Reporting location and the value relevance of accounting information: The case of other comprehensive income

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Abstract

This paper examines the influence of reporting location on the value relevance of other comprehensive income (OCI). Accounting Standards Update (ASU) 2011-05 “Presentation of Comprehensive Income” requires firms to report OCI in a performance statement (i.e., either below net income in a single statement of comprehensive income or in a second statement of comprehensive income that begins with net income). ASU 2011-05 eliminated the option of reporting OCI in the statement of equity, based on the argument that performance reporting would improve the transparency of OCI in the financial statements. We find mixed evidence that the value relevance of OCI differs across management’s choices of OCI reporting location prior to the implementation of ASU 2011-05. However, we do find a decline in the value relevance of OCI for firms that were required to change the reporting location of OCI from the statement of equity to a performance statement in response to ASU 2011-05. This result holds after we include a control group consisting of firms that did not change the reporting location of OCI. Overall, our findings suggest that the value relevance of OCI is determined by whether its reporting location is consistent with the firm’s reporting history.

1. Introduction

In June 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2011-05 “Presentation of Comprehensive Income”. The objective of this Update is to “[…] improve the comparability, consistency, and transparency of financial reporting and to increase the prominence of items reported in other comprehensive income […]” (ASU 2011-05, p. 1). Under Statement of Financial Reporting Standard (SFAS) 130 “Reporting Comprehensive Income”, firms could choose to report the components of other comprehensive income (OCI) in the statement of equity or in a performance statement. ASU 2011-05 eliminated the option of reporting OCI only in the statement of equity in lieu of requiring OCI to be reported in a performance statement. A performance statement can take one of the following two formats: a single statement of comprehensive income with the components of OCI below the components of net income (single-statement option); or a second separate statement of comprehensive income (two-statement format) that begins with total net income.

Based on the initial 1996 FASB exposure draft regarding performance reporting for other comprehensive income (FASB, 1996), Yen, Hirst, and Hopkins (2007) conducted a content analysis of the comment letters which indicated that the overall tenor of comment letters was in opposition to the proposed change. This finding suggests that respondents (i.e., reporting firms, major public accounting firms and professional organizations) also believe that reporting location matters despite the fact that ASU 2011-05 (as implemented) does not change what items have to be included in OCI. This Update only affects firms’ options for OCI reporting location. That is, the values of comprehensive income, net income, and OCI are not affected, and as a result there is no impact on items such as debt covenant compliance and management compensation. Nevertheless, current research provides convincing evidence that standard setters, investors, and managers believe that the reporting location of OCI influences its usefulness to investors (Black, 2014).

Further, many comment letters indicated that respondents had a preference for the two-statement option over the one statement option due to the concern that reporting net income and OCI as two subtotals in a single statement of comprehensive income would “inappropriately deemphasize net income, causing confusion in the capital markets” (ASU 2011-05, BC8). Several respondents indicated a belief that the proposed change would impact investors’ perceptions of their firm’s operating results and risk level. On the other hand, a recent study conducted by the Certified Financial Analysts (CFA) Institute argues that OCI
information is underutilized by investors and suggests that investors should increase their use of this information when making valuation decisions. As a result, the CFA proposes to enhance the presentation of OCI items by financial statement preparers and standard setters (Papa, Peters, Schacht, & Lu, 2015).

Prior evidence suggests that management believes that the reporting location of OCI influences its usefulness. Lee, Petroni, and Shen (2006) provide archival evidence based on firms in the property-liability insurance industry in which a relatively large percentage of firms chose to report OCI in a performance statement instead of the statement of shareholder’s equity. They find that managers who manage earnings through sales of APS securities and firms with low disclosure quality are more likely to report the components of OCI in the statement of shareholder’s equity.

The purpose of this study is two-fold. First, it aims to provide additional insight as to whether the financial statement reporting location of OCI matters to investors as evidenced by differences in the value relevance of OCI. Second, it examines whether mandatory performance reporting is more value relevant than the more frequently used equity statement reporting prior to ASU 2011-05. In addition to the comment letters that suggest there is a perceived importance of reporting location, Rees and Shane (2012) note that whether the reporting location of OCI is of actual importance to capital market participants remains an unanswered question due to mixed findings across experimental studies (Hirst & Hopkins, 1998; Maines & McDaniel, 2000) and archival studies (Chambers, Linsmeier, Shakespeare, & Sougiannis, 2007). Given the recent implementation of ASU 2011-05, this study is not only timely but speaks directly to the usefulness of the mandated reporting location change of OCI and thus should be of interest to standard setters.

Research examining firm’s OCI reporting choices suggests a perceived importance of OCI reporting location. Prior to the implementation of ASU 2011-05, a majority of firms chose to report OCI in the statement of equity (e.g., Bamber, Jiang, Petroni, & Wang, 2010; Chambers et al., 2007). In our sample, 65% of firms report OCI only in the statement of equity before the implementation of ASU 2011-05. Approximately 83% (85%) of firms that report OCI in a performance statement use the two-performance statement option in the pre-ASU (post-ASU) period. Consequently, the implementation of this update required numerous firms to change the reporting location of OCI from the previous location in the statement of equity. Consistent with comment letters, the finding that a majority of firms chose not to report OCI and net income in one statement suggests that firms are concerned about the possibility of investors confusing the two amounts.

For the first setting, the pre-ASU period — when management was still able to choose the reporting location of OCI — we find mixed evidence that the value relevance of OCI differs across management’s choice of OCI reporting location, with OCI being the most value relevant when reported in the statement of equity. This finding is contrary to the FASB’s expectation and prior experimental evidence which suggests that performance reporting leads to more transparency and therefore higher value relevance. Our results are largely consistent with the findings presented by Chambers et al. (2007) who find that OCI is more value relevant when reported in the predominant reporting location during the sample period, (i.e., the statement of equity).

For the second setting, the pre/post-ASU period, we find that the implementation of ASU 2011-05 led to a decrease in the value relevance of OCI for those firms which changed the reporting location of OCI from the statement of equity in the pre-ASU period to a performance statement in the post-ASU period. This result holds after we include a “control group” consisting of firms that did not change the OCI reporting location between the pre-ASU and post-ASU period.

Overall, our results suggest that although reporting OCI components in a performance statement might be perceived as the more transparent and therefore preferable approach, a mandated change in reporting location to a performance statement had an adverse impact on the value relevance of OCI. Together with prior evidence, our findings indicate that the value relevance of OCI is higher when a firm’s reporting location of OCI is consistent with its reporting history.

2. Background and hypotheses

According to the traditional Efficient Markets Hypothesis (EMH), the reporting location of financial information should not impact its value relevance (Malkiel & Fama, 1970). However, the debate on the reporting location of OCI has continued for decades. This debate has continued due to conflicting viewpoints by academics, reporting firms and standard setters. Those against performance reporting argue that it is unnecessary because OCI is not value relevant given that the underlying components are transitory in nature. Supporting this view that OCI is transitory and thus less value relevant, several studies using samples of US firms report that net income outperforms OCI in predicting future cash flows and has a greater association with market value (Cheng, Cheung, & Gopalakrishnan, 1993; Dhaliwal, Subramanyam, & Trezevant, 1999; Choi, Das, & Zang, 2007; Barton, Hansen, & Pownall, 2010; Zülch & Pronobis, 2010). While OCI might be transitory, these studies also suggest that total OCI is in fact priced by the US capital markets.

Further, the value relevance of OCI relative to net income is most likely dependent on the country in which it is investigated. Lin (2006) reports that other comprehensive income items are more value relevant than net income when reported in a combined statement of other comprehensive income and net income based on a sample of UK firms. Lin, Ramond, and Casta (2007) also find that other comprehensive income provides incremental value relevance beyond net income for most of the European Union (EU) firms examined in their sample. These findings suggest the importance of revisiting the OCI reporting location debate after the mandatory reporting requirement in the US.

Another concern by standard setters complimented by academic research is that managers’ choice of reporting location of OCI is driven by opportunism and as a result managers may avoid performance reporting to reduce transparency. Lee et al. (2006) find that insurance companies prefer to report unrealized gains and losses on available for sale (AFS) securities which are used to smooth earnings in the statement of equity instead of in a performance statement. Further, Bamber et al. (2010) report that managers are less likely to choose performance reporting when their equity compensation is more sensitive to changes in stock price, job security is lower, and larger (absolute) unrealized gains and losses on AFS securities are reported. These studies are consistent with the findings presented by Chambers et al. (2007) that post-SFAS 130 sample covers 2272 firm-years (~80%) with OCI reporting location in the statement of equity and 535 firm-years (~20%) with OCI reporting location in a performance statement.

Based on a sample of 48 New Zealand firms, Cahen, Courtenay, Gronewoller, & Upton (2008) find that comprehensive income is more value relevant than net income.
imply that managers believe that market participants will pay more attention to OCI when reported in a performance statement — the presumably more transparent reporting location.

The findings of experimental research support the FASB’s belief that performance reporting increases the transparency of OCI (Hirst & Hopkins, 1998; Maines & McDaniel, 2000). As observed by Chambers (2011), these experimental studies were conducted before SFAS 130 was in effect. SFAS 130 required reporting OCI in the financial statements versus just in the financial statement footnotes. Hence, it is reasonable to assume that study participants did not have an opportunity to gain experience in locating and using OCI information reported in “real-world” financial statements. It is also unlikely that study participants had an expectation about the predominant reporting location of OCI. Thus, the results might have been different if the experiments were conducted after the implementation of SFAS 130. In fact Chambers et al. (2007) find that OCI is more value relevant when reported in the statement of equity versus in a performance statement. Thus, investors likely adjusted to the more predominant but less transparent reporting location choice (Chambers, 2011).

Prior experimental and archival evidence is inconsistent with the EMH and should be interpreted in light of alternative theories such as the “Incomplete Revelation Hypothesis” (IRH) (Bloomfield, 2002) and the notion of “limited attention” to available financial data (Hirshleifer & Teoh, 2003). The IRH states that prices react more strongly to statistics (i.e., financial information) that are more easily extracted from public data released by companies. This complements the notion that investors have limited attention with respect to publicly available information and that otherwise equivalent disclosures can impact investors’ decisions differently based on how costly it is to locate and process the disclosed information (Hirshleifer & Teoh, 2003). Thus, the participants in Hirst and Hopkins (1998) and Maines and McDaniel (2000) likely perceived OCI reporting as more transparent and easier to locate under the performance reporting format since they had no prior expectation with respect to a reporting location, as SFAS 130 had not been implemented when the study was conducted. The findings by Chambers et al. (2007) that OCI is more value relevant when reported in the statement of equity may be due to the fact that investors had already formed an expectation about the OCI reporting location based on firms’ reporting history. Despite the presumably lower level of transparency, investors were likely better able to locate and process the OCI information when reported in the statement of equity — the predominant and therefore expected reporting location.

Since the sample period examined by Chambers et al. (2007) is after the implementation of SFAS 130 (1998–2003), we reexamine the association between OCI reporting location and market pricing in a more recent period (2010 and 2011) in which managers had the choice of OCI reporting location. Based on the above discussion, we are unable to make a prediction as to whether OCI is more/less value relevant when reported in the statement of equity versus in a performance statement. One the one hand, prior archival evidence suggests that OCI is more value relevant when reported in the statement of equity. On the other hand, the FASB’s expectations and experimental evidence suggest reporting OCI in a performance statement is the more transparent approach. Moreover, over the seven-year period after 2003 and with the implementation date of ASU 2011-05 required for fiscal year’s ending December 31, 2012, some companies chose early adoption of OCI performance reporting. This may have impacted the expected reporting location of OCI for those firms that chose early adoption and reduced investors’ cost of locating and processing the information which in turn likely increased attention to performance reporting of OCI. This leads to our first research question:

RQ1: If management can choose the reporting location, is the value relevance of OCI different across reporting locations?

ASU 2011-05 imposes a mandated change in the reporting location of OCI thereby largely eliminating managers’ choice of reporting location to one of two performance statements. As a result, a majority of firms were affected by ASU 2011-05 and were required to change from reporting OCI in the statement of equity to reporting OCI in a performance statement. On the one hand, the EMH predicts that the reporting location of financial information should not impact its value relevance. Hence, since ASU 2011-05 only affects the reporting location of OCI and not its content, we would expect to find no change in value relevance. As well, in light of the FASB’s expectations that performance reporting is the more transparent approach, the mandated change in reporting location due to ASU 2011-05 should enhance the value relevance of OCI.

On the other hand, the IRH predicts that the value relevance of an item decreases with information processing costs. Hence, for firms required to change the reporting location of OCI in response to ASU 2011-05, the new location of OCI likely deviates from the expected reporting location. As a result, investors may have found it — at least temporarily — more costly to locate and process the reported OCI information (Bloomfield, 2002; Hirshleifer & Teoh, 2003). This leads to our second research question:

RQ2: Does a required change of OCI reporting location from the statement of equity to a performance statement improve the value relevance of OCI?

3. Data and methodology

3.1. Sample selection

Our sample is based on firms with a December 31st fiscal year end that have the required data available in Compustat and Bloomberg. Due to the timeliness of this study and constraints on data availability, our sample only includes observations from 2 years prior to (2010 and 2011) and 2 years (2012 and 2013) after the implementation of ASU 2011-05. We obtain OCI and net income (NI) data from Compustat and stock return data from Bloomberg. Consistent with prior studies, we eliminate utilities (SIC codes 4900–4999) and financial firms (SIC codes 6000–6999) because they are subject to additional regulation. We are able to identify 2686 firms with all the required data in Compustat and Bloomberg in the sample period. To make our coding effort more manageable, we randomly selected 1000 firms out of the 2686 and hand-coded the OCI reporting location for each firm-year based on the 10-Ks downloaded from the SEC Edgar Database. The reporting location of each observation was coded as either the statement of equity (EQ), a performance statement (PF), or both reporting locations (BOTH). We are able to identify 2686 firms with all the required data in Compustat and Bloomberg in the sample period. To make our coding effort more manageable, we randomly selected 1000 firms out of the 2686 and hand-coded the OCI reporting location for each firm-year based on the 10-Ks downloaded from the SEC Edgar Database. The reporting location of each observation was coded as either the statement of equity (EQ), a performance statement (PF), or both reporting locations (BOTH). Since some firms continued to report OCI in the statement of equity in 2012 and 2013. This approach yields 4000 firm-years for our full sample.

In 2010 and 2011, the pre-ASU period, firms were still able to report the components of OCI in the statement of equity, in a performance statement, or in both locations. Those firms that had reported the components of OCI in the statement of equity in 2011 are required to report the components of OCI in a performance statement in 2012 and 2013, the post-ASU periods. Our sample selection process yields two pre-ASU and two post-ASU observations per firm. Hence, each firm acts as a control for itself. By using two pre-ASU and two post-ASU observations, we hope to mitigate the influence of adoption year effects and to enhance the generalizability of the reported results (Kohlbeck & Warfield, 2010).

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6 SFAS 130 became effective for fiscal years beginning after December 15, 1997. The Hirst and Hopkins study was published in December 1998. The Maines and MacDaniel study was submitted to the Accounting Review in July 1998, accepted in December 1999, and published in April 2000. Assuming that the experiments were conducted at least 6 months prior to the submission date, it is unlikely that the subjects were exposed to OCI reporting in accordance with SFAS 130.

5 See Chambers et al. (2007, p. 504) for a similar argument.

9 See Chambers et al. (2007, p. 564) for a similar argument.

10 If the information required to determine a firm’s OCI reporting location was not available (e.g. missing 10-K), we simply took the next firm following a randomly assigned rank.
3.2. Frequency of OCI reporting

Panel A in Table 1 shows the frequencies of OCI reporting locations for all coded observations. Our findings for 2011 are consistent with prior studies which found that the majority of firms report OCI in the statement of equity (e.g., Chambers et al., 2007; Bamber et al., 2010). We find that the majority of firms (85%) chose to report OCI in the statement of equity in 2011, the last pre-ASU year. Specifically, within this group 65% chose to report the components of OCI only in the statement of equity and 20% report OCI in both a performance statement and the statement of equity. Thus, 55% (20% + 15%) of the firms in our sample reported OCI in at least one performance statement in the pre-ASU period. As expected, we find a very different picture for the post-ASU period. Under ASU 2011-05, 100% of firms report the components of OCI in a performance statement. Specifically, within this group 43% report OCI only in a performance statement and 57% additionally report OCI in the statement of equity.

Panel B in Table 1 shows the frequencies of OCI reporting locations for the subset of firms that reported OCI in a performance statement. Given the choice between the one-statement or two-statement option of performance reporting, the majority of firms picked the two-statement option thereby reporting OCI in a separate statement instead of one-statement of comprehensive income. Specifically, 83% and 85% of performance reporting firms (henceforth PF) chose the two-statement option in 2011 and 2012, respectively.

Panel C in Table 1 shows the frequencies of OCI reporting locations in 2012 for the subset of firms that chose to report OCI only in the statement of equity in the pre-ASU period (henceforth EQ firms). The findings mirror the pattern discussed above. Specifically, 41% of EQ firms chose only the two-statement option in the post-ASU period. Approximately 47% (41% + 6%) of EQ firms stopped reporting the components of OCI in the statement of equity while the remaining 53% (39% + 14%) kept reporting the components of OCI in the statement of equity in addition to reporting OCI in a performance statement.

Overall, the frequencies reported in Table 1 suggest that firms have a preference for the two-statement option. This is consistent with the notion that firms are concerned that reporting OCI and net income in the same performance statement could inappropriately diminish the prominence of net income and lead to confusion among investors. Interestingly, this two-statement option was not part of the initial exposure draft for ASU 2011-05 and was included based on comment letters (see ASU 2011-05, BC10).

3.3. Regression models

In order to assess whether the reporting location of OCI affects the pricing of OCI, we examine the association between OCI and stock market returns. Standard setters and experimental studies (Hirst & Hopkins, 1998; Maines & McDaniel, 2000) claim that reporting OCI in a performance statement, rather than in the statement of equity, is more transparent. To the extent that this claim is true, we would expect investors to be better able to process the reported OCI information if presented in a performance statement. Empirically, we should observe a stronger association between OCI and stock returns if OCI is reported in a performance statement.

Ohlson (1995) provides the theoretical foundation for our research design. Our research design for return-earnings regressions follows prior association studies (e.g., Dhaliwal et al., 1999; Chambers et al., 2007). To assess whether the reporting location of OCI matters to investors, we examine the association between OCI and annual stock returns contingent on the reporting location of OCI. We use two different settings to examine the influence of reporting location on the value relevance of OCI. First, we use a sample based on pre-ASU data. In the pre-ASU period, firms were still able to choose between EQ and PF. As noted by Rees and Shane (2012), the results from a setting in which managers have a reporting choice might be affected by a reporting selection bias and as a result we exploit the second setting in which firms are required to change the reporting location from the statement of equity to a performance statement in response to ASU 2011-05. Specifically, we use a sample of firms that reported OCI only in the statement of equity in the pre-ASU periods and switched to reporting OCI only in a performance statement in the post-ASU periods. Since this change of reporting location was not by choice but in response to ASU 2011-05, the results are less likely to suffer from a selection bias.

3.3.1. Pre-ASU period

We estimate the following cross-sectional regression models based on pre-ASU data (2010 and 2011) to compare the value relevance of OCI across the EQ, PF, and BOTH reporting alternatives in a setting where management has a choice between reporting OCI in the statement of equity and a performance statement (for firm i in year t):

\[
\text{Model 1:} \quad \text{RET}_t = \alpha + \alpha_1 \text{NET}_t + \alpha_2 \text{LOSS}_t + \alpha_3 \text{NL}_t + \text{LOSS}_t + \beta_1 \text{OCI}_t + \epsilon_t
\]
Model 2: \[ \text{RET}_t = \alpha_0 + \alpha_1 \text{Ni}_t + \alpha_2 \text{LOSS}_t + \alpha_3 \text{Ni}_t \times \text{LOSS}_t + \gamma_1 \text{CNTRL}_t + \gamma_2 \text{OCIL}_t + \gamma_3 \text{CNTRL}_t + \varepsilon \] (2)

where: \( \text{RET}_t \) is the return from January 1st in year t to March 31st in year t + 1; \( \text{Ni} \) is net income per share; \( \text{LOSS} \) is a dummy variable that equals 1 if \( \text{Ni} < 0 \), and 0 otherwise; \( \varepsilon \) is a random error term.

\( \text{Ni}_t \) and \( \text{OCIL}_t \) are adjusted for stock splits with the adjustment factor ADJEX from Compustat and scaled by the price at the beginning of the return-accumulation period. The sum of \( \gamma_1 \) and \( \gamma_2 \) (\( \gamma_1 \) and \( \gamma_2 \)) measures the value relevance of \( \text{OCIL} \) when reported in a performance statement (both reporting locations). To formally test our first research question, we test whether \( \gamma_2 = 0 \) and \( \gamma_3 = 0 \). A significant \( \gamma_2 \) (\( \gamma_3 \)) coefficient would suggest that the value relevance of \( \text{OCIL} \) is different depending on management’s choice of \( \text{OCIL} \) reporting location. As pointed out previously, this approach shares a caveat with Chambers et al. (2007) such that the reported results might suffer from a selection bias.

3.3.2 Pre- and post-ASU periods

The following regression model groups firms into a treatment and control group:

Model 3: \[ \text{RET}_t = \alpha_0 + \alpha_1 \text{Ni}_t + \alpha_2 \text{LOSS}_t + \alpha_3 \text{Ni}_t \times \text{LOSS}_t + \gamma_1 \text{CNTRL}_t + \gamma_2 \text{OCIL}_t + \delta_1 \\text{TR}_t + \gamma_3 \text{OCIL}_t + \delta_2 \text{CNTRL}_t + \varepsilon \] (3)

where: \( \text{CNTRL} \) is a dummy variable which equals 1 for firms reporting OCI in the pre-ASU period either in only a performance statement or both, a performance statement and the statement of equity; and \( \text{TR} \) is a dummy variable which equals 1 for firms reporting OCI only in the statement of equity in the pre-ASU period.

The treatment group (\( \text{TR} \)) consists of firms that changed the OCI reporting location from the EQ to a PF in response to ASU 2011-05. The control group (\( \text{CNTRL} \)) consists of firms that were not required to change their OCI reporting location in the pre-ASU period. Specifically, we use a group of firms that reported OCI in both reporting locations (i.e., EQ and PF) or only in PF in the pre as well as the post period. Empirically, we implement the “difference-in-difference” approach with the following regression model:

Model 4: \[ \text{RET}_t = \alpha_0 + \alpha_1 \text{Ni}_t + \alpha_2 \text{LOSS}_t + \alpha_3 \text{Ni}_t \times \text{LOSS}_t + \gamma_1 \text{CNTRL}_t + \gamma_2 \text{OCIL}_t + \delta_1 \text{TR}_t + \gamma_3 \text{OCIL}_t + \delta_2 \text{CNTRL}_t + \delta_3 \text{PRE}_t + \delta_4 \text{OCIL}_t + \gamma_4 \text{POST}_t + \varepsilon \] (4)

where: \( \text{PRE} \) is a dummy variable which equals 1 for pre-ASU years, and 0 otherwise, and \( \text{POST} \) is a dummy variable which equals 1 for post-ASU years, and 0 otherwise.

The null hypothesis is that \( \delta_3 \) (\( \delta_4 \)) or put differently, that the change in value relevance of OCI is equal across both the treatment and control group. The difference between \( \delta_3 \) (\( \delta_4 \)) and \( \delta_1 \) measures the change in value relevance from the pre-ASU to the post-ASU period for the control (treatment) group. Since the control group did not change the reporting location of OCI, the difference between \( \delta_4 \) and \( \delta_3 \) captures broader economic effects that potentially influence the value relevance of OCI.

4. Empirical results

Table 2 reports descriptive statistics for our sample. Table 3 shows the Pearson correlation coefficients with p-values for the main variables used in the multivariate regression analysis. Annual returns (\( \text{RET}_t \)) are significantly positively correlated with \( \text{Ni} \) (0.158, \( p < 0.001 \)). In contrast, the correlation between \( \text{RET}_t \) and \( \text{OCIL}_t \) is

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>10th</th>
<th>25th</th>
<th>50th</th>
<th>75th</th>
<th>90th</th>
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<td>( \text{RET}_t )</td>
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<td>0.23</td>
<td>0.57</td>
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<tr>
<td>( \text{Ni} )</td>
<td>349.00</td>
<td>1557.80</td>
<td>-42.50</td>
<td>-3.38</td>
<td>27.62</td>
<td>169.80</td>
<td>640.90</td>
</tr>
<tr>
<td>( \text{OCIL} )</td>
<td>-5.10</td>
<td>410.30</td>
<td>-43.33</td>
<td>-3.31</td>
<td>0.00</td>
<td>1.95</td>
<td>22.50</td>
</tr>
<tr>
<td>( \text{LOSS} )</td>
<td>0.29</td>
<td>0.46</td>
<td>0.00</td>
<td>0.00</td>
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</tr>
<tr>
<td>( \text{CIPEN} )</td>
<td>1.46</td>
<td>393.30</td>
<td>-21.10</td>
<td>-0.22</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>( \text{CICURE} )</td>
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<td>141.00</td>
<td>-15.69</td>
<td>-0.59</td>
<td>0.00</td>
<td>0.41</td>
<td>7.30</td>
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<tr>
<td>( \text{CIDERGL} )</td>
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<td>35.74</td>
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<tr>
<td>( \text{CISECG} )</td>
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</table>

All variables are adjusted for stock splits and winsorized at the 5th/95th percentile.
results presented for Model 4 are based on the same set of firms in the pre-ASU and post-ASU periods, the coefficient estimates measure the value relevance of OCI across the EQ and PF reporting alternatives in a setting where management was required to change the OCI reporting location. This approach should largely mitigate the issue of selection bias. The coefficient on OCI measures the value relevance when OCI is reported in the statement of equity. The coefficient on OCI*POST measures the difference in the value relevance of OCI between the pre-ASU and the post-ASU reporting period.

The significantly positive $\beta_1$ coefficient (8.398, $p < 0.01$) suggests that OCI is value relevant when reported in the statement of equity in the pre-ASU period. The significantly negative $\beta_2$ coefficient ($-7.017$, $p = 0.06$) suggests that the mandated change in the reporting location of OCI has led to a significant decline in the value relevance of OCI. This finding is in contrast to FASB’s expectations and prior experimental evidence, which suggests that performance reporting is more transparent.

As discussed previously, our results could be at least partly the result of a time effect between the pre and post period rather than the change in reporting location. In order to address this concern, we employ a “difference-in-difference” approach by including a control group of firms which were not required to change the reporting location of OCI in response to ASU 2011-05.

Table 5 also reports the results of the regression for Model 5 which are pooled returns-earnings regressions. The sample contains two groups of firms: the TR group which contains firms that had to switch from EQ in the pre-ASU period to PF in the post-ASU period and the CNTRL group which contains firms that did not have to change the reporting location of OCI.

The coefficient on $\beta_3$ measures the value relevance of OCI for the control group in the pre-ASU (post-ASU) period while the coefficient on $\beta_4$ measures the value relevance of OCI for the control group in the pre-ASU (post-ASU) period. As expected, $\alpha_1$ the coefficient on NI is positive and significant at the 1% level. For the treatment group, we find a decline in the pricing coefficient of OCI; $\beta_1$ declines from 8.399 ($p < 0.01$) to 1.557 ($p = 0.549$) from the pre to the post period. In contrast, the control group displays an increasing pricing coefficient for OCI; $\beta_1$ increases from $-5.097$ ($p = 0.071$) to 2.178 ($p = 0.462$) from the pre to the post period. As shown at the bottom of Table 5, both changes are significant at the 10% level or better.

To formally test our hypothesis, we test whether the change in the pricing coefficient from the pre to the post period is different across the treatment and the control group. As shown at the bottom of Table 5, the results from the Model 5 regression indicate a difference between the changes (i.e., the difference-in-difference is significant ($\beta_3 - \beta_4 - (\beta_1 - \beta_2) = 14.117$ ($p = 0.017$)). This finding suggests that the mandated change of OCI reporting location from the statement of equity to a performance statement had an adverse effect on the value relevance of OCI in the first 2 years after the implementation of ASU 2011-05.

Overall, the findings presented in Table 5 suggest that the value relevance of OCI was higher when reported in the statement of equity and declined for firms that were required to change to performance reporting in response to ASU 2011-05. This finding is also consistent with the notion that investors pay most attention to OCI when reported in an expected location (see Hirst & Hopkins, 1998; Chambers et al., 2007; Bamber et al., 2010; Chambers, 2011).

The OCI variable is the sum of the following components: CIPEN (minimum pension adjustments), CICURR (currency translation adjustments), CIDERGL (derivative gains and losses), and CISECGL (securities gains and losses). One possible alternative explanation for our findings is that they are at least partly driven by changes in a particular OCI component between the pre and the post-ASU period rather than by the introduction of ASU 2011-05. To mitigate this concern, the results for Model 5 are based on a restricted sample for firms which have a non-zero value for at least three out of the four OCI components for all 4 years in the sample period. Attempts to impose more stringent constraints (e.g., a given
component has to be the same sign in all four years) lead to severe reductions in sample size and loss of statistical power.

The findings reported in this study should be considered in light of several limitations. First, although the timeliness of our study was enhanced by examining the value relevance of OCI in the first 2 years of implementation, we acknowledge that our findings may not be generalizable to subsequent years and that both our conclusions based on these years and our conjectures regarding future years are limited. However, investors’ updated expectations with respect to performance reporting of OCI are also likely to influence the value relevance of OCI. Second, we examine the value relevance of OCI in the pre-ASU period only for 2010 and 2011, which also reduces the generalizability of our findings to time periods before 2010. However, we do note that the focus of our study is to examine the impact of a required change in OCI reporting location on the value relevance of OCI in the pre and post-ASU 2011-05 period.

Extending our sample period could lead to the inclusion of other factors that could influence our results. Third, we examine the value relevance for aggregated OCI rather than the disaggregated individual OCI components. Based on our analysis, we cannot conclude whether our inferences extend to the individual OCI components. This is a question we leave for future research to investigate.

5. Conclusions

This paper examined the influence of reporting location on the value relevance of OCI in light of the passage of ASU 2011-05 “Presentation of Comprehensive Income” which requires firms to report the components of OCI in a performance statement (i.e., either below the components of net income in a single statement of comprehensive income or in a second statement of comprehensive income that begins with total net income).

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Association of OCI with returns prior to ASU 2011-05.</th>
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</thead>
<tbody>
<tr>
<td>Dependent variable: RETₐ</td>
<td></td>
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<tr>
<td>Variable</td>
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<td>α₄</td>
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<tr>
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<tr>
<td>OCI*CNTRL</td>
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<tr>
<td>OCI<em>CNTRL</em>POST</td>
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<tr>
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<td>Periods</td>
<td>Pre and Post</td>
</tr>
</tbody>
</table>

All variables are adjusted for stock splits and winsorized at the 5th/95th percentile. *** , ** , * indicates p < 0.01, p < 0.05, and p < 0.10 respectively (two-tailed).

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Association of OCI with returns PRE and POST ASU 2011-05.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Variable</td>
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</table>

All variables are adjusted for stock splits and winsorized at the 5th/95th percentile. *** , ** , * indicates p < 0.01, p < 0.05, and p < 0.1 respectively (two-tailed).
income). ASU 2011-05 eliminated the option of reporting OCI in the statement of equity on the basis that performance reporting would improve the transparency of financial statements by reporting OCI in a more prominent location.

Using a difference-in-difference design, we document a decline in the value relevance of OCI for firms that were required to change the reporting location of OCI from the statement of equity to a performance statement in response to ASU 2011-05. Given that performance reporting is commonly perceived as the more transparent and therefore preferable OCI reporting approach, this finding is of potential interest to standard setters and practitioners. Together with prior evidence, our findings indicate that the value relevance of OCI is higher when a firm’s reporting location of OCI is consistent with its reporting history.

Overall, our findings suggest that the value relevance of OCI is determined by the expected location based on the firm’s reporting history. Although investors should have been aware of the change in reporting location of OCI due to ASU 2011-05, some investors might not have immediately updated their expectations. Likewise, the amount of attention dedicated to new accounting standards and the impact on financial statements may be a function of investors’ level of sophistication and available analytical tools. This suggests that the results of Hirst and Hopkins (1998) and Maines and McDaniel (2000) were not only indicative of the transparency of performance reporting but also likely due to participants’ lack of an a priori expectation regarding the financial statement location of OCI. Thus, the objective of ASU 2011-05 to increase transparency may not immediately be met in the early years of adoption but could increase as investors adapt to the new and presumably more transparent reporting location of OCI. Future research will be able to examine whether this decline in transparency was temporary and whether the objective of the ASU 2011-05 was met in the long-term.

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