RELEVANCE OF OTHER COMPREHENSIVE INCOME BY CHANGE IN REPORTING FORMATS AFTER ASU 2011-05		
Panel B: Value relevance of other comprehensive income by change in reporting formats after ASU 2011-05		
Equation (5):		
$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 11_{it} + \alpha_5 OCI \cdot 22_{it} + \alpha_6 OCI \cdot E1_{it} + \alpha_7 OCI \cdot E2_{it} + \epsilon_{it}$		
Equation (6):		
$RET_{it} = \alpha_0 + \alpha_1 NEG_{it} + \alpha_2 NI_{it} + \alpha_3 NI \cdot NEG_{it} + \alpha_4 OCI \cdot 11_{it} + \alpha_5 OCI \cdot 22_{it} + \alpha_6 OCI \cdot E1_{it} + \alpha_7 OCI \cdot E2_{it} + \beta_1 OCINEG_{it} + \beta_2 OCI \cdot 11 \cdot OCINEG_{it} + \beta_3 OCI \cdot 22 \cdot OCINEG_{it} + \beta_4 OCI \cdot E1 \cdot OCINEG_{it} + \beta_5 OCI \cdot E2 \cdot OCINEG_{it} + \epsilon_{it}$		
	Equation (5)	Equation (6)
Intercept	0.12	0.100***
	(< 0.0001)	(< 0.0001)
NEG	0.013	0.031
	-0.8015	-0.5546
NI	1.043***	0.877***
	(< 0.0001)	(< 0.0001)
NI·NEG	-0.726**	0.008
	-0.0367	-0.9837
OCI·11	0.792	1.866
	-0.594	-0.3698
OCI·22	0.327	1.396**
	-0.4644	-0.0147
OCI·E1	-1.061	2.429
	-0.2516	-0.4937
OCI·E2	0.485*	1.729***
	-0.059	(< 0.0001)
OCINEG		0.036*
		-0.0709
OCI·11·OCINEG		-1.505
		-0.6095
OCI·22·OCINEG		-2.231**
		-0.0186
OCI·E1·OCINEG		-3.687
		-0.3155
OCI·E2·OCINEG		-2.347***
		(< 0.0001)
Adjusted R ²	5.30%	8.47%

*, **, *** denotes significance at 10%, 5% and 1% level respectively.

Numbers in parenthesis are p-values.

Table 3 provides results of testing the value relevance of other comprehensive income by change in reporting formats after ASU 2011-05. Panel A provides descriptive statistics by change in reporting formats after ASU 2011-05. Panel B provides results that examine the value relevance of other comprehensive income by change in reporting formats after ASU 2011-05. Definitions of variables are provided in Appendix.

As Chambers et al. (2007) find that other comprehensive income is only value relevant before ASU 2011-05 when reported in an “equity statement format”, this study examines whether the value relevance of other comprehensive income after ASU 2011-05 is also affected by reporting formats before ASU 2011-05. Hence, for each firm, reporting formats of other comprehensive income in the year immediately before ASU 2011-05 is adopted are compared with those of other comprehensive income in the year ASU 2011-05 is adopted. Results are

provided in Panel A of Table 3. All firms reporting other comprehensive income in a “single statement format” or “two statement formats” before ASU 2011-05 continue to report in the same format after ASU 2011-05. The only exception is one firm reporting in a “two statement format” before ASU 2011-05 switches to a “single statement format” after ASU 2011-05. Among 389 firms reporting in an “equity statement format” before ASU 2011-05, 364 firms switch to a “two statement format” after ASU 2011-05. This again reflects practitioners’ concern about a “single statement format”. Panel A of Table 3 also displays that larger and more profitable firms tend to switch to or continue to use a “two statement format” after ASU 2011-05.

The value relevance of other comprehensive income after ASU 2011-05 by change in reporting formats (Research Question 2) is examined using the following regression models adopted from Chamber et al. (2007).

For this test, one firm switching to a “single statement format” after ASU 2011-05 from a “two statement format” before ASU 2011-05 is dropped. *I1* is an indicator variable for firms that continue to report in a “single statement format” after ASU 2011-05. *I2* is an indicator variable for firms that continue to report in a “two statement format” after ASU 2011-05. *E1* is an indicator variable for firms that switch to a “single statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05. *E2* is an indicator variable for firms that switch to a “two statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05. Other variables are defined in the same way as Equations (1) and (4).

Results are provided in Panel B of Table 3. In Equation (5), the coefficient on *OCI·E2* is only significant. This suggests that other comprehensive income is only value relevant for firms that switch to a “two statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05. In Equation (6), the coefficients on both *OCI·E2* and *OCI·E2·OCINEG* are significant. This suggests that negative other comprehensive income is incrementally value relevant to positive other comprehensive income for firms that switch to a “two statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05. Moreover, the coefficients on both *OCI·I2* and *OCI·I2·OCINEG* are significant in Equation (6). This also indicates that negative other comprehensive income is incrementally value relevant to positive other comprehensive income for firms that continue to report in a “two statement format” after ASU 2011-05. Results in Table 3 imply that other comprehensive income is value relevant after ASU 2011-05 if reported in a “two statement format” regardless of reporting formats before ASU 2011-05. These results can be explained in one of two ways. First, investors can better apprehend information about other comprehensive income after ASU 2011-05 when separately reported (Bloomfield 2002), which is consistent with the practitioners’ view. Second, investors can better process information about other comprehensive income after ASU 2011-05 when reported in the most frequently used format (Chambers et al. 2007).

CONCLUSION

This study presents evidence that the value relevance of other comprehensive income differs by reporting formats after ASU 2011-05. Specifically, this study finds that other comprehensive income is only value relevant after ASU 2011-05 when reported in a “two statement format” regardless of reporting formats before ASU 2011-05. Thus, it should be worthwhile to re-assess the effectiveness of allowing two reporting formats since investors appear to price other comprehensive income only when reported in a “two statement format”. Moreover, investors seem to utilize information in other comprehensive income considerably

more than normally assumed, as negative other comprehensive income is incrementally value relevant after ASU 2011-05 when reported in a “two statement format”.

This study is subject to several limitations. First, the finding of this study that other comprehensive income is only value relevant after ASU 2011-05 when reported in a “two statement format” may be due to the fact that only small numbers of firms choose a “single statement format” after ASU 2011-05. Second, since this study is based on S&P 500 firms, results may not be generalized to smaller firms. Finally, since this study relies on the data in early years of ASU 2011-05, results may alter later years. Thus, I suggest that future research re-examines this topic by expanding the sample to smaller firms and the sample period to later years.

APPENDIX

Appendix 1 VARIABLE DEFINITIONS	
Variable	Definition
<i>RET</i>	12 month buy and hold returns, which are accumulated from the beginning of the eighth month before fiscal year end until the fourth month after fiscal year end
<i>NI</i>	Net income deflated by market value at the beginning of the eighth month before fiscal year end
<i>OCI</i>	Other comprehensive income deflated by market value at the beginning of the eighth month before fiscal year end
<i>NEG</i>	Indicator variable for firms with negative net income
<i>1PRE</i>	Indicator variable for firms reporting other comprehensive income in a “single statement format” before ASU 2011-05
<i>2PRE</i>	Indicator variable for firms reporting other comprehensive income in a “two statement format” before ASU 2011-05
<i>EPRE</i>	Indicator variable for firms reporting other comprehensive income in an “equity statement format” before ASU 2011-05
<i>1POST</i>	Indicator variable for firms reporting other comprehensive income in a “single statement format” after ASU 2011-05
<i>2POST</i>	Indicator variable for firms reporting other comprehensive income in a “two statement format” after ASU 2011-05
<i>OCINEG</i>	Indicator variable for firms with negative other comprehensive income
<i>11</i>	Indicator variable for firms that continue to report other comprehensive income in a “single statement format” after ASU 2011-05
<i>22</i>	Indicator variable for firms that continue to report other comprehensive income in a “two statement format” after ASU 2011-05
<i>E1</i>	Indicator variable for firms that switch to a “single statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05
<i>E2</i>	Indicator variable for firms that switch to a “two statement format” after ASU 2011-05 from an “equity statement format” before ASU 2011-05
<i>CI</i>	Comprehensive income deflated by market value at the beginning of the eighth month before fiscal year end
<i>TA</i>	Total assets at fiscal year end
<i>MV</i>	Market value at fiscal year end
<i>SALE</i>	Sales revenue at fiscal year end

ENDNOTE

1. ASU 2011-05 does not change components of other comprehensive income.
2. Before ASU 2011-05, SFAS 130 dictates reporting formats of other comprehensive income. Under SFAS 130, firms have three reporting format options—(1) single statement format, (2) two statement format, and (3) equity statement format.
3. Value relevance measures the extent to which investors price accounting information, and is usually estimated based on the contemporaneous association between accounting information and stock price (or stock returns).
4. In the Exposure Draft, the FASB initially proposed only one reporting format—“single statement format”. However, the FASB later allowed two reporting formats based on the practitioners’ concern that a “single statement format” would deemphasize net income, and proximity of net income and other comprehensive income would
5. Obscure differences of these two. Allowing two reporting formats, the FASB asserts that a “two statement format” increases prominence of comprehensive income and achieves objective of a “single statement format”.
6. The FASB states “Displaying comprehensive income in an income statement-type format is superior to displaying it in a statement of changes in equity” (ASC 220-10-45-10).
7. December 2011 was the first fiscal year end after ASU 2011-05 became effective for the public companies with calendar fiscal year end.
8. For example, for the firms that adopt ASU 2011-05 in December 2011, 2009 and 2008 are used for the period before ASU 2011-05, and 2012 and 2013 are used for the period after ASU 2011-05. 2010 and 2011 are excluded as a transition period.
9. Among the sample firms, only 40% of firms implement ASU 2011-05 by the required compliance year (i.e., the first fiscal year end after December 15, 2011), while 60% of the sample firms adopt ASU 2011-05 one year after the required compliance year. One firm (Nextera Energy Inc.) still reports in an “equity statement format” until two years after the required compliance year. Two firms (Autonation and Wisconsin Energy Corp.) do not report other comprehensive income during the test period after ASU 2011-05.
10. Devon Energy Corp.

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